
[PES turns into Permission for Environmental Shattering](#)

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Introduction

This bulletin builds on WRM bulletin issues 175 (February 2012) and 181 (August 2012) on Financialization of Nature and Payments for Environmental Services. These bulletins describe the history of the 'payment for environmental services' concept and the role and content of key studies often cited by proponents of 'Payments for Environmental Services', like the Millennium Ecosystem Assessment (MEA) and The Economics of Ecosystems and Biodiversity (TEEB). These two studies in particular were essential in moving the PES concept forward in recent years and helped create the political space for it to be advanced internationally. Today, UN agencies, industry, ecological economists, a growing number of consultancies and conservation NGOs use this space when they keep reminding us that the continued provision of functions such as water filtration of forests and soils, carbon storage in soils and vegetation, biodiversity, pollination of crops by bees, etc. is crucial for humanity and therefore needs to be conserved. The action they propose is based on the belief that the only way to ensure that Nature is valued and protected is through making visible in economic terms the value of these functions that Nature provides for free. They argue that once capital markets, politicians and corporations can see the enormous economic value of what they call 'ecosystem services' - the functions and processes that Nature provides to humanity - it would be easier to demand that Nature must be protected. Some also propose to use this economic value that apparently has not been visible to government, corporations and financial capital as a way to finance the protection of Nature - through payments for these 'environmental services' (PES). Economists have come up with first estimates of the economic worth of 'ecosystem services' and many initiatives, programmes and research and development aid grants are handed out to prepare for the future marketing and trade in these 'environmental services'.

Ever since the first PES programmes were set up, proponents of payments for 'environmental services' have claimed that forest dependent communities and forest peoples will be the big beneficiaries. But are they really? Even the early programmes showed the tendency of such payments primarily benefitting the better-off within a community. They also showed how the intrinsic value of Nature becomes valued less when financial values of PES schemes are introduced. Concrete examples emerging from how the trade in Nature is implemented suggest that these tendencies will be even stronger when PES turns into a trade in 'ecosystem services'.

Increasingly, PES means 'payment that gives permission to destroy'. In order to set up such payments that give permission to destroy, Nature in all its complexity, interconnectedness, diversity and uniqueness is packaged into units of 'ecosystem services' to an extent that far exceeds the commodification necessary for previous PES programmes. Certificates (often called "offset credits") that are used as guarantee that the 'service' is being protected somewhere can then be bought by corporations in exchange for permission to destroy an 'equivalent' piece of Nature elsewhere. A mining company might only be able to get a license to expand their mine into a protected area where mining has been prohibited by law if they buy 'biodiversity offsets' to save extra biodiversity elsewhere in return for the biodiversity in the National Park that the new mine will destroy; urban development may only be allowed in a city's green belt that did not allow any urban developments before if the real estate company will buy 'biodiversity offsets'; or a cattle farmer or logging company may be spared from restoring forest he illegally cleared if he buys 'forest restoration credits' on a financial 'environmental services' exchange. Nature, once it has been packaged into units of 'ecosystem services' that can be compared with each other can also be traded as a financial asset. The 'environmental service' becomes available for speculation. A unique and interconnected Nature is thus turned into separate 'service' units that can be compared with each other, that can be mixed

and matched, bought and sold, because one is considered an equivalent and adequate replacement of the other. This abstraction has turned unruly, dynamic, ever-changing and interconnected Nature into constant, measurable and comparable units of 'ecosystem services'.

The abstraction also allows the merchants of these 'ecosystem service' certificates to pretend that the units exist without their surroundings, that there is no interaction between these units of 'environmental service' and the cultures, the social practises, the land use that evolved with and depends on the part of Nature that has been reduced to an 'environmental service'. Inherent in the concept of PES, and in particular, inherent in the trade in 'ecosystem services', is therefore the assumption that one can separate the environmental dimension of destruction from the social dimension. PES compensation schemes that include the permission to destroy as long as the 'environmental service' is replaced somewhere else willingly accept the uncompensated, and un-compensatable destruction of the social relation, the culture, the social practise tied to Nature. Along the way, laws are being changed so that the previous requirement of guaranteeing 'no biodiversity loss' is replaced with the much weaker obligation to ensure that there is 'no net biodiversity loss'. Where no loss anywhere was the rule before, revised laws will allow destruction in one place as long as the 'developer' can show that no net loss will occur because apparently, the Nature that is being destroyed in one place will be recreated and saved somewhere else.

"The goal is to transform environmental legislation into tradable instruments" (1)

Pedro Moura Costa, co-founder of carbon offset company Ecoscurities and founder of Bolsa Verde Rio de Janeiro

What is being traded in 'Ecosystem Service' Markets?

When a bank or a broker or a company trades grain or oil or cotton on financial markets, they know that a certain volume of a very clearly defined quality of the commodity they are trading - grain, coffee, cotton, oil, etc. - exists somewhere in a warehouse or a field or an oil tanker. What they trade are paper or electronic placeholders of a measurable quantity and quality of the commodity.

In the case of 'environmental services', it is also not the 'service' itself that is traded, but a certificate that represents a guarantee that the 'service' exists in a certain place, quantity and quality. This certificate is often referred to as 'offset credit'.

But is the certificate really a reliable guarantee of the kind needed for the 'environmental service' to be traded as if it were a commodity?

Making a trade is making a promise. And the more complex the market, the more assurances the buyers want that they can trust the original promises about the quality and the quantity of the trade. They cannot easily 'look into the horse's mouth' so they need some other way to make sure that they don't buy a certificate that gets them an old mare when they thought the certificate was for a racehorse. Without such trust in the promise about the quality and quantity of the product a commodities market would not function well. That is why all globally traded commodities, in order to be tradable, must be divisible into such measurable units of comparable quality, with as little regional or local variation remaining as possible.

