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***WHAT GREEN ECONOMY?
DIVERSE AGENDAS, THEIR TENSIONS AND
POTENTIAL FUTURES***

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WHAT GREEN ECONOMY?

Diverse agendas, their tensions and potential futures

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Abstract

The 'green economy' has become a prominent global concept for debating desirable futures, while recasting or marginalising 'sustainable development'. The dominant agenda promotes state incentives for private-sector solutions through two parallel approaches: A techno-environmental Keynesian agenda attempts to stimulate eco-innovation which can become more resource-efficient and economically competitive. And a green markets agenda seeks to make natural resources more economically visible, as a basis to alleviate poverty.

Like sustainable development, green economy agendas claim to redress the socially unequal access to natural resources. These claims have been widely questioned, thus generating extra remedial proposals, opposition and alternative frameworks. The debate features diverse agendas for co-constructing 'green' with 'economy', especially for assigning economic value to natural resources or environmental burdens. Struggles over potential futures take the form of disputes over defining, allocating and valuing resources – i.e. what counts for a 'green economy'.

Introduction: issues to be explored

The 'green economy' agenda has been recasting or even displacing 'sustainable development' as the main global concept for debating feasible, desirable futures and means to achieve them. The concept has been widely adopted, especially through promotion by the United Nations Environment Programme (UNEP) and OECD. As formalised at the Rio+20 conference in 2012, the concept has meant 'getting the economy right' to protect natural resources and enhance social equity.

As a flexible umbrella concept, the green economy encompasses diverse agendas. The global expansion of 'the green economy' has been celebrated, thus downplaying divergences, as if they arose simply from local contexts. Some policymakers and investors have sought clearer metrics for assigning economic values to natural resources and environmental burdens – for what to count and how. Yet accounting measures have become contentious.

Questions for analysis here:

What have been the main modes of linking 'green' with 'economy'?

How are these shaped by institutional contexts?

How have some aspects become contentious?

What implications for clarifying and creating pathways towards a 'green economy'?

To address those questions, this paper surveys main features of the 'green economy' agenda and debate – namely,

- a techno-environmental Keynesianism, which has attracted sceptical responses as regards the prospect of reconciling various economic and environmental aims;
- 'green markets' for poverty alleviation, which has attracted criticism for potentially doing the opposite; and more recently,
- a 'landscapes' approach, aiming to address concerns about local livelihoods;
- 'environmental justice' perspectives from North-South NGO networks opposing the 'green markets' framework of a green economy.

Each section links the sub-theme with analytical perspectives near the end. Finally the paper indicates answers to the above questions, while suggesting how critical studies can learn from and inform societal debate over green economy agendas.

1. Techno-environmental Keynesian agenda

As a central aspect of green economy agendas, a techno-environmental Keynesianism seeks to stimulate eco-innovation which can become more resource-efficient and economically competitive. This greening strategy redirects neo-Keynesian policies which have emerged since the 2008 financial crisis:

Keynesian deficit spending solutions became common throughout OECD and emerging countries, illustrating the incremental change away from market fundamentalism as driver of free-market economies towards a greater substantive economic role of the state. Greening was seen as an investment opportunity within this broader change (Bina, 2013: 1029).

Responding to the financial crisis, a techno-environmental Keynesian agenda would adjust the economic stimuli.

A related impetus has been an effort to clarify or go beyond 'sustainable development', a concept implying resource limits and mitigation costs for climate change. Policymakers sought to identify and promote types of economic growth that would be environmentally beneficial. According to an early proponent of a green economy (Jacobs, 1991), 'Green growth not only

insists on that compatibility, but claims that protecting the environment can actually yield *better growth*' (Jacobs, 2013: 6). The appeal to green markets and economic growth reinforced policy agendas for private-sector investment in 'green technologies', especially through financial incentives such as redirecting subsidies. As the main framework for a green economy, this techno-environmental Keynesian agenda has marginalised other versions such as a green New Deal (section 1.3), as this section shows.

1.1 Promotion by OECD and UNEP: stimulating clean technologies

The OECD has promoted several concepts – 'green economy', 'growing green' and 'green growth' – as if they were interchangeable. According to the OECD (and UNEP), this agenda offers more specific instruments to achieve sustainable development, especially by 'identifying cleaner sources of growth' (OECD, 2010: 9). Yet the 'green economy' agenda relegates social equity to state-industry governance measures such as clearer property rights: 'Sound governance is critical to ensure sustainable and equitable management of natural resources... These [measures] include securing property or use rights and strengthening the institutions that govern the resources' (OECD, 2010: 25).

The agenda acknowledges resource limits, e.g. 'uncertainties about thresholds, irreversible outcomes and discontinuities', especially degraded natural-resource assets (OECD, 2011). Such limits 'can choke off growth' – which remains a main objective. As a way forward, this agenda emphasises state stimuli for the private sector to prioritise resource-efficient technology:

The transition to a green economy will require dedicated policy approaches to foster the development and diffusion of green technologies, and to facilitate the reallocation of capital and labour resources across sectors while minimizing the likely adjustment costs that such processes entail (OECD, 2010: 22).

It proposes that states should divert 'environmentally harmful subsidies' to green technology and development projects, alongside other state incentives for private-sector investment and trade. In particular:

It will be essential to remove barriers to trade in clean technologies as well as to the entry of new firms, and improve the conditions for entrepreneurship, especially in light of growing evidence that young firms represent a large source of more radical innovations. There is also the need for more effective and inclusive multilateral co-operation on science, technology and innovation (ibid: 10).

After UNEP launched its Green Economy Initiative in 2008, an early report proposed a Global Green New Deal (UNEP, 2009), resonating with various national proposals of a similar name. This agenda would expand public services, regulate private-sector activities and promote less resource-intensive patterns. Differences with the green economy exemplify varieties of green capitalism (Aşici and Bünül, 2012; Candeias, 2012; Tienhaara, 2014).

UNEP soon abandoned the Green New Deal concept in favour of a Green Economy agenda emphasising greater resource-efficiency in production methods. According to a UNEP expert report on the manufacturing sector, for example, 'This requires supply and demand-side approaches, ranging from the re-design of products and systems to cleaner technologies and closed-cycle manufacturing'. A closed-cycle process 'maximises the useful life of products and minimises the waste and loss of valuable and scarce metals'. Water-efficient technologies can reduce water demand and pollution (Ayres, 2011: 246, 261, 265). The green economy promotes 'the use of technologies that encourage efficient forms of recycling and reuse' (Young, 2011: 119). To stimulate such improvements, since the 1990s there have been proposals for more stringent environmental regulation, but this remains marginal or absent in the UNEP agenda for a green economy.

1.2 What green investment? Critiques and alternative versions

The aim to decouple economic growth from resource burdens has been elaborated through computer models. According to its results, a green economy can achieve a faster rate of economic growth than ‘business as usual’, even ‘while enhancing stocks of renewable resources, reducing environmental risks, and rebuilding capacity to generate future prosperity’ (UNEP, 2011b: 24). Yet sceptics doubt that a green economy can achieve GHG savings, or close the gap between rich and poor, ‘without some curtailment of ambitions for economic growth’ (Victor and Jackson, 2011: 11). Major reports feature ‘over-optimism and over-simplification of the challenges to greening growth’ (Borel-Saladin and Turok, 2013: 216). Indeed, dominant green economy agenda includes no formal means to ensure lower GHG emissions or resource burdens.

Like the OECD, the UNEP agenda links sustainable development with technoscientific innovation, especially through international cooperation. Hence
the continued need for an enabling environment at the national and international levels, as well as continued and strengthened international cooperation, particularly in the areas of finance, debt, trade and technology transfer, as mutually agreed...
It promotes global collaboration ‘to close the technological gap between developing and developed countries’ (UN, 2012a: 3, 7-8).

