

Ecosystem Services Markets: One Neoliberal Response to Crisis

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“Let’s put a value on Britain’s ecosystem services” – the slogan has a nice ring to it. Perhaps we don’t fully understand the value of the wild plants, animals, and natural cycles around us, and if we did, we could appreciate and protect them better.

But what is it that we don’t know exactly? We know that groundwater cycles are important because of the droughts and floods that strike periodically. We know that the weather is crucial to crops, because it affects yields every year. We know the environmental value of woodlands, as the government learned to its cost when its proposal to privatize Forestry Commission lands was shouted down by the public earlier this year.

Yes, yes, the answer comes, but what we don’t know yet is the *price* or *economic value* of all these things. For example, what would business have to pay for them as commodities or inputs to production? If we knew – via ecosystems markets or some other means – that might give us an additional incentive for holding on to the good things that we have.

If the reasoning sounds suspicious, it should. Environmental service markets are a response not just to ecological crisis but also to business crisis – in particular the prolonged profitability crisis that set in during the 1970s.

That was when returns on many traditional sorts of investment went into seemingly permanent decline. With the help of governments and international agencies, business reacted not only by trying to take back some of the postwar gains made by workers (see Thatcherism and all that came after), but also by seeking alternative assets to put money into. Investors branched out into dotcoms, biotech and financial services or plunged into real estate speculation and infrastructure. Private firms stalked new acquisitions in the public sector or in the commons of the global South. Environmental and financial regulation was rolled back and new business-friendly legislation rolled out. Trade treaties giving Northern companies special protection and privileges proliferated, together with new markets in financial derivatives, helping profit-challenged business expand in an uncertain global environment. The financial sector took over as the profit leader in both Britain and the US. The expanded credit it offered helped keep demand high while offering workers in the North whose wages had been suppressed the consolation of the temporary means of buying goods produced by cheap labour in China and elsewhere.

Ecosystem services markets are deeply rooted in this history. For one thing, like many of the new trade treaties, they loosen regulatory constraints on business while opening up new profit opportunities. Take wetlands banking, which was developed in the US during the 1990s as a way of making it easier for builders to comply with restrictions on dredging or dumping in swampy areas. Instead of having to move to another site, or fashion “compensatory wetlands” on the same parcel of land they were building on, developers could buy pre-packaged “wetlands credits” from distant locations – credits that had been verified through specially-developed valuation techniques to provide “equivalent” ecosystem services.

More recently, the United Nations Development Programme (UNDP) has urged that environmental

impact assessments (EIAs) be carried out in Latin America in a way that would allow impacts to be compensated for by “habitat credits” or “biodiversity offsets” bought in from elsewhere. Through techniques for valuing ecosystem services, environmental impacts would be redefined in a way that ensured that EIA requirements, instead of being a shackle for business, would create a demand for “habitat banking” that could help transform Latin America into what the UNDP calls a “biodiversity superpower”. Britain's Department of Environment, Food and Rural Affairs appears to have been bitten by a similar bug, judging by statements it issued last year enthusing over the economic potential of a “market in conservation projects” populated by a “network of biodiversity offset providers”.

The emphasis on “banking” isn't coincidental. Ecosystem commodities, with their notional, electronic nature, are a potential bonanza for a thrusting financial sector whose post-crisis annexation of enormous slices of public treasuries has only increased its dominance over today's economies. Unsurprisingly, one of the earliest types of ecosystem service market, pollution trading, was developed largely by derivatives traders from Chicago and New York, and among the most avid promoters of markets in forest carbon services are firms such as McKinsey and Merrill Lynch Bank of America. Today's top buyers of carbon credits (one of the commodities traded on climate services markets) are headquartered in the City of London and on Wall Street.

Techniques used to establish the economic value of ecosystem services, in other words, aim not so much at providing new incentives for protection of the environment as at redefining that environment in a way that creates new assets and economic sectors. Like many other responses to business crisis, economic valuation of ecosystem services is, at bottom, a struggle to create and acquire property rights.

The clearest illustration of this process to date is the cluster of climate services markets established under the Kyoto Protocol and the EU Emissions Trading Scheme (EU ETS) – today's biggest ecosystem services markets. Early on, the economic valuation of climate stability was advertised as a step toward harnessing the economic system to environmental goals. Instead, “giving an economic value to the climate” turned out to involve a process for handing over a large range of public goods to the private sector that left the global warming problem behind entirely.

As with all ecosystem services markets, the first step was to simplify and quantify the ecological functions in question, so that standardized increments of “environmental improvement” could be traded for standardized bits of “environmental destruction”. In order to facilitate this exchange, wetlands markets reduced habitat provision, plant diversity, peak flow attenuation and so forth to a series of numerical scores (and sometimes simply to an indication of acreage), obscuring what makes different wetlands valuable in different ways. So, too, the new climate markets measured climate benefits and harms simply by quantifying flows of molecules, especially carbon dioxide molecules, ignoring the fact that a cut of 100 million tonnes of CO₂ through routine efficiency improvements may be much less climatically effective in the long term than an equal cut that comes from investment in non-fossil-fuelled technologies.

But if the economic valuation of ecosystems gave short shrift to many environmental realities, it was very good at setting off a scramble to acquire, produce and trade lucrative assets. Just as “wetlands credits” were valuable because they conferred a right (that would otherwise be curtailed) to bulldoze unique sites in Illinois, so CO₂ pollution rights were valuable because they allowed their holders to go on burning fossil fuels at a time of incipient emissions caps.

So it was no surprise when, under the EU ETS, the biggest polluting corporations successfully

demanded that governments give them enough free pollution rights to cover virtually all, and in some cases more than all, their current pollution output. Many of them later sold, or charged their customers for, the surplus rights they had received *gratis*, ploughing the proceeds back into business as usual. The windfall profits still being made in this way by only ten of Europe's intensive industrial users of fossil fuels exceed the total EU budget for environment.

Demand for carbon dioxide pollution rights at a price companies were willing to pay, meanwhile, touched off a commercial arms race among entrepreneurial spirits to devise ever stranger environmental valuation techniques for manufacturing cheap "equivalents" for CO₂ reductions. Today it is possible for European companies to buy CO₂ pollution rights from factories in Korea that reduce an "equivalent" amount of nitrous oxide, or coal mines in China that burn off methane (a more potent greenhouse gas than carbon dioxide), or tree plantation firms in Brazil that claim their trees can "compensate" for the carbon dioxide emitted through the burning of oil. In addition to entailing further brutal simplifications of natural realities, these equations license enclosures of land, air, water and labor in the global South to serve the "carbon needs" of the North. That is one reason why the Kyoto Protocol and EU ETS carbon markets are strongly opposed by the international farmers network La Via Campesina.

Today, the significant political debates over the EU ETS are not about whether the scheme has any benefits for the climate (it doesn't), but about who owns which goodies. For example, when millions of tonnes of EU pollution rights stolen by computer hackers earlier this year were found to be in circulation, the buzz in the carbon trading community was largely confined to the labyrinthine legal question of who had ownership of the purloined assets, particularly as all of them had been traded many times over.

More than a decade ago, many environmentalists who were vaguely uneasy about the new climate services markets nevertheless took comfort from the idea that "at least now carbon has a price", and gave their reluctant stamp of approval to the Kyoto Protocol and the EU ETS. Today, such environmentalists have cause to regret their earlier naivete.

Will the same be true ten years hence of environmentalists who are today tempted to support biodiversity and other environmental services markets? The answer depends on many things, including the special characteristics of each particular market. But the disastrous history of climate services markets suggests that there is reason to be afraid. Very afraid.