Financialization of Nature

CREATING A **NEW DEFINITION** OF NATURE

Friends of the Earth International

What is at stake?

Nature and communities all over the world are facing multiple crises. Capitalism is also experiencing grave problems. Nature and the communities who directly depend on it are threatened by climate change, water shortages, biodiversity depletion, deforestation and acidification of oceans. Capitalism's crises are caused in part by the demand for new attractive investment opportunities outpacing the supply. Meanwhile nation states are struggling to protect the planet's living conditions with global environmental legislation, without increasing the cost of industrial production. The UNEP, the World Business Council for Sustainable Development, the World Bank and others promoting a Green Economy say that 'green growth' will address these multiple crises in one sweep. Green growth, they claim, will relieve states of the growing financial burden of environmental protection while fixing the environmental damage corporate destruction of nature has already caused.

'Green growth', however, redefines 'green' not 'growth': Nature is described in the language of financial capital to better suit the new Green Economy. This Green Economy needs a flexible idea of nature. A nature divided into different "ecosystem services" that can be quantified, measured and above all, broken up into individual units, so profit can be made from selling rights to these individual units of nature. We call this financialization of nature.

> **Attempts to save biodiversity by redefining nature as a collection of ecosystem services, or "Green Economics", will only deepen existing ecological crises.**

'Green growth' redefines 'green' not 'growth'.

Markets in ecosystem services need clear and measurable units, but nature doesn't come with neat beginnings and ends - nature is a dynamic interaction.

So what is financialization of nature? A potential opportunity to seize? A communication tool? or a threat to oppose?

Whether financialization of nature is seen as an opportunity to seize or a threat to oppose depends on what we consider the cause and what the symptoms of current ecological crises, on motivations and values, and on the kinds of societies and economies we wish to construct.

An opportunity to seize?

Proponents of markets for ecosystem services believe that nature is being destroyed because it has no economic value. For this reason, they argue, markets for ecosystem services are a unique opportunity to make nature visible to politicians and financial markets. Markets for ecosystem services would also raise extra funds for nature conservation, they claim. Biodiversity loss would be prevented if (some of) nature's value was made visible in economic terms. Private sector capital can be raised to protect these 'ecosystem services' if a market could be created for the trade of these services.

Such markets in ecosystem services need clearly defined and measurable units. But nature doesn't come in neat units with clear beginnings and ends. Nature is an inherently dynamic interaction of human and non-human relationships. For rights to these ecosystem services to be traded on capital markets, this dynamic nature needs to be broken down into stable and quantifiable units that are assumed to exist in isolation from other ecosystem service units or social, cultural or spiritual links.

A pragmatic communications tool?

Those who want to use economic valuation of nature as a communications tool that helps show the 'true cost of destruction' believe that *"nature is destroyed because its economic value is not visible enough to corporations and politicians".* They too see economic valuation of nature as an opportunity but may oppose pricing and ecosystem markets. They share the assumption that nature can be broken down into distinct and quantifiable ecosystem services. They insist that the different steps involved in reimagining nature as composed of standardized, comparable, quantifiable – and thus tradable - ecosystem services units are all separate, stand-alone steps and that one can engage in some without endorsing others. However, promoting ecosystem markets involves the same methodologies and institutions for pricing and trading which were developed for economic evaluation. To believe that these processes are separate or that a firewall can be placed between them is a delusion. They inform and rely on each other.

The process of turning nature into tradable ecosystem services is often presented as a way of 'internalizing externalities', of bringing what is outside of economic considerations inside. It is assumed that including these costs of destruction that are usually left out of economic cost calculations can help show the 'true cost of nature's destruction'. By making these costs visible, the theory goes, political and corporate decision-making will change. In reality, defining boundaries around the new 'ecosystem services' just creates new 'externalities': Only those aspects of nature defined as ecosystem services are included in the economic value estimates. But much of 'nature' will continue to remain outside the economic calculus, so the claim that ecosystem service valuation will show the 'true cost' of destruction of nature is false. For example, the social, cultural and spiritual values and functions that are also part of 'nature' remain 'externalities'. Ecosystem service valuation will not halt this destruction of the social, cultural and spiritual functions and values of nature.

A THREAT TO OPPOSE!