This beneficent language has been criticised as doubly deceptive – marginalising or devaluing grassroots innovation which draws on many kinds of knowledge (Ely et al., 2013), while also concealing North-South inequalities of capacity and access. As an NGO warns, Northern states may use their environmental standards to justify trade barriers against exports from Southern countries, while also demanding that they open their markets to low-carbon technologies or ‘environmental goods’ from the North. Such measures ‘would penalise developing countries that lack financial resources or access to low-emission technologies’. Instead they need ‘options to develop their own industries and products while maintaining tariffs that are appropriate to this objective’ (Khor, 2011: 10). Similar concerns have a long history: ‘Ecological structural change may be a prerequisite for sustainable co-existence with the South, but... will consolidate the industrial countries’ technological advantage and thereby their economic dominance’ (Sachs et al., 2000: 164).

Techno-sustainability advances have been doubtful even for the global North. As a test case, since the 1990s the European Union has had policies promoting eco-efficient technology. It has sought to ‘exploit the competitive advantages associated with the gradual shift to a knowledge-based economy’, associated with eco-efficient technology (CEC, 1993: 58). The Lisbon Agenda identified technoscientific innovation as a crucial means for the EU to become the most competitive knowledge-based economy (EU Council, 2000). Instead specific policies incentivised a ‘finance-driven growth regime’: the financial sector became the key growth area in the subsequent decade, thus diverting investment. Meanwhile high-tech employment stagnated, high-tech manufacturing even declined, while low-skilled insecure employment rose (Birch and Mykhenko, 2014). Emphasis on financial innovation meant a failure of resource-efficiency aims and a longer-term impetus to financialise natural resources (see Sections 2 and 3).

In the early period of the Lisbon Agenda, the EU had some investment in resource-efficient technology, alongside policies for decoupling economic growth from resource demands. Yet the latter has happened in only a relative sense, and only in some sectors; coupling with resource burdens has continued in the minerals sectors (Jackson, 2009). Moreover:

The European economy grew by 35% between 2000 and 2007, but also material consumption increased in absolute terms (7.8%), almost three times the growth in European population (2.6%).
The absolute growth in material consumption indicates that the EU did not achieve an absolute

decoupling, but only a relative decoupling... when companies are able to produce their products with lower costs (i.e. through efficiency gains) and demand for those products increases, those material-efficient companies might expand their production volumes, offsetting their efficiency gains (EIO, 2011: 14, 26).

Indeed, under the well-known rebound effect, greater efficiency has generally increased demands on natural resources (Sorrell, 2010a, 2010b).

Energy supply and use illustrate a modest decoupling, along with limitations. Although renewable energy has somewhat decarbonised the energy supply, this gain makes no difference to sectors using energy. Energy demand per person has been somewhat reduced by energy-efficient appliances, but their production has consumed more resources and created more waste including GHG emissions. An environmental Keynesianism will undergo conflict between reducing such resource burdens versus maintaining employment through production of more appliances (Blackwater, 2012). The latter is inherently linked with capital-intensive Big-E Energy for controlling and exploiting labour: ‘due to the continuing centrality of Big-E Energy for labour productivity, investment in the so-called “green economy” is directed mainly at projects that leave fossil fuel use unaffected’ (Corner House, 2014: 22); renewable energy often provides a supplement rather than an overall substitute for fossil fuels.

Since the 2007 financial crisis, many economic stimulus packages have been promoted as ‘green’ but have a doubtful basis for such a claim. Some schemes operate in a structurally conservative way; for example, Germany’s car scrappage premium has benefited companies and employees in strong sectors (Brand, 2012a: 22). Even if green investment can eventually reduce resource demands, it requires an enormous short-term input of resources including energy; this once-off ‘debt’ in resource usage may not be recouped for a long time, if ever.

More fundamentally, resource burdens result from the profit motive driving exploitation and power struggles – which are obscured in the green economy agenda (Brand, 2012b: 4).

The green economy is thus not a win-win game but carries within it dozens of conflicts; it already excludes people, and it too is based on relations of power and domination. Consequently, what is important is to observe accurately the concrete forms of a green economy as well as the forces and interests driving it. In this it becomes clear: The currently dominant interest is in expanding capitalist market structures, and here too more growth is involved (Brand, 2012a: 38).

1.3 Green New Deal as a marginalised green economy

By contrast to the UNEP and the OECD versions, the ‘green economy’ concept has been elaborated along lines also called green New Deal, expanding public-sector capacities and responsibilities. In the US context this agenda has been promoted as *The Green Collar Economy*. This proposes a green New Deal creating thousands of jobs that help conserve energy (e.g., insulating older homes and buildings) and/or use alternate energy sources such as solar panels (Jones, 2008). Similar proposals have aimed to overcome energy poverty and to provide a socially equitable distribution of benefits, e.g. through transition assistance (ILO, 2012).

A similar agenda has been elaborated by the Green Party in many countries. Rather than growth or technology, their versions emphasise resource limits and public goods, especially public services within community-based economies. So their Keynesian agenda seeks resource *sufficiency*, beyond simply efficiency. For example, Greens in the European Parliament advocate:

Green economy understood as: the entire economy functioning within the limits of sustainability in respect to biodiversity and planetary boundaries, maintaining ecosystem services, climate protection and use of natural resources; human development where social conditions are improved, global

injustice is reduced and the economy is progressing within the ecosystem boundaries without being dependent on growth to function (Greens in EP, 2012).

Other examples propose:

Excellent public transit and efficient housing in high-density nodes along existing transit corridors will make cities more liveable and people-friendly (Green Party Canada, 'A Smart Economy through the Green Economic Plan').

A Green economy will use resources fairly and responsibly to provide a decent quality of life for all. Work will pay a living wage and high-quality public services will be run for public benefit, not private profit... By nurturing low-carbon industries and community economies, and by making polluters pay, a prosperous and resilient Green economy will thrive in harmony with our environment (Green Party UK, 'Green Economy').

In such ways, 'green economy' rebrands proposals which have a long history under other names, especially the Green New Deal. Such proposals resonate with wider agendas for a transition to well-being without economic growth or even with degrowth (Bina, 2013: 1030). Also called a sufficiency perspective (Jackson, 2009), this features 'socially public services like transport or cultural events enable social inclusion for all', with universal basic provision of public goods like energy and water (Lorek and Spangenberg, 2014: 37).

On the one hand sufficiency targets excess, because excess burdens individuals and society with all sorts of costs. And on the other it targets deprivation, because many people are without the bare necessities of life (Unmüßig et al., 2012: 39).

Although sufficiency has been elaborated in some UN documents (e.g. UNDP, 2007), the concept has been marginalised by the dominant agenda for a green economy.

2. Green markets for poverty alleviation

As a central aspect of the UNEP agenda, 'green markets' are meant to promote 'inclusive, equitable development' by linking resource efficiency, social equity and poverty alleviation. Such linkages involve tensions among various diagnoses and remedies. Conflicts arise not simply from new markets, but also from economic assumptions depoliticising the power relations which allocate resources (see section 2.5). From those conflicts, some institutions have elaborated a 'landscapes approach', emphasising livelihoods as central to a green economy (section 2.6).

2.1 Poverty alleviation how? Tensions among remedies

As UNEP's overall definition: The green economy seeks economic growth with 'significant decoupling from environmental impacts'. A green economy 'creates jobs and economic progress, while at the same time avoiding considerable downside risks such as the effects of climate change, greater water scarcity and the loss of ecosystem services'. The new focus on a green economy reflects the 'growing recognition that achieving sustainability rests almost entirely on getting the economy right' (UNEP, 2011b: 17).

A 'right economy' means correctly valuing natural resources, especially ecosystem services, so that economic activity more wisely manages them to benefit the poor.

There is an inextricable link between poverty alleviation and the wise management of natural resources and ecosystems, due to the benefit flows from natural capital that are received directly by the poor. It is particularly important in low income countries, where ecosystem goods and services are a large component of the livelihoods of poor rural communities and provide a safety-net against natural disasters and economic shocks (UNEP, 2011a: 1).