In the case of 'ecosystem services' it is even a bit more complicated because what is traded is not really the 'service' but a certificate that holds the promise to keep the 'service' in a

certain condition over a certain period of time.

Before an 'environmental service' – or certificates that represent the 'service' – can therefore be traded on an 'environmental services' market, the 'service' has to be defined in a way that makes it possible to compare one package of the 'service' from one place with another package of the same 'service' from another place. On the basis of these definitions and measurements, the trader must be able to verify that the two packages offer the same commodity. He also must be able to verify and judge the quality (and quantity) of the 'service' based on the definitions and measurements.

Already for commodities like coffee or oil or cotton or corn, it is not that simple to define the commodities as reliably as the financial traders want. Trying to achieve this definition and then being able to measure the 'service' in such precise ways as is requested for commodity markets has been impossible so far for all 'environmental services'. Still, some of them, like carbon dioxide, are traded on advanced financial markets. The main market for offset certificates of carbon dioxide was until recently the Clean Development Mechanism (CDM). The CDM is part of the Kyoto Protocol, an international climate treaty (see WRM bulletin 172 at <http://wrm.org.uy/bulletins/issue-172/> and www.carbonradewatch.org). Industrialised countries with an emission reduction target under this treaty could use CDM offset certificates to claim that they had achieved their reductions. When demand for such CDM offset certificates fell because industrialised countries did not commit to big reductions of greenhouse gases after 2012, the price for CDM certificates collapsed.

In addition, numerous reports show that many certificates - probably the majority of CDM offset certificates that are sold - do not really represent any extra reductions. This shows that it is an untrustworthy, and therefore a risky market. Such a market is possible only because it was created by governments who approved a very unreliable definition of what a 'carbon credit' is, and who have decided to accept carbon credits as being what the definition says they are even if they cannot verify that this is the case.

The verifiability of biodiversity offset credits is equally dubious (2). For example, in a 'bat biodiversity offset', the bat and its habitat are not bought and then moved to the place the buyer of the certificate destroys bat habitat. What is traded is a placeholder, the offset certificate. The certificate represents a guarantee that the bat and the habitat which the seller is offering are the same in quantity and quality as the bat and the habitat that the buyer of the certificate will destroy. The buyer has to have the guarantee that when s/he shows the certificate to the environmental authority, they will accept it as equivalent to the habitat and bats destroyed. And all traders inbetween also had to have the trust that the certificate would be accepted as equivalent because they were deciding how much to pay for the certificate based on that trust that the certificate would be accepted as valid.

The carbon market has shown that a market can function as long as the environmental authority accepts the certificate even if it does not meet the quality or quantity that the authority said would be needed. But when that happens, Nature loses. From an environmental perspective, the certificate represents a guarantee that the owner of the land that houses the bat and its habitat will protect the land in at least as good a condition as it was when the credit was sold and the land owner received the 'environmental service' payment for the bat and its habitat – for as long as the bat and habitat in the other location remain damaged. If that promise is not kept, both the original Nature and the offset replacement will have been lost, possibly irreplaceably. That is the gamble promoters of 'ecosystem service'

markets are willing to take.

From PES to 'offset' payments for 'environmental services'

- Different types of PES

The term 'Payment for Environmental Services', or PES, is used to describe many different types of arrangements to pay for a certain practise that will protect or restore some function or process of Nature. Yet, these different arrangements which are all referred to as PES, have entirely different historical and social origins. Based on existing examples of the most commonly found payment arrangements that are all referred to as PES, the following section describes some common characteristics of four different types of PES found today. These four groups show how the original PES programmes from public funding to implement a public policy (I) was extended to also include PES initiatives financed by private donations or voluntary programmes for public relations purposes (II), and more recently, 'offset' PES schemes where a voluntary 'offset' payment is meant to nullify pollution considered excessive (III), or where the payment gives permission to destroy or pollute above a legal limit (IV).

I. PES to implement public policy that protects Nature. These are PES schemes where governments use public money to pay or subsidize for restoration or protection of 'environmental services' that are protected through a public policy. Examples include (a) New York City or Vancouver city paying watershed owners who are located outside the city boundaries and therefore not bound by the cities' regulation to preserve the land that is vital for the cities' water supply; (b) the government of Costa Rica using public money raised from collecting a tax on petrol consumption to pay land owners to not cut down or restore forests, or (c) the EU's Common Agricultural Policy payments to farmers to preserve biodiversity. The WRM briefing on PES also describes an often-cited example of two communities in the Indian Himalayas, Kuhan and Ooch, that reached an agreement to protect the streamflow that both communities depended on. While the payment is not linked to implementation of a public policy it shares many of the characteristics of the PES schemes that primarily are subsidy payments to implement a policy that is in the interest of the public. The amounts to be paid under schemes of this type are negotiated or set by the state or directly among the parties involved. The 'service' is described in very general terms, or not at all. No direct or detailed measurement of the quantity or quality of the specific 'service' for which payment is received, are necessary and the payment is not linked to permission to destroy or pollute above legal limits elsewhere. Payments do not require a financial market and no environmental commodity or asset is bought or sold. Modification of existing law to create new assets or define environmental commodities is not required. Risk of damage to community cohesion or restriction of rights to access and use of community territory is relatively low but certainly exists as the example of the PES scheme in Costa Rica shows where poorer farmers and indigenous communities were unable to gain access to the payments in the early stages of the programme when mainly better-off and larger land owners benefitted from the payments. Contracts specifying changes to land use or use of the territory are required but obligations only last for the duration for which payment is received.