From an ecological justice perspective, financialization of nature is only the latest step in a centuries-old process. Each time capital markets face a new crisis, finding new ways to extract value from nature becomes more attractive. Colonial powers declared nature 'empty land', even when it was the territory of indigenous peoples. This 'empty land' approach later saw nature reframed as 'natural resources'. 'Resources' could be exploited in accordance with 'resource management plans' and integrated into capital markets. At the same time, traditional land use practices were declared inefficient or destructive and indigenous peoples and traditional communities lost access and control over the nature they considered their territories.

This latest round of integration of nature into capital markets requires a redefinition of nature or a part of it as a series of unconnected ecosystem services. Even though the process is often presented as a technical exercise, it is fundamentally political. It will therefore come up against the same resistance, conflicts and violence that previous inclusions of nature into capital markets have encountered. The environmental justice perspective understands that economic valuation and financialization of nature are simply the latest examples of capital markets using nature for profit maximization, as they have been doing for centuries. Consequently, the environmental justice perspective tells us that making nature visible to capital is a threat that must be opposed. It will mean more, not less, violence against indigenous peoples and traditional communities and less, not more, control for those communities over the territories they depend on, shape and are shaped by.

For further information: **REDD – A Collection of Conflict, Contradictions and Lies. WRM, 2015. www.wrm.org.uy**

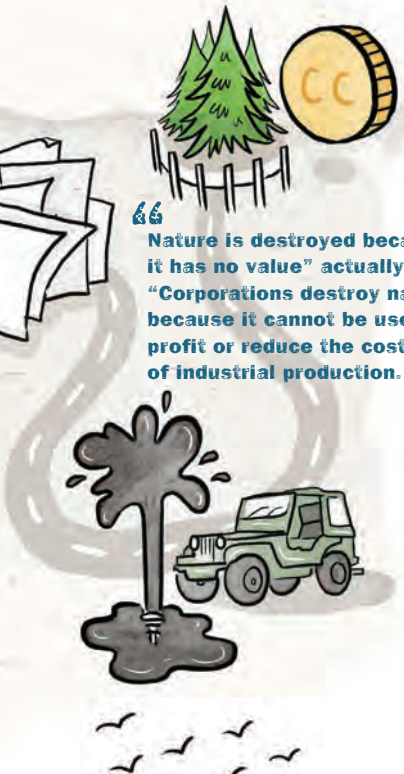
"The objective is to transform environmental legislation into tradable instruments[1]"

Offsetting – activities that supposedly create ecological benefits as compensation for ecological damage – is attractive to corporations with a long history of responsibility for biodiversity destruction. Governments facing pressure to set legal limits for destruction or pollution, without creating barriers to continued industrial production, also find offsetting appealing. Offsetting can grant corporations a social license to destroy, which in turn undermines local resistance to such destruction: 'where's the problem?' a mining company might argue, 'the 'ecosystem service' units destroyed in one place will be recreated or preserved elsewhere'. It also promises to reduce the cost of compliance with environmental regulations for corporations because offsets provide a cheaper option than changing the business model that relies on destruction of nature.

Financialization of nature is simply the latest case of capital markets using nature for profit maximization, as they have always done.

Making more of nature accessible to capital markets

For capital markets, the value of ecosystem services lies in being able to appropriate parts of nature's 'free gift', the natural wealth created through human and non-human relationships interacting over time. In the past, this appropriation happened by integrating parts of nature at low cost into capital circulation. Each time this happened, nature was defined in such a way that the portions desired for integration into capital circulation became visible and accessible for capital markets. European colonial powers of the 17th century defined nature as empty and unproductive land that could be colonized, made productive and its wealth extracted. Those who inhabited this colonial nature were defined as non-human, as savage, as outside 'civilisation'. In the late 19th century, nature was redefined through the 'natural resources' it provided and a set of environmental regulations and natural resource management plans began to determine how timber, rubber or minerals, for example, could be extracted and sold at profit in global markets.



> **"Nature is destroyed because it has no value" actually means "Corporations destroy nature because it cannot be used to create profit or reduce the costs of industrial production."**

How nature is defined has changed over time, depending on the particular free gift of natural wealth that capital markets required access to. The portions of nature that were not of interest to capital markets, corporations and politicians at any given time remain invisible in the definition – a dispensable 'externality' that is of interest to capital only if its maintenance is a legal requirement, and thus a cost factor or limit to industrial production.

