

# The Business of Nature

**Holding Big Business to Account for the  
Overexploitation of Biodiversity**



NATURE NEEDS MORE



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Nature Needs More works on tackling the key  
systemic enablers of the illegal wildlife trade,  
including unconstrained consumer demand for  
wildlife products and the significant deficiencies  
in the legal trade system under CITES. To stop  
the extinction crisis we need to form a new  
relationship with the natural world.

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## Foreword from the CEO

**The BU\$INE\$\$ of Nature Report** has been in planning for some time now, as the third report in a series investigating the unchecked exploitation of wild species for profit. Our first report, *Debunking Sustainable Use* [1], published in 2020, outlined that any discussions of sustainability without the corresponding transparency is simply a neoliberal ideology. In the report we highlighted the SUS in the current SUSTainability strategy. The tragedy is that the sustainable use model is the foundation used by too many NGOs and IGOs, while they clinically sidestep the lack of supply chain transparency and lack of evidence that ‘sustainable use’ - as practiced today - is saving wild species from overexploitation.

Our second report, published in 2021, *Modernising CITES – A Blueprint for Better Trade*

*Regulation* [2], outlines a new regulatory framework for CITES based on whitelisting (reverse-listing), regulating business directly and businesses paying the full cost of regulation. Moving CITES to a reverse-listing model, which was first suggested in 1981 at CITES CoP3 [3], would mean that the convention is responsible for regulating ALL trade in wild species. Such a move is critical given that the landmark May 2019 IPBES report [4] into the global extinction crisis confirmed that direct exploitation for trade is the most important driver of decline and extinction risk for marine species and the second most important driver for terrestrial and freshwater species.

Under a reverse listing model, the businesses who want to trade carry the full burden of proof that

they understand what constitutes an ecologically sustainable off-take and these same businesses must cover the full cost of trade monitoring and regulation. The days of all profit and no responsibility must come to an end. Business and industries know this is on the cards, as evidenced by the plethora of phantom solutions they have proposed in recent years. These phantom solutions, which we explore in this report, cannot be allowed to divert attention away from tackling the biodiversity crisis in the same way as with the last thirty years in responding to climate change.

This third report was initially planned for publication in 2022 but given the delays in finalising the Kunming-Montreal global biodiversity framework and the uncertainty in how the world would respond to the global pandemic, given the link between COVID-19 and the legal trade in endangered and exotic species, we decided to wait and watch. Sadly, what has crystallised is possibly the worst-case scenario, namely business and investors working out that they can continue to profit from the extinction crisis by proposing a new range of phantom solutions to avoid their main fear of significant regulation by governments.

None of the proposed constraints on the live animal trade have been adopted, so the risk of future zoonotic pandemics will continue to increase. The new global biodiversity framework has many ambitious targets, but they are voluntary and full of loopholes exploited by the phantom solutions brought into play by business. This means we haven't really made progress on regulating the use of wild species.

Maybe the easiest analogy to demonstrate how slowly we collectively learn how to deal with the systemic problems created by an unrelenting focus on economic growth is to look at the history of our response to global warming. We have had evidence of global warming and predictions from

early models since the 1950s, but a scientific consensus and public awareness did not really take shape until the 1980s. The fossil fuels giants were aware of what the future held in store.

In October 1979, a memo sent to Robert Hirsch, Manager of Petroleum Exploratory Research at Exxon [5], outlined a study on the potential impact of fossil fuel combustion on CO<sub>2</sub> concentration in the atmosphere, saying, ***“present trends of fossil fuel combustion with a coal emphasis will lead to dramatic world climate changes within the next 75 years”.***

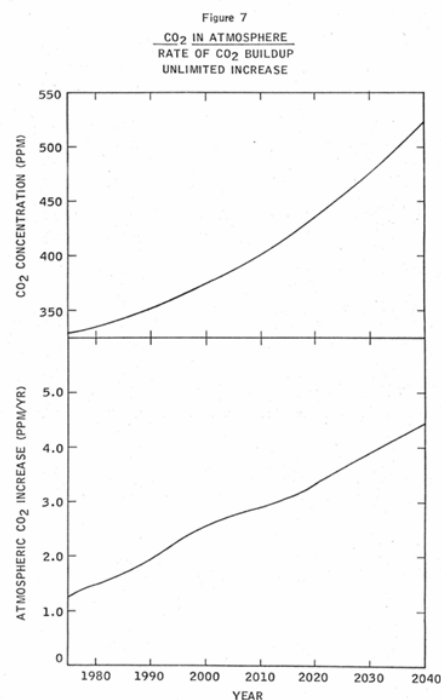


Figure 7 in the report predicted the build-up of CO<sub>2</sub> in the atmosphere, saying ***“noticeable temperature changes would occur around 2010 as the concentration reaches 400ppm. Significant climatic changes occur around 2035 when concentrations approach 500ppm.”*** This 1979 analysis is pretty much on track, as of today atmospheric CO<sub>2</sub> levels are 424.5ppm.

Atmospheric CO<sub>2</sub> is easy to monitor, universities, government agencies and citizen scientists have been monitoring the trends for decades. This one, single measurement and the prediction it enables



# BUSINESS of NATURE

about global warming has been in the public domain for all these years.

The resulting effect was stated in the 1979 Exxon memo rather innocuously as *“increased global temperatures and environmental upsets”*. This risk was openly acknowledged by the fossil fuels industry, who even chose to publish their findings to ensure that they were in the public domain so they had a defence of being open about their finding should they be sued, learning from the mistakes of the tobacco industry [6].

So, what was the result of these predictions? Instead of triggering a managed transition away from fossil fuels over the last 40 years, the industry *“has perpetrated a multi-decade, multibillion dollar disinformation, propaganda and lobbying campaign to delay climate action”* [7]. Key to these campaigns was to **“reposition global warming as theory, not a fact”**, with **“advertorials”** – advertisements disguised as

**editorials – with broken record messaging of “weak” evidence, “non-existent” proof, inaccurate climate models.**

**So why is the foreword for a report on biodiversity loss discussing the fossil fuel industry and climate change? The (luxury) industries who profit from the exploitation of wild species have learned how to deal with fears about biodiversity loss from the fossil fuel strategies to deal with climate change.**

What happens when you can’t rely on one simple and easily obtainable measure (as with atmospheric CO<sub>2</sub>) to predict the equally catastrophic case for biodiversity loss? Thankfully, conservation organisations and academia have been monitoring the decline of species for decades. In this instance it was hard for business to use the same disinformation and propaganda they have used to delay climate action. In the case of biodiversity loss, they can’t “reposition biodiversity loss as a theory, not a fact” or pay for advertorials on the “weak” evidence, “non-existent” proof. Instead for the last two decades or more business have focused on producing glossy sustainability reports, paying for sustainability advertorials and supported the rise of sustainability editors. While much has been written, little has provided any proof.

And then, at the turn of 2020 a global pandemic started that some of the world’s leading epidemiologists had been expecting. They knew that humans were vulnerable because the line between us and exotic animals had long been breached for trade and landgrabs [8].

While COVID19 was the first truly global zoonotic pandemic, too few people know that the years since 1980 have seen outbreaks of new, mostly viral, infections at a rate of one every eight months in hot zones from Brazil to central Africa to south-east Asia. They include the catastrophes of HIV and Ebola, as well as SARS and H5N1 bird

flu. Would COVID19 be the catalyst to finally curb the commercial overexploitation of nature?

Nature Needs More waited and watched, our BU\$IN€\$\$ of Nature report was put on hold. What consumption changes and new regulations, if any, would the global pandemic trigger?

Business and industries must have let out a sigh of relief that their wealthy consumers, who couldn't travel, spent their time renovating and decorating their gilded cages, buying the very products whose raw materials are being lost to ecosystems at an alarming rate, and driving ecological disruption and stress at the heart of viral outbreaks.

While businesses know they have dodged a bullet, they are also aware that they needed something - anything - to prepare for when their years of greenwashing are going to be challenged. This is the point we are at, with the creation of a plethora of phantom solutions (offsets, credits, certifications, ESGs etc) to avoid the scale of government intervention needed to properly regulate the business of biomass extraction.

Of course, the scale of the required regulation is only possible by breaking the stranglehold that large corporations and their wealthy investors have on our politicians, media and institutions. Will more people demand a managed transition, requiring industry regulation, closing tax loopholes and a commitment to degrowth? Or will we follow a more chaotic route to the end of the cycle, as discussed by Peter Turchin and Ray Dalio [9]?

The BU\$IN€\$\$ of Nature outlines some of the real solutions needed. Interestingly, these solutions aren't new, we simply have to remember that we had periods previously where certain industries were subjected to drastic regulation as the result of a crisis. In closing, I would like to thank Peter Lanius, the lead author of this publication for his diligence in investigating and compiling the information outlined in this important report.



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## Section 1

# Introduction

In this report we show that the extraction of biomass is big business and mostly conducted by or on behalf of large corporations. For example, the international seafood trade alone was worth over US\$250 billion in 2019 [10]. This already astonishing figure only counts unprocessed fish, crustaceans and molluscs, the total trade value would be vastly bigger if we were to look at the consumer end of the value chain. The companies trading in seafood are equally big – 24 of the largest seafood businesses in the world have revenues in excess of US\$1 billion [11].

Our ravenous consumption of biodiversity has long reached the point where it is no longer sustainable. There is mounting evidence that we are already causing the 6<sup>th</sup> mass extinction event and the 2019 IPBES Global Assessment Report [12]

warned of up to 1 million species of being at risk of extinction in the near future. According to this report, **direct exploitation for trade is the most important risk factor for marine species and the second most important for terrestrial and freshwater species (after land use conversion)**.

Despite growing public awareness of biodiversity loss, the problem with changing this trajectory lies in the fact that the businesses doing the biomass extraction are not subject to any direct regulation to counteract their desire to grow both revenue and profit. Without a change in policy settings for these companies, as long as overexploitation remains profitable, it will continue.

Most large conservation NGOs have been pointing out endless problems with the current system, but their main focus has been on illegal activities, such

as illegal logging, the illegal wildlife trade and IUU fishing. They have failed to address the underlying drivers of overexploitation – that the current system of neoliberal free-market capitalism pretends that all government regulation is ‘bad’ or at least inefficient. As a result, they have been unsuccessful in stopping biodiversity loss and have remained largely peripheral to the expanding scale of biomass extraction and the trade in wild species.

The only regulatory framework we have to prevent overexploitation of nature, the 1973 Convention on the International Trade in wild species of flora and fauna (CITES), is ineffective in its current form and does not regulate business directly. It puts the burden of proof and enforcement on national governments, irrespective of the resources (or lack thereof) these countries have available to them.

Businesses are fully cognisant of the risk of future, direct regulation and are working hard on making

sure this does not happen. They have learned from their peers in the tobacco industry and the fossil fuel companies how to divert public attention with greenwashing and how to create phantom solutions that do not threaten future profits.

They have also learned that the best way to avoid future brand and reputation risks is by seemingly engaging with the problem in public and lobbying hard against direct regulation in private. The compliance of the corporate media in sidestepping this failure of governance and accountability makes it very difficult to use public pressure to achieve real change.

**We show in this report that regulating the wildlife trade is neither hard to do nor does it require the end of capitalism. It does require remembering that we had previous periods where certain industries were subjected to drastic regulation as the result of a crisis.**



For example, the Great Depression experience in the US led to highly intrusive regulations for banks, in the form of the Glass-Steagall Act of 1933, which changed the nature of the financial industry until the 1980s when those regulations were progressively dismantled.

Being able to address the biodiversity crisis through direct regulation of businesses in a handful of industries is a very different proposition to solving climate change due to human greenhouse emissions. The latter problem can indeed not be solved under capitalism, as energy use is all-pervasive to the economy. It would require creating a very different economy that is fully constrained by global limits on energy use and carbon emissions. These constraints would have to flow into consumption and would force a complete overhaul of global supply chains. Changes on this scale are not even contemplated as yet, we are still betting on a technological fix that will leave everything else the same.

In contrast, the use of biodiversity and even land conversion is restricted to a couple of industries which are known to create enormous waste as the result of their focus on profit and growth, not sustainability. We demonstrate that direct regulation of these extractive processes and businesses combined with changing a narrow range of policy settings (such as eliminating harmful subsidies) would be sufficient to address the overexploitation of nature for human consumption.

Introducing such regulations would make the companies involved in biomass extraction very unhappy, as they would have to fully pay for the cost of regulation. But the resistance to such narrow, regulatory change will be miniscule compared to the wholesale overhaul of the economic system that is required to really address climate change and fossil fuel use.

Introducing these regulations also does not mean we have to simultaneously create and sell a viable alternative to capitalism to the public.

Of course the fallout for consumers from making our exploitation of biodiversity ecologically sustainable would be noticeable, most likely through higher prices for seafood and timber products. This could lead to a backlash, which should be addressed through going back to earlier, much more equitable, settings on the relative distribution of wages and profits.

To start this process those active in the field of conservation – NGOs and academics in the first instance – need to stop their implicit or explicit endorsement of the phantom solutions peddled by business and government. This means rejecting biodiversity credits and offsets, stopping their engagement in multi-stakeholder initiatives, rejecting (self)-certification schemes and mercilessly pointing out all forms of greenwashing.

This may sound straightforward but is quite difficult, as both conservation NGOs and academics are now accepting funding from the very businesses that are doing the harm under the guise of ‘collaborative problem solving’. This approach is based on a misreading of the relative power of the parties involved and on ignoring the myopic focus of businesses on shareholders and profits in the current system.

**The only power NGOs, activists and academics can have in our current economic and political system comes from directly opposing business, not from working with them. The old saying of “if you can’t beat them, join them” does not apply. Joining them makes these actors complicit in the destruction of nature, as large corporations will continue to put shareholders and profits first for as long as they are allowed to do so.**





## Section 2

# The Business of Biodiversity Loss

Under the current ideology of neoliberal free-market economics the role attributed to business is a wholly positive one. Government is portrayed as inefficient, slow and interfering in people's lives. Civil society is seen as either irrelevant or even non-existent [13].

Business, in stark contrast, is given the sole role of 'creating' wealth and economic growth, the so-called tide that was supposed to lift all boats. In this narrative business has no responsibility other than to its shareholders.

Since markets are supposed to be completely efficient, whatever business is doing is presumed to be the optimal outcome for everyone. Models of capitalism with greater state intervention than permitted under this model, such as in China and Russia, are denounced as autocracies.

Today few people still fully buy into these narratives which were created in the 1980s and 1990s and have been refined and repeated ad-nauseum since. But that does not change the fact that no alternative narrative has been able to establish itself and that the power over public policy wielded by business and the top 1% in the Global North is now near absolute.

This power has been used extensively in the last 40 years to weaken regulations on business and to undermine regulatory agencies. It has also been used to make sure that whilst businesses may have to pay fines for gross criminal conduct, no executive or director ever goes to jail.

An unfortunate by-product of this ideology has been the wholesale destruction of nature for profit. The capitalist mode of ownership and

wealth distribution requires never-ending economic growth to hide the fact that without government intervention the distribution of wealth gets grotesquely skewed towards the top 1%. The only way to 'achieve' never-ending growth is to commoditise the commons (fossil fuels, minerals, land, water, biodiversity etc.) and to monetise previously non-commercial activities (such as childcare, aged care etc.).

The specific neoliberal bend on this much older story has been the elevation of the individual and their needs and wants over any form of collective needs and considerations. This specific denial of our social nature has become a major impediment to solving the 'wicked' problems like climate change and biodiversity loss.

Polls and surveys in the Global North consistently show that people are in favour of tackling both climate change and biodiversity loss, but not at a cost that would affect their 'lifestyle'. This has led to all sorts of weird effects, the latest being the dominance of 3-4 ton electric trucks and SUVs as the supposed answer on how to reduce carbon emissions from cars [14].

Yet it is precisely the lifestyle of the affluent in the Global North (and the copycat behaviour of the affluent elites everywhere else) that is destroying the very basis of our existence. Both climate change due to greenhouse gas emissions and biodiversity loss due to the overexploitation of nature ultimately result in fatal consequences for human civilisation.

The current elites are both unwilling and unable to address these wicked problems. For over a decade now, a handful of the ultra-wealthy have been gathering in luxury hotels to discuss the growing risk of civil disruption as a result of inequality, climate change and environmental breakdown.

An even smaller part of this elite networking group acknowledges that *"It is the wealthiest in society who are right now advocating to slow down the pace of tackling these huge issues"* [15]. As predicted by Peter Turchin [16], elite infighting at the end of economic cycles is nothing new and, with a few exceptions such as the New Deal, can go on for decades providing no solutions to the deepening crises happening outside these gilded cage events.

## Biodiversity Loss is Not an Individual Problem

That humans do not behave in the rational way presumed by modern economics is obvious. If they did, companies would not have marketing departments and would not bother with advertising and PR. If we were capable of making rational decisions, we would not still be arguing about reducing greenhouse gas emissions or overfishing. That would have all happened a long time ago, maybe as long ago as 1972 when Limits to Growth was first published. Instead, the mainstream rubbished the report and we in the wealthy West all kept consuming with no care or

regard for tomorrow or the fate of our grandchildren.

There are many reasons why this was inevitable. Behavioural economics calls the main culprit 'hyperbolic discounting', which is a very fancy way of saying that we couldn't care less about consequences that are decades away. Even though we can be made to care, briefly, with the right framing, we cannot keep long-term consequences in focus during the day-to-day. Add to that deliberate distractions, misleading and contradictory information and well-resourced

propaganda and our brains do not stand a chance of keeping focussed on seemingly far-in-the-future problems like global warming and environmental breakdown.

Once the consequences become obvious and remain in the news due to undeniable changes in established weather patterns, then all of a sudden, we can stay engaged and 'care', but it still doesn't lead to individual behaviour change without a corresponding change in social norms. Because despite the individualist rhetoric that is so central to the neoliberal ideology, we are much more concerned about fitting in with the mainstream than standing out by, say, reducing our level of consumption by two thirds. Instead, we go into debt to finance consumption we can't afford to signal belonging to a higher status group we don't actually belong to but aspire to!

Capitalism and businesses are highly adept at exploiting our desires, anxieties and irrational behaviour. Social media is just the latest iteration in creating an environment that fosters overconsumption and impulse purchasing. Businesses have learnt to use our dopamine addiction to sell us 'feel good' purchases (that we may have no use for or later regret). They have

also learnt that when we are in an emotionally vulnerable state, we are likely to buy more. So, keeping us overwhelmed with complexity and suggesting constantly that absolutely everything is our individual responsibility (from paying the bills to fixing the climate) creates just the right mix of anxiety and exhaustion to keep us pliant and consuming.

The strange thing is that the vast majority of people see no other option than to go along with this charade even though the anxiety and exhaustion are real, the debt can be crippling, the mental health and addiction effects are getting out of hand and an ever-greater number of people in the Global North are getting angry at the lack of opportunity, life satisfaction and inequality generated by this system.

Despite the anxiety and anger, we feel powerless to change this and equally powerless to do anything about the wicked problems, like climate change and biodiversity loss. Probably to keep ourselves sane, we conveniently assume that governments and NGOs will fix this 'for us'. That would be nice, but that's not how power works under the capitalist version of representative democracy.

## Power, NGOs and Biodiversity Protection

Our modern version of representative democracy has given a vote to every adult, but this vote has become mostly meaningless. With the comprehensive demise of mass-membership in political parties and other civil society organisations, voting has become pretty much the only form of active civic participation.

If you want to remove any power and influence over decisions made by government from the general population, then eliminating all forms of

public discussion and opinion forming and reducing the vote to a non-choice between political parties that are all beholden to the same donors and lobbyists is a great way to create a pretend democracy whilst relentlessly talking about how much worse things would be under 'autocracy'.

The reality is this is how power works today. Businesses and the rich have unlimited access to elected officials and public servants and can

influence decision making through donations, lobbying, consultants who echo their views, think tanks writing reports to support policy proposals, buying media coverage and even through creating fake grassroots campaigns. Monopolisation of access and power have led to ever more audacious self-serving behaviour by the elites, creating something more akin to a kleptocracy [17].

This is not conjecture, the thesis was comprehensively proven by an empirical 2014 study which found that the general public has no discernible impact on government decision making in the US [18]. After analysing the policy outcomes in relation to over 1,700 recent policy issues in the US, the results were conclusive: *“economic elites and organized groups representing business interests have substantial independent impacts on U.S. government policy,*

*while average citizens and mass-based interest groups have little or no independent influence”*. Similar findings have been made for the UK, Australia and the EU [19], but they are not quite plutocracies to the same degree as the US just yet.

The caveat is that some problems, like climate change and biodiversity loss, eventually become too big to ignore and the public will demand action. This is the point where we are at now and this report shines a light on both the role of business in getting us to this point and the plethora of phantom solutions embraced by business and governments to stop any real action from upsetting the status quo.

We are not going to examine the role played by the conservation NGOs in this saga in any great detail, apart from their sometimes embarrassing complicity in creating or endorsing phantom



Governments like to project they make decisions based the best expert advice. The problem is that too many specialist experts don't want to or know how to be political. In staying out of the politics they continue to miss the point, the hidden agendas, the political undercurrents and the power plays. In contrast, corporations and their think-tanks live in the politics and focus on the big picture (continued economic growth and growing profits).

Today's experts have lost credibility in the public's eye because of their willingness to represent the interests of powerful actors (like corporations, IGOs, governments) or because they are toeing the party line to not lose funding and status.

Many large conservation NGOs are now so dependent on government contracts or funding that they can no longer act as pressure groups. Even though they see their access to governments as a positive, their expert authority is undermined by being unable to speak out against the hand that feeds them. This keeps them marginalised and makes them ineffective in saving the natural world from the effects of unconstrained growth.

solutions (see Section 7). Suffice to say that, just like the public, most of these NGOs have had almost no impact on policy outcomes or on changing the trajectory of increasing biodiversity loss. Whilst there have been isolated successes in local settings or sometimes even at the national level, they are often later reversed or have more unintended consequences than any of these agencies would ever be willing to admit to.

The main reason is of course that the vast majority of these organisations see themselves as awareness-raising, fundraising, and expert project management organisations, not civic society pressure groups. Hence, they have no power, and

cannot have any beyond some very limited expert authority, which these days is often counterproductive (see box above).

Further, governments and businesses have learnt how easy it is to steer the large conservation NGOs away from the radical actions needed and towards non-solutions and processes that may placate the public anger and desperation just a little bit longer. In return for their compliance these NGOs gain government and business funding, a seat at some of the less important tables and a degree of self-importance and status that can be used for branding and public fundraising drives.



We can categorially state that the current crop of large conservation NGOs will not play a significant role in altering either the climate change or biodiversity loss trajectories. They are and will remain a sideshow that creates a useful distraction for those in power to continue to pursue their never-ending growth and exploitation of nature for profit. By aligning themselves with business and governments and by bending their original missions for the sake of corporate donations and government contracts, they have become subservient to the current economic system.

The best short-term option we have is pressuring politicians into properly regulating business to adhere to the environmental limits of our planet. Businesses can be made to behave rationally as long as the means of monitoring, control and enforcement are a sufficient deterrent to non-compliant and criminal behaviour. We have discussed the core of such a regulatory framework in our Modernising CITES report and we expand on this with additional policy and regulatory settings in the final two sections of this report.

## The Legal Trade is Being Ignored by Politics, NGOs and MSM

What makes matters worse when it comes to the NGOs and the mainstream media is that they pay far too little attention to the legal trade in biodiversity. With our current, neoliberal policy settings, both the domestic and international legal trade in wild flora and fauna equals destruction of nature. Yet the main actors, which could impact how the trade is conducted and how it is monitored, show little interest in better regulating the legal trade.

We explore why businesses behave the way they do in subsequent sections. **More curious is the fact that governments, relevant IGOs, conservation NGOs and the mainstream media**

**are completely united in their utter lack of interest in the legal trade and its impact.**

They are clearly alarmed at the scale of overfishing, deforestation and overall loss of biodiversity. But the basic assumption across all of these actors (and business) appears to be that if it wasn't for illegal activity the way we exploit nature would be sustainable.

Of course, there is zero evidence for this assumption. It is a statement of faith (or ideology if you prefer). Much of the ongoing deforestation has actually been legal under domestic laws. Even without the impact of IUU fishing the exploitation of the oceans is unsustainable because the





fisheries management authorities exist to assist business interests, not protect nature. Fishing quota and access agreements are political creations, not science.

Whilst we can understand governments, the MSM, and IGOs behaving this way, given they are heavily influenced by business interests, it is far more concerning that so many conservation NGOs have been willing to go along with this narrative. When the so-called defenders of nature cannot bring themselves to dive deeply into the underlying problems with the legal trade in biodiversity and fail to see that the insufficiently regulated, legal pursuit of profits from nature will inevitably result in unsustainable practices, then something has gone deeply wrong. From our perspective, these NGOs have bought into the guiding ideology of our time to an extent that it has clouded their judgement.

Our guiding ideology comprises the basic and implicit assumptions that we take for granted and never question, and which get deeply embedded

in social norms and thus become self-reinforcing. This becomes self-evident when we look at what content Western media of any type is willing to champion and what gets ignored. Everything in the Western mainstream media (books, music, TV, print, radio, film/streaming, online platforms, theatre etc.) is today geared towards consumption and not only because of advertising or product placement. The major story lines always involve characters who can and will consume. It does not matter whether they are advocating more traditional 'stuff' or 'alternative choices' like wellness or prepping. The lifestyle espoused is always about buying, acquiring, consuming.

Anyone without the means to consume is either ignored or vilified (as in the TV show *Squid Game*). The adverse consequences of unlimited consumption are never shown in the context of consumption, only in documentaries, blogs or non-fiction books. The link between consumption and consequences appears off limits to Western media.

Going back a few centuries, Western ideology also adopted a profoundly practical, power-based relation to nature. **In our modern understanding, nature has no inherent meaning and hence no inherent value. It is not divine, as in most earlier theologies.** We do not equate Earth/nature to a goddess that gives life. Instead, we are happy to talk about 'natural resources', a term that commodifies nature to that which can be exploited for human gain.

Further, in our science that which has no proof, has no truth. This is the essence of the scientific method, which is based on sensory perception and measurement. And **since meaning and purpose sit outside sensory perception and scientific measurement, there can be no meaning, no inherent truth to nature.** This is not a critique of the scientific method; it is a critique of a worldview based entirely on science and the scientific concept of truth.

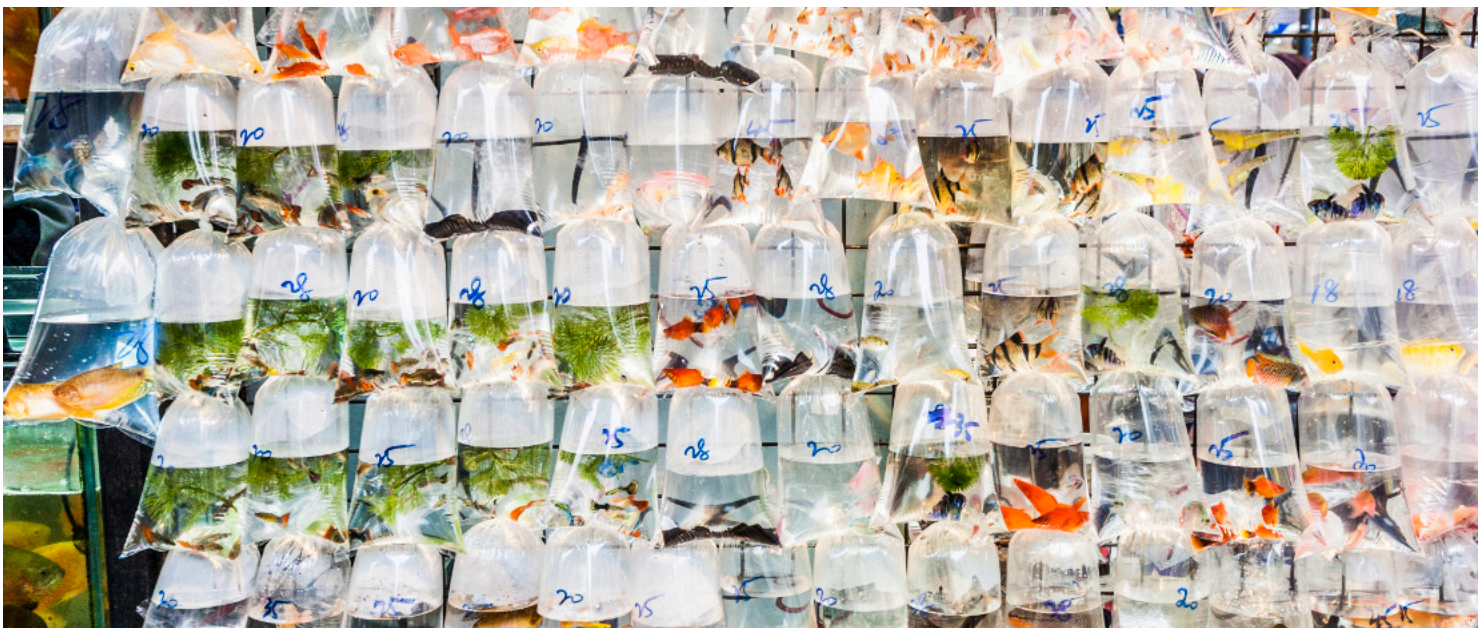
**The result of this practical, scientific, without inner meaning or divinity, view of nature means that is perfectly ok for us, as humans, to make nature fit 'our' purpose. In fact, it puts no constraints at all on what we do with nature.** It is not just ok for humans to exploit nature, 'progress'

demands that we do so. We can and should act as nature's overlords.

Our mainstream media, politicians and even most conservation NGOs and academics never question these fundamental assumptions. There is little evidence that younger generations are any different, despite Fridays for Future and similar protests, which are focused on the survival of future generations of people not non-human species. The industrial scale exploitation of nature is fully in line with this ideology, the notion of sustainable use was brought into this much later and does not question the fundamental approach.

That all Western and Westernised societies fully buy into this guiding ideology and notion of humanity is easily evidenced from looking at government budgets – health & education are almost always the top priority for those who vote and the OECD average of spending on health is 9% of GDP (18% in the US!) and 6% on education.

In contrast, total spending on environmental protection was around 0.02% of GDP in France and Germany in 2018 and 0.01% in the UK (many countries don't even bother to compile data on environmental spending) [20].



## The Wrong Starting Point

To paraphrase the old joke, if we want to get to a fair and equitable solution to climate change and biodiversity loss for all mankind, we wouldn't start from here. *Here* means not only neoliberal free-market ideology and exceedingly powerful global corporations, it also means a global North/South divide with a long history of colonialism and ongoing exploitation. *Here* means a largely irrelevant United Nations and IGOs like the World Bank and IMF under the de-facto control of the US as a result of its veto rights, and many other institutions created to further the free-market agenda and the interests of the rich in the Global North. *Here* means how easy it is to create shell corporations and fake banks [21] and governments tolerating or even supporting the system which enables money laundering, tax evasion and capital flight.

Starting from *here* means accepting that the affluence of the Global North was and is built on exploiting the South [22], despite colonialism supposedly having been abandoned decades ago. It further requires talking about the vastly uneven distribution of all the things that matter to our collective well-being: fossil fuels, minerals, fresh water, fertile soils, biodiversity. It should be immediately obvious that as long as *here* means operating from a basis of national instead of common interests, we are not going to get anywhere.