According to this diagnosis, the same market remedies can protect ecosystem services and the poor alike; but tensions among remedies have pervaded official texts and debates. In preparing the 2012 Rio+20 Summit, UNEP defined a green economy as promoting 'improved human

well-being and social equity, while significantly reducing environmental risks and ecological scarcities' (UNEP, 2010: 5). According to a later report, we should 'continue efforts to strive for inclusive, equitable development approaches to overcome poverty and inequality'. They mention 'preserving and respecting non-market approaches that contribute to the eradication of poverty' (UN, 2012a). This implicitly acknowledges the role of commons, i.e. community access and control over natural resources. At the same time, the agenda promotes public-sector dependence on the private sector: 'We recognize that the active participation of the private sector can contribute to the achievement of sustainable development, including through the important tool of public-private partnerships' (UN, 2012a: 7).

This focus shifts 'participation' further way from the citizenry. As originally formulated in the Brundtland Report, sustainable development depends on democratisation as a crucial means for the poor to obtain a fair share of resources: 'Such equity would be aided by political systems that secure effective citizen participation in decision making and by greater democracy in international decision making' (WCED, 1987: 15). Citizen participation has a weak echo in Sustainable Development Goals, which should 'include active involvement of all relevant stakeholders, as appropriate, in the process' (UNKP, 2012). Even more weakly, the Rio+20 outcome document undertook to establish 'an inclusive, transparent intergovernmental process' to develop global sustainable development goals (UN, 2012a).

As an original motive for a Green Economy agenda, UNEP sought macro-economic concepts to gain attention from business and governments for resource protection. According to the UNEP Director, the Green Economy challenges the 'myth of a trade-off between environmental investments and economic growth'; the problem lies in the current 'gross misallocation of capital', partly due to fossil-fuel subsidies, which should be replaced by green procurement measures (Steiner, 2011). Similar proposals had been supported by environmentalists, e.g. as regards energy and agricultural policies. Yet the Green Economy agenda instead prioritised new financial instruments, opening up extra opportunities for powerful interests to financialise and appropriate natural resources.

Tensions among remedies likewise pervade various UNEP expert reports drawing upon proposals from business, NGOs and environmentalist experts, who were thereby drawn into the process. According to a report on the greening of agriculture, this takes many forms: 'A diverse, locally adaptable set of agricultural techniques, practices and market branding certifications such as Good Agricultural Practices (GAP), organic & biodynamic agriculture, fair trade, ecological agriculture, Conservation Agriculture.' Such improvement requires investment, research and capacity building. These measures are needed in the following key areas: soil fertility management, more efficient and sustainable water use, crop and livestock diversification, biological plant and animal health management, an appropriate level of mechanisation, improving storage facilities especially for small farms and building upstream and downstream supply chains for businesses and trade (Herren, 2011: 36).

For a long time, development NGOs have proposed such measures as necessary for small-scale farmers to enhance agricultural productivity and counter the power of global markets. But such measures and aims remain marginal to the dominant UNEP agenda for a green economy. This instead promotes instruments for pricing 'natural capital', especially ecosystem services, thus extending carbon markets to more natural resources. Why?

Financialisation has sought ever-more opportunities. The green economy agenda emerged from the financial crisis, whose major cause is 'over-accumulated capital that seeks new investment opportunities. Financial capital has discovered agriculture, soil, infrastructure, and environmental protection as a new field of investment...' (Brand, 2012b: 1). The green economy agenda attempts 'to turn ecological obstacles to capital accumulation into mere

barriers that can open the door to new economic opportunities’, while depoliticising inherent conflicts and trade-offs (Kenis and Lievens, 2014).

At the Rio+20 Summit the final agreed text omitted the phrase ‘natural capital’ and financial instruments (UNEP, 2012a), given opposition from some representatives of the global South, e.g. Bolivia (as quoted in Brunner, 2012; IISD, 2012: 18, as below). So a financialisation agenda has been promoted in parallel, thus extending the role of private networks since the 1990s, as explained in the next section.

2.2 From sustainable development to natural capital

Green economy agendas have been promoted as more effective instruments towards ‘sustainable development’ – a conceptual fudge since the 1980s (WCED, 1987). Initially the concept blurred conflicts between economic growth versus social equity, and later likewise conflicts between neoliberal versus other accounts of development. Each version links environment with economy in different ways.

The term ‘sustainable development’ is open to interpretation: does it mean ‘development as growth’ or ‘development as equity’? Who should participate, who should benefit from it? ...

A 1980s term that was formerly emancipatory and critical of the system has been absorbed by Realpolitik and the economy, as well as ruling institutions and mindsets (Unmüßig et al., 2012: 19, 23).

Sustainable development was the central concept at the 1992 UN Conference on Environment and Development (UNCED), more popularly known as the Earth Summit. It was a political turning point where MNCs gained institutional legitimacy as environmental saviours through public-private partnerships and market-based instruments (Sachs, 1993; ASEED, 2002).

Free-market environmentalism... has become the order of the day, uniting Northern and Southern leaders alike.... UNCED never had a chance of addressing the real problems of ‘environment and development’... [the Earth Summit] made visible the vested interests that stand in the way of the moral economies that local people are seeking to re-establish in the face of day-to-day degradation of their rivers, lakes, streams, fishing grounds.... By contrast, the preferred response of world leaders and mainstream environmentalists is to seek further enclosure of the commons by the market and the state... (Hildyard, 1993: 22-24)

This appropriation was taken further in the UNEP process leading to the Rio+20 Summit. In 2008 a Deutsche Bank economist carried out a major study comparing ‘ecosystem services’ with financial services and corporate enterprises. This launched a new project, The Economics of Ecosystems and Biodiversity (TEEB), hosted by UNEP and the European Commission. Its first report depicted ecosystem services as calculable stocks, separate from human activities, exception for ‘maintenance and restoration costs’. It also identified the monetary value, e.g. as carbon storage, avoided costs of water purification, etc. (TEEB, 2008). The report served as a pilot study for proposals to financialise natural resources.

In the preparatory discussions for the 2012 Rio+20 Summit, UNEP pressed all participants to focus on the green economy, thus pre-empting alternative choices and marginalising NGO dissent. UNEP promoted the green economy for better valuing nature and thus more efficiently using natural resources. As a key problem-diagnosis, a sustainable future will be possible only

if the environmental and social pillars of sustainable development are given equal footing with the economic one: where the often invisible engines of sustainability, from forests to freshwaters, are also given equal if not greater weight in development and economic planning (UNEP, 2011b: ii).

Visibility was equated with market instruments, as further elaborated by TEEB, hosted by UNEP. Together they have sought ‘to make nature economically visible’, on the assumption that over-exploitation results from nature’s economic invisibility.

A wide array of approaches and instruments is needed to make sure decision-makers take nature's values fully into consideration. These include spatial planning; regulation; protective measures; wise use and management; investments in restoration; certification and labelling; subsidy reform and use of market-based instruments (MBIs) such as payments for ecosystem services (TEEB, 2011).

Such instruments help to identify 'win-win opportunities and trade-offs' (see also ten Brink et al., 2012), i.e. to sacrifice resources for the sake of development elsewhere. Here making nature 'visible' meant managerially substitutable and financially tradable.

TEEB for Business Coalition has encompassed the World Business Council for Sustainable Development (WBCSD), the International Union for Conservation of Nature (IUCN), World Wildlife Fund and others. A WWF initiative is the Natural Capital Project, whereby some NGOs become incorporated into the process

(<http://www.naturalcapitalproject.org/models/models.html>):

The Natural Capital Project — a partnership among WWF, The Nature Conservancy, University of Minnesota and Stanford University — works to provide decision makers with reliable ways to assess the true value of the services that ecosystems provide.... WWF scientists have helped develop InVEST (Integrated Valuation of Ecosystem Services and Tradeoffs) — a unique software tool that models and maps the delivery, distribution, and economic value of ecosystem services and biodiversity, <http://worldwildlife.org/projects/the-natural-capital-project>

Its promotional film asks the question, 'What is nature worth?', whose answer requires quantitative metrics. Such organisations were later incorporated into the World Forum on Natural Capital (2013; see below).