Offsets and No-Net-Loss Regulation belong together

Carbon offsets were an attractive element of the Kyoto Protocol for industrialized countries. The offset mechanism allowed an industrialized country or company in these countries to emit more CO_2 than the Kyoto Protocol permitted. Despite overshooting the limit they could still claim to have complied with their reduction target because they had paid someone elsewhere to make a reduction for them. This idea of 'offsets' that allow destruction or pollution in one place as long as a company is paying for the environmental damage to be 'nullified' elsewhere is increasing in popularity. Governments use it to introduce 'no-net-loss' of biodiversity laws. Corporations like Unilever promise 'no net deforestation' for the commodities they trade. The 'net' is important because it allows destruction or pollution on the assumption that the damage can be offset. It allows industrial production to continue unchecked and unreformed, continuing to depend on the destruction or pollution of nature in places where legal or moral restrictions are in place. Ecosystem service markets trade the promise that an ecosystem service that was supposedly at risk of being destroyed is maintained for a fee paid by the buyer of the ecosystem credit. The offset credit then gives its owner the right to destroy nature in a place of their choice even if the law restricts such destruction, because they paid for someone elsewhere to protect or restore an ecosystem service of corresponding "value" to that which they are about to destroy.

For further information: **Friends of the Earth England, Wales and Northern Ireland (2009): A dangerous distraction Why offsetting is failing the climate and people: the evidence. www.foe.co.uk/sites/default/files/downloads/dangerous_distraction.pdf**

Nature as provider of tradable ecosystem services

Nature described as a provider of ecosystem services is potentially interesting for capital markets because ecosystem service units can be used as offsets. Offsets allow continued destruction or pollution of nature where it is most profitable for corporations, even if regulations limit such destruction or pollution in that particular location.

Nature's appeal to capital markets and corporations differs in this latest redefinition because they are not primarily interested in creating a new physical commodity from nature. There will be no value extraction through a physical good. No visible product will be extracted, transported, processed and sold.

In the case of ecosystem services, the value lies in the potential to reduce corporate compliance costs arising from environmental legislation and to enable continuing industrial production despite increasing global limits on 'resource use'. The economic value lies in a market that offers permission to destroy or pollute nature in places that are of interest to capital markets and corporations but where legal or moral restrictions limit the destruction. Ecosystem service markets offer this permission in the form of offset credits.

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'Ecosystem services' have been broken down into different categories, like the capacity of a forest to store carbon or provide habitat that contains a specific biological diversity, a wetland that regulates waterflow, etc. to better fit the types of ecosystem service units that corporations are interested in. The offset credit – the promise to maintain units of a particular ecosystem service that would otherwise have been destroyed - obtains market value only if it can be sold to someone who wants to destroy more of a similar ecosystem service than a legal or moral limit allows. Inserted into such a trade, the promise becomes a permit to pollute or destroy nature.

A carbon market for example trades the promise to protect the ***capacity*** of a forest to (temporarily) store carbon from the imminent risk of destruction. This promise, contained in the carbon offset credit, gives its buyer the right to exceed a legal or moral limit placed on burning carbon previously stored in an underground oil or coal deposit. A biodiversity market pays for the promise to protect a defined unit of biodiversity that was at risk of being destroyed in one place so a comparable unit of biodiversity can be destroyed somewhere else. Ecosystem service markets, in other words, provide a cost cutting tool to corporate industrial production that faces being limited by (global) environmental legislation.

Risk

Risk of exclusion for communities different but similar to other capital markets

Capitalism destroys nature that is of importance to indigenous peoples and forest-dependent communities but that has no economic value for industrial production. Some conservation NGOs and others promoting ecosystem service markets claim that trading in ecosystem services will correct this 'market failure'. They claim that these ecosystem service markets will pay communities for their stewardship of nature, not exclude them.

What they don't say is that ecosystem service markets are first and foremost a cost cutting instrument of interest to corporations whose industrial production risks being limited by (global) environmental legislation. The reality of this market is therefore likely to be no different from the experience communities have had before with global markets that facilitate industrial production, like global markets for tropical timber or rubber, for example. Although the ecosystem services market is not a 'commodities market' it will still establish property titles for the ecosystem services that are traded. Those who own the credit do not need to own the land nor the trees or biodiversity or water on the land, but they do own the right to decide how that land will be used. They often have the contractual right to monitor what is happening on the land and can request access to the territory from which they have bought 'ecosystem service rights' at any time they choose as long as they own the offset credit.