Whilst the vastly uneven distribution of natural resources is an accident of geography, the current and historical inequities are not. They were and are still being created by the nations that are more powerful, financially and militarily. When it comes to biodiversity, the concentration of biodiversity in the Global South is part geography and part history. The warmer climates have higher biodiversity, but the countries of the Global North

largely destroyed their original biodiversity through land conversion and the elimination of predator species, often starting centuries ago.

Of course, we cannot change the fact that we are starting from *here*. The 'wrong' starting point doesn't mean that there is no useful way to address the wicked problems. Instead, we need to focus on the undeniable urgency to tackle climate change and biodiversity loss, but not within the framework of neoliberal free-market capitalism. There is simply no solution under the current ideology, which is why those interested in keeping it intact are so busily generating ever-more



phantom solutions. We will look at some of these in Section 7.

There is also no solution for the problem of biodiversity loss under the current crop of Multi-National Environmental Agreements. CITES [23], the CBD [24], and even the new treaty on Biodiversity Beyond National Jurisdictions [25], in their current form are incapable of halting the overexploitation of nature, irrespective of how many species CITES lists and how many global biodiversity frameworks the CBD agrees on. Fundamentally, neither CITES nor the CBD have any power over business, and it is business and especially big business that is doing the overexploitation. Sometimes with the tacit support of national governments and sometimes

aided and abetted by subsidies that makes matters worse.

**What the phantom solutions and the multi-national agreements have in common is denying the need for direct business regulation. This is not an accident; it is a crucial component of the free-market ideology. If business is basically 'good' and the free market always creates 'optimal' outcomes (as long as governments don't interfere) then why regulate business?**

If we can get to the point where there is broad acceptance for direct business regulation for any business involved in the exploitation of biodiversity, then we have created a new, more hopeful, starting point. Acceptance of extensive, global, and deeply intrusive regulation will negate the free-market ideology and shift social norms as a result. That is what is needed, and we may not be as far away from this point as it seems.

As we will discuss in Section 8, going down the regulatory path is sufficient to address biodiversity loss, but the other 'wicked' problem - climate change - cannot be solved under capitalism. Whilst both are often spoken about simultaneously, we should keep this distinction firmly in mind.





## Section 3

# The Role of Business in the Destruction of Nature

The main factors driving biodiversity loss are the conversion of land from forests/wilderness to agriculture and the extraction of biomass for human consumption. Both are in turn driven by businesses looking for profit. From the perspective of the businesses engaged in these activities there is no downside – they start with something that’s ‘free’ (forests, trees, fish, birds, reptiles etc.) and convert it into products that can be sold (agricultural land, timber logs, seafood, pets, handbags etc.).

Humans, like all other animals, have always relied on natural resources for our survival, that is not the issue. What is new today is that the scale of our exploitation is no longer about survival, but about conspicuous consumption. We no longer

see ourselves as part of nature and we allow for-profit corporations largely unchecked access to natural resources in the name of economic growth and ‘human development’. This is quite a recent development, the first companies created for this purpose, the British and Dutch East India Companies, only date back to 1600.

As with so many human innovations, the problems do not come about immediately as a result of the innovation itself, but through our failure to imagine what happens when everyone starts using the same innovation. We fail to conceive that when everyone starts using an industrial process, they need to produce and sell at ever-increasing scale to make it work. We further fail to consider the delayed consequences of exploitation at an

unsustainable scale, because it happens too far in the future.

The idea of forming joint stock companies to pool resources and manage investment risks is undoubtedly an ingenious innovation. The inability to comprehend how these companies could eventually achieve global scale and power and amass financial resources (or even have their own private armies as in the case of the East India Company) that make them seemingly untouchable should be unsurprising to any student of history.

There is a reason that the commons management system of the past worked for very long time periods and were sustainable, they avoided giving individual actors too much power.

This section looks at the scale of our current overexploitation of nature and the role played by large corporations in this. We start with the overall extraction of biomass for trade and then specifically look at fishing and deforestation. We turn to the exotic skin and fur trade for luxury fashion in the next section.

## The State of Biodiversity and the Role of Direct Exploitation for Trade

In order to understand how much of a problem the trade in wild plants and animals is for our collective future, we need to take a look at the current state of biodiversity and the role of direct exploitation for trade is playing in driving extinction. That we are already in the middle of the 6<sup>th</sup> mass extinction event is no longer in doubt by most scientists [26]. The scale of the extinction crisis has been further quantified and its causes have been rigorously analysed, so we can draw specific conclusions about the role of trade and 'destructive consumption' of biomass.

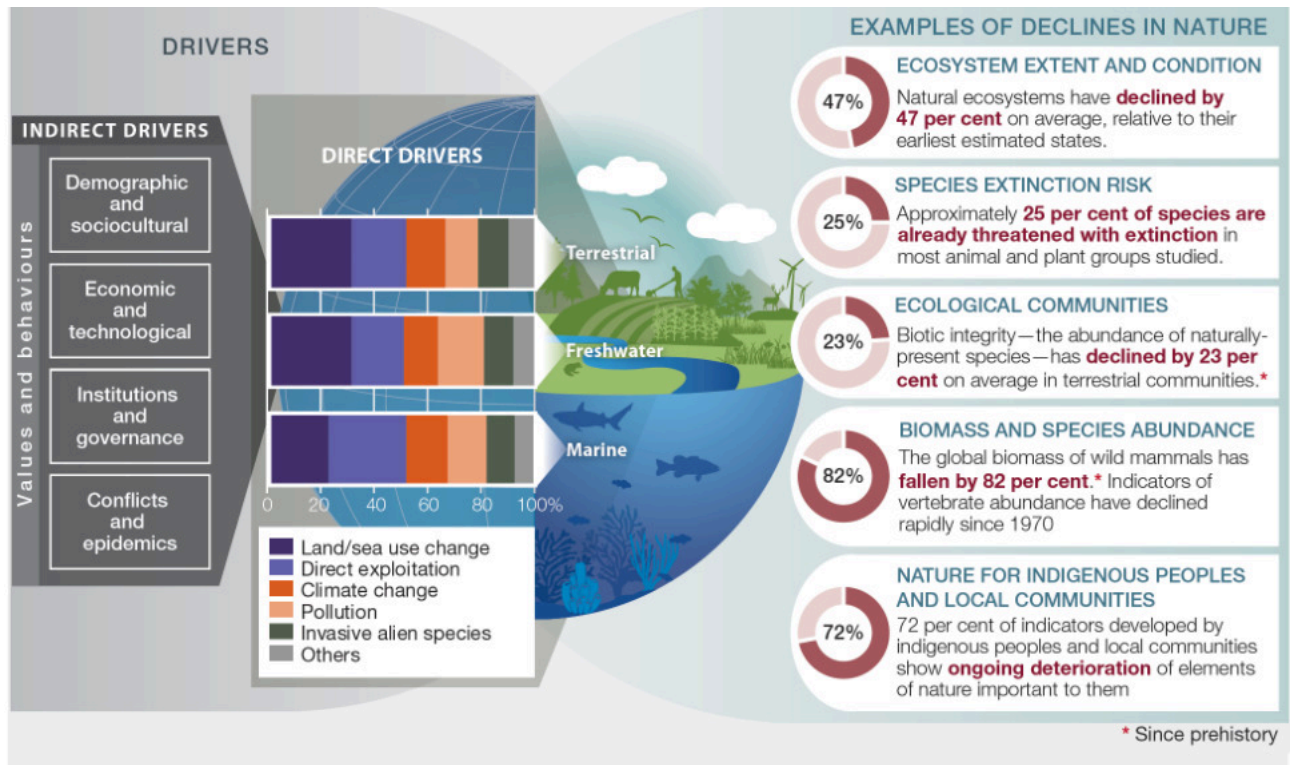
Thanks to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) as of May 2019 [27] we now have the most comprehensive report of the status of biodiversity available. Their Global Assessment Report was based on a systematic review of about 15,000 scientific and government resources and their summary was unequivocal:

*"Nature is declining globally at rates unprecedented in human history – and the rate of species extinction is accelerating", and*

*"The Report finds that around 1 million animal and plant species are now threatened with extinction, many within decades."*

The report shows alarming declines in biomass and species abundance – the global biomass of wild mammals has fallen by 82%. **As can be seen in the graphic reproduced from the IPBES report on the next page, direct exploitation is more important as a driver of extinction than climate change, pollution and invasive species.** For terrestrial and freshwater species its impact is second only to land use (the conversion of wilderness to agriculture or human settlements). **For marine species, direct exploitation for trade and consumption is the most important driver of extinction risk.**

Direct exploitation includes both trade (domestic and international) and subsistence consumption. In today's world, subsistence consumption of wild flora and fauna is a small factor compared to domestic and international trade. We therefore focus on the commercial legal trade in the context of direct exploitation.

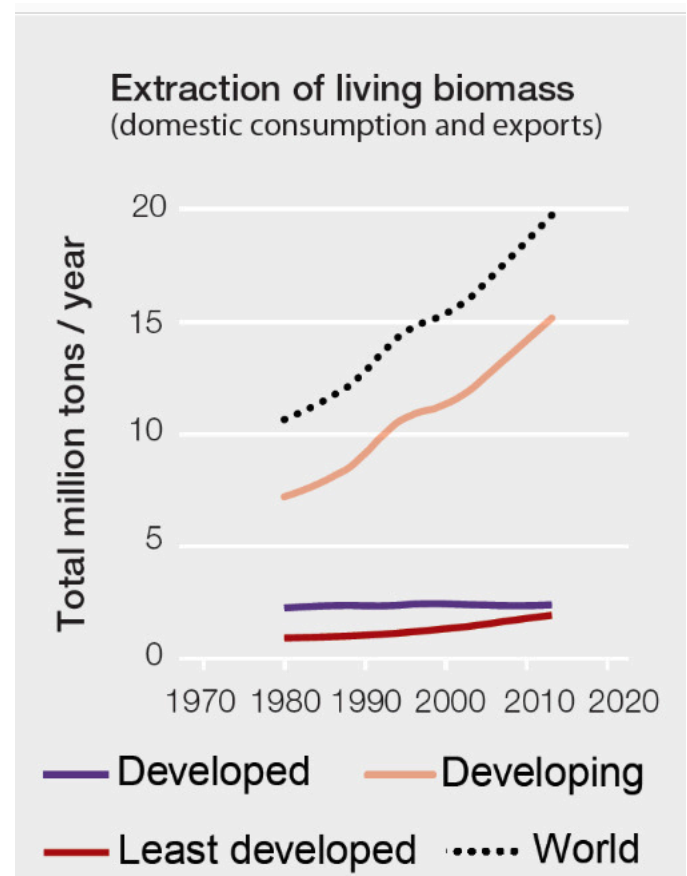


The IPBES report concludes that around 25% of all animal and plant species are already threatened with extinction. Although this Global Assessment Report only provides a snapshot as yet, it is by far the most comprehensive assessment of the state of biodiversity available. Its findings make a mockery of the idea that any of our current practices, including ‘direct exploitation’ or ‘legal trade’, are indeed sustainable.

Even more worrying than the snapshot is the trend and the IPBES report contains a graph of biomass extraction over time, demonstrating the link between direct exploitation and decline in biodiversity. The takeout from the graph (reproduced on the right) is that the trend remains unbroken, despite ‘sustainability’ and ‘sustainable use’ being on everyone’s lips since the Rio Declaration and the inception of the Convention on Biological Diversity (CBD) in 1992 [28].

These high-level data have been further substantiated by much more detailed analysis of many wild species trades, such as fishing and the timber trade and we provide examples of these

and others below. For fishing the link is most obvious as fish stock declines can and have been clearly linked to overfishing.



Thanks to a meta-analysis conducted in 2021 [29] we also have direct evidence of the link between trade and population decline in terrestrial animals. In this study of 500 animal species that are subject to trade, **populations declined by 76% in the presence of domestic trade and 66% in the presence of international trade.**

Unfortunately, the study is heavily skewed towards mammals (450 of the 500 species included), which is simply a result of what biologists tend to get funding for to study, not their prevalence in trade (which is dominated by birds, reptiles and amphibians) or their inclusion on the CITES appendices (mammals make up just 10% of Appendix II listed animal species).

Despite this limitation, **there is clear evidence that national and international trade have a**

**disproportionate negative effect on species abundance.**

**In contrast, the effect of local trade was much smaller and had only limited impacts, despite the fact that an estimated 150 million households depend on the bushmeat trade for both food and income security [30].**

Combined with the IPBES findings we can conclude that both national and international trade are highly detrimental to species abundance and constitute a major driver of species decline and extinction risk.

Because all non-local trade is conducted by businesses, it is critical to study the role that corporations and regulatory environment they operate in play in the direct exploitation of wild plants and animals for profit.

## How Big is the Wildlife Trade?

In the mental picture of the public (as proliferated by both conservation agencies and the mainstream media) the 'issues' of the wildlife trade revolve around iconic animal species only. There is endless talk about elephants, rhinos, lions, sharks and tigers and very little else. Of course, the total wildlife trade is much larger.

Also, in the mind of the public the 'issues' of the wildlife trade are about poverty, poaching and organised crime. There is little concept that the problems of the wildlife trade are more about the quarterly profits businesses make from the trade in wildlife; for example, a 2016 European Parliament Report states, *"The wildlife trade is one of the most lucrative trades in the world. The legal trade into the EU alone is worth EUR 100 billion annually"* [31].

The high profit margins made from this trade mean it is worthwhile for companies to commit to

large advertising budgets to maintain consumer desire; particularly when you have a customer base stuck in a cycle of affluenza and status anxiety.

Affluenza symptoms: *"a painful, contagious, socially transmitted condition of overload, debt, anxiety and waste resulting from the dogged pursuit of more."*

John de Graaf, David Wann, Thomas Naylor (2001)



rendered much of this legal trade to be essentially invisible and so quite difficult to estimate. The WWF's website [32], to this day, only quotes a figure of the value of the legal trade from the early 1990s. How does having information 30 years out-of-date, about the legal trade in endangered species, fulfil WWF's mantra of an evidence-based approach?

In this report, **we will adopt a broader definition of 'wildlife trade' as both the national and international trade in all species of wild flora and fauna.** This means our definition includes seafood (both from fishing and from aquaculture) and the timber trade (again, both plantation and wild forest timber), which are both massive in scale and largely ignored by CITES.

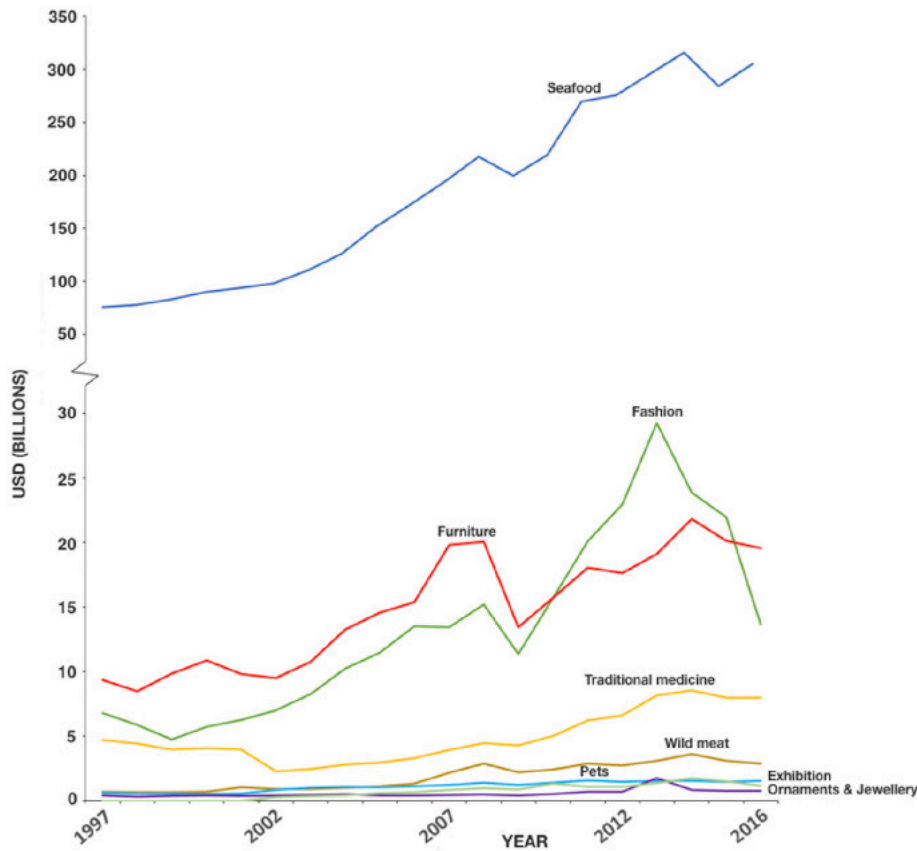
CITES lists nearly 40,000 species for trade restrictions [33], of which the vast majority are orchids, cacti and corals. Despite the fact that half of fish stocks are classed as 'overfished' (which means threatened from trade, the very definition

for inclusion on the CITES appendices) and 10% on the brink of collapse [34], CITES has stayed out of most commercial fishing and basically decided to ignore these species. It has listed some sharks and rays very recently and a handful of other fishes used commercially such as sturgeon, eels and totoabas.

Even though CITES has the option of listing geographically constrained populations and does so for terrestrial animals, it hasn't done so for fisheries that are overfished. Equally, CITES has stayed out of deforestation and land clearing, choosing to list only a handful of tropical hardwood species out of all the tree species used commercially.

Some argue that fishing and timber are not really 'wildlife' and outside of CITES' remit, but on what basis? CITES is supposed to protect all species of wild flora and fauna that are endangered through international trade, and it specifically includes 'introduction from the sea', meaning marine





**Fig. 2.** US\$ value of total wildlife traded (imports and exports) between 1997 and 2016 for all wildlife trade categories. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

species caught outside a country's exclusive economic zone (EEZ), as part of international trade.

**The real reason is more likely that CITES lacks the funding and status to battle the massive commercial interests behind forestry and fishing.** On top of that, forestry and fishing are usually part of the powerful ministry for agriculture or primary industry (or even have their own ministry), whilst the tiny CITES management and scientific authorities of a country are usually located in the environment ministry. So, it should come as little surprise that CITES has had almost zero impact on the seafood and the timber trades.

The question is, does it matter that politicians, the mainstream media, the public and CITES ignore these trades? The answer is obvious from this

graph of the **scale of the international trade in wildlife presented above.**

In this analysis, published in 2021 [35], the international trade in seafood alone is worth US\$300 billion, furniture (which only denotes tropical hardwood logs) around US\$20 billion and fashion (denoting exotic skins and fur) around US\$12 billion annually. **These figures are the trade value of the raw materials not the value of the goods created from final manufacture.** The furniture category in this analysis only captures a very small part of the overall timber trade, the total export value of all primary timber products was US\$244 billion in 2020 [36].

## The Extraction of Biomass is a Massive Business

Given that we are living in a global, capitalist economy it is self-evident that the trade in wildlife is conducted by businesses. Yet governments, many NGOs and even intergovernmental organisations such as the IUCN, FAO and CITES all appear united in their efforts of perpetuating two crucial myths:

1. That trading in wildlife constitutes a valid path out of poverty for 'local communities' (usually branded as 'alternative livelihoods'), and
2. That the wildlife trade is conducted by small businesses that can't afford regulatory overheads

Both myths are deliberate misrepresentations of the trade in wildlife and how it is conducted. Local communities almost exclusively benefit from subsistence hunting, fishing and harvesting and the local trade, which, as illustrated above, has a very limited impact on population decline.

**The national and international trade in wildlife largely has no role for local communities in the same way that the national and international trade in, say, grains has no role for 'local' communities. The reason is dead simple – all non-local trade is conducted by business and under our current economic model business has no obligation to local communities.**

Businesses pay salaries to employees, taxes and regulatory overheads to governments and dividends to shareholders, but they don't pay dividends to local communities (other than miniscule donations made under some CSR banner in a few cases). Sure, there are some often-cited examples where local communities do benefit from international trade, such as the indigenous egg collectors for Australian crocodile farms [37] or the people collecting pythons from

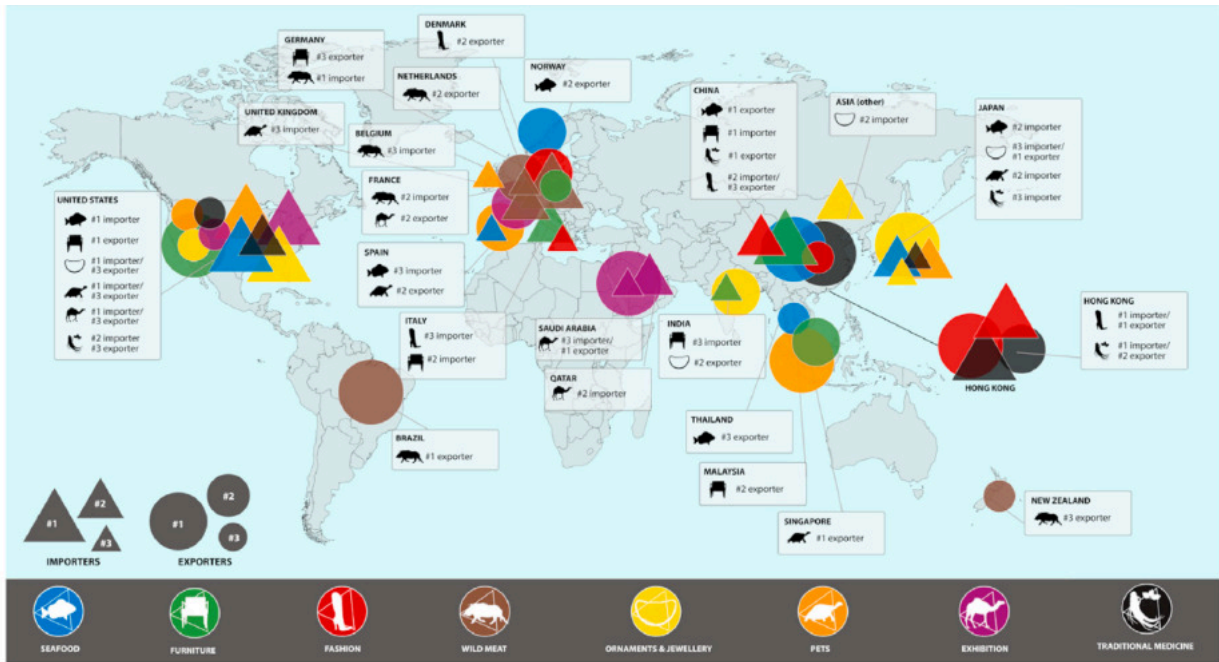
the rainforest for the python skin trade [38]. **But these benefits are incidental, the trade simply provides employment opportunities that may or may not go to local labour. This is the same in any other industry, be it mining or tourism.**

In a capitalist system of biomass extraction there is nothing special about local communities.

Extraction rights are negotiated between business and governments and local communities may or may not get access to employment opportunities. Indeed, far too often local communities lose access rights once a business gains extraction rights, undermining both subsistence provision and local trade. This doesn't have to be just through exclusion from access (such as through fencing) but can also happen through displacement.

Think about local fishermen fishing in the EEZ of a country. If fishing rights to their fishery are given to (usually foreign) trawling operators, their fishery will become non-viable in no time due to the indiscriminate and destructive nature of trawling. This has become a major problem in West Africa, where it has led to an explosion in the wild meat trade [39].





**Fig. 4.** Top three import and export countries/territories for each wildlife trade category from 1997 to 2016 by total US\$ trade value. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

What is even more fascinating about these two myths is that the two prime examples for local community benefit used to perpetuate myth #1, namely the trade in crocodiles and pythons, so clearly contradict myth #2! The trade in crocodile and python skins exists solely for the benefit of a handful of luxury brands, with LVMH and Kering the main two companies buying the skins (and owning both crocodile and python farms) to produce luxury shoes and handbags. In June 2023 LVMH had a market capitalisation of US\$420 BILLION and Kering of US\$70 BILLION, so they most certainly are not small businesses that cannot afford regulation.

Of course, small businesses are involved in the supply chain of most wildlife trades, but that is the same in most industries and is not an argument against regulation. The regulatory burden needs to fall on those who can afford it and in the case of the wildlife trade that will be large companies in wealthy countries, which are the major importers in this trade (as in most trades) and who make the largest profits from this trade.

How do we know that? Because the trade in wildlife is dominated by the countries with the the largest GDP. The map from [40] reproduced above provides a great overview of the top importers and exporters for the different categories of the wildlife trade. The US, the EU, China and Japan clearly dominate this trade. In order of mentions in the top #3 in each category we find: USA (10), China/HK (10), Japan (4), Spain (2), Italy (2), India (2), France (2), Germany (2), Saudi Arabia (2), Belgium (1), UK (1), Qatar (1), Norway (1), Thailand (1), Brazil (1), Netherlands (1), New Zealand (1), Singapore (1). **This is a rich country trade. Apart from some oddities, like New Zealand being the #3 exporter of wild meat thanks to its massive deer farming industry, all countries are out of the top 25 by GDP.**

Whilst this picture already clearly points towards companies that can afford the degree of regulation needed to stop overexploitation, we still need to look into the size of the players involved. We will start with seafood and timber and then take a look at fashion in the next section, thereby covering the 3 largest trades by value.

## The State of Fisheries and Seafood as Big Business

Thanks to a recent presentation by Skretting CEO Therese Log Bergjord [41] we know that 24 companies in the seafood business each have a turnover in excess of US\$1billion. The largest, Maruha Nichiro of Japan, has a turnover of US\$7.2billion and a market capitalisation of US\$1.2billion. Seafood is not as outlandishly profitable as top-end luxury fashion, but the company still made a tidy profit of US\$290million. Compare that to Kering, with around double the annual revenue of Maruha Nichiro (US\$15billion in 2020), made a profit of US\$3.8billion – over 13 times higher.

The fourth-ranked on her list, Mowi (formerly Marine Harvest) of Norway is the world's largest salmon producer, commanding a 20% market share. With a focus on salmon (a luxury seafood), Mowi is more profitable – EBITDA is in excess of US\$500million on revenue of US\$4billion in 2021.

Looking at this list it is already obvious that seafood is big business and dominated by large companies, but that still leaves the question 'What about all those small fishing boats?', all those 'hard-working' fishermen that are always presented by the mainstream media when they talk about fishing. Well, the EU is very helpful in providing a detailed breakdown of its fishing fleet [42] from which we can learn that the total fleet comprised 65,500 vessels in 2017 landing a total catch of 5.3million tonnes. **Of those vessels nearly 80% (49,500 vessels) comprise the small-scale coastal fleet, the proverbial boats from the news. Yet these vessels land only 8% of the total catch. The rest, so to say, is big business and big boats.**

Looking towards China, it accounts for one-third of the world's reported fish production as well as two-thirds of the world's reported aquaculture production. China's 2005 reported catch of wild fish, caught in rivers, lakes, and the sea, was 17.1

Name	Country of Origin	Ownership	Revenue in USD million*
1 Maruha Nichiro	Japan	Public	7,158
2 Nippon Suisan Kaisha (Nissui)	Japan	Public	5,707
3 Thai Union Group	Thailand	Public	3,752
4 Marine Harvest	Norway	Public	3,694
5 Mitsubishi Corporation	Japan	Public	3,400
6 Dongwon Enterprise	South Korea	Public	3,163
7 Red Chamber Group	United States	Private	2,575
8 Nutreco (Skretting)	Netherlands	Private	2,543 <sup>1</sup>
9 Trident Seafoods	United States	Private	2,400
10 Austevoll Seafood	Norway	Public	2,186
11 Kyokuyo	Japan	Public	2,123
12 Cargill Aqua Nutrition	United States	Private	2,140 <sup>8</sup>
13 Charoen Pokphand Foods	Thailand	Public	1,917 <sup>10</sup>
14 Marubeni Corporation	Japan	Public	1,900
15 Pacific Seafood Group	United States	Private	1,370
16 Cooke Aquaculture & Cooke Seafood USA	Canada	Private	1,339
17 Schouw & Co (BioMar)	Denmark	Public	1,263 <sup>11</sup>
18 Nueva Pescanova	Spain	Public	1,134
19 Tri Marine International	United States	Private	1,050
20 SalMar	Norway	Public	1,044
21 Labeyrie Fine Foods	France	Private	1,040
22 Shanghai Fisheries General Corporation	China	State-owned	1,038
23 Royal Greenland	Greenland	State-owned	1,005
24 F.C.F. Fishery	Taiwan	Private	1,000
25 High Liner Foods	Canada	Public	956
26 Bumble Bee Foods	United States	Private	955
27 Yokohama Reito (Yokorei)	Japan	Public	940
28 Wales Group (Sea Value & Sea Wealth)	Thailand	Private	896
29 Parlevliet & Van der Plas	Netherlands	Private	848
30 Nomad Foods	United Kingdom	Public	800



million tonnes, far ahead of the second-ranked nation, the United States, which reported 4.9 million tonnes that year [43]. The Chinese distant water fishing fleet (which operates outside the country's already huge EEZ) is the world's largest with nearly 17,000 vessels [44]. In comparison, the EU distant water fishing fleet has just 255 vessels.

**To make matters worse, China, like the EU, US, Japan and South Korea, heavily subsidises its fishing fleet to make this level of catch viable.** According to the WTO, governments hand out US\$35 billion every year in subsidies, two-thirds of which go to commercial fishers as capacity-enhancing subsidies. The bulk of these capacity-enhancing subsidies are fuel subsidies, the only way to make most distant water fishing economically viable [45]. And why is China reliant on distant water fishing? Because its fisheries are the most depleted in the world [46].

**China's fishing industry is not yet as concentrated in the hand of big business as in the other main**

**fishing nations, but the process is well underway. The total number of fishing vessels reported by China's Ministry of Agriculture and Rural Affairs was 23% lower at 560,000 vessels in 2020 compared to a year earlier [47].** As stocks deplete small-scale coastal fishing becomes less viable and fishers are forced to give up their boats. This is evidenced by the falling catch in Chinese waters – down 5% in 2020 on the year prior.

In summary, fishing is not just big business, it is heavily subsidised big business with subsidies that not only further deplete already depleted stocks, but also cause massive greenhouse gas emissions. To see what this is leading to in relation to the state of fisheries, we can now draw on the most comprehensive assessment conducted to-date thanks to Andrew and Nicola Forrest's Minderoo Foundation which published its Global Fishing Index for the first time in 2021 [48].

According to widely cited FAO data on fishing around 35% of fisheries have been considered

overfished [49]. The much more comprehensive assessment of 1,465 fish stocks across 142 countries carried out for the 2021 Global Fishing Index [50] showed that the situation is far worse. According to this assessment **at least half of all fisheries that could be assessed are overfished and 10% are on the brink of collapse**. With insufficient data for nearly half of global fisheries to carry out an assessment, the situation could be even worse than that.

**Not only is the situation truly dire, but the fact that not enough data is available to properly monitor half of all fisheries across the planet is a sad indictment of our relationship to nature and especially to the oceans.** According to Minderoo, 1 in 5 fishing nations do not require fishers to report any catch data and half do not independently verify catch information. Further, 40% of countries do not formally assess most of their fish stocks and even the ones that do tend to rely on data provided by fishery businesses, not independent scientific sampling (which would have to include sampling across the whole population range, not just fisheries where fish is most abundant by virtue of economics).

In addition, the fishing industry, with the complicity of the UN FAO, uses a misleading definition of sustainability, the notorious Maximum Sustainable Yield (MSY). The self-serving concept behind the MSY is simple: populations grow fastest well before they reach carrying capacity. Hence most commercially targeted fish are considered suitable to harvest at a MSY between 20 and 50% of the carrying capacity of their population [51].