II. Private sector donations and government programmes not linked to public policy.

Companies offer PES projects to avoid reputational damage, to greenwash activities that are damaging to communities, or to reduce local opposition to future expansion of corporate activities like extraction of water, minerals, oil, coal, construction of a mega-dam. Examples include Coca-Cola

paying for water protection to compensate for damage to community water, either where they extract the water, or the PES project could also be located somewhere else.

PES initiatives of this type are voluntary, without a law demanding the payment. In general, no claims are made that the payment is 'equivalent' in economic or ecological terms to the damage caused. The amount of payment is decided by the company offering the payment. Some basic indicators to monitor 'results' that can be claimed to be the result of the payment might be used but no quantification and monitoring of specific 'ecosystem services' is necessary. Financial markets are not involved and no 'environmental services' commodity is created or traded. Contracts that describe how the payment will be spent might be involved but the obligations only last for the duration for which payment is received

Ecuador's Socio Bosque Programme

A variation of this type are initiatives like Ecuador's Socio Bosque programme where the country's Ministry of Environment enters into conservation agreements with private and communal landholders. In return for maintaining forest cover, the programme offers yearly monetary payments to individuals and communities. Socio Bosque was initially funded entirely by the Government of Ecuador. The government is now looking to diversify the sources of funding for the programme, including payments by industry as a compensatory condition for obtaining licences for extractive and other high-impact activities or voluntary corporate contributions, possibly linked to some form of environmental offsetting, or international REDD+ payments. Depending on the future source of funding, the programme may therefore in future turn into an offset PES programme similar to the payment schemes described below.

III. Voluntary payments for pollution or destruction that is seen as excessive. The main difference to PES offset schemes described below under IV is that here, the funding comes from individuals, public institutions, NGOs and corporations that voluntarily choose to "nullify" their polluting activities. The individual or peer group or the public mood might consider the activities a 'moral offense' or the motivation for the payment might be to avoid a reputational or image risk if no 'compensatory' measures are seen to be taken by a company, institution or individual responsible for above average levels of pollution or destruction of Nature. Examples of such voluntary offset payment schemes include FIFA buying offsets for players and visitors attending Football World Cup games and for the emissions generated from the construction of new stadiums, a rock star buying offsets for a tour or CD release, an individual buying carbon dioxide offsets because they take a flight, etc.

IV. PES as permission to destroy or pollute above a legal limit. Environmental Laws are changed to allow a company to pollute or destroy Nature above a limit set by the law as long as a payment is made for the extra pollution or destruction to be 'offset' somewhere else. The company is considered to be complying with the law as long as a payment has been made to someone who will 'offset' the excess pollution or destruction caused, even if the company itself has caused more pollution or destroyed more Nature than is allowed by law. Communities affected by the extra pollution cannot take the company to court anymore for polluting or destroying more Nature than the law allows, because the law itself has given the company the permission to exceed the legal limit – for the payment of a fee in the form of PES offsets.

- From simple trade to complex financial market transaction

The offset PES programmes described under IV exist today in three different forms. The main difference is the extent to which financial markets are used for the pricing and trading of the offsets:

(1) The first type of 'offset' PES programmes are those where the payment is one single transaction between a seller who has polluted or destroyed less than the legal limit allows and the buyer who needs units of 'environmental service' to nullify pollution or destruction above the legal limit. Only a rudimentary environmental market is needed for the 'environmental service' and the offset units are usually bought directly for final use, without further trading. The price is mainly established as a negotiation between seller and the final user of the offset.

(2) The next type already relies more on trading platforms, 'species banks', or 'habitat banks' that act as 'matchmakers' and intermediaries between buyers and sellers. The price becomes more dependent on the trading that takes place on the trading platform, and the control diminishes of the original seller or final buyer to set the price. The trading in 'forest restoration offset credits' that were created by the 2012 revision of the Brazilian Forest Code, for example, uses the Bolsa Verde do Rio de Janeiro (BVRio), a trading platform in Rio de Janeiro where interested buyers and sellers can register and offer or buy their credits. These credits are called CRA (Cota de Reserva Ambiental) and they represent one hectare of protected area of the type that is required under the Forest Code. These CRAs are now traded, among others on the environmental exchange in Rio de Janeiro. The same unit of 'environmental service', in this case called CRA, may be bought and sold several times before it is bought by the landowner or company who needs the unit to nullify pollution or destruction of Nature above the legal limit. A market has been created where those who sold the units originally - communities or land owners with more of the specific 'environmental service' than is needed under the law - are not involved anymore.

(3) In the most complex PES offset trading schemes, the 'offset' is traded in a market where the certificates that are traded represent 'services' that are even less comparable with each other than under (2). Examples are the trading of emission permits and offset certificates linked to climate treaties like the Kyoto Protocol, the EU Emissions Trading Scheme of the California carbon market (for more detail on how these pollution markets function, see for example the publications *Designed to Fail* (<http://www.fern.org/designedtofail>) or *Carbon Trading* (<http://www.carbontradewatch.org/publications/carbon-trading-how-it-works-and-why-it-fails.html>)). How it works and why it fails. If those existing carbon dioxide 'environmental service' trading schemes would allow companies to also buy REDD offset credits, this would mean that they think that the REDD offset credit, i.e. a credit representing one tonne of carbon dioxide emission saved from not cutting down a forest, can be considered to be the same as a credit that represents a tonne of carbon dioxide saved by producing electricity from wind instead of from burning coal - and that therefore the carbon behind the REDD credit will be stored in the forest for as long as the extra coal that the company burns, affects the climate (for more information on what REDD - Reducing Emissions from Deforestation and Forest Degradation is, and why many say No to REDD, see WRM publication 10 things communities should know about REDD at <http://www.wrm.org.uy/oldsite/publications/10AlertsREDD-eng.pdf>). The effort and paperwork needed to try and show that REDD credits and wind farm credits and methane reduction credits represent the same 'environmental service' is enormous. This paperwork costs, it requires technical consultants. As a result, 'transaction costs' of the PES offset project increase.