In such ways, a financialisation agenda was consolidated at the Rio+20 Summit, where the World Bank hosted 'High Level Dialogues' for several initiatives. In particular the Natural Capital Declaration was a commitment by CEOs from the finance sector to incorporate natural capital into their balance sheets: this 'calls upon the private and public sectors to work together to create the conditions necessary to maintain and enhance Natural Capital as a critical economic, ecological and social asset'.

At the Rio+20 conference the Natural Capital Declaration was contentious. According to a global network of civil society organisations (BankTrack, 2012), the Declaration 'is based upon a fatally flawed understanding of the root causes of crises (imperfect valuation of 'Natural Capital and Ecosystem Services') and proposes an equally flawed solution to them (proper pricing)'. Along similar lines, Bolivia's UN representative expressed reservations that the green economy 'may be construed as commodification of the functions and cycles of nature' (IISD, 2012: 18).

In one debate the Declaration was defended by Rachel Kyte, World Bank Group Vice President and special envoy for climate change, as follows:

Once armed with information like how much a mangrove contributes to fish breeding and how much a coral reef protects a coastline from storm surges, then countries are in a better position to decide whether to keep these natural assets intact or allow their destruction for commercial uses.

A WDM speaker responded:

... the benefits of destroying the reef are likely to accrue to investors rather than the poor, who are often the most dependent on free natural resources. So a government or private company may decide to let the reef die because the overall monetary return of preserving it is less, ignoring the fact that the people impacted by the decision will be the poorest (quoted in Brunner, 2012).

The Summit featured a high-profile debate between Pablo Solon, former Bolivian ambassador to the United Nations, and UNEP executive director Achim Steiner, a chief architect of the Green Economy. Solon remarked:

‘But why recognize nature as capital? To create an anti-capitalist society? Please, we are not naïve children. The concept is clear... When value is assigned in capitalism, it is so it can be introduced into the market. This is the goal of the Green Economy... We want a real change. No more capitalism. We believe that capitalism has created this [crisis], for nature and for humans.’ Steiner’s response was that polarization between capitalism and anti-capitalism would lead to ‘the world’ not being able to ‘move forward.’ To which one might ask ‘whose world’ Steiner is referring to (Brunner, 2012).

Indeed, as illustrated by Steiner’s response to criticism, the Natural Capital concept reinforces one potential future for the world and its political-economic promoters, while pre-empting alternatives.

After the conference a new OECD report focused more on the global South, especially on equitable access to resources. It advocated green growth policies which ‘have profound impacts on poverty reduction and social equity’. In addition to sustainable certification schemes, ‘the benefits to the poor will be greatest if land tenure is secured, and the certification schemes give special premium to community-managed forests or small landholders’ (OECD, 2013: 7). The latter point implicitly accommodates NGOs’ criticisms of the UNEP agenda.

2.3 Green markets: pricing versus protecting natural resources

In the UNEP agenda for green markets, better economic decisions depend on correctly valuing nature, understood as stocks needing investment: ‘A green economy values and invests in natural capital’ (UNEP, 2011b: 629). The transition towards sustainable development requires large-scale financing, which ‘can be mobilized by smart public policy and innovative financing mechanisms’ (UNEP, 2011a: 2; also UNEP, 2011b: 319). The latter phrase has been a euphemism for instruments monetising natural resources in tradable forms.

UNEP reports link social equity with better resource-accounting for ‘green markets’. For example, ‘Enabling a green economy means creating a context in which economic activity increases human well-being and social equity, and significantly reduces environmental risks and ecological scarcities’. Policy measures are necessary ‘to enable green markets and ensure more efficient use of the environment and natural resources’, especially by incentivising private-sector investment, according to the report on *Enabling Measures* (Wooders, 2011). In UNEP reports on specific sectors, authors emphasise market incentives (e.g. Ayres, 2011).

The state is given responsibility to stimulate or create such markets. The agenda promotes various instruments:

- green accounting for valuing natural resources as ‘natural capital’, to provide a basis for decisions on investment, services and trade-offs;
- tradable permits to stabilise the total stock of ‘natural capital’ and its ‘environmental services’;
- financial instruments allocating property rights to more natural resources as sources and sinks, e.g. through carbon credits, carbon trading, water credits, integrated water markets, biodiversity credits, etc.;
- infrastructural projects justified as ‘green’, e.g. on grounds that they substitute renewable energy and/or avoid worse developments, based on counter-factual scenarios;
- pollution rights (e.g. purchased from Brazil) which justify polluting developments and have already been sold to third parties as a speculative investment, thus being financialised;
- ecosystem restoration through a credit system to mitigate developments destroying an ecosystem elsewhere, thereby facilitating acceptance or state approval of such developments;

- public-private partnerships bringing extra investment and expertise;
- ‘greening supply chains’ through more efficient use of renewable resources, e.g. by substituting biomass for fossil fuels;
- various technologies promoted as resource-efficient, e.g. biotech, nanotech, synbio, biorefineries, geoengineering, climate capture and storage (CCS).

Those techno-fixes have been widely promoted by corporate interests in the name of addressing anthropogenic climate change, regardless of whether they deny or accept its reality (Mirowski, 2013). A key incentive has been state subsidy, e.g. from renewable energy payments or carbon credits. As the main ‘compliance buyers’ of pollution permits, carbon-intensive industries have delayed the fundamental changes necessary to achieve authentic savings in GHG emissions (Brand, 2012a).

In the EU context, land development sometimes incurs a duty of financial compensation. This could be provided through habitat substitution, variously known as habitat banking or biodiversity offsets, according to various proposals (e.g. Eftic, 2010). Substitution depends on metrics for equivalence: ‘The types of habitats that are being lost through pressures that may lead to a “like-for-like or better” requirement for compensation’ (GHK, 2013: 8). A related instrument is ‘averted risk offsets’ (ibid: 9), dependent on a pessimistic counterfactual scenario justifying a harmful development as beneficent.

New financial instruments have already expanded the scope for ‘green-grabbing’ in the global South. Land grabs have been justified as resource protection, e.g. through biodiversity credits, biocarbon sequestration, biofuels, ecosystem services, ecotourism or related ‘offsets’.

Green grabbing builds on well-known histories of colonial and neo-colonial resource alienation in the name of the environment – whether for parks, forest reserves or to halt assumed destructive local practices. Yet it involves novel forms of valuation, commodification and markets for pieces and aspects of nature, and an extraordinary new range of actors and alliances: pension funds and venture capitalists, commodity traders and consultants, GIS service providers and business entrepreneurs, ecotourism companies and the military, green activists and anxious consumers among others find once unlikely common interests (Fairhead et al., 2012).

Those convergent interests gain greater scope and incentives for green-grabbing through instruments financialising natural resources.

2.4 Payment for Ecosystem Services (PES) controversy

As a focus of controversy, ‘green markets’ are meant to overcome ‘the economic invisibility of nature’ but accounting methods can worsen the problem. In US efforts to create a wetland banking industry, for example, scientific information helps to create a globally common environment. A market in generic, undifferentiated ‘wetland credit’ was created by ignoring much available ecological information (Robertson, 2004: 369).

A UNEP initiative, Payment for Ecosystem Services (PES), depends firstly on ecosystem pricing. This imposes its own invisibilities by denying ‘the multiplicity of values which can be attributed to these [ecosystem] services’. Moreover, the process of production, exchange and consumption of ecosystem services is characterised by power asymmetries which may contribute to reproducing rather than addressing existing inequalities in the access to natural resources and services (Kosoy and Corbera, 2010: 1228).

In two case studies where a PES model attempted to link biodiversity protection with ‘national development’, economic valuation generated conflicts with low-income communities. They framed biodiversity more broadly and supported stronger restrictions on natural resource use (Fuentes-George, 2013: 158).