That such an approach has everything to do with the economics of fishing and nothing to do with ecological sustainability of fish populations is obvious. Knowing further that industry relies on simplistic models to estimate population size and that current management practices cannot even

guarantee fishing at MSY levels, we should not be surprised by the projection that *“under current management [practices], 88% of stocks would be overfished and well below their target biomass in 2050”* [52].

This overexploitation of fish stocks is driven by the wealthy countries that can afford large, subsidised fishing fleets with industrial scale processing at sea. That these countries and the businesses that operate the fleets have no interest in sustainability or even observing existing constraints can be easily seen from the fact that vessels from Spain, the US, Taiwan, and China are the worst offenders when it comes to ‘going dark’, switching off the transponders that signal where the ships are operating [53].



**It could be argued that the significant shift to aquaculture in recent years is going to improve the situation, but there are two counterarguments to this. First, the state of global fisheries remains in decline and overfishing continues to rise, despite massive investments in aquaculture (especially in China). Second, aquaculture can be as destructive to marine ecosystems as trawling – it can wipe out pretty much all other marine species if conducted without sufficient regulation and oversight.**

The example of salmon farming is well known in this respect. Not only do salmon farms extensively pollute the waters they are conducted in, but on top of that salmon are predators and are fed fish meal, which in turn comes from trawling, the most destructive form of fishing [54].



Not only is seafood indeed big business, conducted mostly by large businesses and responsible for devastating impacts on fish stocks, but there is also a long list of practices that further damage marine environments beyond the extraction of biomass.

For example, the industry routinely discards used nets at sea, is known to employ slave labour and creates devastation through indiscriminate 'bycatch'. Bottom trawling, which is responsible for 26% of the total marine catch of fish [55], is the worst practice in relation to bycatch and also causes seabed damage. In shrimp trawling, the level of bycatch can be as high as 90%.

Aquaculture extensively uses antibiotics and anti-parasiticides even when conducted in open water and is also known to aid the laundering of high-value wild-caught species in marine ranches [56]. In addition, farm escapees lead to the introduction of alien species in wild populations. And salmon farms routinely set off underwater explosives to scare seals away [57].

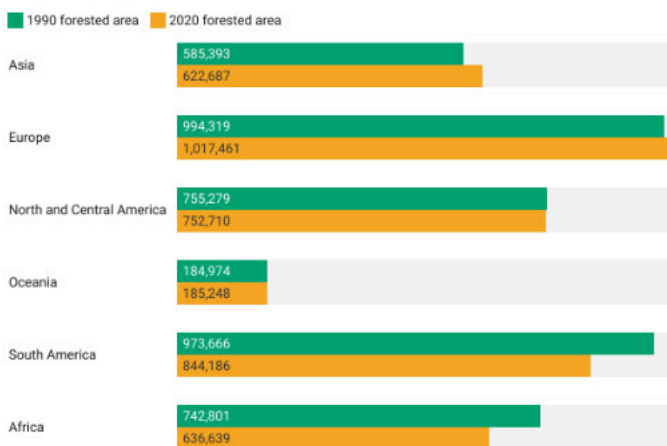
Most of these effects could be contained with proper monitoring and regulation, but businesses fight those with all their might (and usually win) as they would reduce profit.

## Deforestation has a Business Case

Deforestation has long been a major problem through the loss of high-biodiversity tropical ecosystems. Practically all major deforestation today takes place in South America, sub-Saharan Africa and South-East Asia. The forest cover in all other parts of the world is either constant or growing according to FAO data, so it makes sense to focus on tropical timber when analysing the impacts of the timber trade [58].

### Forests are expanding or holding steady in cooler latitudes but shrinking in Africa and South America

Tropical forest loss is a bigger contributor to global emissions than loss of forests in temperate climates, in part because tropical trees hold more carbon in their biomass than in soil. Tropical forests also are important for biodiversity. They contain many more species on a per-area basis than other forest types.



Forest area in thousands of hectares. One hectare = 2.5 acres.

Chart: The Conversation, CC BY-ND • Source: FAO

At the same time, we need to be cognisant of the fact that timber plantations are not intact ecosystems, they are monocultures similar to industrial agriculture. According to FAO data, plantation forests only make up 3% of the global forest area of 4060 million hectares and only 11% of the 1150 million hectares designated as production forests [59]. These plantations provide one third of the timber used in construction and paper/pulp production [60].

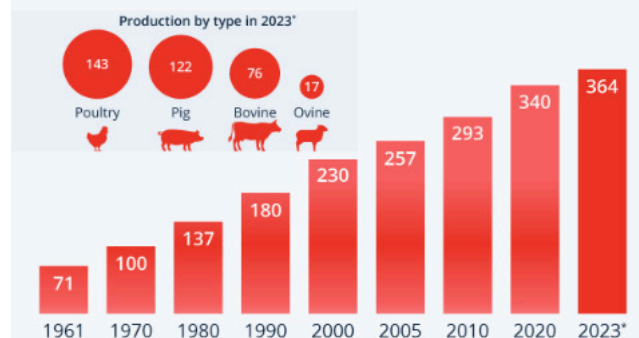
For these reasons, we will focus on deforestation in the tropics for cattle ranching, soy/palm

plantations and the use of tropical hardwood for furniture. The primary deforestation driver in these areas is the legal and illegal land clearing for beef ranching, together with the associated production of soy for animal feed [61]. This primary driver applies mostly to Brazil and other South American countries. Deforestation in Africa is mostly the result of timber exports to China and India for use in furniture and in South-East Asia the major driver is land clearing for palm oil production.

Clear felling or clearing through burning are completely indiscriminate in their destruction, devastating once vibrant tropical ecosystems that are home to thousands of species of plants and animals. An area of high-value biodiversity is converted into monoculture that basically only supports cattle and grass, or soy/palm. Of course, this same land conversion happened in the Global North centuries earlier, so lecturing the likes of Brazil and Indonesia about deforestation is hypocritical, especially since the beef, soy and palm oil get exported to supply the demand in the Global North [62].

### The Growing Global Hunger For Meat

Worldwide annual production of meat (in million tonnes - carcass weight equivalent)



\* Forecast

Source: FAO



statista

However, the impact of continued agricultural expansion is devastating. The Amazon rainforest had lost more than 870,000 square kilometres of primary forest cover by 2018 [63] and the loss of forest areas accelerated in Brazil under President Bolsonaro. Beef production is a massive business and JBS is the biggest meat producer in the world. According to an analysis by the Guardian [64]:

*“...cattle slaughtered in the Amazon by JBS were worth about \$5bn in 2016 while they were still in Brazil, while JBS’s closest competitors, Minerva and Marfrig, processed about \$600m and \$1bn’s worth respectively. The value fell dramatically in 2022, largely because of exchange rate fluctuations, to \$3.9bn for JBS, \$547m for Minerva and \$709m for Marfrig. But this is just the value of the beef coming out of the slaughterhouse; far more value will be added further along the complex supply chain, and by an overwhelming margin the economic value of this industry is being realised outside Brazil, on dinner plates at restaurants in Beijing and New York.”*

JBS has a market capitalisation of US\$40billion, Minerva of US\$6.7 billion and Marfrig of US\$4.7 billion. These are all large, global corporations. They are not directly responsible for the illegal conversion of forests, but it is their demand for beef that drives the expansion of cattle ranches they buy from [65]. If they wanted to, these three companies could use their massive buying power to demand environmentally responsible business practices from their suppliers. But that would go against their inherent desire to increase sales and profits.

As in the case of beef, the deforestation for soy plantations is driven by global demand, in this case by the fast-growing demand for animal feed and vegetarian products. Cargill, the world’s largest crop trader, supplied 2.6 million tonnes of

Brazilian soy to the EU in 2018 [66]. Global Witness finds:

*“The bulk of this soy comes from the Cerrado, one of the most ecologically threatened regions of Brazil and home to five percent of the world’s biodiversity, including jaguars, giant armadillos and tapirs. Expansion of soy production is thought to have led to the destruction of 17,000km<sup>2</sup> of forest and other native vegetation in the Cerrado between 2006 and 2017.”*

Equally, the largest producer of soy in Brazil, SLC Agricola, a company with a US\$8 billion market capitalisation, “cleared more than 30,000 hectares of forest in the Brazilian Cerrado between 2011 and 2017, an area the size of the Maldives. It cleared a further 1,355 hectares in the same region between March and May 2019.” [67]. The problem is not necessarily that some or much of this land clearing is illegal, the problem is that it is taking place simply because of ever-growing demand and without consideration of the long-term consequences for the Amazon and other tropical rainforests.



The same issue applies to the growing appetite for palm oil and the conversion of rainforests in Indonesia and Malaysia, where 85% of the world's palm oil is produced, to plantations. Again, this is big business. Wilmar International, dubbed *"the biggest and dirtiest palm oil trader in the world"* by Greenpeace, has allegedly been sourcing palm oil from 18 different companies responsible for deforestation [68].

But Wilmar is an intermediary, the ultimate demand comes from the biggest consumer brands in the world such as Colgate-Palmolive, General Mills, Hershey, Kellogg's, Kraft Heinz, L'Oreal, Mars, Mondelez, Nestlé, PepsiCo, Reckitt Benckiser and Unilever [69].

Palm oil is mostly used in foods (like chocolate, margarine and cooking oils) and in cosmetic products (soaps and cleansers). **Since 1980 the amount of land the world uses to grow palm has increased massively from 4 million to 29 million hectares in 2021** [70]. This is not a huge area

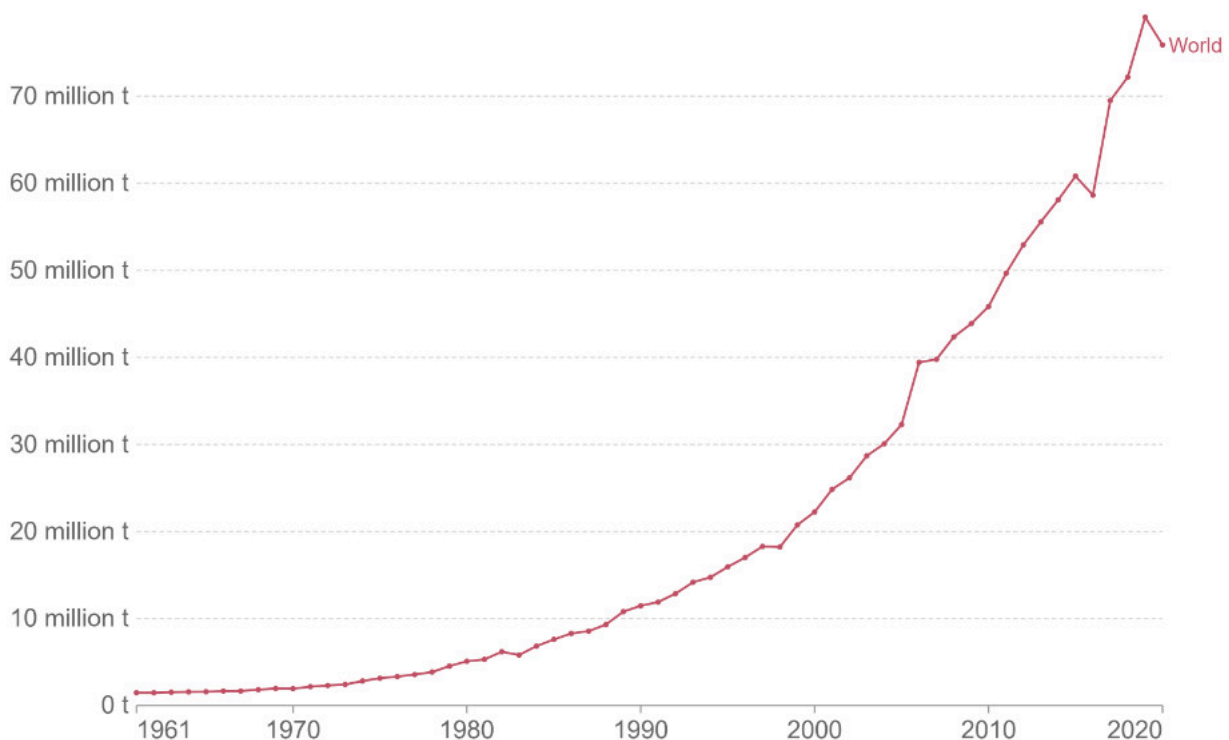
compared to the overall land use for oilcrop production (around 10% of the total), but palm can only be grown in a narrow band around the equator, the domain of tropical rainforests, an area of high value from a global biodiversity perspective.

The only way to grow more palms is to cut down more rainforest and this loss is irreversible in human timeframes. The plantation sector – palm oil and pulp – is the single largest driver of deforestation in Indonesia. Around 24 million hectares of rainforest was destroyed in Indonesia between 1990 and 2015 [71], according to official figures released by the Indonesian government.

The second, smaller driver of deforestation is the demand for wood products (primarily for sawn logs and pulp), which again includes a massive illegal logging component [72]. West Africa is the main hotspot now that Madagascar has in essence been deforested to the point where it no longer can provide enough supplies to satisfy demand.

## Oil palm production

Oil palm production is measured in tonnes.



Source: Food and Agriculture Organization of the United Nations

OurWorldInData.org/agricultural-production • CC BY

The main destinations for these logs are China, Italy and India (and more recently Viet Nam). China and India are the two major manufacturers of furniture made from tropical woods. Italy used to be the world's largest furniture exporter, but now ranks in second place behind China. The main source countries today are Nigeria, Ghana, Gambia, Sierra Leone, Burkina Faso, Senegal and Cameroon [73].

Whilst little information is publicly available about the Chinese manufacturers and their size, as most of them are privately held companies, this is not the case for the Italian manufacturers. Of the 20 largest Italian furniture manufacturers, 15 had revenues in excess of EUR\$100 million in 2016 [74]. Natuzzi, the largest Italian furniture manufacturer had revenues of US\$500 million in 2018 with a gross profit of US\$140 million. Again, we are not talking about small companies in the context of the trade in tropical sawn logs and the derived furniture.

The legal timber trade in tropical hardwood on the exporting countries' side is mostly conducted by relatively small businesses, there appears to be no vertical integration of supply chains as can be found in the large timber companies that manage plantations for construction timber and paper/pulp products.

At the same time the 'turning a blind eye' behaviour of the much larger and wealthier importing businesses (see Indonesia example in box) needs to be questioned, given that the level of illegal deforestation and illegal trade in CITES listed tropical timber species has been extensively documented by UNODC and other agencies.

#### Indonesia, Deforestation and COVID19

In May 2020, at the height of the first wave of the pandemic, the Indonesian government made timber export regulations less strict, **withdrawing the obligation on timber and wood product companies to provide 'legality assurance' documentation with their exports [75]; this was done under the guise of a Covid-19 trade stimulus strategy.**

This regulation change made already opaque supply chains even more open to illegal logging and made access to forests easier for both legal and illegal harvesting of wildlife. The government confirmed timber companies only have to provide legality assurance documentation if customers ask them to do so. Given that too many businesses appear to operate a "don't ask, don't tell" system in relation to their suppliers, it is unclear how many businesses will insist on such proof.

A 2020 Refinitiv Report [76] into the scale of green crime in company supply chains, revealed that **63% of respondents agree that the economic climate is encouraging organisations to take regulatory risks in order to win new business.** This finding confirms why it is so easy to launder illegal product into legal supply chains.

In parallel with this change in legality assurance, the Indonesian government is censoring scientists who question official claims about the country's conservation of endangered species and scale of deforestation [77]. This has serious implications for the trustworthiness of CITES Non-Detriment Finding research carried out in Indonesia as a means to justify the current trade in endangered species from the country.



## Section 4

# Luxury Fashion

Perhaps the industry that has the most to gain by trying to project that sustainability is currently something more than an ideology is the luxury sector. In 2017, Kering's chairman and chief executive François-Henri Pinault said, *"I do consider the luxury segment... is leading the race in sustainability, because we have the resources"*, continuing, *"But again, what is very complicated in the fashion industry is that it's not integrated. It's a value chain with many, many players. And what is striking, and this is the first learning from our EP&L when we released it for the first time [2015], 93 percent of our footprint is outside our legal boundaries."* [78].

For over a decade the fashion industry has tried hard to push its sustainability credentials, with the unquestioning help of the fashion and mainstream

media [79] who are both reliant on the industry's advertising budgets. It has also created a number of sustainability initiatives.

In 2019, and with great fanfare, French President, Emmanuel Macron proposed a mission to François-Henri Pinault to bring together *"a global coalition of companies in the fashion and textile industry (ready-to-wear, sport, lifestyle and luxury) including their suppliers and distributors, all committed to a common core of key environmental goals in three areas: stopping global warming, restoring biodiversity and protecting the oceans."*

'The Pact' [80] website talks about best efforts that are concrete (i.e. visionary but achievable) and that intend to directly address each of the priority areas. It goes on to say: *"The Pact will not reinvent the wheel but create an overarching*

*framework for action*”, with the aim to ensure that new actions will fill the ‘gaps’ across fashion supply chains.

One stakeholder missing from the collaboration is CITES, which seems a glaring omission given endangered species are the raw materials in some of the luxury fashion industry’s most expensive apparel. The industry has a blind spot in relation to its use of wild species, be it by accident or design.

## BIODIVERSITY



The Fashion Pact sparks first comprehensive industry commitment to set Science Based Targets for Nature enabling measurable decrease of impact on biodiversity

The Fashion Pact’s first-year progress report [81], in the summary section, **First Progress of Signatories in Our Pillars** for the pillar of biodiversity, states: ***“The Fashion Pact sparks [the] first comprehensive industry commitment to set Science Based Targets for Nature enabling measurable decrease of impact on biodiversity.”***

This is a statement for which they should feel thoroughly ashamed. Trillions of dollars have been made over decades from the sale of products made from the skin, fur and feathers of endangered and exotic species. Yet, the industry who profits from this has taken until 2020 to create **the first** comprehensive industry commitment to set targets to enable a measurable decrease of impact on biodiversity.

But this statement isn’t just a failure on the industry’s part. It is also a failure of CITES, the

global regulator of this trade in endangered species (which was launched in 1975) and the global conservation organisations who have supposedly worked on this with the fashion industry over the years. Given it has taken until 2020 for the first comprehensive industry commitment to be set, the question has to be asked, why has the CITES regulator had so little influence on how industries use endangered species in their product lines?

As one previous CITES Secretary General stated, *“CITES regulates trade in certain species to ensure the trade is legal and not detrimental to the survival of that species...It seeks to ensure that any such international trade is sustainable”* [82]. If the CITES had regular strategic reviews (rather than just one in its 50 years of operation), the convention’s lack of power in driving any real changes to business practices would have been apparent.

In fashion industry publications, reports, announcements, talks and conference proceedings, if wildlife does feature – and it almost never does – it is only in the context of animal welfare. The industry consistently ignores the lack of supply chain transparency, the ease of laundering illicit products into the legal marketplace and the lack of proof of sustainability.

As an elite networking group, the Fashion Pact shouldn’t be singled out. Endangered species are not covered in reports assessing the environmental and social performance of the fashion industry such as Global Fashion Agenda’s (GFA) publications, CEO Agenda [83] or the Pulse of Fashion Reports [84].

In correspondence with Eva Kruse [85], at the time she was CEO of GFA, she said ***“The legal trade in endangered species is a critical issue and not one we have engaged with in depth before here at Global Fashion Agenda. With regards to biodiversity as a topic, we find that our***

***community of brands and retailers generally hold a low level of knowledge in this area.”***

Ongoing monitoring of GFA’s reports and summits shows little has been invested in changing the fashion industry’s “low level of knowledge” about the trade in endangered species. Similarly, the use of endangered species is not included in a UK parliament report titled **Fixing Fashion: clothing consumption and sustainability (Fashion: it shouldn’t cost the earth)** [86]. This report contains only two mentions of the word ‘wildlife’ (page 9) and only in relation to climate change. There is nothing about wild species who provide the raw materials for the (luxury) fashion industry.



We found the same glaring omission when Copenhagen Fashion Week (CFW) launched a 3-Year Sustainability Action Plan (2020-2022) [87] which had no mention of sustainability in the use of wild species. Nothing much has changed here. Its autumn – winter 2023 sustainability requirements for animals are included in the section on Smart Materials Choices [88].

## Smart Material Choices

With the planet’s resources becoming increasingly scarce and planetary boundaries being exceeded, smart material choices play an integral role in reducing harmful impacts on people and planet. Choices related to a brand’s material consumption and production processes have the highest environmental impact in the value chain, which is why the fashion industry requires change at scale at a speed not yet seen.

We use assessment tool(s) to monitor and minimise negative social and environmental impacts along the entire garment lifecycle and value chain.
Please provide how much of your collection is made of pre- and/or post-consumer waste.
Some of our collection is designed with mono-fibres in mind.
Please provide how much of your fabrics/materials are sourced close to your target markets.
Please provide how much of your materials you are exploring as new/next-generation materials to improve your material mix to reduce negative social and/or environmental impacts.
We consider the five freedoms of animal welfare when sourcing materials from animal origin.
We eliminate coatings and finishes if the product’s intended use does not require them to perform.
We have sought expert knowledge to guide our material choices.
We source raw materials from regenerative agriculture.
We ensure that our supply chain is deforestation-free.

This glacial progress is in stark contrast to the fact that the industry makes extensive use of CITES listed species, such as pythons and crocodiles. These two trades alone are worth nearly 2 billion US dollars at the raw materials end. In addition, luxury fashion now uses shagreen - sting ray skin - another CITES listed species, but there is minimal data on the value of this trade.

Kering and Burberry in 2022 spoke about a “year of maturity” in sustainability. Maybe this was in response to sustainability experts such as Ken Pucker questioning if the sustainability strategy has any real validity in its current form [89].

As with other similar initiatives, luxury fashion companies are now quietly withdrawing from The Fashion Pact. Rather than “leading the race” in sustainability because they have the necessary resources, the lack of media attention of the sector’s use of endangered and exotic species has resulted in the such initiatives “falling at the first hurdle”.



## The Exotic Skin Trade for Luxury Fashion

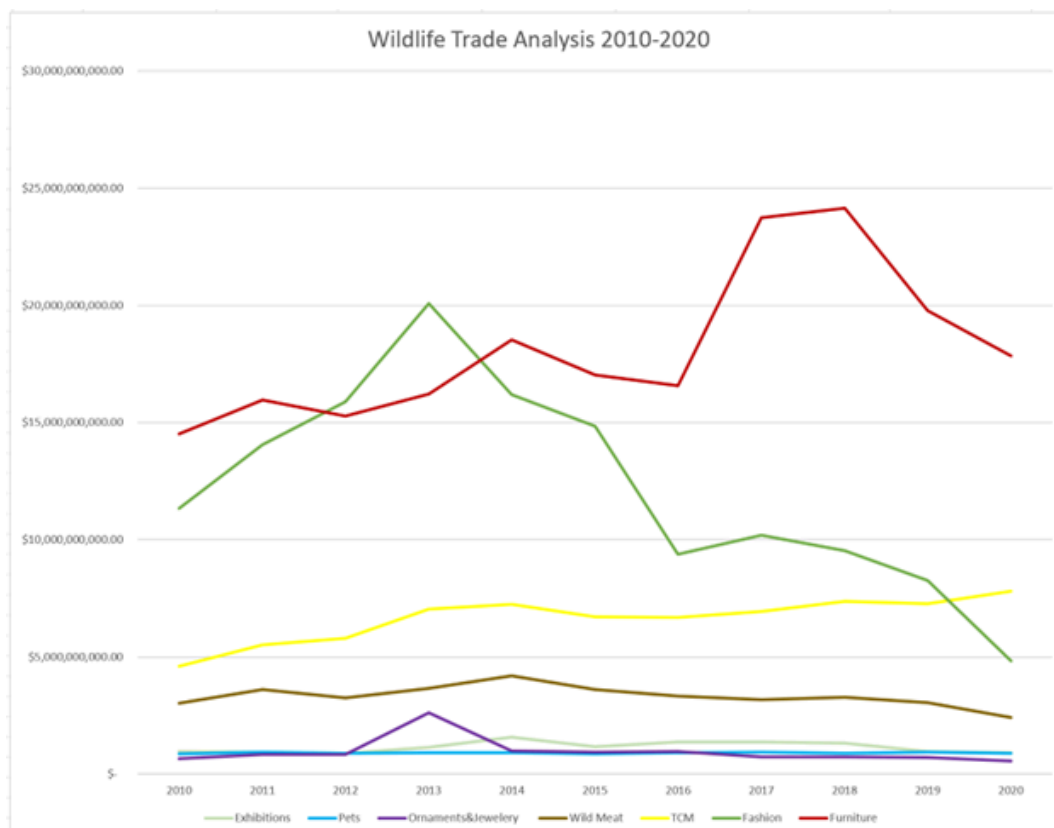
The trade in exotic skins and fur used to be the third largest international wildlife trade, but it declined below the level of the trade in TCM related products for the first time during the pandemic in 2020. We will use this trade to illustrate a myriad of missed opportunities to properly decouple it from the illegal trade through establishing transparent supply chains and tracing of shipments or individual skins. Businesses involved in this trade have been more than happy to simply comply to minimum CITES requirements instead of investing in supply chain monitoring to stamp out the illegal trade.

That both the fur trade and exotic leather trade are luxury trades goes without saying. Products such as jackets, shoes, handbags, purses and belts made from python skin or crocodile leather are among the most expensive fashion luxuries money can buy. Fur products such as coats made from mink or fox have always been luxury items. Fur

trims, recently popular in China, are used to elevate fashion products to luxury status. Both types of products are almost exclusively marketed by the top luxury brands. In fact, luxury conglomerates such as LVMH and Kering have started to manage their own crocodile and python farms to secure supply.

The true value of this trade is not fully represented in the graph below, which only covers the raw materials end of the value chain [90]. Once skins and fur are incorporated into manufactured products and brand names are applied, their value increases massively. The snake that may get sold to a processor for \$30 in Indonesia can result in a \$15,000+ handbag in a brand-name fashion boutique in France or Italy [91].

We will take a closer look at the trade in python and crocodile skins and also briefly examine the issues surrounding the fur trade (which is not regulated by CITES).



## The Python Skin Trade

Despite pythons having been listed for trade restrictions under CITES since the very beginning and despite the fact that they constitute the extreme luxury end of the wildlife trade, the illegal trade remains rampant and poorly monitored. As long ago as 2013, it was conservatively estimated that the legal trade in snake skins was worth US\$1 billion per annum to the EU alone [92]. Once they are manufactured into jackets, shoes and handbags, by the major luxury fashion brands, they sell at eye-watering prices in top-end luxury boutiques.

Even for such an extremely profitable legal trade, the scale of illegal harvesting is known to be significant; just one seizure of illegal python skins in China in 2016 had an estimated worth of US\$48 Million [93]. By some estimates, the illegal trade in mpython skins could be similar in size to the legal trade [94]. **But there is no market for illegal products, the aim of traffickers is to get illegally harvested snakes into the legal supply chains and the known loopholes to do so have remained open for decades.**

Research undertaken because of concerns with this trade raised at CITES CoP17 in 2016 resulted in the report *Assessment of Python Breeding Farms Supplying the International High-end Leather Industry* [95]. The report detailed evidence of countries exporting python with a CITES source code C (captive bred) where there was no known python farming happening anywhere in the country.

Countries such as Lao People's Democratic Republic or Cambodia, have been found to use a CITES source code C on export permits, when there is no evidence of python farming currently in operation in the either country [96]. The report warned that python skin exports using a CITES

source code C from countries other than China, Thailand and Vietnam (for instance Cambodia, Indonesia, Laos PDR, and Malaysia), should *“all be treated with caution until improved data on farms, management and monitoring systems are in place to verify captive production capacities.”*

But these concerns were not new, in 1990 a regional review of supply-side countries in Asia found that python populations in several countries had already declined [97]. The 1990 report discussed that collecting pythons for the skin trade had adversely affected populations and speculated that pythons likely remained ‘reasonably abundant’ in more remote areas not subject to intense collection pressure. It further highlighted some of the key loopholes in the monitoring system and finished by saying a levy system should be investigated because there was evidence that the true value of skins was ‘substantially under-declared’.



The 2016 report again showed just how easy is it to launder illegally harvested snakes into the legal supply chains of some of the richest companies in the world. Research published in 2020 [98] found that between 2003 and 2013, luxury fashion brands had thousands of exotic leather goods seized by U.S. law enforcement; 5,607 individual items, nearly 70 percent of which were exotic leather products. Reptiles accounted for 84 percent of all items, many of which were belts, watch bands, wallets, shoes, and purses. According to the official seizure records Ralph Lauren accounted for 29% of the seized items, Gucci 16%, Michael Kors 10%, Jil Sander 6% and Coach 5%.

The response of the luxury brands was not to invest in cleaning up their supply chains, but instead to (successfully) lobby the US government to suppress access to company and brand information related to seizures! The companies are fully cognisant of the potential damage to their brand and reputation from being seen to be laissez-faire about their complicity in allowing illegal products into their supply chains.

**But cleaning up supply chains is difficult and costly, lobbying government to suppress inconvenient facts is far easier and much cheaper.** It is a sad indictment of the ongoing erosion of regulatory systems when the suppression of company names on illegal seizures can be justified under the guise of commercial in confidence.

Though investments have been made to keep this trade out of the public eye and away from public interest, the python skin trade has received enormous attention from CITES, NGOs and the large industry players (LVMH, Kering) and also from the IUCN and the ITC.