- *Spot the differences*

The most fundamental difference between such 'offset' PES schemes and the PES schemes described in I. and II. is, that in 'offset' PES schemes, the payment buys the permission to pollute or

destroy Nature above a legal limit. This is a fundamental change that totally changes the nature and characteristics of the payment mechanism. These changes in turn have far-reaching consequences for communities participating in or affected by offset PES schemes. Instead of the promised win-win agreements, these offset PES schemes usually increase the ecological and social damage for the community living in or near the location where pollution is higher or more Nature is destroyed as a result of the offset units that the company bought. At the same time, the affected community at this end of the offset transaction does not receive any of the offset payment even though they are suffering from excess levels of pollution or environmental destruction (see examples below).

Another fundamental change in this type of offset PES is that it represents a paradigmatic change for how the law treats polluting or destroying Nature above a legal limit. Legislation where pollution or destruction above the legal limit was an offense punishable through fines is being turned into legislation that allows pollution or destruction of Nature above the legal limit against payment of a fee.

Why these differences matter

PES schemes that involve the trade in 'environmental services' offset certificates always require territorial control, so that the "owners" of the 'service' units and their intermediaries can monitor what is being "traded", to ensure that the 'environmental service' is delivered in full accordance with the terms of the contract. This risks undermining the struggles for the recognition and guarantee of collective land rights of communities who live in and depend on the forests. Because an 'environmental service' contract always suggests that there is an "owner" of the area included in the contract, and that the 'owner' has control over how the area is being used, many communities whose rights to their territory are not recognised or under dispute will suffer even greater pressure to leave their lands, or be evicted.

This is already a reality in many REDD and forest or tree planting offset PES projects. And even if they manage to stay and to benefit in some way, the buyer of the 'environmental service' credit will have the right to enter the area for inspections and monitoring to verify that the 'service' in question is being preserved and maintained. This also is a form of control that violates these communities' rights over their territories and even their right to maintain their way of life.

Pretending that no significant differences exist between the different kinds of 'PES', and that all PES schemes are basically the same, prevents an honest, transparent and inclusive public debate. It does so, because it makes it possible for many conservation NGOs to claim that "REDD is merely a way of recognizing and giving monetary support to indigenous peoples for what they are already doing". Already, many of the programmes with the characteristics described in I and II have shown that 'win-win' situations are rare and that even these programmes can undermine indigenous peoples' rights, weaken community cohesion, cause conflict or increase inequality. These risks increase even more when PES means 'offset payment'. In fact these different types of arrangements carry such different levels of risk for indigenous peoples' rights that they should not be called the same. The confusion that results from lumping all these different payment arrangements together helps the conservation groups, the traders and financial markets consultants interested in creating the new offset commodities and prevents a transparent and informed analysis of the consequences of different payment schemes that are offered to communities.



Some key actors promoting offset PES

- *Multilateral institutions*

Not for the first time, the World Bank is among those spearheading a trend that poses a great threat to the lives and livelihoods of forest dependent communities. The World Bank is one of the strongest promoters of payments for 'environmental services, providing money for projects and schemes that advance this new form of financial speculation with Nature. One likely reason why the World Bank favours these offset PES initiatives is that they help greenwash the destruction of Nature caused by World Bank-financed mining, infrastructure, logging or hydropower projects. In a project in the Democratic Republic of Congo for example, a World Bank loan is supporting the country to become a provider of the marketable 'environmental service' carbon. This would include supplying forest carbon credits under the REDD mechanism or through biodiversity offsets – the demand for which would come in part from the extractive industry and plantation forestry, which the World Bank is also promoting in the DRC. (3)

In addition to financing specific programmes, in 2010, the World Bank launched an initiative called "Wealth Accounting and the Valuation of Ecosystem Services" – or WAVES (4), "a 5-year global program to implement natural accounting in a critical mass of countries." And the World Bank explains that this is important because "Natural capital is a critical asset, especially for less developed countries." (5) WAVES is financing such 'natural accounting' in Botswana, Colombia, Costa Rica, Guatemala, Indonesia, Madagascar, the Philippines and Rwanda, and countries or organizations contributing financially to the WAVES include Denmark, the European Commission, France, Germany, Japan, the Netherlands, Norway, Switzerland, and the United Kingdom. Conservation NGOs are also involved. In Madagascar, for example, Conservation International (CI) is conducting a pilot study (6) for WAVES.

And the World Bank's International Finance Corporation, IFC, holds a 5 per cent stake in the Simandou iron ore mining project in Guinea which is set to become the largest mining project in Africa's history. The project passed IFC guidelines despite the destruction of the habitat for endangered chimpanzees because the construction will involve "offsets", by promises of protection of habitat elsewhere. (7)

The World Business Council for Sustainable Development (WBCSD), a major lobby group which represents big business interests including Syngenta, Rio Tinto and Holcim at the UN, has been a

particularly enthusiastic advocate of PES. 29 WBCSD member companies developed “a vision of a world well on the way to sustainability by 2050”. (8)

- Multinational corporations

The company ‘Business for Social Responsibility’ (BSR) describes itself as working with a “network of more than 250 of the world’s most influential companies.” (9) In March 2013, BSR published a report called “Private Sector Uptake of Ecosystem Services Concepts and Frameworks”. (10) The report not only lists the activities of 35 corporations that are engaged in PES offset initiatives but also shows how closely these corporations are working with conservation NGOs: IUCN is listed as a partner in PES initiatives for AkzoNobel, Eni, Holcim, Rio Tinto, and Shell; The Nature Conservancy are listed as partners for Dow Chemical, Shell and Walt Disney Company; BHP Billiton mention Conservation International as a partner in their PES offset programmes. Other conservation NGOs mentioned include WWF, FFI (Anglo American, British American Tobacco) and World Resources Institute (WRI).