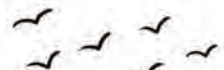
> **"Many of the contracts are also written in English, with no translation or incomplete translations into local languages."**

The consequences for communities are therefore likely to be similar to the experience with global commodity markets: everything not recognized as a marketable ecosystem service will be at best ignored, but more often degraded or destroyed. Everything that is recognized as a marketable ecosystem service is linked to new property titles that include the right to reduce community access to and control over their territories and to control how communities use their territories.[2]

Communities directly involved in projects that generate forest carbon credits – so-called REDD[3] projects – are already finding out how these new markets limit their control over their territories. Friends of the Earth International analysed contracts signed by communities involved in these projects. They found many REDD contracts are *"full of words written with the intention of not being understood, not being fulfilled."* Few contracts clearly explain that the communities will have the obligation to maintain the 'ecosystem service' and allow the buyer of the credit to access their land long after the payments the contract promises have stopped. Most contracts include strict confidentiality clauses that do not allow communities to easily seek legal advice on the conditions they are asked to agree to. Many of the contracts are also written in English, with no translation or incomplete translations into local languages. Where communities receive benefits or are offered jobs, these often increase inequalities: benefits go mainly to local elites and restrictions apply mainly to marginalised community members.

To find out more: **Diego Cardona (2013): Contratos REDD: despojo ilegítimo por vías legales. En: Leyes, políticas y economía verde al servicio del despojo de los pueblos. Revista Biodiversidad, sustento y culturas.**

Amigos de la Tierra Internacional (2014): Trampas de REDD y de otros proyectos de conservación de bosques Manual de prevención dirigido a comunidades www.foei.org/wp-content/uploads/2014/10/Trampas-de-REDD-y-de-otros-proyectos-de-conservaci%C3%B3n-de-bosques.pdf



The myth of successful precedents: Forty five programs worldwide include nature 'offsetting'. The most obvious failure of these initiatives is that none have stopped biodiversity loss.

THE MYTH

The myth of successful precedents:

Forty five programs worldwide include nature 'offsetting'. The most obvious failure of these initiatives is that none have stopped biodiversity loss.

Some have been in operation for decades. Yet across the EU, for example, at least 65% of habitats and 52% of species are at risk of loss and extinction. In Germany, more than 70 hectares a day – equivalent to more than 70 football fields – are sealed for infrastructure and expansion of urban areas. The result is continued loss of fertile land and biodiversity. Land comparable to that being destroyed has become hard to find close to the sites being destroyed. Revisions over the 35-year history of the compensation law have therefore weakened the mitigation hierarchy. Today, it is easier for developers to pay into a compensation fund instead of assuming responsibility for restoring the land – an option that was supposed to be used only as a last resort.

Land banks have been set up while the number of staff overseeing implementation of compensation measures at environmental enforcement agencies has been cut by as much as 30% over the past decades.

In South East Australia, a water trading market has been set up that aims to halt and reverse the degradation of the Murray-Darling Basin, a network of rivers, wetlands, lakes, streams and floodplains. Yet by 2012, twenty of the Basin's river valleys were found to (still) be in poor or very poor ecological condition. Indigenous peoples have seen the river network, which is intricately connected with their social, cultural and economic traditions, turned into a unit of nature "administered as a giant water delivery channel". Water use has become regulated by tradable water entitlements that can also be traded by offshore interests.

Along the way, government and agricultural lobbies began to insist that 'nature has to pay its way', and that revenue from sale of water entitlements should fully replace state funds for restoration. Offset initiatives also, by definition, fail the communities and people who see a place that holds their stories and memories, that has provided solace and often also livelihood, destroyed on the promise that it will be restored somewhere else - often far from the place of destruction.

> **government and agricultural lobbies began to insist that 'nature has to pay its way'**

To find out more: **FERN Briefing Critical Review of Biodiversity Offset Track Record, 2014, www.fern.org Friends of the Earth International (2013): Economic Drivers of Water Financialization.**

THE MYTH

CONTINUED...

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Devaluation: the flip-side of valuation of nature

One example often cited as a success in economic valuation of nature are payments to protect native forest in Costa Rica for its 'service' of providing a home to bees as pollinators of coffee plants.

A study found that bees from two forest fragments near Finca Santa Fe in Costa Rica saved the coffee plantation owner approximately US$60,000 a year. Without the forest bees, he would have needed to rent bee hives to pollinate his crop. An 'ecosystem service payment' contract was agreed between the plantation owner and the owner of the forest. The coffee plantation owner still saved money compared to the cost of renting bee hives, and the forest owner had a financial incentive not to cut down the forest. This part of the story is often mentioned as an example of how 'ecosystem service payments' can provide a win-win scenario for forest protection and agriculture.