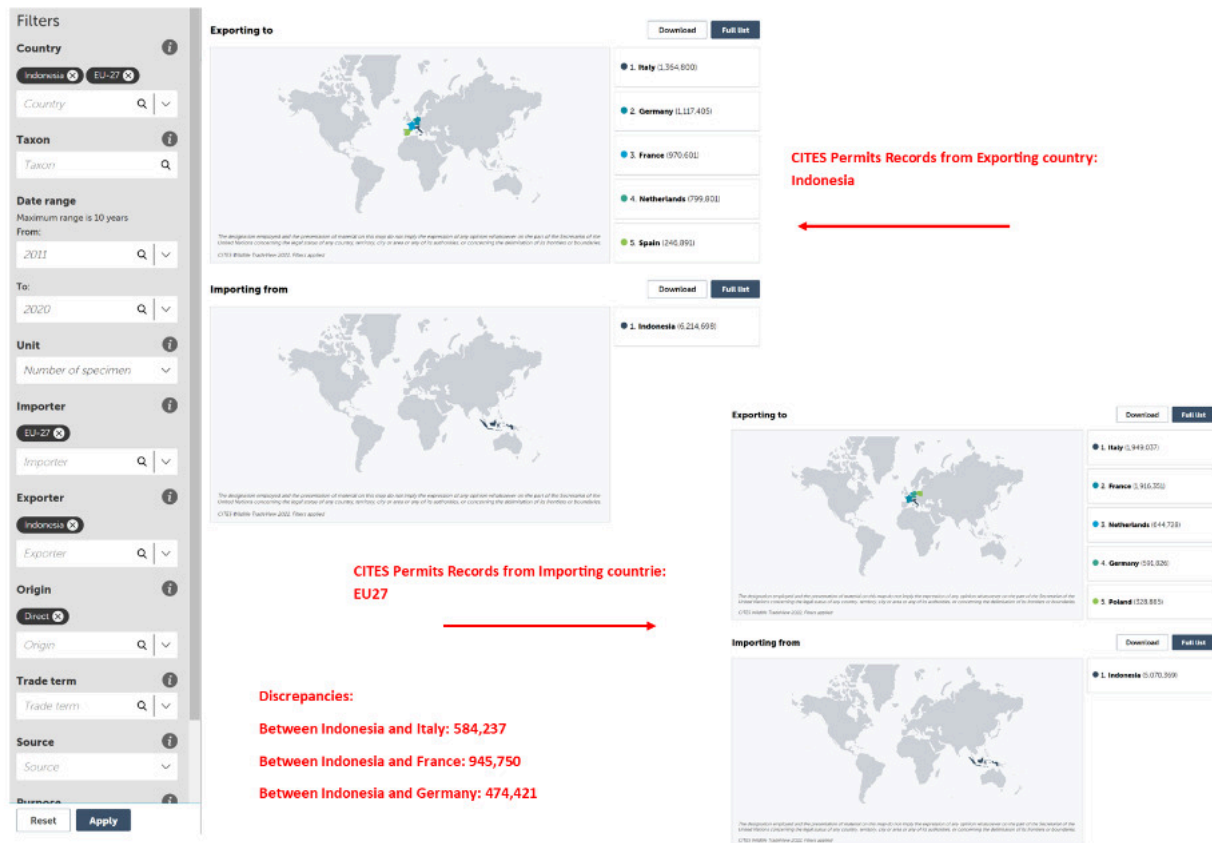
Dozens of comprehensive reports and academic papers have been published over the last two decades, exploring the question of sustainability of current offtake levels (around 350,000 snakes per year from Malaysia and Indonesia alone and 500,000 per year from SE Asia overall) and how to deal with the rampant illegal trade. Farming pythons en masse has been the 'go to' solution to address concerns over wild harvest levels and



numerous options and detailed proposals for tracking individual skins to prevent laundering have been put forward [99].

In a traceable trade system, the numbers submitted to the CITES trade database would be

reconcilable between imports declared by the EU (90-95% of python skins go to the EU) countries and the exporting countries. In the current system, that is not the case, as the graphic below illustrates:



Whilst large-scale python farms have been established in China, Thailand and Viet Nam, their practices remain questionable from a sustainability and legality perspective.

To address ongoing concerns, in late 2013 the Python Conservation Partnership was established; a collaboration between Kering, the International Trade Centre (ITC), and the Boa and Python Specialist Group of the International Union for Conservation of Nature (IUCN). The objective of their collaboration was to conduct research to enable informed recommendations to improve sustainability and transparency of the python skin trade.

In 2014 the first report of this group concluded that, whilst commercial farming of pythons for

their skins appears to be biologically and economically feasible, the absence of strong regulatory measures, monitoring, and enforcement means captive breeding farms for pythons can be used to launder illegally collected or traded animals and skins [100], an illegal annual trade which in 2012 had been credibly estimated at US\$1 billion [101].

It has become nearly impossible to list all the partnerships, collaboration, special interest groups, reports and analyses done on the python skin trade in the last 20 years. Examples and further references can be found here [102] and here [103]. What all of them have in common is that they all conclude with essentially the same recommendations to achieve a legal and sustainable trade:

1. An effective management and monitoring system is required for collection and captive breeding with clear standards for best practice,
2. Use of methodologies that prevent laundering, such as individual skin tagging and radioactive isotope analysis to establish geographic origin,
3. An effective system for end-to-end traceability of skins, and
4. An independent, dedicated funding mechanism to fund the measures above.

**None of this has happened. This is despite the fact that that industry has been part of most of these studies and collaborations, many of which were created under the auspices of high-profile bodies such as the IUCN, the ITC and CITES.**

It would have been trivial for the likes of Kering, LVMH, Prada, Hermès and Burberry to provide the funds to implement any of the recommended schemes for management, monitoring, end-to-end traceability and methods to prevent laundering. These companies make multi-billion dollar profits from products based on wild and endangered species. Yet they did not see the need to spend the money. They prefer to publish meaningless sustainability statements, participate in pointless self-certification schemes and writing reports, instead.

Kering in 2022 published new standards for raw materials [104], including the use of exotic leathers (crocodilians, python, anaconda and

other reptiles). These standards claim that Kering will require complete traceability of skins and verification of source from 2025, but the onus to do this is put exclusively on its suppliers. It also leaves the 'How' (technology, process) to its suppliers, merely stating that *'Suppliers shall agree to second or third party verification of traceability and sourcing claims'*.

**We would implore the reader to pause at this point and really reflect on what Kering Group, a company with a market capitalization of US\$70 BILLION and a gross margin of 24% across all brands, has done here.** After, say, 20 years of total inaction with regards to implementing traceability and source verification, it still cannot contemplate doing anything itself (and thus reduce its gross margin by probably less than 0.1%). Instead, the burden is passed onto suppliers and verification of their claims will be left to third parties.

LVMH, with a market capitalisation 5 times greater than Kering, has taken no additional steps beyond "complying with all CITES regulations", which are clearly not adequate as outlined above. Burberry has stated it is planning a "year of maturity" in sustainability. Yet it is placing leather goods at the centre of its growth strategy, making the supply chain transformation more urgent.

**Even in the case of an immensely profitable trade in a product that could be traced end-to-end through the supply chain, we get 20 years of pledges, promises and no action.**

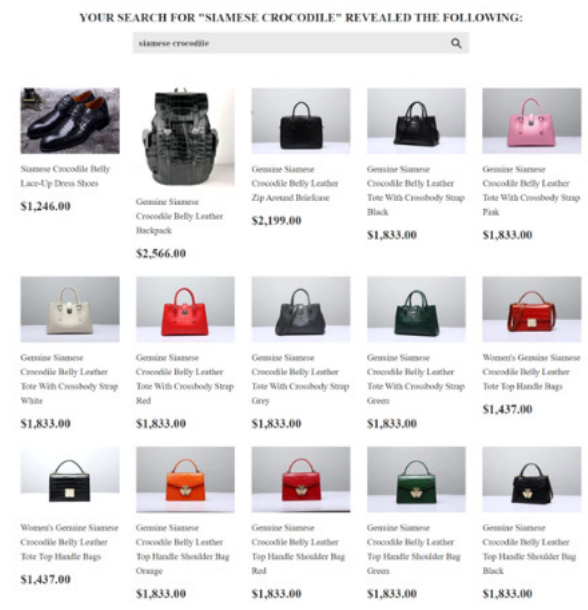


## Siamese Crocodile Skins

Australian crocodiles are the go-to example of the proponents of 'sustainable use' in relation to conservation outcomes and benefits to local communities. Under pressure to produce more examples other than the vicuna, pythons and crocodiles, the CITES Secretariat in 2019 commissioned research to find evidence of sustainable use that contributes to the livelihoods of local communities [105].

Setting aside that they focused entirely on livelihoods and ignored the question of conservation benefits, the results are still very telling. A total of 14 of the 49 examples they managed to find are crocodilians, 4 are pythons and anacondas and 2 are vicunas. **That means even with the most comprehensive attempt yet to find such examples (the report runs to 111 pages) out of some 40,500 species regulated by CITES, it still managed to unearth a total of just 49 examples and relied to 40% on the same three animals that have always been used.**

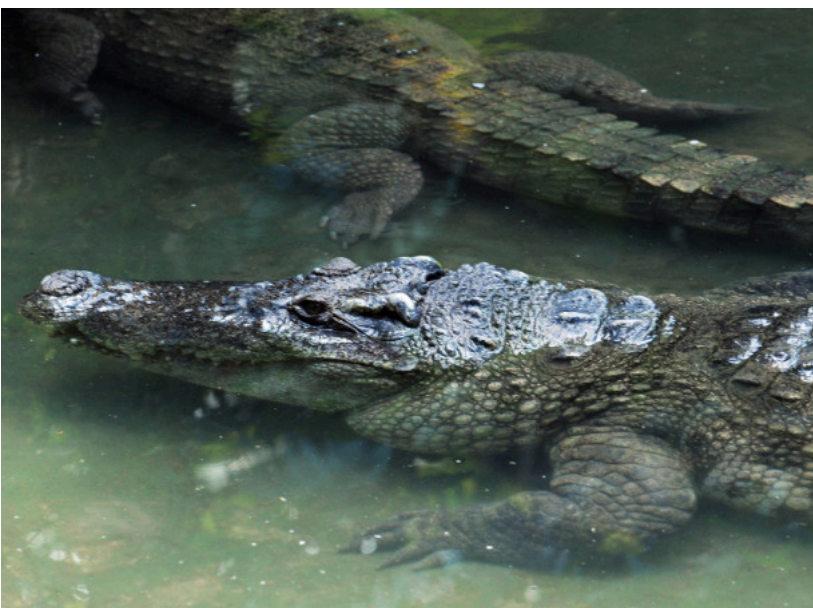
We will look at a counterexample for crocodilians – the Siamese Crocodile – to explore the issues neglected by this approach. CITES is very good at ignoring the commercial dimensions of the trade



when discussing conservation or community benefits, the monetary value of the trade in a species is basically never mentioned. Given that CITES is a trade convention which regulates what mostly amounts to luxury goods, this is a very odd approach.

Siamese crocodiles were once widespread throughout much of mainland Southeast Asia in a range of wetland habitats including slow-moving rivers, lakes, marshes and swamps. The species has now disappeared from 99% of its former range, due to habitat loss to rice farming, an explosion in commercial hunting and the collection of animals to stock crocodile farms starting in the 1950s (to supply the international skin trade). In 1992 the IUCN declared the Siamese Crocodile to be effectively extinct in the wild.

Siamese crocodiles produce fine, soft leather and are easy to breed in captivity. Most wild-caught individuals have been hybridised with other crocodile species, compromising the genetic purity of the vast majority of captive stock as well as severely depleting the wild population. **Today, with fewer than 1,000 adult individuals in the**



wild, it is one of the world's rarest reptiles, reduced to small, fragmented populations in Cambodia, Indonesia, Lao PDR, Thailand and Vietnam.

The conservation community has celebrated a recent sighting of 8 Siamese Crocodile hatchlings in Cambodia [106] and the release of 25 crocodiles into the wild in 2022 [107] as “*raising hope for reptile conservation*”. What they and the fashion leather industry are NOT talking about is that the massive trade in captive bred Siamese crocodiles continues unabated (see graph below).

Thailand exported 1.5 million specimens between 2010 and 2019 and Vietnam half a million. Yet this trade has zero conservation benefit. The conservation status of the Siamese Crocodile has not improved, it remains critically endangered according to the IUCN Redlist.

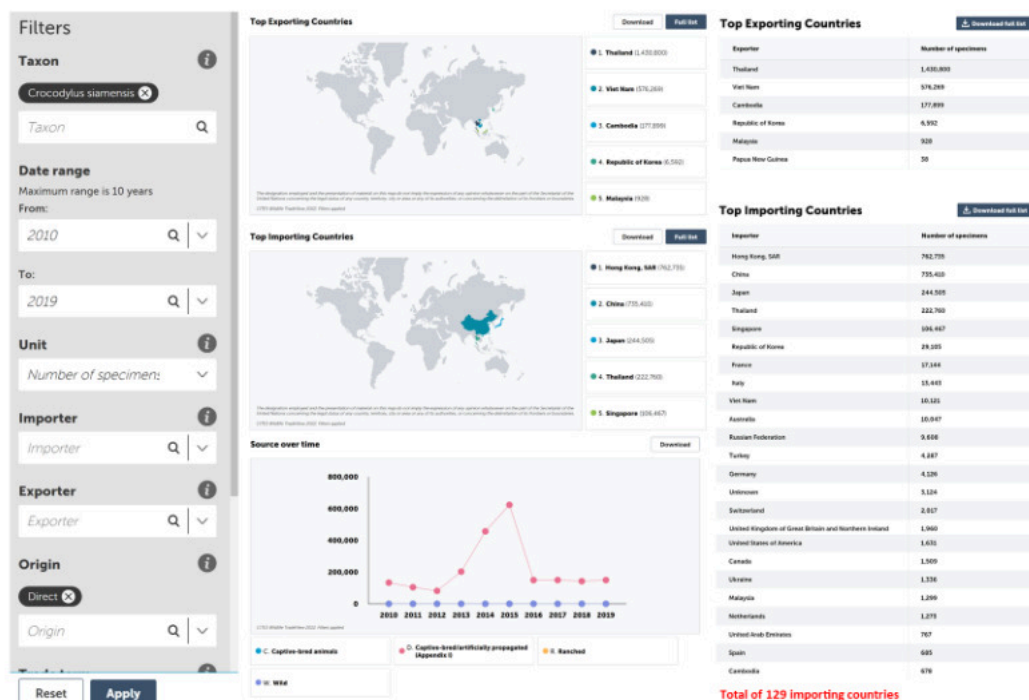
What makes it worse is that for obvious reasons the Siamese Crocodile has been listed on CITES Appendix I since 1975. This means specimens can't be traded for commercial purposes, but the convention provides an exemption for captive bred specimens under Article VII, paragraph 4.

Such captive breeding needs to be approved by the CITES Management Authority of the country but CITES makes no stipulation about deriving any conservation or community benefit from such operations.

**It is obvious that ‘sustainable use’ in this case does not exist, the wild population was wiped out by hunting and to stock the skin trade for the luxury fashion industry. If ‘sustainable use’ was truly what CITES claims it is about, why has no significant money been redirected from industry profits to re-establishing wild populations?**

The products derived from Siamese Crocodile leather are not cheap and make plenty of money for the luxury brands (see image on the previous page).

As long as ‘sustainable use’ that benefits wild populations and local communities remains only an accidental outcome of trade and CITES processes, reports such as the one mentioned above should be seen for what they really are – propaganda to further the ‘sustainable use’ agenda to allow more trade.



## The Fur Trade

The biggest component of the exotic skin trade for fashion products is fur, yet this trade basically has no regulation. The main species traded internationally – mink and fox – are not CITES listed. The main source countries are in the EU and in China, with China also being the main market for fur skins (where they are incorporated into fashion items 80% of which are consumed domestically [108]).

The vast majority of fur traded comes from captive breeding of mink and fox. At the peak the EU had 5,000 farms and Denmark alone had around 19 million minks in 1,500 farms. On a global scale, the trade is truly massive as documented by the HSI fur farming statistics from 2018 [109]:

- Canada – total 1.8m (1.76m mink; 2,360 fox)
- US – total 3.1m mink
- European Union – total 37.8m (34.7m mink; 2.7m foxes; 166,000 raccoon dogs; 227,000 chinchilla)
- China – total 50.5m (20.7m mink; 17.3m fox; 12.3m raccoon dogs)

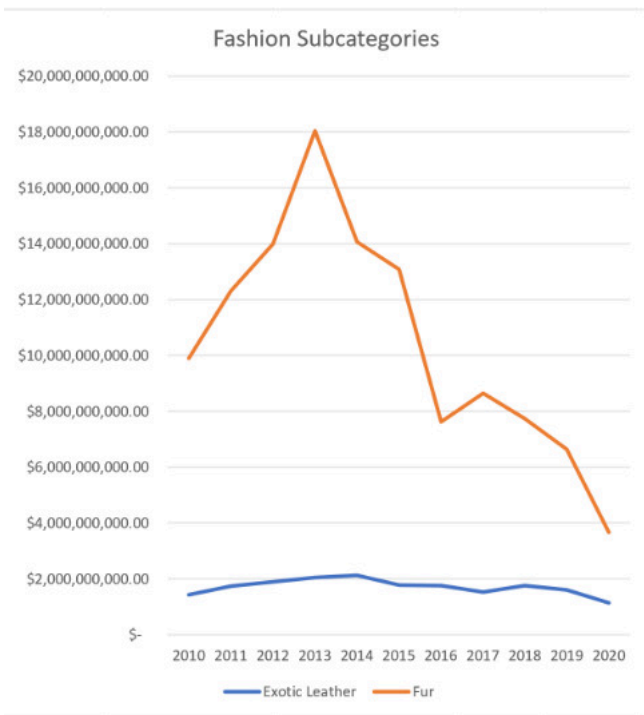
Most of the public's focus on fur farming rightly has been on animal welfare issues. The farming practices are as bad as industrial scale chicken or pig farming – animals being held in tiny wire mesh cages with no ability to engage in innate behaviours (digging, climbing, bathing). Neither China nor the EU have passed any meaningful laws to regulate fur farming. Self-regulation by the fur industry in Europe through its Welfur initiative does not address the cruellest aspects of fur farming [110], it is primarily designed to appease critics yet keep the industry profitable.

It is self-evident that mass-market acceptance of fur relies on consumers being misled and kept ignorant about the true practices of holding and

slaughtering the animals. This applies to farm animals too, but the key difference is that the entire fur industry is an unnecessary luxury – there is no longer a need for fur products to supply warm clothing, we can make better and cheaper cold weather garments from polyester (fleece).

Campaigns by NGOs such as PETA and the Humane Society have affected fur's popularity as they tend to influence the level of demand (together with changing consumer preferences). This happened in the 1980s and again more recently, as can be seen from the graph on the next page [111].





Pelt prices are heavily influenced by demand and demand appears to have peaked in 2013. The total value of the international fur trade dropped by 63% between 2013 and 2019 (pre-pandemic), but the total weight of the fur traded only dropped by 22% over the same period, which means the main driver was dropping prices due to reduced demand.

The international fur trade is dominated by mink (75% of the total trade value in 2013) and the mink trade was further devastated during the early pandemic due to mink catching COVID.

As a precautionary measure, the entire mink farm population of Denmark (the world's largest producer) was culled [112]. This cull of 15 million mink is unprecedented and it might mean the industry (at least in Denmark) is not going to make a comeback any time soon. With the virus becoming endemic and cross-species transmission a key driver of new variants, it may be that the Danish government is unlikely to support the re-establishment of mink farming at the previous scale (especially since the government fully compensated the mink farmers for their economic loss [113]). Denmark allowed the resumption of mink farming from January 2023; it remains to be seen if the industry is rebuilt.

The inherent biosecurity risks of massive scale wildlife farming were and continue to be ignored by the industry. This equally applies to farm animals, with mass outbreaks of bird and swine flu becoming increasingly common across the globe as the industry has intensified its farming practices.





**Whilst China closed most of its captive breeding facilities for wild animals in 2020, it has reclassified mink, fox and raccoon dogs as domestic animals, thus preserving the fur industry in the country [114].** This is despite the fact that mink and racoon dog have both been suspected as potential intermediate hosts for the SARS-COVID-2 coronavirus before it jumped across to humans and caused a global pandemic [115].

Both species are highly susceptible to coronaviruses and respiratory diseases (ferrets, a close relative of minks, are the lab animals of choice for animal studies in respiratory diseases and their treatments). To make matters worse, the meat from both species is routinely sold to food manufacturers for human consumption in China and it is highly questionable that this practice will change simply because the species have been labelled as ‘non-food use only’ [116].

**Given the staggering cost of the coronavirus pandemic globally, it would seem completely unconscionable to continue any form of wildlife farming without introducing stringent animal**

**welfare and biosecurity regulations and enforcing them rigorously. That has not happened and is not going to happen. Industry has squashed the attempt to get CITES to better regulate the trade in live wild mammals through a proposed ‘pandemic protocol’ or the related OneHealth initiative [117].**

With new research pointing to racoon dogs being the most likely intermediate host for SARS-COVID-2 [118] media attention has continued to focus on China’s wet markets and the sale of racoon dogs for food, but few have mentioned the true reasons for the captive breeding facilities, which present an equal risk of new zoonotic viruses. In reality, market stalls worldwide are filled with products whose fur trims are from racoon dogs. The food value of the species is mostly a byproduct of the fur industry.

Despite the massive risks, there have been no reports of proper regulation of captive breeding or trade being enacted in either the EU or China. We continue to play Russian Roulette for the sake of profit.





## Section 5

# The Current Regulatory Framework

The international trade in species of wild flora and fauna is regulated through a UN Convention, the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). It was agreed in 1973 and came into force in 1975. Today CITES has 184 signatories and it was designed to make sure that endangered species are protected from overexploitation through trade.

To achieve this protection CITES was given two core mechanisms – listing a species on Appendix I would preclude all commercial trade in the species and listing a species on Appendix II would require the exporting country to grant export permits only in cases where doing so would not be detrimental to the survival of that species. Listing a new species or changing the Appendix listing of a species requires a two-thirds majority of signatory

countries voting in favour. While the listing process has a scientific foundation, it is ultimately political.

Instead of directly regulating the businesses that conduct the trade, CITES requires all signatory countries to set up a national Scientific and Management Authority under the rules of the convention, which provide recommendations on the species needing protection under CITES and which have the authority to grant permits for import and export. **CITES works on the assumption that all signatory countries have the necessary means to pass, implement and enforce domestic legislation in line with the provisions of the articles. This assumption is clearly wrong.**

While it is mandatory to set up Scientific and Management Authority, it is optional under CITES that signatories set up a dedicated Enforcement

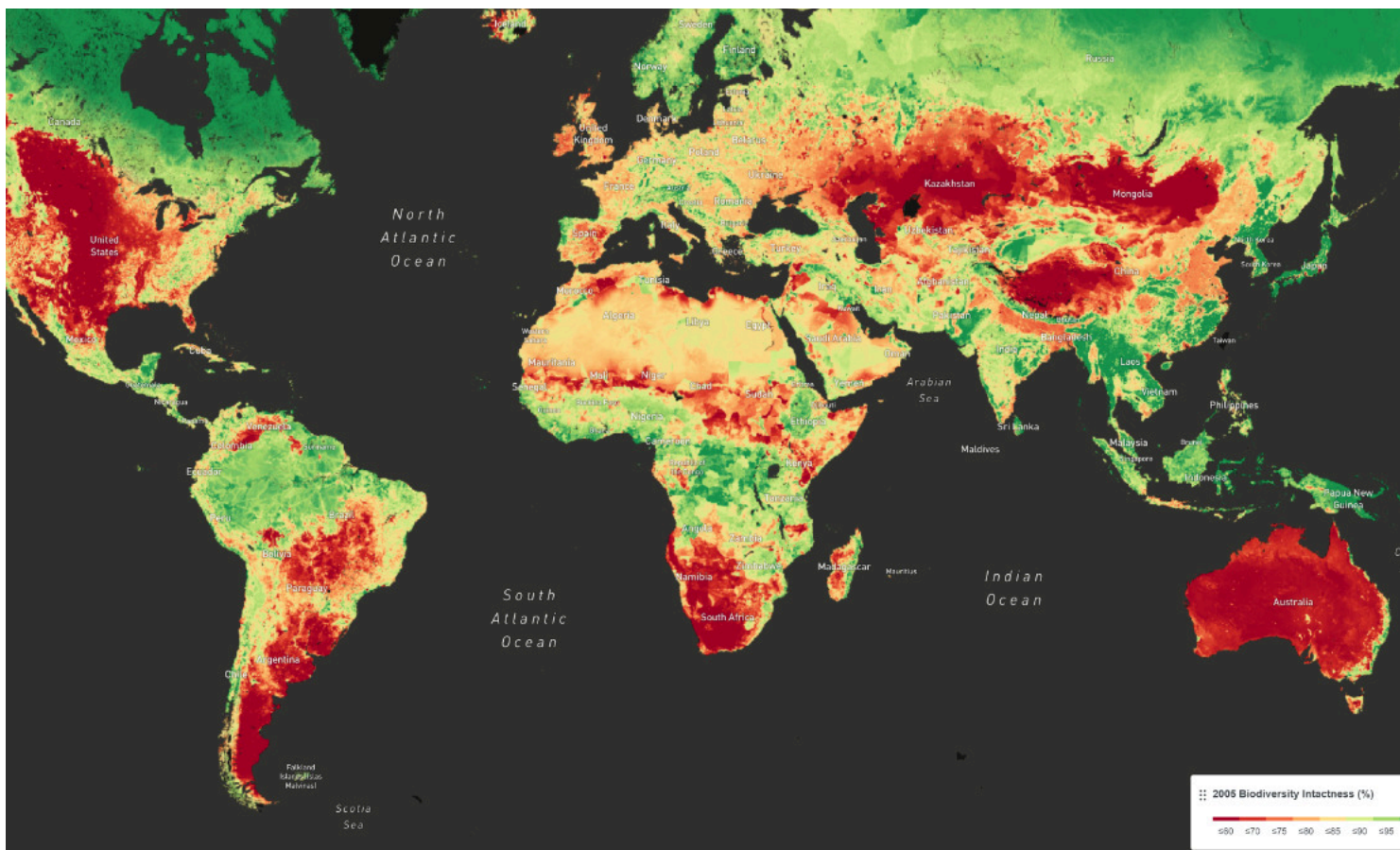
Authority. Of the 183 signatory countries, 85 don't have a dedicated Enforcement Authority [119]. The track record of signatory countries in keeping the trade in endangered species legal and in compliance with the articles of the convention is abysmal – the illegal trade is valued between US\$91-258 BILLION [120], somewhere between a third and three-quarters the size of the legal trade. Further, there is a clear link between trade and population decline in all species for which data is available [121].

The reason is straightforward, wildlife crime is not a priority for any government due to the lack of interest from the general public and CITES does not contain any funding mechanisms that would make up for the inequity between the rich, importing countries and the comparatively poor, exporting countries. The mainstream media will run occasional stories on the illegal trafficking of species that resonate with the public, but they have shown no interest in investigating the true scale of unsustainable exploitation and the

absence of any proof of sustainability in most legal wildlife trades. The MSM also fail to examine the mechanisms that support the illegal trade (money laundering, shell companies, cryptocurrency etc.).

**To make matters worse, CITES makes little attempt to regulate the two largest trades by value, seafood and commercial timber, which we examined in the previous section.** Both trades are theoretically within the purview of the convention but are practically excluded from CITES processes.

CITES has listed only a tiny number of commercially exploited fish species (rays, sharks, eels and sturgeon) and many of these listings are only very recent [122]. About 30 tropical hardwood species (commonly referred to as 'rosewood' and 'agarwood') have been listed. **The reason that CITES avoids fishing and commercial timber production is simple – fishery management authorities and forest management authorities are more powerful in the countries where these industries are large.**



Some countries and trade blocks (like the EU) have passed additional legislation or regulations that go beyond CITES rules. For example, both the EU and US currently prohibit the import of live birds due to concerns over avian influenza [123]. But these are piecemeal solutions that do not impact how the overall regulatory framework works.

As CITES does not have the remit to regulate any domestic trade in wildlife, the often large domestic markets are not subject to any scrutiny. Many countries have additional laws to regulate the domestic trade, but little is known of their fitness for purpose and actual effect on domestic populations. Since there is no mandatory reporting framework for domestic trade, a complete picture is sorely lacking. Further, there are abundant examples of domestic wildlife protection laws not being monitored or enforced.

The scope and effectiveness of most of this domestic legislation is rarely examined in the

context of the impact on populations and ecosystems, even after decades of biodiversity loss (see map on previous page).

In addition to CITES, biodiversity extraction and land use conversion should be subject to broad limits set by the Convention on Biological Diversity (CBD). Whilst nearly all countries on Earth are part of the CBD (although the US has not ratified its membership), the CBD is fundamentally a voluntary agreement, it has no enforcement mechanism like CITES does.

It shouldn't come as a surprise then that of the 20 so-called Aichi biodiversity targets, set by the CBD in 2010, none were achieved by the deadline in 2020 [124]. The CBD agreed new, more ambitious targets in December 2022, with broader reporting requirements and more funding than previously, but these are targets for governments, not business. They are no substitute for the direct regulation of business.

## The Ineffectiveness of the Current Framework

The recent coronavirus pandemic has brought the inadequacy of the current regulatory framework to the attention of a broader audience. Trying to piece together the emergence of the disease in or near Wuhan has proved impossible because of the lack of reliable information in relation to the domestic wildlife trade in China. This is not a Chinese problem; it would have applied anywhere else in the world in the same way.

**The trade in wild flora and fauna lacks transparency, monitoring and enforcement. Outside CITES regulated species, almost no data is collected. CITES only collects data at border crossings and what it collects is pitifully inadequate, often wrong, and usually years late. There is no consistency to the CITES trade data**

**and it rarely (if ever) can be reconciled with other data customs may collect.** Even import and export records for the same shipment rarely match, as reporting of imports is only mandatory for Appendix I listed species (which cannot be traded commercially) and because different units can be used for the same shipment [125].

**There is no traceability of shipments from source to final destination, the supply chains used by business are completely opaque and therefore wide open to laundering illegal specimen into legal supply chains.** Because businesses are not directly regulated by CITES and because the national legislation required under CITES only regulates the import/export procedures, the wealthy companies that are the ultimate



recipients of the specimens do not have to and do not care about what happens in their supply chains in relation to the use of CITES listed species.

National governments in almost all instances lack either the political will or resources to adequately enforce CITES provisions. Even the wealthiest countries cannot be bothered to create effective enforcement capability and to prosecute offenders to the letter of the law.

Australia is considered exemplary by CITES for its domestic legislation, which on paper allows for penalties of up to 10 years imprisonment and fines of up to US\$150,000 [126]. Yet in reality penalties of this magnitude are never applied. The highest sentence issued by an Australian court for a CITES violation has been a jail term of 3.5 years [127] and jail terms are extremely rare for wildlife trafficking offences. Australia has no dedicated wildlife customs officers, and its wildlife crime unit is tiny and situated in the environment

department, not Home Affairs (which contains customs and the federal police).

**In the vast majority of countries, the domestic trade is completely unregulated and unmonitored. Yet the domestic trade can be quite large and not just in the case of China. According to the IPBES, domestic trade dominates in West and Central Africa, Central and South America and in some Southeast Asian countries [128].**

The lack of interest in monitoring the trade is also reflected in the lack of funding made available. CITES gets just US\$6 million pa from member country dues and has no mechanism to support countries in the Global South with funding their implementation and enforcement efforts [129]. Overall, the OECD estimated that global funding (public and private combined) for ALL biodiversity conservation related activities was between just US\$78 and 91 billion a year between 2015 and

2017 [130]. In contrast, public subsidies that are harmful to biodiversity conservation amounted to US\$500 billion per year during the same period [131]. This mismatch is a stark illustration of our complete and utter lack of interest in maintaining a liveable planet for non-human species.

The lack of funding means that the vast majority of CITES signatory countries still use paper-based export permits, which cannot be verified by customs. At the last CITES Conference of the Parties, CITES CoP19, in Panama in November 2022, CITES again discussed the move from a paper-based permit system to a digital one; something that was first put on the CITES agenda in 2002.

A media release during the conference highlighted the statement of the UN Secretary-General António Guterres calling on world leaders to end the "*senseless and suicidal war against nature*". The media release went on to say "*Technological advancements have now created solutions to help stop this war and improve the*

*humanity's relationship with the natural world. Digital technology exists to help us knowing what is happening in the world and making better informed decisions about how-to live-in harmony our rich but delicate ecosystems"*, continuing, "*However, for many countries, the paperwork to process the transfer of species from one territory to another is done by hand. Since many countries currently rely on traditional paper-based means to process permits, human error can creep in, allowing the fraudulent trade in endangered species.*" [132].

Despite his appeal, as yet only 19 of the 183 CITES signatory countries have implemented a digital permit system. The ridiculousness of this was pointed out in a June 2023 interview, as John Scanlon, CITES Secretary-General from 2010 to 2018 commented to Boston's NPR News Station, WBUR, "***We have a paper permitting system which is a 50-year-old permitting system that's open to fraudulent use and corruption, whereas in 2023 we should have a fully automated system***". [133].