Other examples of transnational corporations using PES offsets include Olam, the food corporation that has generated conflict with communities over expansion of oil palm plantations in Gabon (see WRM bulletin 180 at <http://wrm.org.uy/articles-from-the-wrm-bulletin/section3/gabon-resisting-olam-land-grabbing-for-oil-palm-plantations/>). In Vietnam, the company has a CDM registered project and in the Republic of Congo it is involved in “a new Public Private Partnership with the Government of the Republic of Congo that aims to create a viable commercial framework to generate carbon credits from standing forests.” (11)

Rio Tinto states in their report on the company’s PES project in Mongolia (see box), that “the potential for land-use conflict” is becoming an “increasingly significant issue for Rio Tinto” and other corporations, even at the licensing stage. As a result, they look to biodiversity and other PES offset schemes to help the company “achieve the goal of net positive impact, while meeting legal requirements and maximising conservation gains.”

A report from Columbian organisation Fundepublico highlights that in addition to the land taken for the mining and infrastructure, such offset schemes will also occupy large areas of land: Companies “cannot find the land to establish the offsets”, that “in the cases where offsets have been established, environmental agencies do not know the exact location of offset sites” and that “the puzzle of matching offset demand with offset supply has yet to be solved. And it’s a complicated one. With over 8 million hectares under mining titles, over 130 oil and gas companies, with operations in the country over at least 1.5 million hectares, including Shell, Oxy, Chevron, ExxonMobil, and Petrobras, and thousands of kilometers of highways in the pipeline that will affect critical biodiversity hotspots, one of the key questions is where are the hundreds of thousands of hectares needed in offsets going to come from,” (12) Fundepublico explain in their report.

Just like mining and real estate companies have a particular interest in biodiversity offsets, airlines, car manufacturers and entertainment companies are among the most frequent buyers of carbon PES certificates. Conservation NGOs like Conservation International (CI) play an important role as intermediaries, project managers or brokers of contracts for these PES trades.

Carbon offsets from Madagascar for Air France

To combat climate change, Air France finances the “Holistic Conservation Programme for Forests in Madagascar” (HCPF), a project aimed at fighting deforestation in Madagascar. In

theory this project should contribute to preserving biodiversity, stocking CO2 emissions and also helping towards "sustainable human development". However, for villagers living nearby, the reality is quite the opposite: access to land has become restricted and controlled.

English: <http://www.amisdelaerre.org/REDD-in-Madagascar-You-can-t-see.html>

In Peru, for example, Latin America's largest airline Latam bought 7,000 carbon offsets from a tree plantation project run by a company called Bosques Amazonicos in Peru's eastern province of Ucayali. In the case of Latam, the companies said it would use the credits to 'offset' the impact from the quickly increasing number of flights until 2020. Entertainment company Disney bought 437,000 carbon offset credits from the Alto Mayo Initiative, a project in the northern San Martin province that is funded by the Peruvian government and Conservation International (CI). (13) Walt Disney also bought carbon credits from a REDD PES project in the DRC, also involving CI (see WRM report "Democratic Republic of Congo. Conservation International REDD pilot project: a different kind of Disney production" at <http://wrm.org.uy/books-and-briefings/democratic-republic-of-congo-conservation-international-redd-pilot-project-a-different-kind-of-disney-production/>).

- Conservation NGOs

As part of the World Bank's WAVES (Wealth Accounting and the Valuation of Ecosystem Services) initiative, CI is currently conducting a pilot study in Madagascar to quantify 'ecosystem services'. While CI 'encourages local communities to stop environmentally harmful practises' it aids mining corporations like BHP Billiton to not just continue but greenwash their harmful practises that undermine the local communities livelihoods – in future not just through their mining operations but also through biodiversity offset projects closing off community access or restricting community use of the remaining territory not yet devastated by mining.

Alongside CI, groups including The Nature Conservancy (TNC), World Wide Fund for Nature, (WWF), the Wildlife Conservation Society (WCS) are involved in many forest carbon and biodiversity offset projects and initiatives where they promote offsetting as a lucrative and business-friendly form of PES. Organisations like the Environmental Defense Fund, while not involved in managing offset projects directly, play a key role in advancing the concept through lobbying and promoting the concept at UN and business fora. TNC, CI, WCS and the Rainforest Alliance also joined forces to set up a certification scheme for forest carbon offsets, the Climate, Community & Biodiversity Standard, CCB; (14) and CI and WCS provided the Secretariat for the 'Business and Biodiversity Offsets Programme between 2004 and 2008.

- Specialist investment funds and market makers

To capitalize on this expected new market in 'environmental services', numerous specialized firms have emerged in recent years. Companies like Ecosystem Marketplace and Canopy Capital provide visibility; carbon credit sellers like the Carbon Neutral Company, Climate Care, the Bolsa Verde do Rio de Janeiro facilitate the sale of offset credits from forest and biodiversity or forest restoration offset projects; specialist investment funds like Althelia, Terra Global or the Forest Carbon Group help in pooling private funds that then is available to biodiversity and forest carbon offset companies like Wildlife Works, ERA.

