

Unmasking the Blue Fix

Our relationship to the ocean has changed greatly over the centuries. For those who fish, it is their livelihood, and for trade, the ocean is considered simply a surface across which goods can be shipped. At the beginning of the 20th century, another era began, centred on the extraction of ocean resources from the seabed, and today there is talk of the “blue economy”, which promises a triple win on the ecological, social and economic fronts.

The discourse around blue growth, blue economy, blue revolution and the like is a masterfully mixed and powerful cocktail, made up of three main ingredients:¹

1 part conservation:

to quench society's thirst for action against climate change, and attract private investments towards protected marine areas and sustainable tourism

1 part protein:

to satisfy the growing world demand for healthy protein and nutrition through the expansion of large-scale aquaculture projects that demand a large sum of capital, while ignoring the negative socio-ecological consequences of this technology

The promise of blue growth

The Rio+20 conference in 2012, as a follow up to the 1992 Rio de Janeiro Earth Summit, promoted the idea of “green growth” as a way of achieving sustainable development and responding to society's ecological and economic concerns. Governmental and intergovernmental institutions along with conservation organisations began using the term blue growth to put concerns about oceans on the table.² The concept spread around the world through international conferences such as the annual “Our Oceans” conference (originally initiated by the US State Department) – the next of which will be held in Oslo, Norway, in October 2019; countless reports and articles;

1 part energy/extractive:

to refresh the palate with a burst of wind energy and a touch of new deep sea minerals, without altering the familiar and persistent flavour of oil and gas.

Although each of the three central ingredients already had its own history and trajectory well before blue growth became a buzzword, what makes this such a potent cocktail is the synergy of the three elements, brought together in one elegant framework for reframing ocean politics that can be supported by many stakeholders.

and national strategies and intergovernmental policy frameworks on blue growth (including the UN Food and Agriculture Organisation's (FAO) own policy).

All the buzz around blue growth, blue economy, blue revolution, blue investors fora, blue carbon, blue mining and even blue fashion can be dizzying, and consensus about its meaning is a long way off. However, this lack of specificity has strategic value. The blue economy discourse has opened a space for a broad and seemingly precarious coalition of diverse actors and agendas, from conservationists to mining companies.

The conservation fix

Despite the growing concern about climate change among societies around the world, in practice, the real budgetary commitments from governments and donors are insufficient to reach the global targets agreed at the 1992 Earth Summit and at Rio+20 in 2012. To deal with this funding gap, the conservation component of the blue fix turns ocean conservation into an attractive investment opportunity.

What some have called “for profit conservation” is based on the idea that environmental degradation and climate change are considered a market deficiency, since nature is not yet fully integrated into the market system.³ Furthermore, “selling nature to save it”⁴ allows conservation to pay

for itself.⁵ This method of environmental protection effectively shifts the priority away from addressing the most urgent ecological crises, which might be antagonistic to the interests of prevailing industries.

Marine Protected Areas (MPAs) have emerged as one key way of advancing this type of conservation, and since 2006, alliances between States, private banks, and the World Bank, along with NGOs like National Geographic, The Pew Charitable Trusts, and Conservation International have established 22 large MPAs across the world,⁶ some of which exceed 100,000 square kilometres. The tourist potential of the valuable landscape is seen as an attractive investment opportunity.

BOX 1

Kiribati: deep sea mining and Marine Protected Areas in the name of sustainability

Despite being among the most affected by climate change, small island developing States (SIDS) are exemplary for the expansion of the blue economy towards deep sea mining. Concessions have been approved in the Kiribati Sea to extract chemical elements known as rare-earth. Demand for these elements has increased in recent years in the manufacturing of “green energy technologies” (for example, wind turbines and photovoltaic batteries depend on these minerals),⁷ and for that reason they are framed as part of the new blue economy based on clean energy.