## Why Business Does Not Care About Current Regulations

There are currently no agreements or other regulatory mechanisms in place that directly regulate business when it comes to the exploitation and trade in wild flora and fauna. All regulation of business conduct is left up to national governments, which equally have made no attempt at directly regulating the trade in biodiversity (with a handful of minor exceptions).

This may have been a valid approach in the 60s and 70s when most of these multilateral agreements were set up, but today it makes the regulation of business activities and trade basically impossible.

As the multilateral biodiversity agreements like CITES and the CBD have nothing to say about business conduct and business regulation it should come as no surprise that corporations involved in biomass extraction generally have zero interest in these agreements beyond the one element that

directly affects them – the need to obtain CITES export permits (and import permits in some cases). There are some frameworks that regulate fishing quota that have a direct impact on fishing companies and businesses usually have to negotiate access rights to extract biodiversity, but that's pretty much it.

**Despite being in the midst of an extinction crisis nature continues to be treated as a free-for-all, especially when it comes to business. To change this, the trade in wild flora and fauna would need to be regulated using international agreements that directly apply to businesses. Most of the trade is global and national legislation lacks the reach when companies can easily relocate their headquarters or use subsidiaries or shell companies in other countries to avoid the regulatory burden in particular markets.**

Transnational regulation of business activities would require national governments to cede powers to a multinational regulator. This is currently a proposition that most national governments outside the EU and EEC find impossible to accept. As long as power and national sovereignty remain the primary considerations of governments and their leaders, we stand little chance of reigning in unsustainable business practices when it comes to the exploitation of biodiversity.





## Section 6

# The Structural Enablers of Destructive Business Conduct

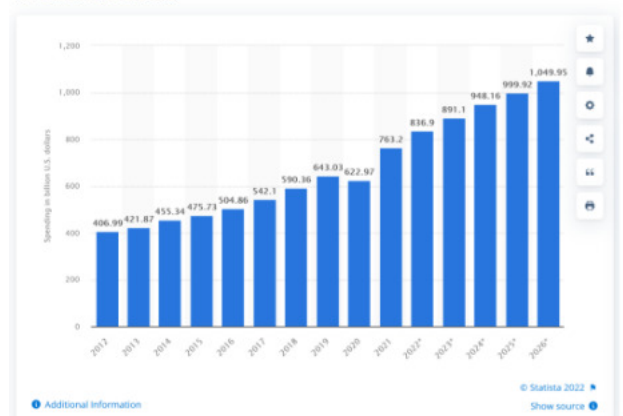
That much business behaviour today is neither ethical nor sustainable in many industries is hardly news to observers of corporate conduct. Faced with a situation where we are already exceeding planetary boundaries, any push for 'more' (growth, consumption, sales, profit) has to be considered not just unethical and immoral, but suicidal. And yet **everlasting economic growth remains official government policy everywhere and is the default premise of any business operating under capitalism.**

At present, no large business would consider ceasing all advertising and marketing to reduce consumption of its products and services. This would be seen as inconceivable from a shareholder, board and executive management perspective. On the contrary, global advertising

spend continues to rise and is projected to reach over \$1 TRILLION US dollars by 2026 [134]!

The luxury industry is one of the world's largest advertisers, spending US\$5.5 billion in the US alone in 2019 [135]. Of course, the push to

Advertising media owners revenue worldwide from 2012 to 2026  
(in billion U.S. dollars)



increase consumption extends beyond advertising and marketing. It is inherent to much of the media and entertainment industries, including social media (think Instagram and TikTok influencers). Hence counting advertising dollars alone does not reflect the true scale of 'content creation' to boost consumption.

Even governments today feel compelled to act as cheerleaders for 'favoured' industries. China lobbied the WHO for years to get TCM formally approved into the global compendium of medical practices by the World Health Organization and succeeded in 2019. China's government and leaders, including President Xi Jinping, have long lauded the benefits of TCM medicines [136].

This may seem a benign case, but TCM still involves the use of endangered species and often illegally obtained animal products. A significant part of the purpose of the 22,000 captive wildlife breeding facilities operating in China before their

enforced closure after the outbreak of SARS-COVID-2 was to provide products to the TCM industry [137].

With worldwide demand for TCM products rising, the use of dried and ground up elephant skin as a 'cure' for stomach ailments has led to a marked increase in poaching of Asian elephants [138].

**It is the fact that the cheerleading for particular industries or products never considers the potential adverse consequences for nature or people that makes this a fundamental flaw in how we run our economies at present.**

Beyond advertising and government cheerleading, there are several other structural enablers of destructive business conduct in relation to biodiversity that will have to be addressed as part of new regulatory framework. We will look at some of these in the following subsections.

## We Haven't Got Corporate Crime

Beyond this universal lack of interest in the legality of their supply chains, far too much corporate behaviour is plainly illegal. Corporate (white-collar) crime is widespread, massive in scale and totally and deliberately ignored by governments and their law enforcement agencies. You can go to jail for many years in the US for stealing from a convenience store, but nobody goes to jail when companies steal billions.

The current approach in the Western world is that corporate crime is not actually criminal in the sense that the person or people responsible should be severely punished in such a way that it acts as a deterrent to others. Instead, in the paltry number of cases where through the sheer audacity of the crimes committed regulators are forced to take notice, if any action is taken it tends

to be that companies are fined, and the individuals and companies involved are absolved of any wrongdoing by using 'negotiated settlements' instead of guilty verdicts established by court procedure [139].

The sociologist Edwin Sutherland introduced the phrase "white-collar crime" in 1939 and he stated that "*The crimes of the lower class are handled by policemen, prosecutors, and judges, with penal sanctions in the form of fines, imprisonment, and death,*" while "*the crimes of the upper class result in no official action at all, or result in suits for damages in civil courts.*" [140]. This hasn't changed in 85 years.

We can see this from the fact that 111 member corporations of the US Chamber of Commerce have violated state and federal laws a staggering



15,896 times and racked up penalties totalling more than US\$154 billion since 2000 [141], yet nobody went to jail, and nobody had to plead guilty. The annual cost of corporate and white-collar crime to Americans is estimated at between US\$300 billion and US\$800 billion a year, while the cost of street level crime is an order of magnitude lower at about US\$16 billion [142].

Even in the absolute worst cases of corporate wrongdoing, like the OK Tedi mine disaster or the manslaughter of 346 people in the Boeing 737 MAX debacle, fines levied are paltry compared to the scale of the crime. If Boeing was an average working American, the fine it received for killing 346 people amounts to US\$4,315 and a promise to 'do better'. Boeing was not put under any supervision or new regulatory oversight; it didn't even have to enter into any enforceable undertaking [143]!

When it comes to law enforcement, the vast majority of resources are dedicated to street crime and there is almost zero interest in pursuing and prosecuting corporate crime. While the FBI in the

US obsessively measures other crime, it does not have a comprehensive gauge of corporate fraud, executive fraud, tax evasion, or embezzlement. There is not even an agreed upon definition of which crimes should be counted under the white-collar crime moniker. In most instances only major fraud is considered a crime worth investigating, like in the case of Wells Fargo Bank which 'encouraged' employees to open fake accounts at the expense of its own customers [144].

Unsurprisingly then that the total scale of corporate criminal conduct is unknown. The best estimate from the US is that only 5% of corporate crimes ever come to light [145]. On top of this deliberate lack of enforcement, convictions are vanishingly rare. In the US 8.6% of the adult population has a felony conviction, yet less than 0.03% of corporations do. This is not because corporations are somehow much better behaved than the individuals who compose them. Recent studies show that large corporations commit on average two incidents of major financial crime each week [146]. The issue is lack of interest and

resources in investigating corporate crime and lack of prosecution, not lack of criminal conduct.

It should be immediately clear that in the absence of meaningful consequences there is a high incentive for corporate criminals to continue with their behaviour. **Fines levied against corporations are not paid by executives or directors, they are paid by Accounts Payable, i.e. they simply become a cost of doing business.** Large enough fines may make a brief dint in the next quarterly results but are then quickly forgotten. Boards and shareholders mostly shrug them off, knowing full well that the profits made from engaging in criminal practice in the first place usually far outweigh the risk of prosecution and level of fines.

Whilst we have used mostly US based examples, the behaviour of regulators and prosecutors in other countries is no different. The EU's approach to 'punishing' business is also mostly based on fines.

When it comes to corporate crimes against the environment, the cavalier attitude is even more apparent. The first comprehensive analysis of corporate attitudes towards green crime by Refinitiv (one of the world's largest providers of

financial markets data serving over 40,000 institutions) in 2020 found that [147]:

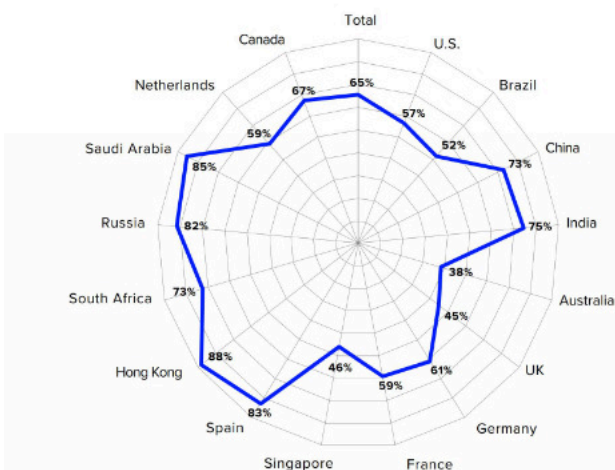
- Two-thirds (65%) of respondents know or suspect that third parties they conduct business with may have been involved in a range of illegal, environmentally damaging activities.
- Only 16% of respondents say that they would report a third-party breach externally.
- Only 53% said they would report it internally.
- Critically, 63% of respondents agree that the economic climate is encouraging organizations to take regulatory risks in order to win new business.

**It is the absence of corporate criminal law and the even laxer attitudes to green crime that enables and incentivises this behaviour.**

Because of this system we have allowed corporations to create, every instance of such behaviour is seen as 'isolated' or 'an accident' and nobody is ultimately held accountable to prevent further instances of environmental disasters. Owners are shielded by limited liability and asset partitioning. Boards and management are shielded by not having corporate criminal law.

Figure 2.7: Illegal activities

*Do you know or suspect any of your third-party suppliers or their suppliers have been involved in any of the following?*



**A substantial 65% of respondents know or suspect that third parties they conduct business with may have been involved in a range of illegal, environmentally damaging activities (Fig. 2.7).**

## The Deliberate Ignorance of Global Supply Chains

One of the truly strange by-products of globalisation and just-in-time production is the ruthless efficiency yet deliberate ignorance of the global supply chains that make this system work. Today, most, if not all, large companies with global supply chains have no real idea about *HOW* their supply chains actually work.

They have near-perfect visibility and knowledge of *WHEN* and *WHERE* products will arrive for the next step in this vast chain, but the company at the end that puts their brand on the final products would know little or almost nothing about *WHO* was involved at every step of the way. From a regulatory compliance and legality perspective this is incredibly convenient as it imparts plausible deniability on the brand owners who are usually in the sight of activists and authorities. This is evidenced by the Refinitiv report mentioned above, as it is clear that businesses are aware that illegal activity is taking place in their supply chains, but do not care because they don't have to.

This seemingly strange approach makes perfect sense when you consider that supply chains are optimised for efficiency and variability of supply [148]. The supply chain is never static, in order to keep the just-in-time supply going at all times, the chain needs to be able adapt quickly to changes in the availability of raw materials, parts, machinery and labour. Constant product changes and changes in transport flows means that any 'link' in the chain can be replaced at short notice.

**When your primary aim is to keep the chain going on-time, on-budget and without interruptions then it is actually beneficial to not know and not care about *HOW* the chain works and *WHO* is involved at every step. This deliberate opaqueness helps those who manage the chain to keep it going to reduce complexity**

**and it affords every link in the chain the capacity to constantly improvise [149].**

In practice this means that anything other than the *WHAT*, *WHERE* and *WHEN* of the flow of goods in the chain is treated as a black box and therefore rendered irrelevant. **From the standpoint of enforcing the legality and origin of wildlife products, this renders any sustainability statements made by the brand name owners rather meaningless and explains why they are never backed up by any concrete evidence.**

For example, in 2020 Kering for the first time published a 'dedicated biodiversity strategy'. In it, Kering made the commitment to "*continue to ensure that all plant and animals based raw materials come from legal, verifiable sources at a minimum*" [150]. This may sound useful, but it comes without any detail on *HOW* Kering would do that. The reason why the *HOW* was omitted should be obvious from the discussion above – Kering (or any other company making similar commitments) has no way of knowing. Knowing and ensuring would run counter to both the efficiency drive and the need to maintain black boxes so that improvisation can continue.

Ensuring that all raw materials such as python skins come from legal and verifiable sources means knowing not just the *WHAT*, *WHEN* and *WHERE* at all times, but also the *WHO* the goods were acquired from and *HOW* the goods were obtained and processed by the supplier. It is possible to do this in a static supply chain by using supplier certification, monitoring and regular inspections, but this approach is not compatible with a dynamic supply chain optimised for price and on-time delivery.

The true attitude towards what is going on in their supply chains was neatly illustrated by Hermès in



relation to its use of ostrich skin for handbags when under attack from PETA over the conditions in South African ostrich farms [151]:

*In a statement, Hermès said: “Contrary to what the video broadcast by [Peta] suggests, the farms shown in the videos do not belong to Hermès. Hermès operates at a secondary level within this industry. The small quantities of ostrich leather used by Hermès do not come from farms but tanneries which, as per all Hermès suppliers, are subject to permanent and stringent controls.”*

This is not unique to Hermès; it would apply to any modern supply chain. Between Hermès and the ostrich farm are probably at least 4 other types of businesses: the tanneries, which buy from the importers, which buy from the exporters, which buy from the processors, which buy from the farms.

Equally, businesses do not feel compelled to ask any questions about the true origin and legality of the products entering their supply chain. This is especially pronounced in the timber trade. Interpol estimates that 15-30% of the global wood trade comes from illegal logging [152]. This astonishing level of illegal trade raises barely a shrug from the (not really) concerned public and the authorities.

Businesses involved in the timber trade equally prefer to look the other way. Importers are usually happy to assume that if the timber reached their premises, it must have been obtained legally. As, for example, in the case of timber from PNG ultimately destined for Australia [153]:

*As far as some Chinese buyers are concerned, the fact that timber logs are able to leave PNG is proof enough that the trade is legal.*

*“They must have granted a certificate to be able to cut down wood in those countries, I think,” Zhuo Weiyong, a manager at a major Chinese timber company, tells the Guardian.*

Procurement for any modern corporation is a cost centre driven to relentlessly bring prices down, not to worry about the legality of any individual shipment somewhere deep in the supply chain. This is one of the major reasons why the legal

trade in endangered species and the illegal trade have become so intertwined as to be considered inseparable.

Illegal shipments can only be discovered as illegal if traceability to the ultimate source is possible. Once they have entered a legal supply chain, that will usually only be possible in rare cases where DNA or radioisotope analysis are conducted and can prove illegality.

## Meritocracy is Elevating Psychopaths

One of the more surprising drivers of corporate criminal activity is that psychopaths and narcissists are over-represented by a factor of somewhere between 4 and 10 in corporate leadership roles today [154]. Why does that matter? Because male psychopaths are 20 to 25 times more likely to be in prison than non-psychopaths [155] and the vast majority of corporate leaders are males [156].

**The reason that psychopaths have an outsized chance to make it into corporate leadership roles is even more worrying, we have designed the system to help them reach the top! A shared belief in meritocracy has resulted in a system that is perfect for gaming by psychopaths – standardised tests and ‘performance’ based hiring and promotion [157].** The clue about ‘performance’ is in its double meaning – as both measurable performance based on narrow metrics (sales, profit) and as ‘performing’ (as in acting) when it comes to interviews.

Psychopaths lack the ethics and moral compass to perform honestly on both counts – they will happily and convincingly lie to get to the next level. Their lack of guilt in combination with superficial charm, egocentricity and grandiosity make it easier for them to game the promotion process. Relentless self-promotion comes easy to them and gets them noticed by those with the

power to shape careers. They will also throw other people under the proverbial bus to reach their goals. Hence the system we have created to avoid nepotism turned out to be the perfect breeding ground for psychopathic leaders [158].

The inherent drivers towards wealth, status and power of narcissists and psychopaths have further been perfectly aligned with shareholder interests by narrowing the accepted remit of corporations to ‘increasing shareholder value’. By redesigning executive remuneration to enable outsized gains via the granting of massive amounts of stock



options, encouraging and enabling stock buybacks (even stock buybacks financed by debt) and profit-based bonus payments the system has further increased the inherent drivers for those with criminal tendencies to seek corporate leadership roles.

**No appeal to reason, ethics, social norms or corporate social responsibility will turn this around. The current structural settings, together**

**with putting the psychopaths in charge, fosters corporate criminal activity. The lack of enforcement and prosecution means they get away with it, repeatedly. If we want to see different outcomes, we need to change the system. Business regulation only works if the potential consequences for misconduct and criminal behaviour involve those responsible going to jail and risking their personal wealth.**

## Business Treats Nature as an Externality

Crimes against nature and the environment are even less likely to be considered. **The problem starts with the assumption that underpins all corporate extraction of biomass and all dumping of waste back into the environment – that nature is both an externality (and hence does not need to be considered in any business activity) and free.**

In relation to biodiversity and sustainability, today pretty much all 'ecosystem services' and waste released into the environment are treated as externalities. The business is not paying for these,

and it is allowed to ignore them in its accounting and financial performance. Triple bottom line accounting was supposed to address this lack of accountability, but it never took off and is no longer talked about other than in the context of B-Corporations and similar entities that use it by statute.

When the scale of the release of waste or pollution is too big to ignore, they may have to pay a fine, yet businesses never pay the full cost of remediation. BP paid US\$8.8 billion to settle the 'injuries to natural resources' from its Deepwater Horizon disaster when approximately 5 million barrels of oil had spilled into the Gulf of Mexico, the largest offshore oil spill in US history. The environmental impact on the approximately 8,000 marine and bird species in the area will be felt for decades [159], but BP has 'settled' and can 'move on'.

Fishing is treating the oceans not just as a free resource, it is also full of externalities – bycatch being the most obvious problem. Whilst the focus of environmentalists has too often been on marine mammals, turtles and albatrosses when it comes to bycatch [160], the problem is much broader than that. The majority of bycatch is juvenile or inedible fish, which are discarded dead back into the ocean. When the target species is narrow (say





prawns) and the method is indiscriminate (trawling), then most of what is being caught is going to be 'bycatch'. As long as bycatch is an externality, there is no incentive to modify fishing gear to reduce bycatch or to change the preferred (most economical) fishing method.

Externalities in fishing also include wastewater from ships, discarded nets and fishing gear, plastic pollution, discarded waste from factory ships and oil pollution. Unless there are specific laws in place regarding this type of pollution in a fishery and the compliance with those laws is actively monitored, they can all be treated as externalities by the fishers.

Aquaculture, like plantation forestry, may be better in relation to externalities, but it depends on the species and what regulations are in place. The farming of Atlantic salmon in open water for example is known to be highly detrimental to the ecosystem it is conducted in [161]. The use of antibiotics, anti-foulants and pesticides to control sea lice and disease in combination with excess nutrients and feces can devastate life in the surrounding waters. Escapees from farms can

impact wild populations and sea lice can spread to other wild species.

The total damage caused by salmon farming has been estimated at US\$50 billion globally from 2013 to 2019 [162]. If there are no regulations in place to curb the impacts (and mostly there are not), then these impacts can be treated as externalities by the company and ignored.

Fish farming is also a major consumer of wild fish - about a fifth of the world's annual wild fish catch, amounting to about 18m tonnes a year, is used to make fishmeal and fish oil, of which about 70% goes to fish farms [163]. The cost (externality) in this case is borne by fishers in developing countries, who are seeing their stocks depleted or access to fisheries restricted in order to satisfy the demand for farmed fish from affluent consumers in the Global North.

## The Lack of Accountability to Nature and Stakeholders

As we examined above in the current system of corporate regulation nobody needs to feel responsible, but that begs the question of *WHO* should feel responsible and *WHO* they should be accountable to. This is where things get even murkier, as both boards and management of corporations are subjected to extremely low standards of accountability.

It all starts with the fact that there is no clearcut agreement on *WHO* the law says boards and CEOs have a duty to - be it the shareholders, a mix of stakeholders, the corporation itself, or some combination thereof [164]. What is not in doubt is that in the eyes of the law, the standard of fulfilling those duties is extremely low. The US “business judgment rule” is very forgiving of corporate directors and officers for making lousy business decisions, so long as they can show evidence that those decisions were duly considered [165].

The business judgment rule serves as the ultimate shield from accountability to shareholders and stakeholders alike, as evidenced by the fact that no board member of any large US financial services institution was found to have breached their fiduciary duties when prosecutors and courts examined the financial crisis of 2008 [166].

In reality, when it comes to boards exercising their governance and risk management duties on behalf of shareholders (or stakeholders), most boards simply passively consume what management feeds them and directors have neither the time nor inclination to actively demand additional information or make any effort to verify claims made by executives.

**So, if management can easily game their accountability to the board and if directors are shielded from accountability to stakeholders by an extremely low standard of ‘having acted in**

**good faith’, then where does the accountability to employees, broader society and nature come from? The answer is simple and tragic – it does not exist.** In the absence of any specific legislation in relation to corporate conduct (like health & safety regulations), corporations operate in a moral vacuum of ‘anything goes’ as long as it keeps shareholders happy i.e., makes more money.

In relation to sustainability this moral vacuum results in most cases in a ‘don’t ask don’t tell’ approach to any involvement in say the use or trade of biodiversity. Unless a company is specifically targeted by NGOs or activists about say, the sale of ivory or sea cucumbers on its platform (e.g. Amazon, WeChat, ebay, Etsy etc.), it will prefer not to know and not to look. Even when caught out, they respond with statements like [167]:

*Tencent, the owner of WeChat, said in a statement: “We are vigilant against unscrupulous parties making unauthorised use of our platforms and services to pursue illegal activities. We encourage users to report illegal and inappropriate activities.”*

*A spokesperson for Amazon said: “All sellers must follow our selling guidelines and those who do not will be subject to action including potential removal of their account. The product in question is no longer available.”*

Notice the language in these statements. Tencent is asking USERS to report illegal and inappropriate activities (translation: it’s too expensive and inconvenient for us to employ dedicated people to look ourselves). Amazon is equally elegant in deflecting responsibility, SELLERS must follow guidelines, leaving out the question of *WHO* is policing the sellers. Amazon did not say it would make any effort to look for other products.

Companies actively lobby against specific legislation that would increase the ‘burden’ on

them when it comes to the sustainable use of biodiversity.

When opportunity presents itself to roll back existing regulations or legislation, they will usually take it. For example, when trade collapsed early during the pandemic, the Indonesian timber industry successfully lobbied for the removal of export licensing requirements that were put in place to ensure the legality of exported timber and wood products [168]. This retrograde step was then sold by the Indonesian government as a trade stimulus measure to counter the effects of the pandemic trade slump.

With such an uncontested degree of influence by business and economic elites it should not come as a surprise that they can act with impunity and subvert the true meaning of ecological sustainability to suit their purpose. To make matters worse, they have also created an army of 'helpers' to hide their role in being the primary driver of unchecked exploitation.

## Subverting Representative Democracy

The last 30 or so years have seen successful efforts by corporations and their 'helpers' in undermining representative democracy across the Western World. These 'helpers' come in many guises: consultants, think tanks, lobbyists, paid for academic research and the creation of a 'evolving door between political/government jobs and the private sector. This would not have been possible without the increasing concentration of business into monopolies and oligopolies and the corresponding increase in profits.

**Representative democracy is a fragile concept to start with, it needs to be paired with widespread and deep public engagement to arrive at policy outcomes that benefit the whole of society and not just the rich.** With the decline in labour union membership and political party membership the two crucial pillars of counterbalancing business power and public engagement have been effectively dismantled in the last three decades.

This has enabled a wholesale remaking of government by stealth, starting with the outsourcing of public services to the private sector under the guise of 'efficiency'. No evidence of such efficiency was ever provided, but it has been a boon for dodging political accountability,

channelling money to favoured business interests and for the private sector careers of politicians after leaving (or loosing) their jobs.

Public servants providing 'frank and fearless advice' have been sidelined by political appointments and the ever-increasing use of consultants. By engaging consultants, ministers can rest assured that the advice will support the policy outcome they are looking for, no matter how ridiculous the argument has to be. PwC had no problem 'finding' AUD\$137 BILLION that business would want to invest in the government's proposed Nature Repair Market over the next 25 years [169].

Evidence presented to a Senate hearing later revealed that this number was in 2050 dollars and included all sorts of other investments unrelated to the proposed nature market [170]. PwC produced the report free of charge in the hope of gaining work later when it comes to the implementation of the bill. The partners know nobody is going to come asking in 5 or 10 years what happened to the billions that were supposed to flow from business into conservation measures, but the fees for the work will boost their bonuses.

Unfortunately for PwC it is currently basically banned from getting any new government contracts in Australia, as partners in the firm were found to have breached confidentiality when working on new tax laws [171].

Think tanks and paid for academic research has been another key avenue for subverting democracy. They provide both the ammunition and 'scientific' backing for policy proposals that benefit vested interests, not the greater good. In conjunction with the corporate media giving these think tanks and willing academics a platform, a fake public discourse can be created that provides convenient cover for the politicians fronting these proposals. The think tanks tend to lack any transparency when it comes to their funding, thereby hiding the narrow corporate or political interests they represent.

Taken together, businesses and the rich basically have unlimited access to elected officials and public servants and can influence decision making through donations, lobbying, consultants who echo their views, think tanks writing reports to support policy proposals, buying media coverage and even through creating fake grassroots campaigns. This is not conjecture, the thesis was comprehensively proven by an empirical 2014 study which found that the general public has no discernible impact on government decision making in the US [172]. After analysing the policy outcomes in relation to over 1,700 recent policy issues in the US, the results were conclusive: *"economic elites and organized groups representing business interests have substantial independent impacts on U.S. government policy, while average citizens and mass-based interest groups have little or no independent influence"*.

Similar findings have been made for the EU [173] and Australia, but they are not quite plutocracies to the same degree as the US just yet. In the US corporate influence reached a whole new level

with the *Citizens United vs. FEC* case in 2010. The Supreme Court ruled that political campaign donations are protected under the 'free speech' provisions of the First Amendment, which means that the US government can no longer put financial limits on campaign contributions by corporations or the wealthy. The ruling has ushered in massive increases in political spending from outside groups, dramatically expanding the already outsized political influence of wealthy donors and corporations [174].

**The level of corporate subversion of representative democracy has reached the point now where most people in the Global North have realised that democracy is no longer working for them. To divert the resulting anxiety, anger, and frustration politicians and the media have created endless 'culture wars' and businesses have embraced all manner of phantom solutions, especially when it comes to biodiversity loss and climate change.**





## Section 7

# Phantom Solutions To Avoid Regulation

Greenwashing and phantom solutions take many forms, but what they all have in common is that they are orders of magnitude cheaper than taking real action to avoid biodiversity loss and carbon emissions. They are also not a threat to the current neoliberal free-market ideology and the rich individuals and corporations who are the main beneficiaries of this system.

Meaningful action in most instances would be highly disruptive to business as usual. If we go back to our foray into supply chain management above, it becomes immediately obvious just how disruptive such action would be. Let's assume that Kering would take its commitment to *'ensure that all plant and animal-based raw materials in its supply chain come from legal, verifiable sources'* seriously. As we explained, any current, just-in-time supply chain cannot handle this commitment.

It runs counter to both the efficiency drive and the need to maintain black boxes so that improvisation can continue. It would therefore require a separate process built around a (largely) static supply chain which is either wholly owned by the company or managed in a highly intrusive manner.

Business logic and profit drive dictate that any commitment to sustainability or legality of supply will be as minimal as possible – as evidenced by the statement from Hermès reproduced in the supply chain section above. By applying *'permanent and stringent controls'* to the tanneries it buys from, Hermès wants the public to believe that their responsibility ends at that. Of course, the likelihood that illegal products enter the supply chain as late as the tanneries in Italy is very low. It is much more convenient and less risky

for traffickers to launder illegally obtained skins much earlier in the chain.

Hence, we end up with industry sectors committing to meaningless but well-publicised certification schemes, pacts, guidelines, multi-stakeholder initiatives, sustainability statements and the latest 'high-ambition initiatives' that look great to the mostly only peripherally concerned public but do little to ensure sustainability and legality of supply.

We will discuss the most common phantom solutions in the following sections. Whilst some of them are specific to the business of biomass extraction, most share many commonalities with their carbon reduction counterparts. Because the public angst about biodiversity loss trails climate anxiety by a decade or so, many of these phantom solutions were pioneered for emission reduction schemes and are being adapted now for biodiversity loss.

## Biodiversity Offsets and Credits

Under our current economic system businesses exist to make and increase profit, which is achieved by increasing sales, margins, and reducing costs. This primary objective of business is in conflict with the high transaction costs incurred by well set up and well managed markets in biodiversity offsets or credits. For such biodiversity offsets and credits to provide useful conservation outcomes they would need to be set up in a way that favours the protection of high-value ecosystems, which would require extensive baseline research for project and comparison sites. They would also need to incur high overheads for ongoing monitoring and enforcement. This violates the need for business

to keep transaction costs low, so business lobbying will focus on keeping the overheads of any such schemes minimal and on the creation of extremely simplified (and often misleading), but achievable, success measures.

Over the long run, the nature of power that corporations have over policy outcomes through lobbying and political donations means ultimately such schemes tend to produce many perverse consequences. But because corporations and financial markets are allowed to ignore these perverse consequences and focus on making bigger profits only, the systems will not be corrected.



A good example of this process in action is the biofuels mandate in the US (known as RFS – renewable fuel standard). The initial idea from the early 1990s of replacing oil-based fuels with ethanol from corn starch was motivated by ‘increasing sustainability’ and reducing carbon emissions. Through decades of industry lobbying this has morphed into a monstrous scheme of policy settings, tax credits and grants [175] that has achieved sustainability of profits for corn agriculture (with guaranteed markets, buyers and increased prices), but otherwise is disastrous from an environmental perspective as it has led to a dramatic increase in acreage for corn and soybean cultivation, increased water and fertilizer use and overall caused higher carbon dioxide emissions than using oil [176].

Do any of the agribusiness executives and traders care about those impacts? No, of course not. Profits have increased and become predictable in an industry normally associated with endless price fluctuations and unpredictability. That the scheme is now harmful to the environment is not their fault, at least from their perspective. They just lobbied for what’s good for them.

This one example is fully in line with many other such schemes. The utter uselessness and downright fraud of carbon credit schemes has been big news in the mainstream media recently, good examples are here [177] and here [178] and here [179]. Carbon credits created by these schemes are junk from an emission offset perspective, the schemes focus on fulfilling the demand for credits and not on verifiable offsets. They use dubious assumptions about ‘preventing potential deforestation’ and chose comparison sites that suit the objective of creating credits, not scientific validity.

There is zero reason to believe that any biodiversity offset or credit schemes will be any better. Given they are heavily promoted by both

the OECD [180] and the WEF [181] corporations can rest assured that they will not be detrimental to business or economic growth.

Australia has been a pioneer of biodiversity offset schemes, which are designed to ‘offset’ the negative impacts of development projects, for example open cut mines or large housing developments on sites of high biodiversity value.