Another important market maker is the Business and Biodiversity Offsets Programme (BBOP) of the market-oriented Forest Trends group. (15) Led by an international collaboration of representatives

from companies, financial institutions, governments and NGOs, BBOP has been instrumental in developing of principles and standards for biodiversity offsets. Among the NGOs on the BBOP's Advisory Group are Flora and Fauna International, CI, TNC, Birdlife International, WCS, the Rainforest Alliance and WWF-UK. Among its pilot biodiversity offset PES schemes, BBOP mentions the large-scale Ambatovy nickel and cobalt mine in Madagascar, the retroactive assessment of impacts associated with a now closed Solid Energy coal mine in New Zealand, a proposed Newmont gold mine in Ghana and a Anglo American platinum mine in South Africa. (16) Solid Energy, as Rio Tinto in the case study above, cite the interest to maintain their 'social license to operate' as one of the reasons for engaging in the biodiversity offset project: "The operations of the minerals industry in New Zealand (and indeed, internationally) have increasingly come under public scrutiny. It is important to recognise that offsetting represents an opportunity for Solid Energy to build and enhance its social license to operate." (17) Newmont mention that the company "demonstrated their commitment to a biodiversity offset for the Akyem Project in their November 2008 EIS" [Environmental Impact Assessment], thus hoping that the proposed offsets will help the company obtain the mining license. (18)

- Universities and consultancies

Universities, research institutes and consultancies play a crucial role in the process that is turning Nature into comparable and therefore, tradable 'ecosystem service' units. Many of them insist that what they are doing is 'just making the economic value of nature visible', and they may insist that 'that is not the same as putting a price tag on bumblebees or ecosystems'. Yet, the scientific work they do, the preparation of the methodologies, giving academic credibility to dubious calculations, pretending that it is possible to 'internalise' external costs, all of this helps prepare the ground for ecosystem trading.

Tracking PES failures

- Biodiversity offset PES advancing quickly despite track record of failure

Promoters of biodiversity offsets seem to have adopted the World Bank's approach to 'Learning by Doing': The learning never seems to be happening and the doing just continues. Nature offsetting programmes have been in existence for decades in Australia, the US and Canada. Their experience is predominantly one of failure. In Canada, for instance, in projects that were meant to offset the loss of fish habitat, researchers found that 63% of projects failed to achieve the stated target of no net loss. (19) In the USA among the many reports documenting the failures of PES offsetting even only on ecological grounds are a 2001 report from the National Research Council in the USA reports includes a whole annex of reports from 1983 to 2000 demonstrating that wetland compensation sites have regularly failed (20), and a 2005 report from the USA Government Accountability Office is titled "Wetlands Protection: Corps of Engineers Does Not Have an Effective Oversight Approach to Ensure that Compensatory Mitigation is Occurring." (21) The FERN briefing Critical review of Biodiversity Offset track record (22) includes additional references to studies about the failure of biodiversity offset programmes.

- Why the Trade in Environmental Services will increase ecological and socioeconomic injustice

Morgan Robertson explains in 'Measurement and alienation: making a world of ecosystem services' how the process in which Nature is turned into an 'ecosystem service' resembles and is likely to

have similarly profound effects on society as the process of turning human work into wage labour. And Beverly Keene from Jubilee South stated: “We do know what happens when you put a price on the part of Nature that has already been drawn into the financial markets - land: millions of people were made landless, social exclusion became a reality – and it did not lead to the protection of the land. (23) Are we facing another Enclosure?” From the Enclosures of 18th century in Britain to the land grabbing today, far from giving value to local peasant and forest dependent communities and indigenous peoples, putting a value on land has meant putting a price tag on the part of Nature we now commonly call ‘land’. The consequence has been expropriation, landlessness and destruction of fertile lands so that maximum short-term profits at great long-term cost can be sucked out of it.

Proponents of ‘Payments of Ecosystem Services’ have yet to explain why things would be different this time, when we have seen the same process run its course already twice through human history. Each time, the consequences were more misery for the majority and more profit for the small elite who control the capital accumulated in the previous round of turning a part of Nature or human work into a financial asset.

And whilst the process is still in its early stages, the first examples of what ‘trading in environmental services’ looks like in reality already suffice to say ‘no’ to more of the same.

- Community rights to their territories – from access to use – become even more precarious

The expansion of capital has meant destruction and negative impacts on community life and the forest on which ‘the Poor’ depend. This has been the case whenever transnational companies buy or acquire concessions over areas of forest to harvest timber, build a mega dam, establish a monoculture oil palm plantation, extract oil or minerals or build a road. With offset projects and the financialization of Nature that the trade in ‘environmental service’ offsets represents, the problems that arise are similar, but they are manifested with an accelerated intensity. New actors who have no visible presence in the area determine the local land use, which means it is not clear who is behind the processes, but they undoubtedly act in very close coordination with big transnational companies and private and state banks, and with the support of the facilities offered by the state through the reformulation of national and international legal and regulatory frameworks.

- Offset contracts present a great risk to communities’ traditional way of life (24)

In 2004 / 2005, WRM received information that indigenous and peasant communities who had signed a carbon offset PES contract for a project located on their territories in the Ecuadorian Andes were forced to pay more money to fulfil contract obligations after fires destroyed trees they had planted as ‘carbon trees’ than they were getting through carbon payments. The joint research with Accion Ecologica at the time revealed how risky such carbon contracts can be for communities. It was the first example we encountered, and many have followed since. CENSAT – Friends of the Earth Colombia recently analysed REDD offset project contracts (see “Despojo ilegítimo, por vías legales” at http://www.wrm.org.uy/html/wp-content/uploads/2014/01/Esp_Biodiversidad_12_2013.pdf).

