

A TREE FOR A FISH

Understanding the (il)logic behind Biodiversity Offsets

Although the idea behind putting a price on natural systems has been around for several decades, the concept of ‘innovative financial mechanisms’ for pricing biodiversity was popularized at the 2010 United Nations Convention on Biological Diversity (CBD). Parallel to this, the Economics of Ecosystems and Biodiversity (TEEB) project, led by the Deutsche Bank, was launched, advancing the idea of incorporating the economic ‘value’ of ecosystems into governmental and corporate decision-making. Funded by the EU Commission, Germany, the UK, the Netherlands, Norway, Sweden and Japan, TEEB was welcomed by the CBD.

Proponents affirm that to consider the economic ‘value’ of biodiversity, separated accounting ‘units’ are necessary. These units “can also be leveraged as a new class of capital asset” since the real revenues stand in financialised products derived from the credits, as experienced with carbon trading. Hence, by ‘turning-nature-into-numbers’, proponents construct apparent equivalences between different biodiversity types, locations, times, and contexts. The argument then goes that the destruction in one place could be compensated with the supposed protection, or re-creation, in another ‘equivalent’ place, so that the overall result is no net loss in biodiversity. This completely ignores other knowledges and values attached to ‘biodiversity’ by local communities. In addition, it ignores the foundation of what makes a natural system unique or what defines the area as an ecosystem in the first place.

In the quest to prove the impossible, the UK mining company Rio Tinto, which has more than 60 mines in over 40 countries, claims that mining can be a sustainable activity. Rio Tinto defines biodiversity offsetting as “conservation actions leading to measurable gains for biodiversity on the ground, designed to compensate for the unavoidable residual impacts of Rio Tinto’s project developments on significant biodiversity”. Yet, Rio Tinto has an extensive record of human and environmental violations from Indonesia to South Africa to Brazil. A motion at the UK Parliament in 1998 described Rio Tinto as “probably one of the least compassionate and most cruel worldwide” (Carrere, 2004).

The Business and Biodiversity Offsets Programme (BBOP), an international coalition for the development of offset methodologies and standards, focuses on demonstrating “a balance between a project’s impacts on biodiversity and the benefits achieved through the offset.”ⁱ The EU working group on No Net Loss of Biodiversity draws upon the BBOP principles.ⁱⁱ According to BBOP, offsets are supposed to be the last resort for developers seeking to compensate for unavoidable damage, after applying some form of mitigation hierarchy: Avoidance, Minimization, Rehabilitation/Restoration and Offset.ⁱⁱⁱ These categories hide the power relations embedded in the projects’ environmental and social destruction.

Developers may however not comply with the mitigation hierarchy. For example, a proposed project in Germany involves impacts on Muhlenburger Loch, a protected area. Planning permission was applied for on the grounds of “no alternative sites”, with proposals for compensation. The offset proposals entailed replacing 170 hectares of wetland with “comparable habitat” across four sites. This however would have resulted in only 100 hectares. Moreover, the EU Commission placed the case under examination, concluding that the developer had not sufficiently considered alternative sites (Bull et. al., 2012).

Experience with Carbon Offsets

The experience with carbon offsets shows a disastrous record not only at the offset site where social and environmental harm has been widely documented in various projects, but also in the overall increase of pollution levels.^{iv} As with carbon offsets, biodiversity offsets would not reduce pollution or biodiversity loss. Every offset project would have an ‘equivalent’ destruction somewhere else. This could also lead to quicker and easier approving of destructive projects, adding another layer of financial profits for the same actors that are destroying biodiversity in the first place.

In Winchester, UK, the inhabitants were ‘compensated’ after much local resistance against the loss of the Twyford Down grassland due to the construction of a highway, and offset with the creation of a countryside area (Bryant, 1996). This area was nevertheless later paved over to build a 428-space park-and-ride car park.^v Likewise, in the Stroud valley, UK, Lioncourt Homes is currently planning to build 100 houses on the Rodborough Fields, with proposals to use

biodiversity offsetting to justify the building project. Gloucestershire Wildlife Trust objected affirming that: “First it is not possible to recreate some ancient habitat types, such as the grassland community at Rodborough Fields, and second it does not take into account the fact that a local community might be losing their much-loved wildlife area and the compensation for that loss is carried out somewhere else.”^{vi}

Besides the many technical problems involved in carrying out offset projects an underlying problem is the commodification of biodiversity, which fails to recognise that biodiversity cannot be replaced and replicated. Carbon and biodiversity offsets require ecological destruction. The trading value of their ‘units’ increase by enhancing their scarcity.