Ecosystem pricing can play diverse political-economic roles, which warrant analysis. Whether to price nature – how to answer the ‘monetary value question’ – depends on specific contexts, e.g. the goals of environmental protection and egalitarianism, including elements of distributive and procedural justice, with sensitivity to positions of social and environmental movements (Kallis et al., 2013; see also Muradian & Gómez-Baggethun, 2013). Those considerations are pre-empted by the financialisation agenda: the carbon-trading system becomes a precedent for monetising more natural resources, e.g. biodiversity, ecosystem services and water. By analogy to wage-labour discipline, ecosystem pricing signals the real subsumption of nature to capital:

What such ‘green finance’ portends is not only economic breakdown, but also ecological meltdown, as the promise of quick speculative super-profits draws capital away from the long-term, large-scale investment that is needed to develop renewable energy and to transform unsustainable modes of production and forms of life that are premised on fossil fuels (Fraser, 2012: 12).

Although aiming to incentivise more careful use of resources, financial instruments change their role. An Ethical Water Futures Market ‘wants to increase the monetization of the “blue gold” to offer, in addition to an organized platform for existing water trading, a transparent pricing mechanism for the flows of currently free public water’ (Issumo et al., 2010). Through various ‘resource derivatives’ (e.g. Sandor, 2012, 2013), third-party investors can speculate on the failure to protect biodiversity or particular species.

Water is seen as a private good, even as an ‘asset class’, i.e. attractive for financial instruments such as derivatives: ‘I expect to see a globally integrated market for fresh water within 25 to 30 years. Once the spot markets for water are integrated, futures markets and other derivative water-based financial instruments...will follow’, according to the Citigroup’s chief economist (Buiter, 2011). Why isn’t water public good? He further explains:

Oscar Wilde wrote: ‘A cynic is a man who knows the price of everything and the value of nothing.’ I never understood this aphorism, so I became an economist (ibid).

Why does the price/value distinction matter? By betting on a future price, financial instruments often undermine public-sector assets and accountability. Through derivatives in general,

... short-term investors can benefit from the devaluation or failure of underlying long-term assets such as companies, infrastructure projects and even government debts. In this way, financial capital attacks its own basis in the ongoing process of accumulation taking place in the ‘real’ economy (Corporate Watch, 2012: 23).

By extension, newer derivatives facilitate betting on the degradation and scarcity of natural resources. According to an NGO coalition,

... because the price of ecosystem services is linked to supply and demand, the price rises and profits increase as the ecosystems providing the services become more scarce – as they must under an economic system that requires the transformation of natural resources into capital (GJEP, 2013: 8).

Indeed, scarcity raises the price of natural resources, thus further stimulating green markets and perhaps in turn incentivising scarcity. These dynamics relate to an inherent tension within the green economy: ‘If scarcity is a problem, growth becomes a problem, and greening [is] its solution of choice... green growth is a priority, which locks us into a pattern of increasing scarcity’ (Bina, 2013: 1036-37). Indeed, the ecological crisis is turned into a financial opportunity.

Such opportunities have been explored by a UNEP Inquiry into the Design of a Sustainable Financial System, i.e. for a green, low-carbon economy. As its mission statement notes, this would need an infrastructural investment of US\$6 trillion annually to 2030. Yet ‘the current financial “rules of the game” may not be well suited to accelerate this transition’ (UNEP, 2014a).

A transition to what? According to critics, financial instruments have been meant to attract investment for large-scale infrastructures, especially those perpetuating transport demands and use of fossil fuels, albeit with lower GHG emissions than previously. In this agenda, promoted by the European Commission, private-sector finance should benefit from new subsidies and state reforms.

It should become the engine of financial innovation and capital markets for pension funds and insurances, increasing derivatives-based financial products, developing debt markets and opening up poor and emerging economies to foreign banks (Gerebizza and Tricarico, 2013: 4).

Such subsidy can be officially justified as ‘green’, e.g. by supposedly saving GHG emissions or protecting biodiversity, through various techno-fixes (mentioned above). Such arrangements perpetuate a circular logic, for example: carbon capture and storage (CCS) can justify expansion of fossil-fuel developments. In the name of resource efficiency and GHG savings, biorefineries deplete and pollute water, whose consequent scarcity makes water more suitable for commoditisation and derivatives markets.

2.5 Resource allocation depoliticised

All those instruments serve to depoliticise choices of development model and resource allocation. By supposedly protecting natural resources, the process incorporates conservation groups and environmental experts. According to a speaker at the World Forum on Natural Capital (2013), for example,

Many of those who attended and who presented were from large multi-national companies and global institutions and reported that incorporating natural capital within their activities made good business sense. This helped create a buzz of excitement from the business sector seeking competitive advantage and from the conservation sector welcoming acceptance of the importance of ecosystems by business.

Through such participation, commoditisation is more readily depoliticised as a common societal interest. This has been theorised as neoliberalisation, which ‘involves the privatisation and marketisation of ever more aspects of biophysical reality, with the state and civil society groups facilitating this and/or regulating only its worst consequences’. Ecological fixes are devised in the name of remaking, conserving or expanding nature. There arises an apparent paradox: ‘nature's neoliberalisation is about conservation and its two antitheses of destroying existing and creating new biophysical resources’ (Castree, 2008: 142-43, 150). This destruction applies firstly to communities which protect resources: As the ‘dismal science’, economics relies on foundational assumptions ‘that make community invisible’ and legitimise its destruction (Marglin, 2010: 4).

Such decisions are depoliticised as societal non-choices through market-type instruments. Their extension to environmental issues has drawn on concepts from the economist Ronald Coase. According to his theory, when property-rights holders bargain to reach a monetary agreement, this is a superior means towards an efficient outcome, i.e. to ‘maximise the value of production’, regardless of how rights are initially assigned (Coase, 1960: 15). Likewise outcomes can be optimal regardless of what use values are prioritised by exchange value and investment. Although he advocated state intervention for pollution problems, his private-bargaining model has been selectively elaborated by economists advocating green markets.

Thus economics has basic assumptions which depoliticise the assignment of property rights, thus excluding any question about re-assigning them or changing production priorities (Felli, 2013). Such issues are depoliticised in practice through environmental pricing. Carbon-trading markets assign property rights in carbon emissions according to current patterns, thus reinforcing them while also pre-empting any debate over systemic change (Lohmann, 2005). As another example, EU biofuel targets created a new quasi-market, generating political

controversy over the precise criteria, while depoliticising societal conflicts over land-use priorities and changes (Levidow, 2013).

Those examples also illustrate how economic models and instruments are used by participants in struggles over market formation. ‘Economics transforms market politics, shaping the terms of struggle over market rules.’ It helps ‘to legitimate an institution for allocating an essential resource and to manage the political struggle around that resource’ (Breslau, 2013: 832, 848).

2.6 Landscapes approach

Beyond initiatives for green markets, the ‘green economy’ label has been widely adopted by many global and national institutions for their development agendas. At the same time, some have shifted their focus towards how natural resources can better sustain community livelihoods – sometimes called a ‘landscapes’ approach. Although the concept dates at least from the 1990s, it has attracted greater interest in the ‘green economy’ policy context. This shift resulted partly from conflicts over schemes for quantifying resources such as carbon emissions, carbon credits, forest conservation, etc. Such schemes had relegated resource-allocation to expert management and/or financial instruments. Within a landscapes approach, experts have elaborated principles for ‘a shift from conservation-orientated perspectives toward increasing integration of poverty alleviation goals’ (Sayer et al., 2013).

In preparation for the Rio+20 conference, the CGIAR held a special conference, reported as follows: ‘600 Global Experts Convene to Discuss Agriculture's Role in a Green Economy’. This network elaborated a landscape approach: ‘The landscapes approach aims to tackle agriculture and forestry issues together, rather than in isolation, examining trade-offs and seeking solutions which can be beneficial to all, especially local communities’ (CGIAR, 2013).