Their analysis of how these contracts affect communities involved in or affected by such REDD offset projects confirms WRM’s observations that overwhelmingly, (a) communities bear more risk than project developers if something goes wrong with the project and are the last to receive benefits while the promotional material only talks about the benefits and not about the risks; (b) contracts include restrictions on traditional land use practises for at least some in the community yet often, these restrictions are not fully explained before contracts are signed; (c) small-scale swidden agriculture and traditional practises are described as main causes for deforestation while the real drivers of

deforestation or risk to biodiversity are not mentioned; (d) contracts guarantee outsiders like project developers, their managers and technicians and others linked to the marketing of the offset project nearly unrestricted access to the territories in which the offset is located; and (e) surveillance and monitoring measures focus on community use of forests, not large-scale deforestation or biodiversity destruction and often pit community members against each other as among the few jobs offered locally is always the local fiscal or surveillance agent whose role it is to pass information about community use of the forest on to the project developers. Another tendency already made in relation to older PES schemes without offsets is that where communities receive benefits or are offered jobs, these often increase inequalities within the community with benefits going primarily to local elites and restrictions applying predominantly to marginalised community members. This is also true in the case of REDD offsets.

“[name of the company] respects the Indigenous People’s rights under the United Nations Declaration on the Rights of Indigenous People (UNDRIP) and all other human rights instruments, including non-discrimination against women, children and Indigenous People. The Project will endeavour to operate in recognition of these rights and practices.”

CENSAT say that many REDD contracts they assessed were full of “words written with the intention of not being understood, not being fulfilled”, an assessment that corresponds to WRM’s impression of REDD offset contracts that we have come across over the years. What is more, many times the obligations that communities or families enter into are not clearly explained or described in ambiguous terms that can easily be misinterpreted. Many REDD offset contracts are also in English or in a language that is not comprehensible for the communities or families. Seeking outside advice on such complicated and ambiguous legal documents is complicated by the fact that almost all REDD contracts that CENSAT analysed contained strict confidentiality clauses.

CENSAT concludes its research with the call to “not accept or sign contracts for REDD projects, as a precaution. Not signing is the only way to avoid the risks and conflicts that these REDD conservation projects can create.”

The profit of destruction

- Trade in Ecosystem Services needs destruction to continue because without destruction there is nothing to ‘offset’

Trade in ‘environmental services’ does not attempt to change the current model of production and consumption which is the root cause of the multiple crises we currently confront, including the gradual destruction of forests around the world. Instead, trade in ‘ecosystem services’ goes hand in hand with the ‘green economy’: Both are based on the assumption that limitless growth is possible on a finite planet, that the issue is just to organise that growth better, to make it ‘green’, to offset the damage in one place and hope that the ecosystem in the other place will grow back fast enough to be ready in time for the next round of offsets. As Rio Tinto noted, “there is potential for land-use conflict to become an increasingly significant issue” (25), not just for Rio Tinto but for all industrial land-use and infrastructure developments. Offsets - whether for carbon, biodiversity, water, natural beauty, forest restoration or the pollination services that bumblebees provide - play a crucial role in this context of heightened conflict over land-use decisions. As the case of biodiversity offset plans in the UK show, the UK Government hopes “that biodiversity offsetting could help to accelerate the construction of homes by making it easier to overcome environmental objections.”(26) Elsewhere,

companies use offsets to justify the expansion of 'biodiversity-neutral mining', 'carbon neutral coal fired power plants', 'biodiversity-neutral uranium mining' in National Parks when archeological sites are destroyed to make room for the mines, carbon- and biodiversity-neutral' expansion of airports and runways.

- Rights of Nature versus Permission to Destroy.

Proponents of 'ecosystem service' payments say that it is important to be able to show the 'true cost of destruction'. There are two problems with this statement. First, as Albert Einstein noted "Not everything that can be counted counts, and not everything that counts can be counted." Hence, there will never be a number that reflects the 'true cost of destruction'. No mathematical calculation will ever be able to capture the many aspects of Nature that are simply incalculable - the joy of hearing the stream run over its rocky ground, the sound of a nightingale, the earthy smell of decaying wood teeming with insect life, the memories of cultural practise captured in pictograms, tree carvings, etc. It is not a matter of increasing effort, funding or methodologies but a matter of conception that every mathematical calculation will always only capture a very small fraction of Nature's value. The claim that valuation of Nature, or calculating the value of a nation's 'natural capital', will represent the full and true value of Nature is not just misleading, it is ludicrous. Yet, it is an often heard justification for advancing with the calculations that are paving the way for the trade in 'ecosystem services'.

Continuing down that path leads us into a radically different direction than exploring how to apply the concept of Rights for Nature as a starting point for land use and economic planning, and working not from the premise of dominating Nature but of respecting Nature. Offsets - whether they are for water, carbon, biodiversity, natural beauty, forest restoration or pollination by bumblebees - do not help us, neither individually nor collectively as society, to change our mind-set and economic model towards enoughness. As Kevin Anderson from the Tyndall Center explained (27), offsets are worse than nothing because they maintain the illusion that 'business as usual' is an option and they create the illusion that something is being done.

- PES as a way of de-politicising the struggle for a different economic and development model

There is a second problem with the assumption that showing the 'true cost of destruction' will change political and business decisions that destroy Nature. The proponents have not yet to explain how showing the number will change the political decisions. Showing the number in and by itself does nothing to change that imbalance of power, nor does it address the need for continuous economic growth in a capitalist economic system.