As experienced with the carbon markets, governmental institutions play a key role in providing the regulatory frameworks needed to create demand and attract investors. Proponents of biodiversity offsetting suggest that ‘price’ will act as a form of regulation, since developers will look for the cheapest land to develop. In addition to the large amounts of regulations and laws created to set up a market, in the case of the carbon market public funding was needed, in forms of subsidies or tax incentives, to attract ‘investments’ which largely benefit the biggest polluters.

In a world of offsets, fines and penalties are no longer needed to enforce the type of regulations that protect natural areas and communities. Rather, offsetting renders these regulations as obstacles. Moreover, offsets impose a hegemonic view on how to perceive the world. Nature accounting detaches biodiversity from its localities and other values and cultural significance.

EU Biodiversity Strategy to 2020

In 2010, the European Council adopted a new biodiversity target in order to halt biodiversity and ecosystem service loss by 2020, to restore ecosystems in so far as is feasible, and to step up the EU contribution to averting global biodiversity loss.^{vii} To support this target (and the targets of the CBD agreed in Nagoya in 2010), the Commission developed in cooperation with Member States, an EU post-2010 Biodiversity Strategy, which includes six sub-targets and 20 related actions.^{viii}

Target 2 requires that “ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems” by 2020.^{ix} Under this Target, Action 7 seeks to “ensure no net loss of biodiversity and ecosystem services” and it is composed of two complementary sub-actions:^x

- a. the Commission will develop a methodology for assessing the impacts of EU funded projects, plans and programmes on biodiversity by 2014
- b. the Commission will carry out further work with a view to proposing by 2015 an initiative to ensure there is no net loss of ecosystems and their services (e.g. through compensation or offsetting schemes)

The No Net Loss (NNL) initiative is a mechanism to supposedly maintain biodiversity levels while, at the same time, allowing “development” on largely protected areas. The destruction of one habitat would be “offset” by the creation of another through ‘units’ of biodiversity.

The first report assigned by the EU Commission, “*The use of market based instruments for biodiversity protection – the case of habitat banking*”, published in 2010, recommended the need to alter existing environmental directives such as the Habitats Directive and the Environmental Liability Directive and to ensure consistency of offsetting legislation across Member States in order to “enable trades across political boundaries... [which] might facilitate the development of an EU wide scheme that coherently implements Habitat Banking across Member States, allowing for systematic EU wide trading of credits.”^{xi}

The European Parliament adopted a resolution on April 2012, urging the Commission to “develop an effective regulatory framework based on the ‘No Net Loss’ initiative, taking into account the past experience of the Member States while also utilising the standards applied by the BBOP”. The resolution also highlighted the importance of applying such an approach to all EU habitats and species not covered by EU legislation. The Resolution also “Emphasises the importance ... of developing innovative financial mechanisms – in particular habitat banking in conjunction with offsetting.”^{xii}

Led by the Institute for European Environmental Policy (IEEP), a signatory to the WAVES initiative from the World Bank,^{xiii} the study, “*Policy options for an EU No Net Loss Initiative*”, was commissioned by DG Environment, aiming to support the development of the NNL initiative, which would need to be a mandatory condition for all sectors, not only for built developments but also for agriculture, forestry and fisheries.^{xiv} IIEP and DG Environment hosted a workshop in Brussels in July 2013, evidencing a strong support to the role of biodiversity offsetting for achieving NNL in the EU, while ignoring the numerous problems inherent in biodiversity offsetting.^{xv}

The Forest of Dean: Forest Mitigation in the UK

In the south west of England lies a public 30,000 acre Forestry Commission managed forest of historical and even mythical importance. The heart shaped forest is bordered by the River Wye to the north and west and the River Severn to the south and east consisting of mixed forest – one of the few surviving ancient woodlands in England.

The forest was once the King's territory, reserved for royal hunting as early as 1066. As such the central forest is very sparsely populated. Most of the development lies on the periphery of the forest and this is where problems arise. The pressure for development encroaching in to the Forest is a very serious concern. A development project slated for the community of Cinderford is a prime example.