A landscapes approach has been extended to forestry. For a long time, the REDD+ (Reducing Emissions from Deforestation and Forest Degradation) scheme has undergone criticism for focusing on GHG accounting and for dispossessing communities. Eventually a REDD+ report emphasised livelihoods as central to a green economy: ‘The protection and development of a broad range of forest-based livelihood strategies is, therefore, a key element of many country strategies to implement REDD+’ (Watson et al., 2013: 8).

Further linking a landscapes approach with a green economy, a later report proposed that ‘REDD+ could well become the world’s largest payments for ecosystem services (PES) scheme’. Alluding to political controversy over REDD+, the report emphasises the need to clarify access rights:

The legitimacy of REDD+ depends on legal clarity over which institutions have the authority to make decisions, who has the right to participate in the decision process, who has tenure and rights over forests, and ultimately who receives REDD+ payments (UNEP, 2014b: 17).

Such rights are understood mainly within a liberal-individualist framework of more fairly distributing economic benefits and/or market opportunities. For example, it is necessary to ‘Improve human wellbeing through economic growth but also through more equitable distribution of opportunities and rewards’ (ibid: 34). There remains a tension between community rights versus individual property interests.

Forestry protection has more generally elaborated a landscapes approach. According to the Centre for International Forestry Research (CIFOR), a green economy ‘would highlight full value of forests’ through a landscapes approach. The CIFOR Director General’s blog states:

The basic landscape hypothesis is that we will find better solutions if we explore opportunities that cut across the disparate sector economies, disciplines and territories. That is, we will find combined solutions that are better than the sum of their sector-specific parts (Holmgren, 2013).

His statement attracted negative comment from Wally Menne of Timberwatch, which monitors impacts of the timber industry:

In my opinion Peter Holmgren's 'landscape approach' is really just a shallow ploy to justify the even greater exploitation of already stressed natural and people-modified habitats, in order to accommodate the unsustainable demands of the 'green economy' for biomass fuels and FSC-certified toilet tissue produced from unsustainable and ecologically incompatible mono-culture tree plantations!

This response illustrates how a landscapes approach encompasses divergent agendas, as does the overall 'green economy'.

As the 'green economy' umbrella more broadly encompasses a landscapes approach, this offers entry points for debating who shall access natural resources (land, forests, water, etc.), for what purposes, for whose benefit and for what livelihoods. Although meant to overcome conflicts around REDD+, this approach multiplies tensions and perhaps makes them more explicit.

3. NGOs' interventions

In the face of green economy agendas, NGOs' roles have become divided. Some have elaborated the UNEP-TEEB 'natural capital' framework for ecosystem pricing as a resource-conservation strategy. Some have proposed extra means to ensure socially equitable access to resources, implicitly within the UNEP framework. By contrast, opposing the 'natural capital' framework, other NGOs have elaborated alternatives around the concepts 'environmental justice' and 'commons'. Those stances express divergent responses to the dominant liberal-individualist framework of social justice (sub-sections 3.3 and 3.4). This penultimate section analyses NGO critiques and strategies for alternative futures.

3.1 NGO critiques of financialisation agenda

NGOs have together criticised the financialisation agenda for turning the ecological crisis into more business opportunities for global plunder, by analogy to the harm already done through financial instruments such as carbon credits. Meanwhile some oppose the 'green economy' concept altogether, while others remain ambiguous, e.g. 'No to *their* green economy' (Attac France, 2012). Some distinguish between the 'true' versus 'false' green economy, i.e. the financialisation of nature (WDM, 2012). According to critics, financialisation imposes various harms which can be summarised along these three lines:

i) Nature commoditised as private goods

Having been redefined as a resource, nature is again redefined as a service providing stocks of water, soil, biodiversity, etc. Natural resources are given a monetary value so that they can be managed as private goods. This valuation structures payments between protectors and users of 'ecological services'. Commoditisation reinforces the power of multinational corporations and financial institutions – the same actors who have caused the crisis (ALAI&TNI, 2012: 11).

In the name of GHG savings or biodiversity replacement, moreover, such instruments facilitate developments which are environmentally and socially destructive. After logging companies bought access rights under REDD-type programmes, these have served to criminalise indigenous communities. They were accused of 'illegal logging for continuing centuries-old practices they have employed for centuries' (Global Witness, 2009).

Tradable carbon credits have been given to palm tree plantations which displace communities. These developments have been called 'green deserts', a phrase originally describing tree plantations colonising the Amazon in the 1960s (Hance, 2008; Carbon Trade Watch, 2012). By analogy to carbon offsets, biodiversity offsets facilitate destruction elsewhere. For example, Brazil's national oil company Petrobras has created a new mangrove, enclosed within

a fence for protection from local people, to replace a mangrove that was previously harvested by them (Lohmann, 2012).

ii) Finance developed, nature separated and communities dispossessed

In the name of conserving natural resources, they become subordinated to financial instruments. New instruments are proposed for water spot markets, biodiversity banks, etc. (WDM, 2012). Biodiversity offsets mean: if you conserve somewhere, you can destroy somewhere else (ALAI&TNI, 2012: 18). As more natural resources are commoditised and opened up to derivatives trading, 'These markets will increase demand for land, which will drive global prices even higher', while shifting land and resources to control by banks and pension funds (Tricarico, 2012).

Rather than finance development, these instruments develop finance; new instruments value nature as a resource separate from society. This undermines commons and communities dependent on them (Lohmann, 2012). In the name of making nature more visible, this agenda makes commons even less visible and secure. Advocates of monetizing nature ignore the social actors who help to maintain 'ecosystem services'; indeed, 'such terms all but obscure the social context' (Unmüßig et al., 2012: 28).

Even worse, financial instruments generate and depend on perverse incentives which dispossess communities. 'Conservation markets such as habitat banking required development-related ecological harm for their existence...' Credit-bearing indicators of nature health may command higher market values, raise economic rents, attract investors to 'grab' the higher land values, displace people from the land and thus increase inequity. All this 'may amplify the drivers of biodiversity degradation by diluting the possibility of collective action in support of conservation policies'. This also displaces local eco-cultural knowledge and practices which may be more benign for biodiversity (Sullivan, 2012: xi-xii).

iii) State accountability displaced by financial instruments

Early-draft 2010 UNEP proposals linked resource-efficiency with public goods which can enhance equitable access to resources. For example:

sustainable public procurement policies, ecological tax reforms, public investment in sustainable infrastructure — including public transport, renewable energy, or retrofitting of existing infrastructure and buildings for improved energy-efficiency (cited in WDM, 2012).

But these state responsibilities were soon marginalised by an agenda for financialising natural resources.

Once nature is financialised, judgements on trade-offs obscure (and may worsen) the difference between those who benefit or lose from economic development. Multilateral political action and public-sector capacities have potential to develop solutions:

There is a strong belief that it is impossible to mobilize public resources at a sufficient scale to advance development and fight climate change. This is false. There is a host of ways in which innovative financing mechanisms could mobilize public resources (Alexander & Riggs, 2012).

But state accountability and capacities are displaced by market instruments, whereby no one can be held responsible for the consequences.

3.2 Resource futures: equitable access or commons?

Given those harms from 'green markets', as the dominant agenda of the green economy, what other proposals arise? Some NGOs have elaborated the UNEP aim for a socially equitable access to natural resources. A Christian Aid programme identifies 'the role of inequality in

perpetuating the high levels of global poverty and undermining attempts at environmental sustainability'. As remedy, a 'fair green economy' would require

... a transformation of global economic models to deliver long-term sustainability and greater equity...

the interests of poor and marginalized communities [should] be protected through greater democratic governance, with communities in developing countries having control over the natural resources on which they depend for their living, including land tenure, water access and forest management (Doig and Carroll, 2011).