In the words of a former Kiribati minister: “[Deep sea mining], what an ironic story! First they tell us we have a problem because the Western countries burn too many non-renewable fossil fuels and now the same countries want to take our non-renewable minerals to solve the problem?” [...] Conservation here and mining next door, I mean honestly, how credible does that make your political intentions?”⁸

Meanwhile, other sectors, such as small-scale fishing, do not feature as part of the country’s blue economy agenda.⁹

The protein fix

FAO and OECD projections indicate that global catches in wild capture fisheries have stagnated – at 90.9 million tonnes in 2016 —¹⁰ and are unlikely to grow in the decades to come. In comparison, aquaculture production has exploded in the past 30 years, outpacing the growth of capture fisheries at an average rate of 8.6% per year. Aquaculture is now responsible for almost half of the fish we eat.¹¹

Faced with an increasing global demand for fish protein¹² and declining wild fish stocks, the protein

component of the blue fix presents a solution by framing large-scale aquaculture as the future of fisheries.

It is true that large-scale aquaculture has provided a steady protein fix over the past three decades, but it relies on vast energy inputs and increasing volumes of capture fish, soy, rapeseed, sunflower and wheat for feed. This is particularly the case for the production of species relying on fish meal and fish oil for feed (such as carp, marine shrimp, salmon, tilapia and other finfish).¹³

BOX 2

Turkey's transition into aquaculture

In Turkey, regulatory changes encouraged concentration within the aquaculture sector by rejecting applications for investments of less than 250 tons. As a result, the fast growth of aquaculture has forced the disappearance of small-scale fish production from the market.¹⁴

Furthermore, aquaculture in Turkey depends on anchovy for the production of fish meal, which has put additional stress on anchovy stocks in the Black Sea. In the words of one industrial fisherman and fish meal producer in Turkey, "this creates its own capture fishing economy and increases the pressure on wild fish stocks instead of decreasing it. So, it leads to a paradox between capture fisheries and intensive marine aquaculture production".¹⁵

The energy/extractive fix

Framed as a response to climate change concerns, the blue economy discourse at the global level has a strong focus on emerging industries such as alternative wind and tidal energy as well as the deep sea extraction of rare minerals.¹⁶ But in practice, priority goes to oil and gas, maritime transport, and mining as the components with greater profits. The oil and gas industry is still an expanding system. Offshore oil and gas accounted for almost 34% of the total value of ocean-based industries in 2010.¹⁷

The ecological impact of oil and gas extraction on oceans (especially since the Deepwater Horizon oil spill in the Gulf of Mexico in 2010), and the broader effect of fossil fuels and carbon emissions on the climate are now undeniable.

According to Watts, the vast network of wells, pipelines, oil tankers and so forth that make up the global "petro-infrastructure" is responsible for almost 40% of global CO₂ emissions.¹⁸

In its New Policy Scenario,¹⁹ the International Energy Agency (IEA) projects that the largest area of growth in both oil and gas production will come from deep-water exploration, and that off-shore gas production in particular will skyrocket by 69% from 2016 to 2040 (2.2% per year).²⁰ In other words, "This imperative drives the oil frontier to the ends of the earth, or more properly a mad gallop to the bottom of the ocean. Deepwater exploration is the new mantra".²¹

BOX 3

The Netherlands: wind energy, the public face of ongoing offshore drilling

The government of the Netherlands, a public supporter of the FAO's Blue Growth Initiative, has developed its own 2016-2021 Policy Document on the North Sea, which emphasises the Dutch "energy transition at sea"²² with the emerging wind energy sector as evidence of the value put on sustainability.

But the fine print demonstrates very clearly that this move into alternative energy will in no way limit or interrupt the expansion of oil and gas extraction. The document also recognises that competing interests may emerge, and provides guidelines for assessing to whom permits should be granted. Priority is given to "activities of national interest: shipping, oil and gas extraction, CO₂ storage, generation of sustainable (wind) energy, sand extraction and replenishment, and defence".²³

In other words, the proposal in no way implies a territorial transition from one energy regime to another. In fact,²⁴ the Dutch government makes it clear that priority will be given to oil and gas.

Conclusions

Blue growth is a broad and ambiguous concept, home to many visions and ideologies, and it is in this breadth that irreparable ecological and social contradictions remain.