The Forest of Dean has large deposits of iron ore and coal which are still mined today at small-scale levels. The wealth of minerals and ancient rights associated with them have led to an interesting situation. In this case the development proposals covers an area which was once a deep coal mine (the remaining buildings) and the site of an old opencast mine (the grassland). Once opencast operations were completed the area was designed and managed as acid grassland by the Forestry Commission. The natural regeneration of the area was a huge success and is now populated by rare animals, insects, invertebrates and birds.

The plan consists of moving the road through the forest, to build a college and a hotel where a slow-growing alder grove stands in addition, industrial units and houses. At the entrance to the new road are three abandoned ex colliery buildings that have been inhabited by Horseshoe bats, a protected species. In addition, the area holds many other protected species.

The justification by the developers (a combination of Councils and Government Agencies) is that the building could happen as long as the biodiversity is mitigated, or moved, to another site. If this development project is green-lighted locals worry that the mitigation argument will be used for more destruction of this ancient woodland which still provides a home for the mythical “white heart” or white stag.

Despite the destruction to the protected species, the slow-growing alder grove or the fact that the Forest of Dean already has a college, plans for building are moving forward despite strong opposition from local groups like Dean Forest Voice, Dean Natural Alliance and Forest of Dean Friends of the Earth which have campaigned hard to keep the development project out of the area.

For more information see:

<http://www.deanforestvoice.org/index.html>

<http://www.deannaturalalliance.org/>

The CEE website for Biodiversity, a network of non-governmental organizations in Central and Eastern Europe, wrote a critical review on IEEP's study, highlighting the many problems in using offsets for achieving NNL. On one side, the technical issues: difficulty of measuring biodiversity, of restoring and recreating nature and of setting adequate baselines; the uncertainty of their final outcome; and the evidence that offsets often provide 'equivalent biodiversity' that is grossly inferior to that which was destroyed. Further, the review points to how public authorities have failed to penalise or deal with failed offsets and have failed to ensure that the mitigation hierarchy is applied. And lastly, it underlines how biodiversity offsets do not take into consideration the impact of developments on local communities, “the impact of which cannot be offset”.^{xvi}

Ways Forward

Reducing complex and interconnected ecosystem to monetary values reduces the natural world into tradable 'units' largely for corporate interests. Proponents claim that biodiversity offsetting is 'the only option' to get business on-board. Framing the market as 'the only option' available colonizes our imaginations and silences the many others that are strongly resisting and defending lands.

Across Europe resistance is growing and movements are making important links between their struggles. Save Gosforth Wildlife^{xvii} are resisting UK government plans to use biodiversity offsets to undermine local opposition against luxury housing estates;^{xviii} along the HS2 high-speed train line, local groups insist that biodiversity offsets elsewhere are no compensation for destroying Alvecote Woods; in Notre Dame des Landes, France, ecologists supported local activists protesting at the site of a proposed airport by exposing how the government's claim of building a 'green airport', was nothing but empty promises built on incoherent 'biodiversity offset' methodologies and calculations;^{xix} and in Roşia Montană grassroots resistance against a Canadian gold mining company has grown into one of the largest campaigns in the last 20 years in Romania.^{xx}

www.carbontradewatch.org

CARBON TRADE WATCH

C. Princesa 6, Ent - 08003 Barcelona, Catalunya, Spain

+ 34 625 49 8083 - carbontradewatch@gmail.com

REFERENCES

BBOP (2009) Business, Biodiversity Offsets and BBOP: An overview. *Forest Trends*, Washington, DC, USA.

Bryant, B (1996) Twyford Down. Roads, campaigning and environmental law, *E&FN Spon*, UK.

Bull, J; Suttle, B; Gordon, A; Singh, N; and Milner-Gulland, J (2012) Biodiversity offsets in theory and practice. *Flora and Fauna International*.

Carrere, R (2004) *Minería. Impactos Sociales y Ambientales. World Rainforest Movement*. Uruguay. www.wrm.org.uy/fr/files/2013/04/Mineria_Impactos_sociales_y_ambientales.pdf

Kill, J (2014) *Valuation of Nature: The price to pay for valuation, A critical exploration*, Rosa Luxemburg Foundation.