The state of New South Wales (NSW) in Australia has had a biodiversity offset scheme and credit market since 2017 and it was recently examined for its effectiveness by the Auditor General of NSW. The findings are utterly damning and basically show that the scheme as designed and implemented is completely unable to meet the objective of protecting endangered species and vegetation [182].



At its centre lies the idea that developers who want to clear native vegetation can purchase biodiversity credits offered by landowners with like-for-like ecosystems/species. That means that *“...the current biodiversity credit market in New South Wales consists of 1394 different types of ecosystem credits, which are approved to be traded in 364 different offset trading groups, and 867 different species credits.”* [183].

This already tells you that they used a reductionist approach to market design, which is inevitable if you want to create a financial market and keep overheads low. Of course, the likelihood that ‘the market’ can find like-for-like credits is not very high, for example, coastal ecosystems (with high land value for property development) cannot be easily found in the arid inland. It should not come as any surprise that the auditors found that

*“around 90% of demand cannot be matched to credit supply”.*

**If the idea of the scheme was to stop development when matching credits cannot be found, that would be just fine. But that’s not how the scheme works.** Instead, *“...the Scheme allows developers to pay into the Biodiversity Conservation Fund and transfer their obligations to the BCT. This allows the developer to proceed with their project. The BCT must then meet these acquired obligations by buying the required credits, or by undertaking other approved activities set out in the Regulation. The BCT has more options than developers **on how and when it acquires its obligations**”* [emphasis added, 184].

**In plain English, the development project can proceed and the obligation to find like-for-like credits (which don’t exist) can be parked with another entity who then ... does nothing.**

It is also very telling that since the scheme came into force 5 years ago, just 37 landholders entered into Biodiversity Stewardship Agreements (BSA) that supply credits to the scheme. This contrasts with a pipeline of AUD\$112 billion in infrastructure projects in NSW. It should be obvious that the whole scheme cannot possibly work as a way to protect biodiversity (especially since 90% of BSA sites are not even monitored). It works extremely well as greenwashing, though.

There is absolutely no reason to believe that any other biodiversity credit or offset scheme created anywhere else is going to be any different. They only come into existence to create the pretence of ‘doing something’ about environmental degradation and biodiversity loss. If governments really wanted to stop developments on valuable land, they would do so by directly using their legislative power, not phony markets and credits.



## MSIs, Certification Schemes and Infiltration of NGOs

The use of multi-stakeholder initiatives (MSIs) and certification schemes has been a staple of the phantom solutions that business will readily commit to as they are always voluntary and always designed in such a way that the actual impact on the business of trading in biodiversity remains negligible. **Because the member corporations control the MSI or certification scheme, they can dictate not just the terms of their commitment, but also the terms of verification and enforcement** (although most of the MSIs and certification schemes do not include any enforcement provisions).

The simplest way of making sure the commitments as part of a MSI or certification scheme remain inconsequential is to either not have any verification, or to hand it to a ‘friendly’ third party, or to simply not allocate any money to independent research.

For example, one of the oldest and biggest forestry certification schemes is the FSC (Forest Stewardship Council) with over 230 million hectares under management. It has been around since 1993. The FSC logo is designed to assure consumers that the certified wood products have been tracked throughout their supply chains and are guaranteed to come from responsibly managed forests independently monitored by credible third-party auditors.

Yet when Mongabay (a news site for environmental news) tried to find well-designed scientific studies into the effectiveness of the scheme in 2017 [185], they could only find 13 that fit the criteria and **not a single study into the long-term impacts of certification!** Mongabay wrote: *“Very few studies directly measure the effectiveness of FSC certification. And many of these are biased by design or lack methodological*

*rigor to prove causation. Very few make appropriate comparisons...”*

Their findings are that FSC managed forests *“...seem to be better for the environment than conventionally managed ones... However, very few studies could point to whether certification actually caused these positive outcomes. Instead, the positive changes seen in certified forests could be due to preexisting conditions, or because responsible forest managers may be more likely to try to get FSC-certified in the first place.”* [186].

There is no doubt though that the FSC certification is a great marketing tool, which is why paper manufacturers and furniture makers are all on board. They have no interest in undermining a great branding tool by commissioning rigorous research which may find that the scheme is next to useless.

In the area of the illegal wildlife trade the online trade in illegally obtained animals and animal products has been a major concern for conservation agencies since the advent of ebay and the situation became even worse in the Facebook and Etsy era [187]. The global campaign group Avaaz reported that they found tiger cubs, leopards, ocelots, African grey parrots and the world’s smallest monkey, the pygmy marmoset, among the endangered animals for sale on Facebook pages and public groups [188].

*“Traffickers do not shy away from listing their goods for sale in public groups, nor from including their phone numbers in their posts,”* said Ruth Delbaere, senior legal campaigner at Avaaz. *“On Facebook wildlife trafficking takes place in broad daylight.”*

In another example of just how easy it is to buy endangered species illegally online, VICE World News’ own investigation found it took them less

than 24 hours to order an endangered tiger on Facebook [189]. The ease of wildlife trafficking online led Raúl Grijalva, Democratic congressman and chair of the House Committee on Natural Resources to say [190]: *“Not only does Facebook know that wildlife trafficking is thriving on their platform – they have known about it for years. Yet, they continue to blatantly ignore the problem – or worse – enable it, violating even their own self-professed stand against criminal activity and physical harm to animals.”*

And it isn't only Facebook, as it isn't hard to find images or videos of the illegal pet trade on TikTok or Instagram or rhino horn and elephant ivory beads on Etsy. In recent years a growing number of interior designers have added taxidermy and insect collections to their portfolio. While few customers can afford the ostentatious end of this macabre styling trend, many turn to Esty where

you can find an assortment of endangered and exotic species, from bats to birds, butterflies and bugs.

Recent research by scientists from the University of Adelaide found 32 species of bat for sale on Etsy, including those listed threatened or critically threatened. *“I was surprised by the volume of bats, the species available,”* says Dr Anne-Lise Chaber, a lead author of the study [191].

Similarly concerning are examples such as the Queen Victoria's birdwing butterfly only found in the Solomon Islands and Papua New Guinea (Bougainville Island only). Regarding the trade in this butterfly, the Solomon Islands was placed under CITES trade sanctions in 1995. After nearly 30 years these sanctions have still not been lifted, meaning that the Solomon Islands hasn't met the conditions set out by the CITES standing committee to allow the resumption of trade. Yet this rare species can be found for sale on Esty for



several hundred dollars, either mounted in a frame or under a glass jar. So who should be sanctioned, countries, businesses or both?

The industry response has been another MSI - the Coalition to End Wildlife Trafficking Online. Launched in 2018, it lists three conservation organisations, WWF, TRAFFIC and IFAW, who are stated to be the convenors of the coalition [192].



The group includes Facebook (Meta), Google, ebay, Etsy, Instagram, Microsoft, TikTok, Alibaba and many more:

**Early after its launch, the coalition stated its goal was to cut the illegal online trade by 80% by 2020** [193]. Their 2021 progress report states that [194], as a group, they removed 11 million posts and listings of illegal wildlife for sale but did not say what percentage of the total illegal online trade that amounts to.

If we apply the yardstick of an evidence-based approach favoured by the convenor NGOs to the 2021 progress report, has the target been achieved? Aside from the number of removed posts provided without context, it highlights the number of staff who received training, the number of listings reported by citizens and the ‘number of impressions’ of the user awareness campaigns. **There is zero information on how these measures are in any way connected to the stated objective of “cutting the illegal online trade by 80%”.**

There are countless more examples on the relative uselessness of MSIs and voluntary certification

schemes. In a comprehensive study of MSIs created to address human rights abuses in business supply chains MSI Integrity found “*MSIs are not effective tools for holding corporations accountable for abuses, protecting rights holders against human rights violations, or providing survivors and victims with access to remedy...They are simply not fit for this purpose.*” [195].

The reason should be obvious from what we wrote in the previous section and as MSI Integrity equally highlights: “*MSIs have not fundamentally restricted corporate power or addressed the power imbalances that drive abuse. Companies have preserved their autonomy and safeguarded their interests throughout the design, governance, and implementation of MSIs.*”

All of this leads to the question, should global conservation organisations, such as WWF, lend their brands so easily to business? The approach of the large, corporatised NGOs is characterised in their almost pathological desire to get a perceived seat at the business table in the hope of changing business practices through voluntary certification schemes or MSIs, even if it clearly compromises their stated mission.

The failure of this approach was documented in a series of articles in Mongabay in 2016 [196] and earlier in 2011 in Dispatches reporter Oliver Steeds’ investigation, *Conservation’s Dirty Secrets*. It is the result of a perceived dichotomy – that traditional conservation based solely on protected areas has failed to halt the destruction of nature (which is correct) and therefore one must engage with those doing the destroying (business) and ‘help them see the light’ and change their practices.

**The latter assumption is typical of conservationists who are mostly scientists – and as academics they try to do economics (‘natural capital’, ‘payments for ecosystem services’), but they don’t do power. They never talk about**



**power; they (pretend to) ignore power, and they fail to see it as a major driver in society and human affairs.** That's because *"serving power is baked into the industry's DNA"* as one astute commentator observed recently [197].

A handful of people in the conservation sector have begun to acknowledge that conservation NGOs are at risk given their lack of commercial sophistication, which is allowing management consultants to rapidly become seen as the saviour on environmental matters; one of the extremely worrying trends of the post-pandemic era.

As a result of management consultants entering the conservation space, global conservation NGOs seem to have dug in on their belief that their certification schemes and appeals to self-regulation by business are 'doing good'. They equally believe that they are not compromised in their mission by lending their brands to such schemes and by accepting corporate donations or

paid research assignments. This belief is genuine and maintained by confirmation bias, that is by only looking for evidence that supports the belief. How far this confirmation bias goes is evidenced by the utter lack of rigorous studies into the effectiveness of certification schemes.

**In contrast to state capture of governments by corporations, this weird state of affairs might be best understood as 'self-censorship' by the corporate NGOs. It's a form of self-delusion, because the relative power in the relationship was ignored by one side (the side without any) from the onset. So, business gets to look good, the corporate NGOs get to feel good, and the unsustainable practices are perhaps slightly less unsustainable, but of course remain unsustainable** [198].

## Sustainability Reports and CSR vs Supply Chain Transparency

Sustainability reports published by corporations and any form of Corporate Social Responsibility commitments and reporting are basically marketing exercises. Nothing about what is in these reports is mandated and hence any reporting standards are always going to be self-serving to portray the minimal efforts made by the corporation in the best possible light.

Net-zero (carbon emissions) commitments have been all the rage recently, including with some of the biggest polluters on the planet, like Chevron. The path chosen by participating corporations is always the same – only count the emissions you want to count (Chevron only counts its emissions from operations, not from the oil it produces) and then use junk carbon credits to offset those emissions and ‘achieve’ net zero [199].

Chevron is of course not alone in seeking the easy way out to preserve its outrageous profitability. In a study of 25 of the world’s largest companies that have made net zero pledges, NewClimate Institute, who compiled the report, said the efforts of the 25 companies studied would make little impact [200]. Only one company, Maersk, got a ‘reasonable’ rating on the integrity of its claims. Three got a ‘moderate’ rating and the rest scored either ‘low’ or ‘very low’.

JBS, the world’s largest beef producer and a prime driver linked to the deforestation in Brazil [201], scored ‘very low’ on both the integrity of its claims and the transparency in target setting and reporting.

**Without mandatory standards, all sustainability reporting is basically greenwashing. As long as the company controls not only what it reports on, but also what it does not report on, how it is reported, how targets are set and what means**

**are to be used to achieve them, the scope for cheating and misdirecting is endless.**

The reason we have financial reporting standards that companies have to follow is of course in order to prevent this exact scenario. The difference is that shareholders are investors and hence interested in reliable financial reporting. They have no real interest in equally reliable sustainability reporting, as adopting such measures would inevitably reduce profits.



A comprehensive study covering 20 years of sustainability reporting found just that [202]:

*“It turns out that reporting is not a proxy for progress. Measurement is often nonstandard, incomplete, imprecise, and misleading. ... Worse yet, the focus on reporting may actually be an obstacle to progress—consuming bandwidth, exaggerating gains, and distracting from the very real need for changes in mindsets, regulation, and corporate behavior.”*

That sustainability reporting does nothing to achieve actual sustainability should not be a surprise at all. Businesses are required to grow, so



setting limits runs counter to their prime directive. As Pucker reports in the above HBR article:

*“According to a 2016 study [[https://www.researchgate.net/publication/290522562\\_Is\\_Earth\\_recognized\\_as\\_a\\_finite\\_system\\_in\\_corporate\\_responsibility\\_reporting](https://www.researchgate.net/publication/290522562_Is_Earth_recognized_as_a_finite_system_in_corporate_responsibility_reporting)] that examined more than 40,000 CSR reports, less than 5% of reporting companies made any mention of the ecological limits constraining economic growth. Even fewer—less than 1%—stated that when developing their products, they integrated environmental goals that align with experts’ understanding of planetary boundaries. Instead, most companies set goals based on their capabilities or aspirations.”*

Whilst businesses publicly profess to care and publish glossy (but meaningless) reports, at the same time they are lobbying furiously against mandatory standards.

As Ken Pucker writes in *The Myth of Sustainable Fashion*, “Retire Sustainability: Less unsustainable is not sustainable. Fashion companies should not be allowed to simultaneously profess their commitment to sustainability, while opposing regulatory proposals that deliver the same end. Businesses must disclose their lobbying efforts, use their clout to affect positive change while engineering a business system that is regenerative.” As a replacement to in-house sustainability reports he suggests “mandatory stewardship reports attuned to planetary thresholds and that must be subject to annual external audits.” [203].

**From the capitalist business logic’s perspective their approach cannot be faulted, though. It is vastly cheaper and more efficient to invest in greenwashing spin than into greening the full company supply chain. Because that logic is so compelling and fully internalised by managers in any large corporation, every single company can**



**rely on their competitors going down the exact same path. Hence there will be no real pressure to do the ‘right’ thing by society and nature when the ‘right’ thing by business logic is to stick to greenwashing and glossy sustainability reports.**

Even the very first step – mandatory standards on supply chain transparency are vigorously opposed by large businesses involved in biomass extraction. The world’s only attempt to create a common, mandatory standard for supply chain due diligence and transparency, the EU’s proposed Corporate Sustainability Due Diligence Directive, is currently being fought over by the EU Commission, the EU parliament, the member states and the corporate lobbyists acting in the background. At present it would appear that the director’s duty of care has been successfully purged from the draft [204] and the directive’s provisions on the trade in biological diversity are as simplistic as they will be useless.

Specifically, the draft directive only refers to one condition, which states [205]:

*The prohibition to import, export, re-export or introduce from the sea any specimen included in the Appendices I to III of the Convention on*

*International Trade in Endangered Species of Wild Fauna and Flora (CITES) of 3 March 1973 without a permit, interpreted in line with Articles III, IV and V of the Convention;*

That’s it. There is zero gain here in terms of preventing overexploitation, as all EU countries are signatories to CITES and hence already obliged to put this provision into national law.

Further, the issues with the use of CITES listed species are rarely about the lack of permits, the issues tend to be either the use of fraudulent permits or potentially feeble basis on which permits are issued (Export permits and the non-detriment findings which form the basis on which permits are issued are the responsibility of national CITES authorities and the convention does not supply or enforce standards for non-detriment findings [206]).

The current wording in the draft directive also allows companies to ignore everything that happens in the supply chain before the specimen is first exported, which runs counter to the supposed intent of supply chain duty of diligence.

## The Marine Parks and Protected Area Scam

Governments are of course equally culpable in creating phantom solutions and signing up to ambitious pledges with no realistic chance of ever committing the funds and political capital to achieve them. This even works in the case of the primary Multilateral Agreement to protect global biodiversity – the UN Convention on Biological Diversity (CBD). Corporations have learned long ago that governments might use international agreements to get contentious national legislation passed. By inserting themselves into negotiations early, corporations can make sure that even international agreements will not be a threat to their power and profits.

In the lead up to the latest round of negotiations for new global biodiversity targets under the CBD there was a huge push by academics and NGOs for the catchy ‘30 by 30 target’, alluding to 30 per cent of terrestrial, freshwater and marine areas being protected by 2030. Fortunately for business and governments, most of the academics and NGOs failed to ask ‘protected from what or who?’. The failure to ask this question means ignoring the groundwork business interests had been laying many years prior.

The 30 by 30 target was indeed agreed in December 2022 as part of the Kunming-Montreal framework and the final text reads [207]:

*“Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and*

*traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.”*

That sounds really positive unless you happen to have the time and capacity to dive into *HOW* protected areas are defined in this context and *WHAT* ‘effectively managed’ means. As mentioned above, business and their armies of lobbyists and think tanks and willing helpers in academia have been playing this game much longer and have been preparing the groundwork for this eventuality of a strong target for protected areas.

Governments ceded their authority to define ‘protected area’ and ‘effective management’ to the IUCN, specifically the IUCN World Commission on Protected Areas (WCPA). If you want definitions that suit neoliberal corporate extraction of natural resources, you need to influence the WCPA.

Following the 1992 IUCN World Parks Congress, a new system of categorising protected areas was developed. Key was that new categories were introduced that allowed resource extraction. Until 1992 there were just 4 categories:

- I. Strict Nature Reserve or Wilderness Area
- II. National Park
- III. National Monument or Feature
- IV. Habitat or Species Management Area

After 1992 there was a push to introduce new categories that allowed extraction activities. The sordid history of how this change came about is recounted in the 2005 paper [208] *“Rethinking protected area categories and the new paradigm”*

By the time of the 2002 IUCN World Parks Congress two new categories were adopted

- V. Protected Landscape or Seascape
- VI. Protected Area with Sustainable Use of Natural Resources

As would be expected there has been an explosion of 'protected areas' since, with most growth being in the new categories.

For example, the new category V meant that traditional farming lands of the Andes, traditional coffee growing areas of Central America and Mexico, long settled landscapes of the eastern USA and Canada and rice terraces of the Philippines could all be termed protected areas, even though they had been heavily modified to meet human needs. No surprise that many don't see this as conservation!

Category VI went even further; with the stated hope it be widely adopted as a means of linking conservation and development. **With commercial scale extraction now allowed in the definition of a protective area, there was a rapid expansion of areas deemed 'protected'.** The 2005 paper [209] questioned if almost half (47.9%) of these new PAs were real or if the kind of progress celebrated at the 2003 World Parks congress was illusory.

Category VI has allowed governments worldwide to include massive forest areas, which are heavily logged, in their protected area commitments. For example, Australia claims to have 22% of its giant

landmass as protected areas already, but over 62% of that is through the use of category V and VI. Without these not-really-protected areas, only 8% of Australia's landmass would count as protected.

The authors of the 2005 paper made very clear their thoughts on the problems of semantics when it comes to the establishment of protected areas, going as far as saying ***"Category V has been used or proposed for use in a manner that tortures the notion of PA so badly as to make it unrecognizable"***, and concluding, ***"The vision of a humanised PAs presented by the new paradigm will lead to a biologically impoverished planet"***. There is no getting away from the authors' predictions having been clearly borne out.

Of course, we need to be open to the possibility that with the 2022 Kunming-Montreal global biodiversity framework governments are going to be more serious about protecting the environment and reducing overexploitation. Given what we discussed throughout about the relative power of the corporations doing the biomass extraction and national governments, that is not very likely.

Going back to the text of the target, it states that *'sustainable use ... is fully consistent with conservation outcomes'* and that protected areas *'are effectively conserved and managed'*. Which should lead us to the question "How is that enforced?". The answer is that it isn't. The IUCN WCPA accepts that it has no control over the ability of national governments to enforce these provisions and to finance 'effective management'. So, to not upset any government, it allows four types of 'effective management', ranging from 'evidence based' (which is high cost) to 'assumption based' (which costs nothing and achieves nothing) [210].

**The question of businesses engaged in 'sustainable use' in these protected areas paying for effective management, monitoring and enforcement is not being asked because putting it**

Terrestrial Protected Areas in Australia by IUCN Management Category (2022)

IUCN Category	Number of protected areas	Protected area (ha)	Average size (ha)	% of Australia	Contribution to NRS (%)
Ia	2,663	15,830,920	5,945	2.06%	9.32%
Ib	67	3,855,903	57,551	0.50%	2.27%
II	1,134	39,491,130	34,825	5.14%	23.24%
III	2,421	1,874,785	774	0.24%	1.1%
IV	4,643	2,477,433	534	0.32%	1.46%
V	361	8,002,906	22,169	1.04%	4.71%
VI	1,352	98,133,222	72,584	12.76%	57.75%
Not Applicable	9	2,825	314	0.00%	0.00%
Not Assigned	1,397	272,138	195	0.04%	0.16%
Not Reported	1	0.4	0.4	0.00%	0.00%



**on the table would violate the neoliberal, free-market consensus.**

The most obvious application of the business pays principle would be in fishing, since marine protected areas almost always allow commercial fishing. For example, auditors in EU highlight only 1% of 3,000 supposedly ‘protected’ areas in the Mediterranean ban fishing [211].

**A 2018 analysis of Europe’s seas confirmed destructive trawling is more intense inside official EU marine sanctuaries, while endangered fish are more common outside them [212]. In the UK 97% of marine protected areas are subject to bottom-trawling [213].**

Similarly, Australia allows commercial fishing in 37 of its 44 marine parks [214].

**Which leads to the question what a ‘marine park’ is really for? Certainly not for the protection of marine wildlife.**

Not only do commercial fishing businesses not pay anything to help monitor and enforce sustainability in these ‘marine parks’. On the contrary, as we showed in Section 2, commercial fishing fleets receive extensive government subsidies and are basically never penalised for the ‘externalities’ that we discussed previously.

**So, whilst conservation NGOs and academics celebrated the adoption of the headline grabbing 30 by 30 target, nobody felt the need to ask the real question: “Will the substance behind the hype be of any use to biodiversity?”. Sadly, the answer is most likely going to be ‘No.’**

## Equating the Wildlife Trade with Poverty Alleviation

Hiding the corporate mode of exploitation is a tried and tested smokescreen by large corporations to divert public attention from what is really happening. Industrialised agriculture and especially industrial animal farming has made this diversion into an artform. When under threat from new regulations, the industry waxes lyrically about the small farmers struggling to survive and stages media friendly protests with tractors blocking roads and the like.

The Dutch farmers' protests against new laws introduced last year to limit nitrogen emissions is a prime example of using this strategy [215]. **Despite being a country of just 17.5 million people and just 180,000 farmers, the Netherlands is the world's second largest exporter of agricultural produce.** With a land area of just 48,000 km<sup>2</sup> (smaller than West Virginia), it is obvious that only highly industrialised agriculture can achieve this sort of output. The new laws threaten this very mode of production by limiting the number of livestock that can be kept in the country.

Using the well-established playbook to protect their vested interests, big, media friendly, protests got staged and a new political party was founded to 'protect small farmers'. What the protestors and those pulling the strings did not talk about is that Dutch farmers are not the poor, struggling farmers of the myth by any means, as **farmers are second only to bankers in the top occupations of the country's 317,000 millionaires** [216].

The fishing industry uses the exact same playbook when it comes to fighting reductions in quota or any attempt at actual monitoring of catch levels and compliance with fishing regulations. **The media will be guided to the small boats and struggling fishermen that make up the majority**

**of the number of boats but are largely irrelevant when it comes to catch levels and destructive practices**, as we showed in Section 2. The media goes along with this, and it would seem it even extends to stock photography sites like iStockphoto and Shutterstock. When you search for photos of fishing trawlers on either site, you get small boats. It is like the massive trawlers that are up to 140m in length do not exist (or have been censored?).

It should therefore come as no surprise that the proponents of the (evidently unsustainable - see Section 2) legal trade in wildlife have adopted the same tactics in the last couple of decades. Using the plight of poor local communities in desperate need for 'development' and 'diversification of livelihoods', the international trade in exotic and endangered species gets conflated with 'helping' poor, struggling communities.

This is a smokescreen in very much the same vein as the agriculture and fishing examples just mentioned. The examples always used by



proponents of this strategy are trophy hunting, wild harvesting for trade/ranching and wildlife tourism [217]. It is taken as a given that the community benefits are 'significant', especially for community-based conservation schemes. In reality, the vast majority of benefits flow to the (usually foreign-owned) tourism or hunting operators [218] or the manufacturers at the end of the value chain for wild harvesting [219]. This does not negate the fact that individuals often gain employment opportunities from these schemes, but the miniscule scale of such opportunities stands in no relation to the needs of the overall community [220]. A great example of this is the trade in wild snowdrops from Georgia. Around 200 locals make US\$120 each per year and get US\$1.60 per 1000 bulbs whereas the retail price in the Netherlands is US\$1,140 per 1000 bulbs [221].

This strategy of pretending that the wildlife trade should be seen as a path to poverty alleviation in the Global South has also been adopted by a wide range of IGOs and even been supported by many conservation NGOs. This is unfortunate and probably a by-product of the crisis in the conservation sector we discussed in the

subsection on the Infiltration of NGOs (page 69). The exclusive protected areas approach is pretty much dead, and the 'new' protected areas allow 'sustainable use' (see previous subsection). That has left traditional conservation with seemingly nowhere to go other than jumping onto the bandwagon. The thought of attacking free-market capitalism and private property rights has either never crossed their mind or they are too scared to lose their funding going down that path.

**And yet, under a capitalist system the benefits of extraction from nature go to those who own the extraction rights and the owners of the land (if applicable). Unless that system is changed the wildlife trade cannot be a path out of poverty for indigenous people and local communities.** Every publication ignoring that underlying logic is simply propaganda created to divert attention from what is really going on.

We would like to remind readers at this point that we are not opposed to the cultural and local trade in species. If properly managed as a commons, neither trade is linked to extinction risk. It is only the commercial domestic trade and the international trade that have been clearly linked to population decline [222].

Even the CITES convention itself has recently become a target to give this smokescreen more credence. CITES was designed to protect species from overexploitation through trade and making poverty alleviation of indigenous people and local communities (IPLC) a core topic of CITES was not on anyone's high-priority list until very recently. Nevertheless, now every Standing Committee meeting and Conference of the Parties has an agenda item called 'Livelihoods'.

The latest push has been the attempt to give IPLC representatives a special status in CITES decision making processes [223]. This is odd, to say the least. If we recall that those conducting the trade – businesses – play no role in CITES at all and if we



further recall that the basis of CITES listings – non-detriment findings – are entirely the responsibility of national governments, it would appear that if you wanted to include local and indigenous knowledge in the (supposedly) scientific decision-making process, you would urge national governments to do so.

There is no need or reason to have special representation of local communities at CITES. Select representatives of IPLC already attend CoP, of course on the basis of someone (usually industry bodies or government) providing the funding to attend a 12-day conference in a far-away, expensive location.

As we discussed in detail in our Modernising CITES report [224], the convention does have strong inequities baked into its design. The countries of the Global South carry most of the costs of implementing the convention but get no funding to do so. The vast majority of the profits from the trade goes to large corporations in the Global North. At the same time the notion that CITES should somehow ‘take care’ of local communities is plainly ridiculous for a convention based on national sovereignty and private property rights over nature. **Properly dealing with local community benefits would require accepting a multi-level commons management framework, it cannot be settled in a meaningful manner under a system of private property rights.**

## UN SDG, ESG, Pacts and Other Smokescreens

Businesses sign up to all sorts of initiatives, goals, principles, pacts and the like to create the impression that they are doing ‘good’, that they are moving with public concerns over climate change, biodiversity loss, plastics pollution, human rights abuses etc. What all these have in common is that they are voluntary and have no useful enforcement mechanism. The result is that they are nothing other than smokescreens, convenient excuses to not do anything of substance, which would reduce profits.

The list of these smokescreens is almost endless. We will look here at some that are popular with businesses extracting biomass: the UN Sustainable Development Goals (SDGs) and Business for Nature. We will also briefly examine ESG investing, which is basically a marketing ploy by fund managers to get higher fees.

Corporations ‘signing up’ to the UN SDGs is like signing up to any non-binding lofty goal or ambition, it is entirely meaningless. First of all, there are 17 SDGs of which just two concern

biodiversity loss – Goal 14: Life Below Water and Goal 15: Life on Land. The rest are mostly focused on development (read: economic growth) and the obvious tensions between the individual goals and 169 targets are never addressed in the UN SDGs framework. Instead, anyone can ‘pick and choose’ what goals or targets to sign up to. The resulting problem of the SDGs is well described in a 2020 publication [225] which concludes that SDGs “prioritize economic growth over sustainable resource use”. The paper continues:

*“Based on an analysis of targets and indicators, we identify a prioritization of economic growth over ecological integrity and a focus on efficiency improvements rather than absolute reductions in resource use. Due to their high and unsustainable levels of resource use, this lack of absolute reduction targets is especially problematic for industrialized countries in the Global North.”*

Or, in short, **less unsustainable does not equate to sustainable**. To make matters worse [226]:

*“We find that the SDGs mainly rely on those institutions currently responsible for unsustainable resource use and propose measures that in part counteract the possibility of transformative change.”*

**Which makes clear why corporations have no problem signing up to the UN SDGs.** There are plenty of other research papers on this topic which all come to the same conclusion. The UN SDGs will not lead to changes that keep industrial civilisation inside planetary boundaries. All the targets are non-binding, and many have no end date. What else could businesses ask for when it comes to signing up?

A more recent initiative is Business for Nature which describes itself as [227]:

*“Business for Nature is a global coalition that brings together business and conservation organizations and forward-thinking companies. Together, we demonstrate and amplify a credible business voice on nature calling for governments to adopt policies to reverse nature loss in this decade.”*

This sound more like a Multi-Stakeholder Initiative, but its goals and priorities (see image below) are so ill-defined that they best fit into this section.

There is awful lot of noise in those priorities and pretty much nothing of substance. This makes it very easy for hundreds of large corporations to

sign up and ‘look good’ for doing so. Whilst it is no surprise that the WEF is the first partner organisation on its partner list, what is disappointing is to see conservation organisations be so keen to be partners of such a collaboration which sets the progress bar so low.

Business for Nature lobbied for mandatory business reporting in the lead up to the CBD CoP15 at which the Kunming-Montreal global biodiversity framework was agreed. Specifically, they lobbied for *“large businesses and financial institutions to assess and disclose their risks, impacts and dependencies on biodiversity by 2030”*. Of course, mandatory in the context of the CBD means that every signatory government would have to devise and pass national laws to this effect, so its not exactly likely to happen given the level of corporate influence over policy we discussed earlier.

Such ‘mandatory’ reporting would indeed be useful in light of what we talked about in relation to supply chain transparency, assuming the reporting goes into that level of granularity. But as we have seen in the section on sustainability reporting above, reporting itself has zero impact on business behaviour. That requires mandatory regulation of business activities in relation to biomass extraction, not just the disclosure of risks, impacts and dependencies.

## Our 2022-2024 Priorities

- 1. Global Advocacy:** Continue to unify and amplify a leading business voice calling for ambitious policies on nature at global level
- 2. National Implementation:** Create a business-government dialogue in 4 countries (India, South Africa, Malaysia, Colombia) to inform the development of the business chapter of CBD NBSAPs
- 3. Business Action:** Encourage further business action by engaging companies, simplifying the landscape and amplifying existing initiatives

We take an integrated systems approach to contribute to a nature-positive, net-zero-emission and equitable world.