Another part of the story is not told as often. Shortly after the study was published, prices for coffee crashed on global commodity markets. As a result, the plantation owner at Finca Santa Fe switched from growing coffee to growing pineapples. Pineapple plants do not need bees for pollination. Seeds negatively affect the quality of the fruit. The presence of seeds might even lead to the crop being banned from export to the US market under the 2002 US 'bioterrorism' law.

According to the logic of ecosystem service valuation, the monetary value of forests around Finca Santa Fe dropped from US$60,000 a year to zero. Keeping the forest standing – if it was home not only to bees but also hummingbirds and bats (which is likely) – now increased, not decreased the cost of pineapple production. The logic of the new economy of nature as a provider of ecosystem services means the pineapple plantation owner would be better off if the forest was cut down. That is exactly what is now happening to forests surrounding pineapple plantations in Costa Rica.

To find out more: **Jutta Kill (2014): Economic Valuation of Nature. www.rosalux.de/fileadmin/rls_uploads/pdfs/sonst_publikationen/Economic-Valuation-of-Nature.pdf**

Tradable Forest Restoration Credits: Symbol of paradigmatic change in environmental legislation

In 2012, Brazil revised its Forest Code. Under the law, land owners have to keep a certain percentage of the forest intact. Under the old Code, if land owners had cut more forest than was allowed by law without restoring the forest, they risked a fine. Above all, they might lose access to rural credit lines. Even though law enforcement was weak, land owners faced the risk that borrowing money would become more expensive. As a result, deforestation rates fell significantly when the law was enforced and large land owners felt the cost of illegal destruction. They then lobbied for the 2012 Forest Code to introduce a 'forest restoration credit' (CRA). As an alternative to the land owner restoring the illegally cleared forest on his own land, he can buy a CRA. The credit represents the promise that someone somewhere else has protected more forest of the same type than was necessary under the Forest Code. This claim of extra protection above the legal requirement somewhere else nullifies the excess destruction of forest committed by the buyer of the CRA. These CRAs are now traded, among others, on the Bolsa Verde do Rio de Janeiro, the environmental exchange. Where land prices are high and destructive practices are lucrative, these forest restoration credits allow land owners to continue destroying more forest than the law allows. A land owner need only buy 'forest restoration credits', including from regions where the threat of deforestation is much lower or non-existent.

'Green uranium'

Biodiversity offsets connect uranium mining in Namibia with controversial plans to expand nuclear power generation in England, where they are used to facilitate destruction of protected bat habitat. Namibia's central Namib desert has seen a "uranium rush", with the French corporation Areva, a key beneficiary. Areva controls a third of the uranium mines currently operating in the Namibian settlement, Trekkopje. The planned expansion would turn the site into the tenth largest uranium mine in the world. The mining will affect one of the most important wetlands in southern Africa. Mining could also expand into a National Park where important archaeological sites have been found. In 2009, the German government funded an Environmental Impact Assessment, hoping to develop *"a living example of how mining can contribute to the achievement of sustainable development"* in the 'Namib Uranium Province'. *"Under any of the mining scenarios envisaged, [economic] benefits will be at the cost of the biophysical environment which will be a net 'loser.'"* the report notes and at the same time suggests that with **biodiversity offsetting**, Namibia could *"position itself to capitalise on a 'green' brand of uranium."*

'Green infrastructure' – the new label for 'useless, unnecessary mega-projects'

In the Camargue region of France, 'biodiversity compensation is a new alibi for promoters of concrete', explains Friends of the Earth France. The Caisse des Depots (CDC) bank has purchased thousands of hectares of land in southern France, which has already been impacted by earlier intensive use. The Camargue is home to endangered species such as the Little Bustard and the Bupreste de Crau, a blister beetle. CDC are seeking company finance for the restoration project on the land they bought. In exchange, the companies receive a compensation certificate that they can use to 'greenwash' the environmental damage caused by their projects elsewhere. Rather than tackling the loss of biodiversity and other damage caused by urbanisation, this compensation "enables the reduction, in particular, of delays in getting projects accepted by local communities", the French Minister of the Environment acknowledged.