Lohmann, L (2012) Performative Equations and Neoliberal Commodification The Case of Climate, *The Corner House*.
www.thecornerhouse.org.uk/resource/performative-equations-and-neoliberal-commodification

Robertson, M (2011) Measurement and alienation: making a world of ecosystem services. *Transactions of the Institute of British Geographies*, Royal Geographical Society, UK

Sullivan, S (2012) Financialisation, Biodiversity Conservation and Equity: Some currents and concerns. *Environment and Development Series*, 16, Third World Network, Malaysia.

Notes:

- i. Business and Biodiversity Offsets Programme, http://bbop.forest-trends.org/pages/biodiversity_offsets
- ii. EU NNL Working Group, 12 July 2013, Development of Operational Principles of any proposed EU no net loss initiative, http://ec.europa.eu/environment/nature/biodiversity/nnl/pdf/NNL_Operational_Principles.pdf
- iii. BBOP, Mitigation Hierarchy, http://bbop.forest-trends.org/pages/mitigation_hierarchy
- iv. See more at: carbontradewatch.org; globaljusticeecology.org; iearth.org; wrm.org.uy
- v. The Independent, "Second Battle of Twyford Down looms over plan for car park," 06 July 1999. <http://www.independent.co.uk/news/second-battle-of-twyford-down-looms-over-plan-for-car-park-1104427.html>
- vi. BBC News, "Rodborough Fields housing objection from wildlife trust," 13 July 2013. <http://www.bbc.com/news/uk-england-gloucestershire-23301393?print=true>
- vii. <http://ec.europa.eu/environment/nature/biodiversity/comm2006/2020.htm>
- viii. TARGET 1: Fully implement the Birds and Habitats Directives; TARGET 2: Maintain and restore ecosystems and their services; TARGET 3: Increase the contribution of agriculture and forestry to biodiversity; TARGET 4: Ensure the sustainable use of fisheries resources; TARGET 5: Combat Invasive Alien Species; TARGET 6: Step-up action to tackle the global biodiversity crisis.
- ix. European Commission, Working group on no net loss of ecosystems and their services, http://ec.europa.eu/environment/nature/biodiversity/nnl/pdf/Subgroup_NNL_Scope_Objectives.pdf
- x. European Commission, DG Environment, http://ec.europa.eu/environment/nature/biodiversity/nnl/index_en.htm
- xi. FERN, "What is biodiversity offsetting and why is it problematic?" 2013. <http://www.fern.org/biodiversity-offsetting>. For EU Member State frameworks see: FERN, "Briefing Note 3: Biodiversity Offsetting in Practice", January 2014. http://www.fern.org/sites/fern.org/files/Biodiversity3_EN.pdf
- xii. European Commission, Working group on no net loss of ecosystems and their services, http://ec.europa.eu/environment/nature/biodiversity/nnl/pdf/Subgroup_NNL_Scope_Objectives.pdf
- xiii. The Bank's 2012 Environmental Strategy includes the "Wealth Accounting and Valuation of Ecosystem Services" (WAVES) initiative. One of the main objectives of the WAVES initiative is to "build international consensus around natural capital accounting", <http://www.wavespartnership.org/en/about-us>
- XIV. Institute for European Environmental Policy, Policy Options to achieve no net loss of biodiversity, <http://www.ieep.eu/work-areas/biodiversity/nature-conservation-policy-and-its-implementation/2014/04/policy-options-to-achieve-no-net-loss-of-biodiversity>
- XV. European Commission, CIRCABC, <https://circabc.europa.eu/faces/jsp/extension/wai/navigation/containers.jsp>
- XVI. CEE website for Biodiversity, Critical review of biodiversity offset track record, http://www.ceeweb.org/wp-content/uploads/2011/12/Critical-review-of-biodiversity-offsets_for-IEEP_Final.pdf
- XVII. See the "Irreplaceable: Nature Not for Sale" photo exhibition for full texts and details of resistance across the globe: <http://photos.criticalcollective.org/index.php?module=media&pld=100&category=gallery/exhibition>
- XVIII. More info at: www.nhsn.ncl.ac.uk or Facebook Save Gosforth Wildlife
- xix. More info at: <http://www.acipa-ndl.fr/> (NGOs); and <http://zad.nadir.org/> (Occupation movement); and naturalistesenlutte.overblog.com
- XX. More info at: <http://www.rosiamontana.org/en/>