Environmental, social, and governance (ESG) investing has been all the rage for the last few years. This has mostly to do with marketing efforts by fund managers that can charge higher fees for ESG investments and pretty much nothing to do with having any real impact on business behaviour in relation to these three areas of concern. Further, what constitutes ESG is not defined, and any fund can decide how to implement their ESG policy. Whilst many funds do use ESG ratings provided in-house or by third parties, according to [228]: “ESG ratings firms’ assessments are based on subjective judgments, extrapolation, and incomplete data.”

The purpose of this type of investing is clearly outlined in the Harvard Business Review article, *ESG Investing Isn’t Designed to Save the Planet*, which states [229]:

*“Most people assume that ESG Investing is designed to reward companies that are*

*helping the planet. In fact, ESG ratings which underlie ESG fund selection are based on “single materiality” — the impact of the changing world on a company P&L, not the reverse. Asset management firms have been happy to let the confusion go uncorrected — ESG funds are highly popular and come with higher management fees. The danger with ESG investing is that it might convince policy makers that the market can solve major societal challenges such as climate change — when in fact only government intervention can help the planet avoid a climate catastrophe.”*

So, if asset management firms are complicit in not correcting their customers’ confusion about ESG investing, because they are profiting from the higher management fees connected with ESG funds, then isn’t this just another form of greenwashing?

That these funds are popular has everything to do with investors looking for higher returns and almost nothing to do with any benefits for the environment or society. Obviously relying on investors chasing higher returns to deliver better environmental, social and governance outcomes is a completely deluded strategy from the get-go. In theory investors can impact business behaviour via shareholder engagement (e.g. voting at annual meetings). But according to what ESG expert Ken Pucker found in his analysis in [230]:

*“Unfortunately, shareholder engagement represents a small subset of ESG investments, and even ESG funds from large asset managers do not always vote in favor of environmental and social proxy proposals. In fact, a recent study revealed that Vanguard’s FTSE Social Index Fund, the oldest and largest ESG index fund, either abstained or voted against environmental and social proxy proposals more than 95 percent of the time over the past 14 years.”*

The impact of ESG funds on capital allocation for investment is negligible for large, mature corporations (who are busy buying back their own shares to boost prices and not selling new ones) and there is no evidence of ESG funds/fund managers engaging in any name-and-shame practices to stigmatise bad behaviour. Instead, the whole ESG story is really just about promising higher returns and charging higher fees.

**ESG funds are measured against benchmarks for financial returns; they are not measured on the impact they deliver. The absence of mandatory, comprehensive, or standardized impact reporting makes any claimed environmental or social impact hard to verify and both the funds and company will surely be very happy about this state of affairs.**

That ESG funds have outperformed conventional funds in recent years has mostly to do with the

fact that they heavily invest in large technology companies, like Apple, Microsoft, Nvidia, Alphabet (Google) and Tesla. These companies have driven most of the gains of the overall US stock market, so with ESG funds being heavily invested in these ‘cleaner’ shares they have outperformed broader index funds. That probably made investors in ESG funds happy, but the net result to the environment is zero, no company has changed its behaviour.

There is currently an attempt underway to codify nature-related risk and opportunities to “*shift global financial flows away from nature-negative outcomes and toward nature-positive outcomes. Its goal is to develop and deliver a risk*



*management and disclosure framework for organisations to report and act on evolving nature-related risks and opportunities.”* Created by the Taskforce on Nature-related Financial Disclosures (TNFD) [231], this is yet another voluntary, business led initiative to “increase disclosure ambition over time”.

These are brand and reputation management exercises to make sure that the public does not demand government regulation. Ambition is the new buzzword when it comes to staving off mandatory regulation. In the same vein as the TNFD, the Global Commons Alliance is creating Science Based Targets for Nature [232] on the

basis of ‘Nature Ambition Loops’ which will in their view “enable and engender stronger voluntary action for nature”. The primary purpose of setting these science-based targets are according to them:

- “get ahead of regulation and policy changes
- strengthen their reputation among consumers, employees, and society”

**It is nice to see how open corporations and their aligned bodies like the WBCSD and WEF are on the real purpose - preventing regulation and protecting their reputation - but this also shows how secure they feel in the power they have over politicians at present.**

## Private Finance for Nature

Recent years have brought about a lot of talk about private investment in nature and many new terms have been coined – green bonds, blended finance, payments for ecosystem services etc. – to magically create new classes of investment products that will supposedly channel billions of private money into nature conservation and restoration without governments having to foot the bill. At the heart of all these efforts lies the supposition that ‘governments are unable to commit the necessary funds’ and thus the private sector has to come to the rescue.

This is of course a lie to further neoliberal policies (recall that all government is bad, unless it makes the rich richer), but in the case of private finance for nature it is also not going to happen. **The real problems with creating private finance for nature is that nature restoration and conservation does not produce any cash flow that the private sector could harness to create a return on investment.**

Biodiversity and ecosystem services are public goods and by themselves have zero financial value

unless they are commercially exploited for profit by harvesting biomass or by ringfencing services for private gain. It is not possible to create financial investment opportunities in ‘nature’ without governments implementing regulatory policies that create cash flows in the first place.

The main advocates of private investment in nature are well aware of the shortcomings of nature ‘as is’ for creating new investment opportunities. Hence the effort is currently mainly going into pilot projects and lobbying governments. The first step to achieving scale in the future is to advocate ‘blended finance’.

Blended finance is a misleading term and describes a situation where the financial product being sold mixes ‘concessional and commercial returns’. That’s financial jargon for saying that public funds need to be included to make the ‘investment’ attractive to private investors. In order to understand what that looks like in practice, we can use the World Bank’s rhino bond product released in 2022 and “structured, priced

and sold” exclusively by Credit Suisse, the very bank that was rescued by a forced fire sale to USB just a few months later.

So how does this this ‘conservation bond’ actually work [233]? The World Bank issues US\$150 million worth of bonds for ‘sustainable development projects’, which are sold via Credit Suisse to private investors. Of that US\$150million, US\$10 million is given to two black rhino conservation areas in South Africa. Instead of getting interest payments on these bonds, the investors get a success payment linked to the increase in black rhino population at the end (after 5 years). That success payment comes from the GEF, meaning from government funds, and the World Bank repays the principal of the bonds at maturity.

Investors get a success payment linked to the growth rate in the black rhino population instead of normal bond interest payments (‘coupons’). For this to be attractive either the success payment would need to be significantly higher than the interest payments over 5 years or the bonds need to be sold below book value (so there is a further gain when the principal is repaid at the end). This is exactly what happened – the bond was sold at 94.8% of its nominal value and the maximum success payment is US\$13.8 million [234].

Investors will also want security that the maximum payout is at an achievable target growth rate of black rhinos. That means the target and measurement will be set in such a way as to be easily achievable. They will also be ‘narrow’, that is the whole US\$10 million the two conservation areas receive from the bond can be channelled



into whatever boosts the rhino population growth rate. Which means that this narrow approach has the potential to be damaging to other species (e.g. divert more ranger resources to rhinos so elephant poaching increases) or the ecosystem as a whole.

There are so many things wrong with this approach it is difficult to know where to start. First and foremost, this is not a 'conservation' bond, the principal is invested in sustainable development projects, that is development projects with a financial return to the lender (The World Bank). These obviously cannot be conservation projects, as conservation cannot provide a financial return. The conservation part is a marketing gimmick financed by the GEF. Notice that no private funds actually flow into the conservation project!

We could have achieved the same outcome for conservation by providing a US\$10 million GEF grant to South Africa to invest in those same rhino conservation areas and would have likely saved many millions on intermediary fees (for Credit Suisse) and established much more comprehensive project success criteria and controls.

Another example of green bonds that have come back into favour are 'debt-for-nature' swaps. These products allow (foreign) cash-strapped low-income countries to restructure their external debts in return for conservation outcomes. A good example how that looks in practice are so-called 'blue bonds', as used by Belize to restructure US\$553 million worth of debt [235] in return for marine conservation pledges. However, *"allocations to environmental projects can fall well short of amounts saved in debt repayments"*. It gets worse [236]:

*"In the case of Belize, just \$84 million of the \$553 million deal actually went toward marine conservation, Barclays estimates. A further \$86 million is allocated to*

*intermediaries and service providers such as re-insurers, advisers and credit providers, Bloomberg News has reported. That's on top of the \$10 million originally disclosed by Belize, to help cover the closing cost for the transaction."*

Given that green bonds constitute the vast majority of the green finance market as it exists today, this is not very encouraging for the whole exercise of 'attracting private investment into nature'. The World Bank in its recent paper on private finance for biodiversity and ecosystem services [237] acknowledges as much. The paper concludes:

*"Financing biodiversity projects is difficult because of their local nature, small scale, and lack of monetizable cash flows. Putting a price on something historically seen as a public good is challenging. Given these circumstances, integrating biodiversity risk into risk management more broadly (including through greening supply chains) is likely to have a larger impact."*

**The whole idea of a 'Green Wall Street' and private money fixing the environmental mess created by private businesses is basically a phantom solution. Having successfully indoctrinated governments and the public to believe that only the private sector is efficient and can 'fix things', financial players will use any green bonds, blended finance and similar instruments to extract fees, not to fix nature.**

It would be nice if this whole effort could be stopped before it ever reaches a scale where it becomes too big to fail. As the World Bank acknowledges in its report, the best way forward is to focus on eliminating subsidies that are harmful to nature and on getting private businesses to *"integrate biodiversity risk into risk management more broadly"*. The latter can only happen through mandatory government regulation.



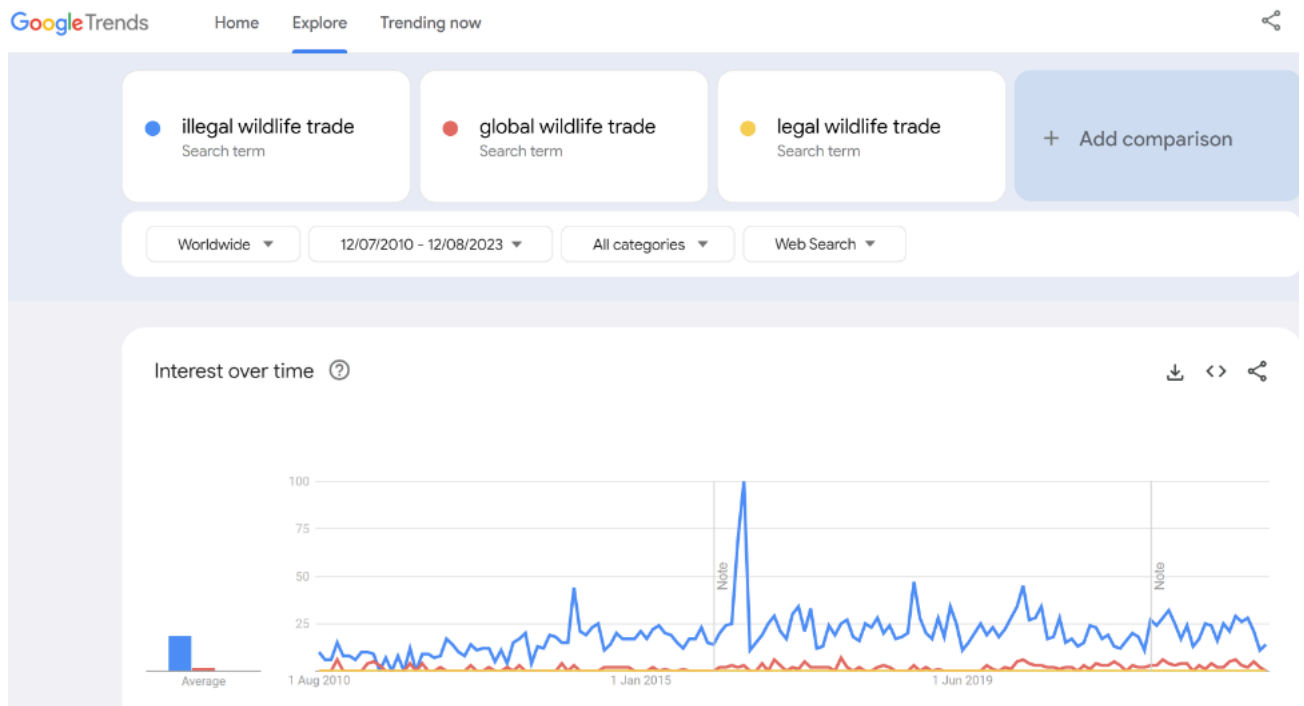
## The Real Value of Phantom Solutions

**What all these phantom solutions have in common is that they will do nothing to improve the prospects of nature under the continuing onslaught of human exploitation and conversion of the remaining wilderness. It would be disingenuous to claim that this is their prime purpose, it is just an ‘unfortunate’ side-effect of corporate interests protecting their power and profits.**

Protecting profits and power means fighting stringent government regulation that imposes a real cost on doing business. Whilst businesses already have the power to make sure that this doesn't happen, they are also aware that public anxiety over climate change and biodiversity loss is rising. From this perspective these phantom solutions are best understood as a diversion and risk mitigation strategy. Keeping people ignorant about the true scale of the calamity we are facing due to our unsustainable energy and biodiversity use is critical to keep the money flowing to those who least need any more.

The investments companies currently need to make in phantom solutions to keep the billions flowing to their executives and shareholders are so miniscule as to be obscene. Participating in MSIs, certification schemes, initiatives etc. costs perhaps a couple of employee's wages and some paltry donations to NGOs. Buying politicians is equally cheap – the total lobbying spending of the US oil and gas industry in 2022 was just US\$124 million [238]. This seemingly large number is less than a rounding error compared to their profits – the 5 biggest oil producers alone made nearly US\$200 billion in profit in 2022 [239].

It also needs to be mentioned here that the diversion strategies employed do not end with the phantom solutions we outlined above. Getting the mainstream media and public attention to largely focus on the **illegal** wildlife trade is equally beneficial to the companies doing far greater damage with their legal, but unsustainable, practices. This is not conjecture, a simple Google Trends search illustrates the difference:



Which means the decline in biodiversity will keep accelerating until the public demand for directly regulating businesses engaged in the extraction of biomass has reached a point where governments are forced into real action. Until that point, we can all rest assured that whenever one phantom solution has reached the end of its useful life as a diversion to placate the anger and anxiety of populations, a new one will promptly be invented (think Corporate Social Responsibility becoming Triple Bottom Line accounting becoming ESG commitment) and hawked around as evidence that now businesses are really getting serious about being 'nature positive'. This latest buzzword is just like any of the other smokescreens and pseudo-solutions. It can mean whatever you want, as long as it doesn't mean mandatory regulation.

**You cannot make an artificial construct, a corporation, expressly created to make money from exploiting nature, inherently care about preserving nature (or at least sustainability). In our current weird economic logic, it is enough for a business to only care about making more money for its owners. Without changing that**

**economic logic, at least for this subset of companies, we are not going to change the trajectory of biodiversity loss.**

Businesses do not care about scientific facts, especially scientific facts that result in consequences that are far in the future. Corporations and their executives care about their next quarterly results and the potential short-term risks to brand and reputation. Causing an environmental disaster is a brand and reputation problem that needs to be 'fixed' and then forgotten.

Emptying the oceans may be a scientific fact with potentially grave consequences for human survival, but it is not a problem for the commercial fishing fleets doing the emptying. It does not create any imminent brand or reputation risk. What percentage of the general public would even know the names of the top 5 commercial fishing companies?

**The only way to change this destructive logic is mandatory regulation.**





## Section 8

# A New Approach to Regulating the Business of Biomass Extraction

In this report we have outlined how we are currently trapped in a destructive relationship with nature fostered by an ideology of free-market, neoliberal capitalism, and a universal belief in economic growth as a proxy for ‘progress’ (which seems to mean little other than living longer these days). This conflation of growth and ‘progress’ is blinding us to both our animal nature and the destruction we are wrecking on the biosphere in the pursuit of more.

Whilst the economic system created by this ideology is already clashing with the reality of a limited planet and limited fossil fuel reserves, that clash is only beginning and is not yet at a scale where the human capacity for self-delusion, confirmation bias and wishful thinking can’t still pretend it isn’t happening. We have only just

reached the tipping point of public recognition and acceptance on anthropogenic climate change. We are still some years away from a similar tipping point, where the impact of biodiversity loss on the countries of the Global North becomes too obvious to be ignored.

As with climate change, that does not necessarily mean we are going to change course. As we illustrated, the extraction of biomass is big business and big business has massively more power than ordinary citizens in the democracies of the Global North. Businesses have learned to direct public attention away from both the problems they are causing and the power they have accumulated. This creates a dilemma when it comes to changing courses and saving human civilisation from near-certain collapse.

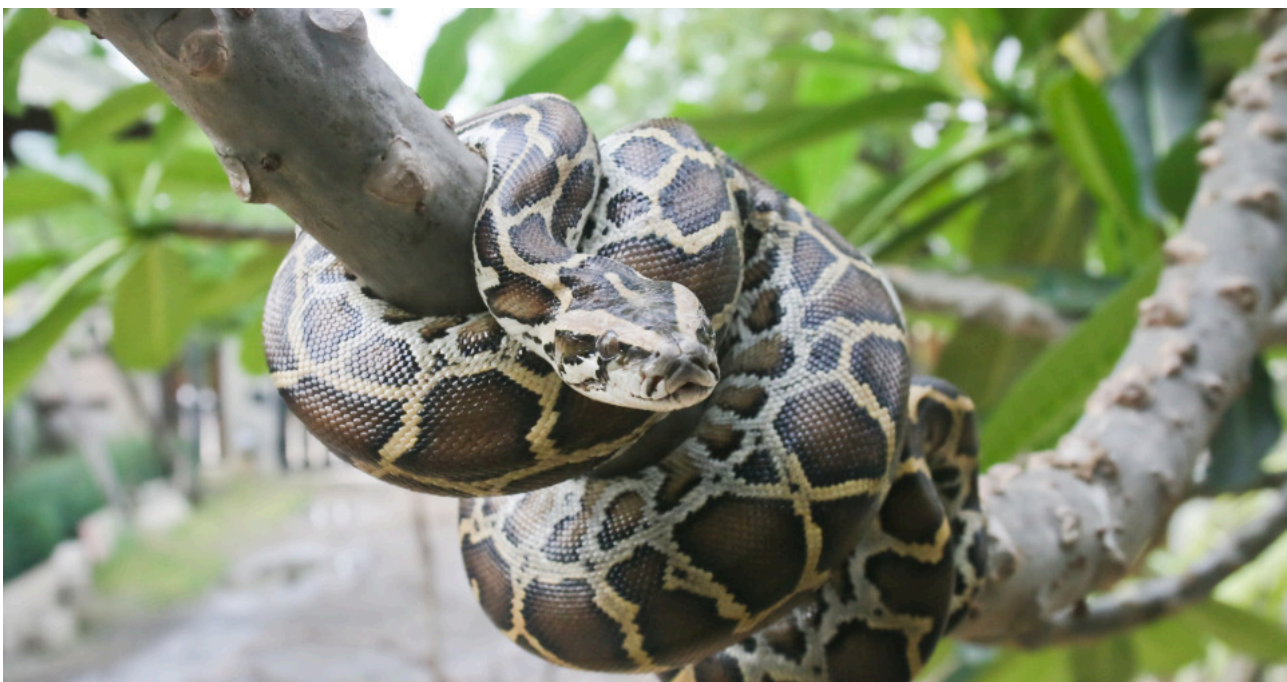
The likely scenario for the near future is that voluntary and 'market-based' approaches to counteract the self-destructive trajectory of this ideology and power constellation will prevail for the time being and hence favour actions that appear compatible with the never-ending growth mantra. The transition to renewable energy sources and electric vehicles is one such action, as is the transition to aquaculture in fishing. Both sound like a solution, but only if you don't ask too many questions about how they scale. Both are sold as not requiring any change to consumption or behaviour patterns.

**Despite the inherent inability of any market-adherend solutions to solve the underlying problem, they are largely what is possible today and therefore better than not taking any actions at all. With this caveat in mind, we will outline some of the key regulatory changes that could be made to hold business accountable when it comes to biodiversity extraction.**

Obviously, despite the clearly established need for action and their comparatively minor impact on business and the wealthy compared to a wholesale change in system and ideology, they are

going to fight even the most minute changes that reduce profits every step of the way. That's because corporations and their owners have now been accustomed to having all the power in any country other than perhaps China (which has recently started reigning in some business sectors). They control government agendas and the media and have become expertly adept at manipulating the public into supporting policy measures that go against public interest.

Combine this degree of power with having effectively no responsibility towards nature (as demonstrated in Section 4) and it should be abundantly clear that change will not be easy and will be driven by necessity, not choice. That means it is going to be the fear of the wealthy and the managerial class to lose (some of) their power and wealth that will lead to them acceding to (minor) changes, not rational argument or scientific research findings. Historically it is more likely that such changes are implemented after the catastrophe has already happened (like the post WWII switch to a more equitable version of capitalism), but there are examples when the elites accepted that change was necessary to protect their power and status and supported the



necessary policy reforms before the crises got worse (like in the US from around 1910 to the New Deal) [240].

As we demonstrated in the previous sections much of the damage to nature stems from the lack of accountability of executives, boards and corporate shareholders for their actions. This lack of accountability to nature and broader society is underpinned by a lack of transparency and an absence of a proper corporate criminal law.

It is made worse by the obfuscation of ownership through intermediaries (asset managers, mutual funds, pension funds, ETFs) and the use of shell companies, secrecy jurisdictions and even fake banks.

Addressing these interconnected issues is vital to turn the tide.

**In addition, we need to actively set limits on corporate extraction of biomass and the incentives to do so. That means a strict application of the Precautionary Principle as the basis for regulating all business activity related to biomass extraction. In terms of CITES that means going to reverse listing and putting the burden of proof on business, upfront, before any trade can take place.**

It further requires restricting advertising and marketing for endangered and overexploited species and abolishing harmful environmental subsidies. It also requires the introduction of a crime of ecocide under the Rome statutes and abolishing limited liability for such crimes.

We discuss these proposed changes and how they compare to a wholesale change in economic system in more detail below.

## Precautionary Principle and Burden of Proof

Under the current blacklisting model employed by CITES, the burden of proof lies with those who oppose trade, which in most instances means conservation NGOs, philanthropists and sometimes governments. Those with the power and the money – the businesses that generate massive profits from the trade in endangered species – can focus their attention on lobbying governments and undermining or coopting NGOs, without having to make any financial contribution to regulation.

In theory the Precautionary Principle is enshrined in CITES via the use of non-detriment findings (NDF) and export permits, but in practice there is no mandatory standard for NDFs and no funding to get the quality of NDFs that would be needed to prevent overexploitation [241]. Therefore, any claim that CITES already uses the Precautionary Principle is both bogus and disingenuous. To achieve a strict application of the Precautionary

Principle it would be necessary to change CITES to a default of 'no trade', also known as whitelisting or reverse listing.

Under such a model CITES would regulate the businesses that trade in wild species directly. By virtue of the 'no trade' default it would also be responsible for regulating the trade in ALL species of wild flora and fauna [242]. The fact that moving to a reverse listing model would result in CITES being responsible for regulating the trade in ALL species of wild flora and fauna is important to stress, given the amount of research in recent years pointing to wide-spread biodiversity loss and the extinction crisis for the trade in non-CITES listed species.

Despite the recognition that CITES currently excludes many species that are overexploited by trade (such as most fish species), conservation NGOs have failed to see the common denominator

in the blacklisting model and are yet to turn their attention and lobbying to reverse listing.

We showed in our Modernising CITES report [243] that it is possible to create a transnational regulator which regulates businesses directly without becoming captive to business interests. It is also possible to design such a regulatory system in a way that is both equitable and financially viable from a monitoring and enforcement perspective. We based our proposed regulatory system on existing precedents of transnational business regulation inside the EU. As such a model requires all participating countries to delegate sovereign rights to a transnational body, it is not very likely to happen anytime soon.

Nevertheless, the assumption of national sovereignty over nature and wildlife that underpins the design of CITES as it stands was always a result of politics, not scientific judgement. We are all equally dependent on the health of ecosystems that transcend national boundaries and on the biosphere as a whole. Nature is a commons and needs to be treated as

such, which requires a global commons management system. Regulating the international trade in wild species under a multi-level commons management framework makes national borders comparatively irrelevant, as the trade is conducted by businesses, not governments. Therefore, a properly designed CITES would need to regulate both national and transnational business directly, in conjunction with national legislation, monitoring and enforcement. In the regulatory model we proposed, businesses would need to provide the proof that any trade in wild species they wish to conduct is going to be ecologically sustainable according to the scientific process stipulated by CITES.

Even though this is a drastic change compared to the current CITES model, it is only marginally different from existing regulatory models for pharmaceuticals and aircraft. The critical aspect of this model is that businesses pay the cost of regulation, creating the funding stream to adequately resource monitoring and enforcement of the legal trade.



## Business Pays the Cost of Regulation, Monitoring and Enforcement

There is a large group of academics and NGOs who believe CITES is effective in the way it regulates the trade; it just has not been given enough resources to do its job properly. That's like saying CITES is a great car, shame about the fact that we have no petrol to drive it. One without the other is useless in both instances.

**If governments in the Global North had the desire to supply sufficient funding to make CITES truly effective, they would have done so by now. After all, this is not a new problem, it was built into the design of the convention 50 years ago.**

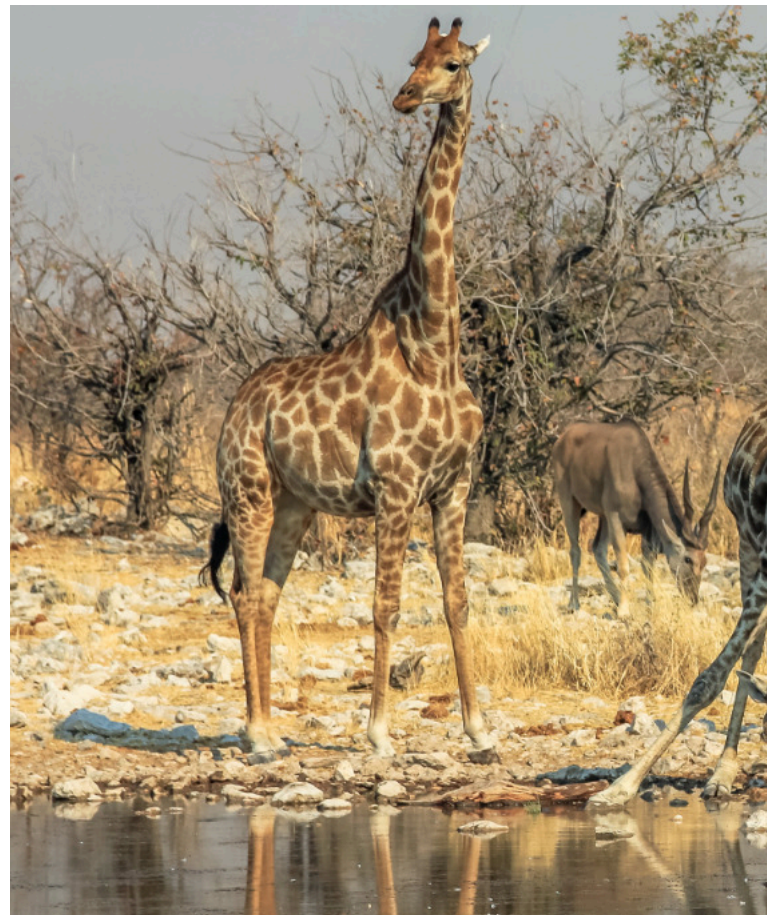
CITES never included a funding model to enable all signatories to adequately resource scientific research, monitoring and enforcement. Creating a dedicated enforcement authority is optional under CITES, so it should come as no surprise that the illegal trade is rampant and growing 2-3 times faster than the world economy overall. This makes CITES effectively a paper convention, impoverished to the point of being useless.

CITES also lacks any associated funding mechanism to support countries of the Global South, which tend to be the main countries where extraction of biomass happens today. When the CBD was created in 1992 at least it came together with the creation of the GEF to channel funds to the Global South. Of course, the funds the GEF disburses are completely inadequate compared to the scale of the task (and the ambitions of its Aichi and Kunming-Montreal global biodiversity frameworks), but at least such a mechanism was created.

The lack of resources at all levels within CITES makes it impossible to achieve the desired proof of sustainability of extraction and adequate enforcement outcomes. The amount of funding

available to combat the illegal trade is miniscule compared to other transnational crimes and reliant on government and philanthropic funding. The World Bank Group estimated that just US\$260 million was made available annually [244] to fight an illegal trade worth at least US\$100 billion pa. The CITES Secretariat receives about US\$6 million pa to regulate a global trade worth hundreds of billions annually.

Just because governments currently display zero desire to renegotiate CITES to make it fit for purpose under vastly changed conditions to 50 years ago does not negate the need to advocate for change. Whilst the only way to truly implement the Precautionary Principle and reverse the burden of proof is to rewrite the convention as outlined above, **it is possible to inject significant**



**funding into CITES and make businesses pay at least part of the costs without changing the articles of the convention. Such a move would bring the trade in line with other regulated industries where businesses are required to pay fees commensurate with regulatory costs.**

### **A 1% Levy on Imports to Major Markets**

A substantial increase in funding for CITES monitoring and enforcement can only be achieved by getting the businesses that profit most from the trade to contribute to the cost of regulation. This is common practice in many industries and can be implemented under CITES in an equitable way by means of a 1% levy on imports to the main import markets (US, EU, China/HK, Japan, UK).

There is no need to create a new tax or customs duty to achieve this, it can be done via: *i)* these countries implementing mandatory CITES import permits in national legislation (the US already has

this), and *ii)* making the cost of the import permit equivalent to 1% of the value of the shipment as declared to customs.

The main import countries would further need to agree to contribute an equivalent amount to what is raised from issuing the import permits to the CITES External Trust Fund. The External Trust Fund would then disburse these funds according to a formula agreed to by the Conference of the Parties. This whole mechanism would need to be voluntary to not run afoul of the articles of the convention but could be underpinned by appropriate CITES decisions and resolutions.

### **Register of Businesses Trading Under CITES**

Establishing a business register of companies that trade CITES listed species would improve transparency, data collection and could be used to levy fees used for CITES initiated scientific research and significant trade reviews. Such a business register could either be set up under the auspices of the UNEP (in a similar way as the CITES trade database is set up under UNEP-WCMC) or it could operate as a separate, global NGO.

Because such a scheme would have to be voluntary to start with, there would need to be an incentive for businesses to participate and to pay fees. Governments could create an expectation (or requirement) in their own jurisdictions that businesses do register and submit detailed information on their trade in CITES listed species. In addition, CITES could alter the format of import and export permits to include a column on the source of each specimen which would be populated with the identifier of the business in the business register.

Businesses would surely complain about disclosing 'commercial in confidence' information to such a register, but part of the purpose is to increase transparency of the trade in endangered wild species. The same businesses who complain are



already likely to be writing glossy reports pushing their sustainability commitments. Additional pressure on businesses to comply with the register could be through the use of a 'tick' (like the CE mark) applied to any wildlife based products where businesses have been judged to be fully transparent in disclosing information to the register. As much of the trade is in luxury items, this would create the necessary brand and reputation risk for not taking part in this scheme.

To overcome business pushback on such a register stipulating the submission of internal data considered commercial in confidence, it could also be included in supply chain due diligence laws as discussed in the next section.