One company has already bought biodiversity credits in advance, as a way of demonstrating their will to compensate for the environmental impacts of an infrastructure project that is opposed by local groups. CDC has also proposed that the Alienor construction firm should buy restoration offsets on 1,372 hectares of land elsewhere to compensate for the damage that will be caused by a controversial new motorway in the southwest of France, the Pau-Langon project (A 65).

For more information: **www.nacicca.org**

“It is such a perverse world where corporations are people and forests are bundles of carbon, water and biodiversity offsets.”

Safeguards and certification – more than window-dressing?

A key interest in ecosystem service markets is their potential to reduce the cost of compliance with environmental legislation or enable continued industrial production despite (global) limits put on 'resource use'. The product traded in ecosystem service markets is a promise that an ecosystem service that would have been destroyed will be saved with the help of the ecosystem service offset payment. In turn, the buyer can use the offset credit to comply with environmental legislation and still destroy nature where it is most profitable. The right for the company to destroy nature is granted on the basis of a hypothetical story that without the offset payment, the ecosystem service represented by the offset credit would have been destroyed. Because verifying such a hypothetical story is impossible, the image presented of the project that produced the offset credit is very important in the marketing of the 'product'.

Certification standards like those of the 'Climate, Community and Biodiversity Standard' (CCB) are used to provide an assurance that the image presented of an offset project in a faraway location is trustworthy. These labels are essentially a marketing tool for the offset industry rather than an instrument applied to safeguard indigenous peoples' rights or traditional forms of land use.

To find out more: **Virtual nature, violent accumulation: The 'spectacular failure' of carbon offsetting at a Ugandan National Park. Connor Cavanagh and Tor A. Benjaminsen, 2014**

CONCLUSION

It is such a perverse world where corporations are people and forests are bundles of carbon, water and biodiversity offsets. Financialization of nature is a symbol of this perverse world, not a solution to its problems. Financialization represents further reduction of community control over their territories and an extension of the social license for corporations to destroy the web of life we depend on and which is showing increasing signs of multiple crises. Financialization extends the damage done by a predatory and exclusive development model that activists have been fighting against for years. It is a model that favors companies that pollute and cause irreparable environmental impacts, while destroying local communities' and Indigenous Peoples' cultures, and eroding or annihilating their historical and collective rights. Financialization of nature, and in particular markets in ecosystem services, provide a lifeline for this corporate destruction to continue, despite the blatant and multiple ecological crises associated with it. Hence, **from an ecological justice perspective, financialization of nature must be rejected as a false solution.**

> **Is there a law in Europe where it is written that when you build a factory, you can evict people at the other end of the world?**
>
> **Tutiko Kimaleni, Chief of the Basigu, a Ugandan ethnic group, commenting on a REDD project in Uganda.**
> **(Extract from the France 5 report "Acheter vert, l'envers du décor", 2010)**

For further information: **Friends of the Earth International (2014): Position paper on the financialization of nature. www.foei.org/resources/publications/publications-by-subject/forests-and-biodiversity-publications/ friends-of-the-earth-internationals-position-paper-on-the-financialization-of-nature/**

Friends of the Earth Europe (2014): Nature is not for sale. The dangers of commodifying our natural world. www.foeeurope.org/sites/default/files/foee_position_nature_is_not_for_sale.pdf

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Friends of the Earth International (2013): Economic drivers of water financialization. www.foei.org/wp-content/uploads/2013/12/Economic-drivers-of-water-financialization.pdf

World Rainforest Movement (2013): 10 Things Communities should know about REDD. http://wrm.org.uy/books-and-briefings/10-things-communities-should-know-about-redd/

REJECTED!

1. Pedro Moura Costa, co–founder of carbon offset company Ecosecurities and founder of Bolsa Verde Rio de Janeiro. www.bvrio.org/site/
2. FoEI, Economic drivers of water financialization, November 2013, EJRN Program, 90 pages, pp 7-8.
3. REDD stands for Reducing Emissions from Deforestation and Forest Degradation.
4. Bettina Matzdorf et al. (2014): Paying for Green? Payments for Ecosystem Services in Practice. Successful examples of PES from Germany, the United Kingdom and the United States.

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REJECTED!

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Cover: Attempts to save biodiversity by talking about nature in terms of "Green Economics" will only deepen existing ecological crises.

Friends of the Earth International is the world's largest grassroots environmental network with 75 member groups and over two million members and supporters around the world.

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