Towards more equitable access, an NGO coalition promotes a community-based model:

Experience has taught us that more equitable access to our natural resources can have multiple benefits including the creation of jobs and improved stewardship of our natural resources. This is the case in both developed and developing country contexts. From community forestry in Nepal to family forests in Sweden, the places where local people have secure forest tenure rights are marked by stable forested landscapes, in which local businesses supply a wide range of forest products and services that benefit not only local society, but also the global public good (Green Economy Coalition, 2012: 33).

Such proposals overlap with aspects of UNEP's framework, while remaining silent on its proposal for green markets through new financial instruments.

By contrast, North-South NGO networks attacked UNEP's role in the financialisation agenda. For alternative futures they built on concepts from the 'climate justice' movement, such as indigenous land rights and food and food sovereignty. But it was difficult for the 'climate justice' concept to link initiatives in such diverse contexts; Northern groups were operating in a post-industrial context, while global South groups were confronting fundamental issues of development, livelihoods and colonialism (Bullard and Muller, 2012: 59).

North-South NGO networks sought to elaborate a joint framework through environmental justice and commons. For example:

Where markets seek to take power away from the people and distribute resources according to the participants' ability to pay rather than need, a commons-centred approach treats nature, the environment, food, water and other vital aspects of our lives as something we all share rights to and a responsibility for. Food and energy sovereignty are part of this rapidly developing, commons-centred, alternative view of how we should run a truly green global economy (WDM, 2012).

At the Rio+20 Summit, the parallel People's Summit denounced the UNEP agenda as follows:

This so-called 'green economy' is one of the expressions of the current financial phase of capitalism which also makes use of old and new mechanisms, such as deepening public-private debt, stimulating over-consumption, the ownership and concentration of new technologies, carbon markets and biodiversity, land grabbing and foreign land acquisition, public-private partnerships, among others.

Here commons link cultural and natural diversity: 'The diversity of nature and the cultural diversity associated with it are the basis for a new paradigm of society.' It demanded popular sovereignty over commons, e.g. 'For the peoples' sovereign control of the commons, and against the attempts at commodification', and 'For Life and commons, social and environmental justice' (People's Summit, 2012) – rather than social or green 'equity'.

The financialisation agenda was again highlighted at the World Social Forum in March 2013. For example:

Capitalist environmental policies like Payments for Ecosystem Services (PES) and carbon and biodiversity offsets will enrich corporations and a few big NGOs while marginalizing and even expelling the very indigenous peoples, local communities, small peasants and women that have conserved and restored nature for generations (Climate Space, 2013a).

Payments for Ecosystem Services (PES)... has resulted in furthering a greed economy instead, enabling the continued promotion of monocultures, rise of trade in carbon credits, the establishment

of speculative markets in biodiversity and forests. Grassroots communities have been further marginalized in the process, with their food, water, livelihood resources increasingly coming under the “ownership” and control of big business (JSAPMDD, 2013).

In those sessions, some speakers counterposed ‘resource commons’ and ‘resource sovereignty’. The latter concept has a precedent in the 1962 UN General Assembly Resolution 1803 on the Permanent Sovereignty over Natural Resources, affirming the right of peoples and nations to permanent sovereignty over their natural wealth and resources. An implicit target then was Western neo-colonial domination; more recently ‘the right of peoples’ has been conceptualised as communities defending commons against their own nation states as well as multinational capital. In the context of resource sovereignty, speakers promoted agroecological methods as dual means to address the food crisis and climate crisis (Climate Space, 2013b; Hilmi, 2012).

Together those various concepts help tell stories about how resistance to enclosure protects or further develops commons, as a basis for a different future. North-South NGO networks converge in joint resistance against the financialisation agenda: ‘Ample opportunities for North-South alliances and campaigns exist around these issues’ (Tricarico, 2013). Beyond carbon credits and REDD+, however, new financial instruments exist mainly as concepts or proposals, e.g. for habitat banking and PES; tangible targets for attack remain elusive.

NGOs face strategic dilemmas, especially about whether or how to reclaim the ‘green economy’ concept. Diverse versions proliferate, some overlapping with UNEP’s framework. Some NGOs seek an alternative concept (e.g. commons) for linking resource struggles in the global North and South. As a related dilemma, NGOs seek greater state responsibility for public goods, but such an agenda seems remote from any major political party, especially in the global North.

3.3 Environmental justice through commons

In opposing the financialisation agenda, NGO networks have extended earlier resistance against enclosure of commons, while also broadening the concept for post-capitalist visions. For more than two decades, critical scholars have theorised community struggles as re-inventing nature by defending and expanding commons as an alternative development model. This gained new urgency and wider interest through the Zapatista revolt, building on the *ejido* communal-land tradition for indigenous autonomy in new forms (Stephen, 1998). Alongside conflicts with state authority and privatisation, commons also involve a conflict between ‘group-versus-individual ownership, with the group asserting the right to determine who is a member’. Through commons, ‘cooperative management of common property resources and reciprocity serve enlightened self-interest whenever one is going to remain a member of the group for the foreseeable future’ (George, 1998: xi, xii).

Commons have been threatened by expert management under state ownership, as well as by privatisation, argues Michael Goldman. Would-be managers speak about ‘getting the price right’ on nature – that is, making one’s natural garden suitable for capitalist integration. Since the 1990s a dominant concept has been ‘the global ecological commons’, whereby all resources have transboundary significance and thus warrant expert management through a global science, supposedly standing above politics. ‘The more support common-property institutions can gain from state and transnational agencies, the more “sustainable” capitalist mining, farming and logging can be’ (Goldman, 1998: 6).

Since the original 1992 Earth Summit, common-property metaphors have been financialised. Beyond pricing nature for its more efficient use, the green economy envisages new financial instruments as commodities in their own right, e.g. through biodiversity credits, water

derivatives, etc. Economics more explicitly defines the relevant knowledge for managing ‘the global commons’ as a stock of calculable, substitutable goods.

Since the colonial period, for example, forest management has had contending accounts of what is to be conserved or distributed. These judgements have been pre-empted by global arrangements for forest governance such as REDD+. Forests have been conceptualised as carbon stocks, rendering them governable for climate-mitigation purposes. This agenda has stimulated a counter-expertise valorising diverse forms and uses of forest resources. The concept ‘carbon accountability’ highlights tensions around who accounts for carbon, how they do so and how they are held accountable (Gupta et al., 2012).

Critics point out the difficulties of converting other forest values such as biodiversity into monetary values and that, in spite of the win-win rhetoric of REDD+, there will be unavoidable trade-offs. The trade-offs and incompatibilities between envisioned co-benefits are often not easily visible (Buizer et al., 2014).

Indeed, potential uses and beneficiaries become less visible. As carbon is monetised, it is separated from forest rights. This resource-accounting creates the conditions for capital accumulation by dispossessing communities (Forsyth and Sikor, 2013).

Paradoxically, capital accumulation depends on commons and undermines them – an inherent contradiction attracting wide interest since the 1990s. Social science has largely understood commons as common-property resources or regimes managed through self-governing, self-organised institutions (Ostrom, 1990). This understanding takes for granted the wider context of capital accumulation, which depends on commons to supply cheap human and natural resources.

By contrast, for anti-capitalist supporters of commons, ‘Their key issues are how to bring together various aspects of the struggle against commodification and create “another world” satisfying the needs of global justice.’ A strategy must understand how the existence or annihilation of a common-property regime depends on ‘the class relations and forces within a particular region and stage in capitalist development’ (Caffentzis, 2004: 25). This broader perspective identifies essential linkages between commons and communities, ‘as the main strategic horizon for a new political discourse’, emerging from the current transnational movement for global justice and solidarity (De Angelis, 2003). Commons have diverse forms and sites, always dependent on communities.

Communities also play a vital role in the productive activity of private enterprises and public services, where communities of work and struggle constantly recreate commons despite – in the teeth of – hierarchical chains of command and the forms of work organisation that they impose (de Marcellus, 2003).

Those commons elements have been undermined even more by neoliberal agendas but can be developed – as both a basis for resistance and alternative futures.