Not only do proponents of the valuation of Nature fail to acknowledge that the underlying issue is one of politics and power, about what kind of development we want to pursue, putting PES and economic valuation of Nature at the center of the debate also leads to the debate becoming de-politicised: the focus turns from the political decision to a debate about the technicalities of destruction. We already witness how organisations and movements insisting on discussing what kind of development to pursue, are being marginalised by politicians and corporations who insist that dialogue be held only within those parts of civil society that are 'reasonable'. (28) The debate then is not anymore about whether to build the road, license a mine in a National Park, bulldoze the ancient woodland for a new luxury housing development, etc. but about how many units of which quality of ecosystem service A, B, C and D are needed to offset the destruction.

"While natural capital accounting empowers the moneymen, it disempowers the rest of us and undermines public involvement" (29)

Mobilising to say No to Trade in Ecosystem Services

Saying “No to offsets” is saying “Yes” to keeping corporations within laws defined by clear limits, fines and penalties, not laws defined by fees that buy permission to destroy and pollute. In Cochabamba in April 2010, at the first World People’s Conference on Climate Change and the Rights of Mother Earth (30), a popular alliance of non-governmental organizations and networks and social movements was forged to search for its own agenda. At Rio+20 the process continued and resulted in a common stance of opposition to the “green economy”, with a collective agenda. Since 2011, a network of organizations, movements, campaigns and affected communities from different global regions have been building the global campaign Dismantle Corporate Power and Stop Impunity (31).

PES schemes that give permission to destroy even more Nature than the law allows will further increase this corporate power. The opposite is needed. All these processes therefore need to be strengthened in order to effectively fight the big corporations and financial institutions responsible for the financialization of nature and of life in general.

Today it is essential, to begin with, for civil society movements and organizations to demand information and transparency on the financialization processes that are rapidly advancing in the countries of the South, and, above all, on the role of governments which, without consulting anyone, propose and approve laws and decrees, often contrary to their own constitutions and to international agreements, to facilitate the appropriation of land and nature by financial capital groups. And we must all work together to strengthen the debate, putting the “technical” and seemingly “complex” aspects of financialization into the plainest language possible.

The more people there are who are aware of the issue and understand its perversity and its impact on the lives of communities who depend on forests, or on nature in general, and on all peoples in the long run, the more possibilities there will be to build the solid front needed to combat this trend.

Nature is not for sale. It is priceless, and it must be defended.

Take Action

- Sign on to the Statement No to Biodiversity Offsets (EN, FR, ES, PORT, and others)
<http://no-biodiversity-offsets.makenoise.org/>
- Help distribute the Peoples Agreement adopted at the World People's Conference on Climate Change and the Rights of Mother Earth in April 2012 in Cochabamba, Bolivia
<http://pwccc.wordpress.com/2010/04/24/peoples-agreement/>
- Support groups that call on the EU to end its carbon trading market, the EU Emissions Trading Scheme: Scrap the EUETS <http://scrap-the-euets.makenoise.org/> (EN, ES, FR)

(1) <http://www.bvrio.org/site/>

(2) *Reference to papers by Morgan Robertson who describes this in much detail.*

(3) *Sian Sullivan of the Third World Network*

and <http://documents.worldbank.org/curated/en/2011/06/14597637/>

[congo-republic-forestry-economic-diversification-project](http://documents.worldbank.org/curated/en/2011/06/14597637/congo-republic-forestry-economic-diversification-project)

(4) <http://www.wavespartnership.org>

(5)

www.unep.org/greeneconomy/Portals/88/documents/INDICATORS%20PPT/d3s1%20Marianne%20Fay

[%20Wealth%20Accounting%20and%20Valuation%20of%20Ecosystem%20Services%20\(WAVES\)%20A%20Global%20Partnership.pdf](http://www.unep.org/greeneconomy/Portals/88/documents/INDICATORS%20PPT/d3s1%20Marianne%20Fay%20Wealth%20Accounting%20and%20Valuation%20of%20Ecosystem%20Services%20(WAVES)%20A%20Global%20Partnership.pdf)

(6) <http://blog.conservation.org/2012/01/making-waves-in-madagascar-putting-nature-into-the-equation/#sthash.tjGzyVOI.dpuf>

(7) http://www.brettonwoodsproject.org/wp-content/uploads/2013/12/Simandou-Questions-and-Considerations_finaldoc.pdf

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<http://www.cotizalia.com/ultima-hora/2013/01/airlines-preve-neutralizar-completo-emisiones-20130130-543863.html>,

(14) <http://www.climate-standards.org/about-ccba/>

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(17) http://www.forest-trends.org/documents/files/doc_3124.pdf

(18) http://www.forest-trends.org/documents/files/doc_3122.pdf

(19) *J.T. Quigley & D.J. Harper: (2006): Effectiveness of fish habitat compensation in Canada in achieving no net loss. Environ Manage. 2006 March: 37(3):351-66.*

(20) http://www.nap.edu/catalog.php?record_id=10134

(21) <http://www.gao.gov/products/GAO-05-898>

(22) <http://www.fern.org/sites/fern.org/files/Critical%20review%20of%20biodiversity%20offsets.pdf>

(23) 1/3 of all fertile lands worldwide are considered degraded. Annually, we lose an area of fertile land the size of Bulgaria.

(24) This section is based on the extensive analysis carried out by CENSAT Agua Viva / Amigos de la Tierra Colombia and WRM's own analysis of contracts that communities engaged in carbon offset projects have signed. The full article describing the CENSAT research has been published under the title 'Contratos REDD: Despojo ilegítimo, por vías legales' in the December 2013 issue No 79 of *Biodiversidad: Leyes, políticas y economía verde al servicio del despojo de los pueblos*. Quotations in this section are, unless indicated otherwise, taken from the CENSAT article cited here.

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(26) Ancient woods face axe in drive for homes. Government plan to 'offset' loss of habitat. *The Times newspaper* 4 January 2014, <http://www.thetimes.co.uk/tto/environment/article3965473.ece>

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