The spaces that fishers depend on for their lives and livelihoods are rapidly being corralled into plans for new ports, tourist facilities, shipping lanes, new conservation and mining areas, and new aquaculture ponds. And if they manage to defend a particular fishing area, the combined impact of construction, contamination and climate change means it is less and less likely that fish will be plentiful there.

Endnotes

- 1 This formulation is inspired by David Harvey's work on the "spatial fix". In Harvey's words, the spatial fix refers simply to "capitalism's insatiable drive to resolve its inner crisis tendencies by geographical expansion and geographical restructuring" (p. 24). (Harvey, D. *Spaces of Capital: Towards a Critical Geography*, Taylor & Francis: 2001)
- 2 Silver, J. et al., (1 June 2015). Blue Economy and Competing Discourses in International Oceans Governance. *The Journal of Environment & Development* 24, no. 2, 135–60. Available at: <https://doi.org/10.1177/1070496515580797>.
- 3 McAfee, K. (2016). The contradictory logic of global ecosystem services markets. *Development and Change*, 43 (1), 105-131.
- 4 McAfee, K. (1999). Selling Nature to Save It? Biodiversity and Green Developmentalism. *Environment and Planning D: Society and Space* 17, no. 2, 133–54: <https://doi-org.eur.idm.oclc.org/10.1068/d170133>
- 5 Silver et al.
- 6 Silver et al., 5.
- 7 https://read.oecd-ilibrary.org/economics/the-ocean-economy-in-2030_9789264251724-en#page37
- 8 Quoted in Mallin, M.F. (23 April 2018). From Sea-Level Rise to Seabed Grabbing: The Political Economy of Climate Change in Kiribati. *Marine Policy*. Available at: <https://doi.org/10.1016/j.marpol.2018.04.021>
- 9 Mallin, 2018.
- 10 FAO. (2018). *The State of World Fisheries and Aquaculture 2018: Meeting the sustainable development goals*. Rome, Licence: CC BY-NC-SA 3.0 IGO.
- 11 FAO. (2014 & 2016). Cited in Ertör, I. & Ortega-Cerdà, M. The Expansion of Intensive Marine Aquaculture in Turkey: The Next-to-last Commodity Frontier? *Journal of Agrarian Change*, 2. Accessed 14 August 2018: <https://onlinelibrary.wiley.com/doi/10.1111/joac.12283>
- 12 Global institutions including the World Economic Forum (<https://www.weforum.org/agenda/2018/09/5-ways-to-guarantee-sustainable-aquaculture/>) and FAO (*The State of World Fisheries and Aquaculture 2018*) predict increasing demands for fish products globally.
- 13 Table 3 in Tacon, A.G.J. & Metian, M.. (2008). Global overview on the use of fish meal and fish oil in industrially compounded aquafeeds: Trends and future prospects. *Aquaculture* 285, 146–158.
- 14 Ertör & Ortega-Cerdà, 2.
- 15 Ertör & Ortega-Cerdà, 11
- 16 Our Oceans Conference 2017 areas of action: "There is huge untapped potential. Areas such as aquaculture, offshore renewable energy, blue biotechnology, coastal tourism and marine mineral resources hold major opportunities to foster Blue Growth and promote inclusive development by generating new employment opportunities." <https://www.ourocean2017.org/areas-action>
- 17 OECD. (2016). *The Ocean Economy in 2030*. Paris: OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264251724-en>
- 18 Watts, M. (2012). A Tale of Two Gulfs: Life, Death, and Dispossession along Two Oil Frontiers. *American Quarterly* 64, no. 3, 441: <https://doi.org/10.1353/aq.2012.0039>
- 19 The New Policies Scenario of the International Energy Agency explores the evolution of the global energy system in line with existing policy frameworks and announced intentions.
- 20 IEA (2017). *Offshore Energy Outlook 2017*. International Energy Agency, Paris. http://www.iea.org/publications/freepublications/publication/WEO2017Special_Report_OffshoreEnergyOutlook.pdf
- 21 Watts, 441.
- 22 Ibid., 7
- 23 Ibid., 95
- 24 Ibid., 26