Societal conflicts over resource exploitation have generated more explicit alternatives, some extending commons beyond its traditional forms. In some Latin American countries, Left populist regimes have increased and redistributed national income through resource extractivism, e.g. intensive monoculture and mining, thus dispossessing rural populations and provoking broader opposition. Stimulated by indigenous groups, Ecuador’s social movements have formulated alternatives around the concept *Buen Vivir* (Living Well) – combining environmental justice, common goods, agroecology, food sovereignty, etc. (FGS, 2013). By contrast to the individualist concept of well-being, Living Well promotes collective activities for ‘life beyond development’ (Svampa, 2012). Ecuador’s National Plan for Good Living incorporates the Rights of Nature, meant to overcome the separation between humans and nature.

But alternative societal futures cannot be invented in plans. Effective proposals can arise only from multiple, diverse experiences – an open process of plural, democratic experimentation (Lander, 2012: 90). Such experimentation can reclaim ‘innovation’ from its dominant capital-intensive meaning, instead reshaping technoscience for public goods and democratic participation (Smith et al., 2014).

3.4 Competing concepts of justice

In response to the UNEP framework, NGO strategies have undergone tensions among competing concepts of justice. Some NGOs have emphasised extra measures for social equity, i.e. more equitable access to resources. Others have counterposed environmental justice, understanding natural resources as commons mutually dependent on community stewardship.

By analogy to green economy agendas, climate change likewise has attracted divergent NGO approaches. Social movements have linked ‘climate justice’ with the need for ‘system change’, while denouncing some NGOs for collusion with false solutions such as carbon trading. As the dominant agenda depoliticises power relations and make them invisible, social movements have been ‘attempting to make something visible that was previously invisible’ (Kenis and Mathijs, 2014: 155). These tensions relate to divergent concepts of justice, which emphasise either fair distribution or else societal transformation.

Within a liberal-individualist framework, justice means fair processes for the distribution of goods and benefits, alongside individual capabilities to participate in society (e.g. Armstrong, 2013a, Barry, 1995; Rawls, 1971). Within that framework of rights and justice, some writers have advocated a ‘global environmental justice’ perspective to address the problem of climate change. Here the ‘polluter pays’ principle must be supplemented by extra responsibilities, to be assigned on an individual rather than collective basis, argues Caney (2005).

His individualist-distributive approach easily merges into market-type instruments such as CO2 emissions trading. He advocates the scheme as morally defensible, especially by comparison with potential alternatives for reducing CO2 emissions. Yet his list remains within a liberal framework where private investment is regulated by the state – but not redirected (Caney, 2005). Within a similar framework of distributive justice, some have proposed changes in institutions such as the WTO: ‘As advocates of global distributive justice, we should favour whatever institutional set-up offers the best chance of delivering on the entitlements of distributive justice we believe people to have’ (Armstrong, 2013b: 113).

By contrast to a liberal-individualist framework of justice, social movements have demanded recognition for people’s diverse cultural identities and aspirations in their efforts to reshape production-consumption patterns. From this social justice perspective: ‘By restructuring the relations of production, these remedies would not only alter the end-state distribution of consumption shares; they would also change the social division of labour and thus the conditions of existence for everyone’ (Fraser, 1995: 84). An underlying demand is change ‘in the mode of ordinary political representation’, as an essential means towards parity of participation (Fraser, 2008).

By extending social justice as transformative demands, the concept ‘environmental justice’ aims ‘to render inequities visible’. It highlights the sources of injustice, especially wherever goods and bads are defined in unjust ways (Martin, 2013). The concept demands recognition of differences in vulnerabilities, cultural identities and socio-political power:

... the justice demanded by global environmental justice is really three-fold: equity in the distribution of environmental risk, recognition of the diversity of the participants and experiences in affected communities, and participation in the political processes which create and manage environmental policy (Schlosberg, 2004: 517).

Environmental justice ‘shifts from resistance to reconstruction’, aiming to transform unsustainable practices of production and consumption (Schlosberg, 2013: 49) – thus going beyond distributive issues (cf. Caney, 2005). Transformative perspectives likewise underlie NGOs’ efforts towards alternative futures by highlighting commons, rather than by more fairly distributing resources or goods as stocks.

5. Conclusion: conflicting agendas for a green economy

The 'green economy' has been turned into a prominent global concept for debating desirable futures. When initiated by UNEP and the OECD around 2010, the 'green economy' framework accommodated diverse versions. It included state responsibility for public goods, along lines elsewhere being called the Green New Deal, but this version soon disappeared. As a key concept, ‘getting the economy right’ soon meant state incentives for private-sector investment in green technologies, financial instruments and development projects.

The 'green economy' has been promoted as a more effective means towards sustainable development, yet the latter concept has been recast or marginalised. ‘Sustainable development’ originally promoted greater citizens’ participation for social equity, while the green economy promotes greater private-sector participation through ‘green markets’. Like sustainable development, green economy agendas claim to redress the socially unequal access to natural resources. But these claims have been widely questioned, thus generating extra remedial proposals, opposition and alternative frameworks.

In the dominant version, the 'green economy' agenda promotes state incentives for private-sector solutions through two parallel approaches as follows: From the OECD and UNEP, a techno-environmental Keynesian agenda attempts to stimulate eco-innovation which can become more resource-efficient and economically competitive, while also reducing poverty. From UNEP a green markets agenda seeks financial instruments for making natural resources more economically visible, especially so that ‘wisely managed ecosystem services’ will enhance access to the poor and alleviate poverty. Both approaches have been criticised for perpetuating conflict between economic growth versus resource-protection, as well as for worsening socio-economic inequalities.

Originating in private-sector networks, the green markets agenda espouses ‘inclusive, equitable development’ through various proposals such as natural capital valuation, ecosystem pricing, biodiversity credits, etc. Financial-ecological fixes are devised in the name of remaking, conserving or expanding nature. This agenda has incorporated nature-conservation groups and environmental experts, whose involvement helps to neoliberalise nature by monetising ever more resources.

The dominant agenda has generated doubts about the promise of social equity. NGO responses correspond to competing concepts of social or environmental justice. Some NGOs have proposed extra compensatory measures within a liberal-individualist framework of natural resources as calculable stocks. Others NGOs (e.g. Green Economy Coalition) have proposed community-based alternatives. Some North-South NGO networks have attacked natural capital valuation as an agenda for turning the ecological crisis into business opportunities for more plunder.

The resource-financialisation agenda creates new global-local linkages among institutions, knowledge and expertise. Actual or potential money flows generate new links between global institutions and specific geopolitical sites. In pricing ecosystem services, some resource uses become more visible, as a basis for development projects to devise trade-offs through

compensatory measures. While the dominant agenda conceals and undermines commons, resistance make them more visible.

In those ways, the ‘green economy’ concept has a complex politics:

- Multiple versions have proliferated, e.g., seeking eco-efficient techno-fixes for resource constraints, financialising natural resources, or else strengthening community stewardship over them.
- Each version implicitly links distinctive concepts – of the economy, markets, the state, natural resources, social equity, etc. – while rarely acknowledging the differences, except when NGOs criticise efforts at financialising natural resources.
- The dominant agenda has been largely relegated to private-sector networks, where ‘the right economy’ is further narrowed to new market incentives and instruments, provoking societal conflict.
- Facing those conflicts, some institutions have elaborated a ‘landscapes approach’ emphasising rural livelihoods; this approach too encompasses divergent agendas.
- Together these conflicts may provide opportunities to press public institutions towards greater responsibility for development agendas and priority-setting.

In sum, struggles over potential futures take the form of disputes over defining, allocating and valuing resources – i.e. what counts for a green economy. This framework encompasses diverse agendas for co-constructing ‘green’ with ‘economy’, especially for assigning economic value to natural resources or environmental burdens, as well as for defining social equity. In each version, some resource uses become more visible, while others become less visible and thus more dispensable. By identifying and explaining such tensions, critical studies can inform a societal debate about desirable, feasible futures.

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