Registrations for businesses trading in live animal species or in CITES listed species with revenue above a minimum threshold should attract fees commensurate with annual revenue. Signatories should be encouraged to pass national legislation to make such registration and payments mandatory. Whilst basic registration fees should cover the operating expenses of the business register entity, these additional fees could be again disbursed to the CITES External Trust Fund and used to cover the costs of significant trade reviews.

**Obviously the above is only a stop-gap measure to fix the acute funding problem until such time that the political will exists to renegotiate the convention based on a reverse listing model as outlined above.**



## Supply Chain Due Diligence and Transparency

Currently there is little transparency in the extraction of biomass for trade and in the supply chains that use these products. As we illustrated, the companies that market the final product do not feel responsible for their full supply chain and routinely ignore issues of provenance, legality and sustainability of the raw materials they obtain via their suppliers. In order to change that, the final manufacturers need to be held responsible for what happens in their supply chain. The EU's proposed supply chain due diligence laws will be a first, major step in this direction if adopted by the European Parliament and Council this year.

Supply chain due diligence needs to go hand in hand with transparency, that is mandatory reporting on any trade in endangered and overexploited species initially and ultimately on all trade in all species (including domestic trade). This means mandatory reporting of all fishing activities in all fisheries, including on the high seas, and of the catches being landed and the bycatches that were discarded, with appropriate monitoring and independent verification.

It also means introducing mandatory end-to-end tracking of the trade in all specimens of species considered high value, critically endangered or most at risk from trade (at a minimum all CITES listed species). In contrast to current practices, the system needs to be set up in such a way that trade flows can be properly reconciled, so that it becomes easy to spot the laundering of illegal items into legal supply chains.

Implementing supply chain due diligence and transparency along these lines will increase the cost of trade, which is a good thing when it comes to biomass extraction. The cost should be borne by business, to start with by those businesses that are most able to afford it. The proposed EU supply

chain due diligence law initially applies only to companies with more than 500 employees and annual revenue in excess of 150 million Euros.

Of course, the current draft EU directive is primarily focused on human rights abuses and has very little to offer on the environment as we outlined earlier. But once such laws are in existence and begin to gain acceptance they can usually be expanded in scope. Without transnational regulations on supply chain transparency and due diligence we will continue to be primarily subjected to secrecy, greenwashing and denying responsibility.

Implementing supply chain due diligence properly will lead to narrower supply chains with more direct corporate control. This trend can already be seen in the trade in crocodile and alligator skins, which has been under sustained pressure from activists, NGOs, and IGOs to reduce the illegal trade. The largest luxury conglomerates have started buying and managing crocodile farms, to have more control over their skin supply and to reduce the illegal trade component. Still, secrecy and verification remain a major issue, the Australian government recently announced a review of the crocodile farming industry due to the lack of access by independent bodies to verify claims about animal welfare and humane killing practices.

Mandating such a change in corporate strategy from deliberate ignorance to direct control of supply chains has unintended consequences. If companies own the farms and processors and implement stringent controls, opportunities for laundering illegally collected crocodiles will be vastly reduced. This in turn will reduce the 'alternative livelihood' incomes from the area, which count trafficker's incomes. This effect is



already noticeable in the crocodile trade and has been bemoaned by the IUCN [245] as impacting poverty reduction through wildlife trade.

The fact is, business does employment, not poverty reduction. Better regulation will lead to less illegal trade and less overexploitation. If we want the wildlife trade to help reduce poverty we need a different model for distributing the gains from the trade (recall the price of a Hermes handbag compared to the price of a raw crocodile or python skin). That would mean abolishing capitalism, or at least any version of capitalism that rejects the notion of transfer payments in relation to the exploitation of the global commons.

It's worth repeating here that any voluntary initiative, MSI or certification scheme dreamt up by industry will never achieve meaningful supply chain due diligence. Only national and transnational laws can achieve that.

## Accountability to Society and Nature

Fixing supply chains alone is not going to solve over-extraction and lack of sustainability in operations without broadening the scope of accountability of executives and boards. Triple bottom line accounting quickly went out of fashion, but a different company type, like the B-Corporation certification, could form the basis of such expanded accountability in relation to social and environmental performance if it is given legal status across the globe.

At the moment B-Corps undergo voluntary certification and need to re-certify every 3 years to maintain their designation. The certification process is carried out by a private company, and it has no legal status or legal significance to its shareholders, stakeholders or employees. It is primarily used as a branding tool.

Instead, what is required is an equivalent, legally recognised corporate form (let's call it 'Legal B-Corp') that enshrines environmental and social performance standards as well as transparency and accountability standards into corporate law, so that public stakeholders and regulators have access to the necessary information and the legal standing to be able to sue executives and boards in case of non-compliance. Once such a corporate form has been created and adopted across the major jurisdictions, treaties such as CITES could be amended to require national legislation that any company trading in CITES listed species needs to be a Legal B-Corp.

**Ultimately any company in the business of extracting biomass or trading in biodiversity should be required to be incorporated as a Legal B-Corp. This would be the only way to override the current myopic focus of executives and boards on profit and stock price performance. Unless the needs of nature and other**

**stakeholders are given equal status under the law, the lack of consideration and accountability exhibited at present cannot be changed.**

This change would also need to encompass the abolishing of limited liability status in relation to extreme forms of green crime, such as ecocide (if adopted into the Rome Statutes of the International Criminal Court) and major environmental damage. Even with enshrining environmental performance standards in corporate law in a Legal B-Corp, shareholders have limited attention. Environmental standards will by necessity be far more complex to measure and report than profits and share prices. Unless shareholders are forced to pay attention to protect themselves, they are not going to.

Hence the incentive to exert pressure on management and boards to preference profit and share price growth needs to be curtailed by putting shareholders and directors fully in the picture of liability should things go wrong. Abolishing limited liability in such cases would go a long way towards reducing the incentive to pressure management and boards into cutting corners.



## Making Corporate Green Crime a Dedicated Focus of Law Enforcement

Holding executives and boards accountable for the environmental performance of their company only works in combination with law enforcement paying attention to those crimes and treating them like street level crime, that is applying the full force of the legal system with executives going to jail when crimes have been found by courts to have taken place. This is a very different approach to the current negotiated settlements and voluntary commitments favoured by regulators.

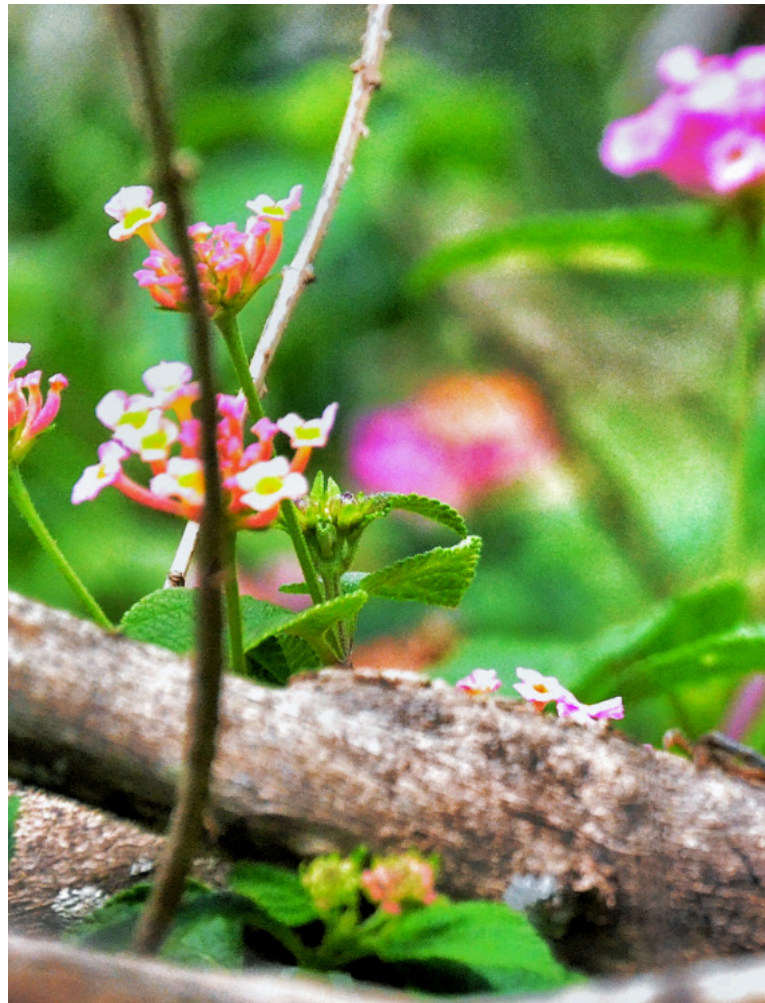
**The problem with achieving this change lies in the need to apply the law to those accustomed feeling above the law. Power does not voluntarily hold power accountable and those in the direct pay and service of the powerful, the professional and managerial class, will not lightly agree to being a valid target for law enforcement.**

Perhaps what can serve as an avenue for getting to such a point is to use a special purpose vehicle with the sole focus of investigating corporate green crime. This is much less threatening than pushing for complete reform of the current law enforcement and judicial system, which is completely fixated on pursuing street level crime (drugs, murder, assault, theft, robbery etc.) everywhere. It would start with a focus on crimes that the public can relate to, like fraud, corruption and money laundering.

The Australian example of establishing independent commissions against corruption in politics may be a useful example of what is possible in this respect. Following early moves by Queensland and New South Wales, which were prompted by scandals, by now all Australian states have such anti-corruption commissions (some of which have wide-ranging powers and have sent politicians to jail). In response to relentless public

pressure to create a federal anti-corruption commission, this topic became a major election issue last year.

The Labor party took a promise to create a national independent commission against corruption to the general election in May 2022, which they won. It followed through on its promise and the relevant legislation came into force in July 2023. This means that all levels of Australian government now have anti-corruption commissions, which is quite a staggering achievement given how corrupt the political system is. The new federal anti-corruption commission received 44 referrals on its first day of



## Restricting Private Property Rights and Incentives for Over-Extraction

Whilst our current system of private property rights as the foundation of business and all other forms of ownership is completely entrenched, we would advocate to restrict those rights in the case of biomass extraction and the natural commons (the atmosphere, biosphere and all natural resources). Restricting private property rights is not new, extending such restrictions to nature is also not unheard of. There is a growing movement of securing 'non-human rights' for animals and ecosystems via the legal system, with mixed successes to date. We also already restrict the trade in humans and some types of pets under various considerations (biosecurity, ethics, human rights etc).

This issue is especially pertinent in relation to captive breeding operations. For example, John Hume was able to set up a rhino farm in South Africa with nearly 2,000 rhinos today. These rhinos have zero commercial value (the trade in rhino horn is prohibited under CITES) and almost certainly zero conservation value [246]. But under South African law there are no constraints on wildlife farming (other than export restrictions imposed by CITES), these animals are considered private property. This means it is perfectly fine to breed lions in captivity, which are then used for 'canned hunting' and the skeletons are exported to China to make lion bone wine [247].

Such gross abuses of wildlife for blood sport or speculation on the lifting of CITES trade restrictions could be prevented if private property rights are restricted for all wild species. This could be used to better regulate captive breeding for the exotic pet trade and also for aquaculture.

What is without doubt is that the current primary incentive for any farming, fishing or logging business is to save costs and maximise profits, which means considerations of adverse effects of cost-saving on the environment or animal welfare issues are not considered. Whether moving to Legal B-Corps as described above is the best avenue or creating mandatory, transnational regulations for each industry would need to be studied. It might well be that such a move could go hand-in-hand with restricting private property rights over wild species and land use.

What should be without any doubt is that abolishing all harmful environmental subsidies needs to be top of the list of measures to take to protect biodiversity from further overexploitation. Our food system is extremely wasteful in terms of





The overexploitation of the natural world comes in many guises, including the dependence on subsidies or the unwillingness to invest in environmental stewardship. Take the example of Western Australian pastoralists, outlined in the January 2020 article *Death by a Thousand Cuts* [248] which discussed “285 family businesses left to their own devices on almost half of WA, the regulators missing in action for decades”. As a result, “overstocking (some pastoralists are known to overstock by 440%, without fear of repercussions) has been the norm, leading to widespread degradation. Erosion and lack of biodiversity now threaten the resource’s ability to renew itself”.

The article goes on to reference a 2011 Department of Agriculture report, released under freedom of information laws in 2014, showing 70 per cent of the leases in the Southern Rangelands were considered “unviable”. Despite this, in 2015, 435 out of 437 WA stations had their leases renewed.

The average age of pastoralists in WA is 60 and few are handing stations down to their children, who want nothing to do with a tough business proposition in a declining landscape, which means that, “Pastoralists have no incentive to keep the land in good condition or mount a decade-long rehabilitation project [and] certainly, their accountants would advise them against it”.

land use, it is designed to promote low-cost production and consumption, not sustainability. Abolishing harmful subsidies would go a long way towards changing that, as food prices would rise, and production methods would need to be adjusted. The same applies to fishing and logging, which are both heavily subsidised and wasteful in their use of natural resources.

This has been agreed in principle as part of the Kunming-Montreal global biodiversity framework Target 18, which says [249]: “*Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least \$500 billion per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.*”

As with our previous discussion of the 30 by 30 protected area target, there are many caveats in this commitment. The explanatory text makes clear that we are unlikely to see meaningful reductions: “*For some types of incentives, it may be possible to eliminate them outright. However, for most incentives a more scaled or gradual approach may be required as different sectors or groups in society have come to depend on them. In some cases, it may not be possible to eliminate or phase out harmful incentives as they are deemed important for other societal objectives. In these cases, incentives harmful to biodiversity should be reformed so that their negative impacts are reduced as much as possible.*”

As the CBD and its global biodiversity frameworks have no enforcement mechanism, this can only be a first step. Ultimately there needs to be a legally binding mechanism and one that the US is part of (the US signed up but has not ratified the CBD).

## Tackling Tax Evasion, Secrecy Jurisdictions, Fake Banks and Shell Companies

Secrecy jurisdictions, like some of the well-known overseas territories of the US and UK, provide facilities that enable people or companies to escape or undermine the laws, rules and regulations of other jurisdictions elsewhere, using secrecy as a prime tool. A secrecy jurisdiction can be utilised not just to underpay tax but for other illicit activity like laundering money [250].

Money laundering is a key component of any illicit trade, including the illegal wildlife trade. Being able to use secrecy jurisdictions and shell companies to hide beneficial ownership and evade regulations are key enablers of undermining environmental laws and regulations. We cannot possibly hope to change the current disregard for nature and the paltry environmental protections we have without closing down the use of secrecy jurisdictions and shell companies.

Secrecy jurisdictions, shell companies, fake banks and related mechanisms are also used by individual and business actors to take money out of countries in the Global South. It is this capital flight that is partially responsible for keeping populations impoverished, which is one of the drivers that leads to poaching and taking part in the illicit wildlife trade. Capital flight from Africa is estimated at more than US\$50 billion per annum at present, with most of this coming from resource rich countries [251].

As capital flight also involves the embezzlement of donations given to environmental and development causes it is directly relevant to tackling not just the illegal, but also the unsustainability of the legal trade in wildlife. There is a long-running campaign in place to change this from both an inequality and tax justice point of view, but it would serve the conservation movement well if it would join in the fight and

make the ending of secrecy jurisdictions and shell companies a priority.

At present there are glaring contradictions in play that reflect poorly on the understanding of business practices by conservation NGOs. The Royal Foundation/United for Wildlife set up a task force to tackle financial crime in the illegal wildlife trade in 2014 and invited the major banks to participate in 'closing down' money laundering and payments for illegal goods. These are the same banks that again and again are ordered to pay fines to financial regulators for enabling or ignoring money laundering in their networks. For example, HSBC, a member of the task force, was fined US\$1.2 billion in 2012 for laundering US\$881 million in drug cartel money and was placed under monitoring by US authorities. In 2021 it emerged that HSBC had belatedly informed monitors of another money laundering network in its system, this time involving US\$4.2 billion worth of payments [252].

As we discussed earlier, as long as companies get away with paying fines instead of executives being sent to jail, these practices will not change, and conservation NGOs would be well advised to think twice about task forces and other MSIs that implore industry to voluntarily clean up its act.





## Transnational vs National Regulation

Many of the necessary changes discussed above would be far more effective if they are enshrined in transnational regulation. Corporations have used their power to drive competition between jurisdictions on lowering taxes and regulations ever since it became possible to move money, information and IP effortlessly between countries. Taking that power away by creating both transnational regulations and transnational regulators would be immensely helpful in reversing the trend of the last 40 years.

In respect of making any type of transnational regulations work, it is necessary to eliminate both secrecy jurisdictions and shell companies first. As long as the ultimate owner of a company or asset can be hidden from regulators, any form of regulation and law enforcement is bound to constantly run into difficulties. Of course, getting

the worst offenders – the US, Switzerland, Singapore, Hong Kong, Luxembourg, Japan, Germany, the UAE, the UK and its overseas territories [253] – to change their way is going to be a massive challenge.

It has to be acknowledged here that agreeing any new transnational regulations is going to be very difficult at present given that the current unipolar global order under US hegemony is coming to an end and we are entering something new, a more multi-polar order with the BRICS+ countries forming the core of a new power block. That doesn't mean that agreements cannot happen, like the CBD Kunming-Montreal framework and the Biodiversity Beyond National Jurisdictions high-seas treaty have shown. It does mean that these treaties are unlikely to involve any mandatory and enforcement measures, though.

## Scale of Needed Reforms Compared to Abolishing Capitalism

Although some of the obstacles involved in getting these proposed changes enacted may seem insurmountable, their scale is miniscule compared to the alternative – managed degrowth and the end of capitalism. Without significantly reducing consumption of biodiversity and without halting the extension of agriculture (and especially meat production), the current trend of massive decline cannot be halted or reversed. Because more consumption equals more profit, there are probably only two choices – rationing use (and abolishing capitalism) or stringent, invasive regulation of industry using the Precautionary Principle. We can compare the scale of the necessary changes in these options by looking at climate change, which can only be solved using the degrowth path.

The massive challenge of reducing greenhouse gas emissions to stop catastrophic climate change quite often is presented as the more pressing problem than preventing catastrophic ecosystem collapse due to overexploitation of nature and land conversion. **In reality, stopping catastrophic climate change is the harder of the two problems to solve, even though it has been talked about for longer and is much easier to measure and model than biodiversity loss.** Once weather changes and extreme events became pronounced it achieved a degree of urgency that is yet to be happen for the biodiversity crisis. Yet despite more public pressure and seemingly endless ‘commitments’ by industry and governments, it cannot be solved under capitalism.

The reason is that despite widespread belief that we can transition our industrial, growth-oriented economy to become ‘net-zero’ emissions, this is a phantom solution in the same vein as the phantom solutions for halting biodiversity loss we

discussed earlier. The current crop of net-zero pledges are rubbish, they were only invented once corporations realised that it would be impossible to reduce actual emissions without reducing revenue and profit. That is not an option for any company under the current system.

**Every single company or even country that is “working towards net-zero emissions by 2050” is using the same strategy – leave everything as is with a bit of electrification thrown in and buying carbon offsets and using carbon capture and sequestration to make up the difference. The problem is that this strategy does not scale to everyone using it.** For a start, electrification requires massive investment in the transmission grid, battery storage, solar, wind, EVs, electric trucks, electrification of production processes (think steel, cement, fertilizer etc.). Those investments will be made using oil, coal and gas (they require energy and materials at every stage), which will cause a further massive increase in greenhouse gas emissions for several decades.

To make matters worse, some of the transport modes that our current economy relies on can probably not be electrified either ever or anytime soon. Existing battery technologies are too heavy for long-distance trucks, tractors, large ships and commercial jet aircraft [254].

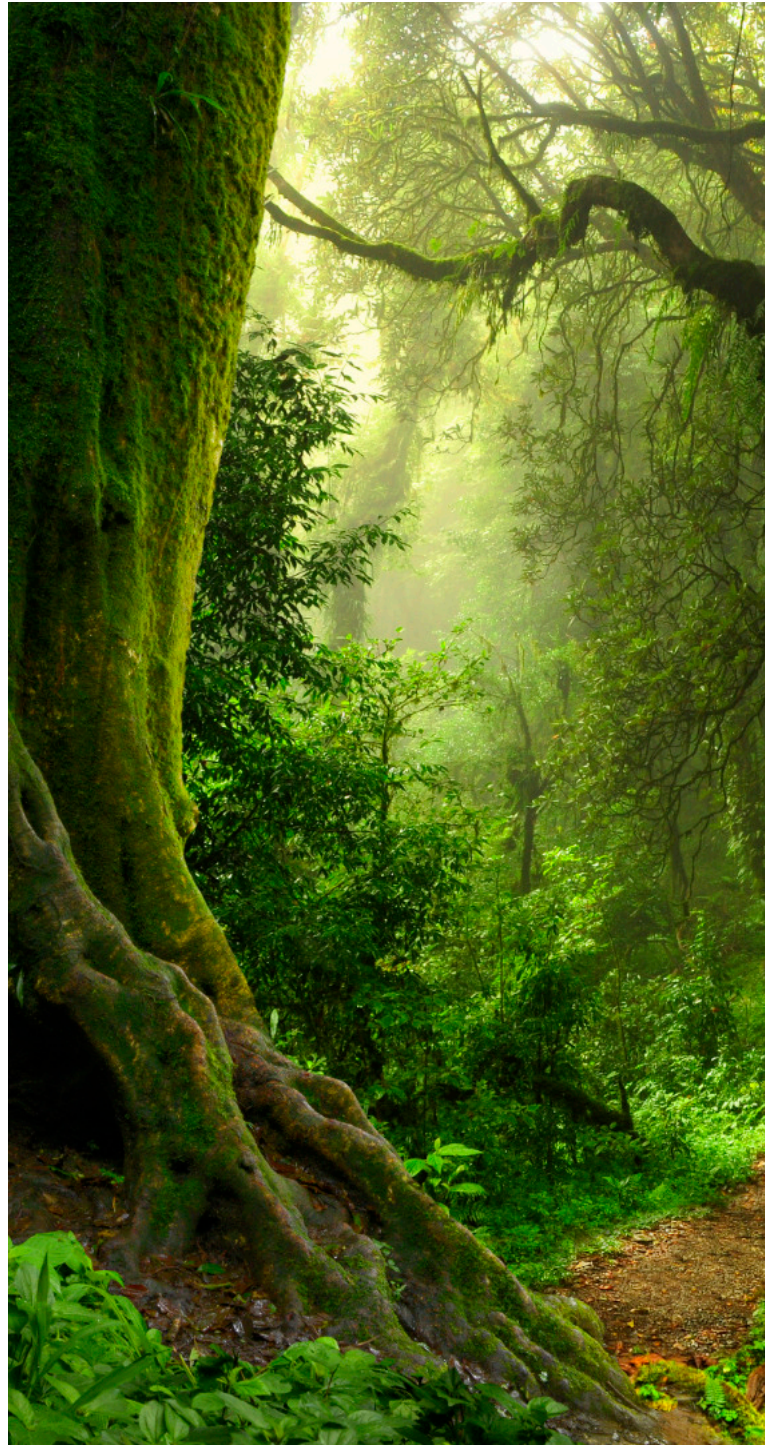
So, offsets will always be needed and especially during the next 25 years. But as with biodiversity offsets, most carbon offsets are junk. They are created because there is demand for them, not because they provide guaranteed, long-term abatement of carbon dioxide in the atmosphere [255]. Carbon capture and sequestration is a true ‘phantom technology’, endlessly talked about but with no proof of large-scale deployability at an (energy) cost that makes it viable [256].

**This is the reason that solving climate change is not possible under capitalism, because the only viable solution would be to allocate ever-decreasing (net) carbon budgets to countries and individuals in a way that is both equitable and takes into account historic emissions. This amounts to globally managed degrowth and that's not possible under the current system of profit making and private property rights, both economically and politically.**

The biodiversity crisis in contrast is solvable under capitalism, because the required restrictions are far less intrusive overall than what is needed to curb climate change. The degree of regulation required is nothing out of the ordinary, really, it is just that we have forgotten the precedents. For example, far-reaching restrictions on banks were introduced after the Great Depression and again after WW2, to ensure that funds stayed in countries which needed to rebuild.

Many crucial industries used to be government owned and operated. All that was undone in the 1980s and 1990s under the banner of deregulation and free-market capitalism. If we are prepared to drop our slavish dedication to this ideology, even just in the realm of biodiversity exploitation, then the problem becomes quite solvable.

As we outlined earlier, we would have to introduce fairly drastic regulations to make our use of biodiversity truly ecologically sustainable and fully based on the Precautionary Principle. But these regulations are sector specific and can be built into and around existing treaties – a modernised CITES based on reverse listing, the BBNJ agreement [257] and the Kunming-Montreal biodiversity framework. They do not require the end of capitalism; they require the end of free-market capitalism in the exploitation of biodiversity. They also require an end to land conversion for



agriculture and rewilding of areas that are no longer in use or are of marginal utility.

They require transparency, data collection, monitoring and enforcement that is unheard of in the trade in wild species, but commonplace in other industries. Both the military and the social media giants have the necessary technology to



achieve global, real-time surveillance of extractive processes both on land and on the oceans. In the same way that Amazon can track millions of shipments across the globe in real time, we can create supply chains for wild species that are similarly tracked from source to final destination. None of this is impossible, it is not even difficult.

The same applies to the broader policy settings that need to be changed. For example, ending harmful environmental subsidies such as fuel subsidies for fishing does not end private property rights or the ability to make profits, it simply corrects distortions that incentivise overexploitation. Similarly, moving away from 'industry friendly' definitions of sustainability (such as the maximum sustainable yield used by fishing) does not end profits, it just reduces allowed catch levels.

As a result of introducing such restrictions and changing incentives, changes will happen downstream in the supply chains and in the pricing of wildlife products such as seafood. This in turn will create pressure on governments to increase the wage share of GDP at the expense of profits, which means changing taxes and distribution patterns to how they used to be 80-40 years ago, not ending capitalism.

Of course, this is only possible by breaking the stranglehold that large corporations and their rich owners have on our political and media institutions. That can happen once part of the elites in the Global North break ranks and side with the 'deplorables' and the squeezed middle class to create a new power block. This process is already underway in both the US and UK [258], but the outcome cannot be predicted.

Not all of the reforms proposed in this section are likely to gain traction, despite the urgency. But some of them are not unique to preserving biodiversity, they have much wider appeal and ramifications (like closing secrecy jurisdictions and abolishing the use of shell companies). Joining forces with other causes has never been a strength of the current crop of single-issue NGOs, but it would make for a more powerful counterbalance to corporate power.

## Practical First Steps to Better Business Behaviour

The starting point for ensuring ecological sustainability in relation to biomass extraction from nature ought to be making it a priority to improve our understanding of the true scale of the international and domestic trade in all wildlife.

Currently any trade reporting is close to useless, the UN Comtrade system lacks granularity for most trades and the shipments recorded in the CITES trade database cannot be reconciled between imports and exports. CITES trade data also have insufficient information to determine the actual number of animals/plants that had to be harvested to make up a shipment. **To get a proper picture of actual offtakes, we also need comprehensive domestic trade reporting, which simply does not exist at present.**

**It is completely disingenuous for governments, IGOs, NGOs and businesses to keep talking about sustainable use when in reality our use of biomass is clearly not sustainable and we haven't got anywhere near the level of supply-chain transparency and trade reporting to get an accurate picture.**

A good starting point to improve this situation would be a global business register of any business trading in biodiversity, irrespective if such trade is domestic or international. That could start with companies where revenue exceeds a certain threshold, but it should be mandatory for any business that trades in CITES listed species. This is not only to capture all the businesses that are trading in biodiversity, but also to capture what is being traded (product and species) in what quantities and at what value. By asking businesses to list their suppliers it would be possible to gather a quite complete picture for both transparency and later regulatory measures.

Such a business register could either be set up under the auspices of the UNEP (in a similar way as the CITES trade database is set up as UNEP-WCMC) or it could operate as a separate, global NGO. The most suitable structure will be based on the need to achieve the three key objectives for such an entity:

1. To create a comprehensive database of all businesses trading in wild flora and fauna,
2. To get a better estimate of the value of trade in each species being traded, and
3. To be able to collect fees from businesses across the world to finance its operation.

Because such a scheme would have to be voluntary to start with, there would need to be an incentive for businesses to participate and to pay fees. Apart from governments creating an expectation (or requirement) in their own jurisdictions that businesses do register and submit detailed information on their trade in wild flora and fauna, CITES can also create leverage by passing a resolution to urge countries to adopt national legislation or by changing the format of their permits, as discussed earlier.

In addition, the Business Register entity could also provide a certification label for businesses prepared to have the information they submit to the register to be publicly available and to submit to an external audit of their supply chain for the species it trades in. This would require paying a higher level of fees so that such information could be verified. In essence such a certification scheme would help businesses keen on being seen as sustainable and responsible in the eyes of their customers to differentiate themselves and address growing concern in the consumer space about the lack of sustainability in the extraction of biodiversity.

The aim of creating such an entity and related certification scheme is not just to assemble a full picture of which companies trade in which CITES listed and non-CITES listed species and at what annual volume. It is also to create incentives for businesses to start investing in traceability. Strong pressure should be applied by CITES to achieve end-to-end traceability for all Appendix I listed species and key, high-value Appendix II listed species such as exotic skins used in fashion, selected rosewood timbers and some luxury seafoods, for example.

In addition to getting businesses to report on their trade, CITES would also need to invest in better data gathering on the existing trade. This means that all signatory countries adopt electronic permits and electronic permit exchange and that the WCMC trade database is significantly upgraded to provide timely, reliable and reconcilable data on both exports and imports (which would mean import reporting has to become mandatory, actual exported quantities are reported as recorded by customs and unit mismatches in reporting are eliminated). Moving to electronic permits would create the necessary integration with customs and automated risk assessments for inspections that are a basic requirement to help make all trade legal.

CITES should also discuss the option of urging signatory countries to outlaw advertising and marketing of CITES listed species. This would be controversial as CITES has been captured by an understanding that its purpose is to promote sustainable use, despite the fact that CITES lacks the means and resources to verify whether any use of Appendix II listed species is truly ecologically sustainable. It would instead mean remembering that in the absence of reliable data the Precautionary Principle should apply for all CITES listed species.

As a convention tasked with protecting species from over-exploitation and extinction through trade, it should be self-evident that the Precautionary Principle applies and that it should take precedence over economic considerations or supposed issues of 'alternative livelihoods' that have become a preoccupation of pro-trade activists to justify expanding the trade in endangered species. Ultimately CITES needs to be modernised to regulate business directly and to become a proper transnational regulator. We have outlined such a model elsewhere [259].

We are fully cognisant of the fact that most of the proposed changes we are calling for are currently seen as either 'undesirable' (by those buying into the reigning neoliberal free-market orthodoxy) or 'unachievable' (by those wanting changes but aware of the lack of power and public concern to achieve them). That should not mean that the need for a radical overhaul can be ignored.

**The old global power constellation and the 'landfill' model of never-ending economic growth are both facing incredibly strong headwinds and with cracks appearing everywhere it should not take very much longer before the old consensus breaks apart and the world either splinters into rival camps or agrees on a new paradigm for human prosperity (without growth).**

**When that happens, the old structures, policy settings and institutions will still be in place. History shows that in a crisis radical change is rarely the result of careful planning and consideration, it is often nothing more than a hastily thrown together bandaid that later grows into a whole new institutional or regulatory structure. It is for this eventuality that we are presenting our solutions, but this does not preclude some less controversial options (like those outlined in this section) to be adopted now.**

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