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A sea of many colours – How relevant is Blue Growth for capture fisheries in the Global North, and vice versa?

Wiebren J. Boonstra[a,b,*], Matilda Valman[a], Emma Björkvik[a]

[a] Stockholm Resilience Centre, Stockholm University, P.O. Box 1096, Stockholm, Sweden
[b] Nordic Centre for Research on Marine Ecosystems and Resources under Climate Change, University of Oslo, P.O. Box 1066 Blindern, NO-0316 Oslo, Norway

A B S T R A C T

Blue Growth is a relatively new term that is meant to realize economic growth based on the exploitation of marine resources, while at the same time preventing their degradation, overuse, and pollution. This article discusses the relevance and usefulness of this new concept for the development of capture fisheries, a sector where growth largely seems impossible without ecological devastation. An analytical distinction between intensive and extensive growth is used to argue that certain development trajectories of capture fisheries might qualify as Blue Growth. Such trajectories of growth are illustrated with the development of the Swedish bleak roe trawl fishery in the Bothnian Bay and Norwegian whitefish fishery in the Barents Sea. Comparison of the cases highlights aspects that Blue Growth advocates might want to include if they choose to consider capture fisheries as a relevant economic activity. These aspects include: a) adding value through certification; b) technological development to make more efficient use of resources used up in the fishing operation, and to upgrade their fish as commodity; and c) specialization.

1. Introduction

> *"I have been feeling very clearheaded lately and what I want to write about today is the sea. It contains so many colours. Silver at dawn, green at noon, dark blue in the evening. Sometimes it looks almost red. Or it will turn the colour of old coins."* [1 p. 159]

'Blue Growth' was introduced at several high-level meetings during 2015, including the World Ocean Summit and the World Ocean Council, and builds directly on the efforts of the Rio + 20 conference in 2012 that advocated a 'green economy' perspective. The term is used in the discussion of how to best manage the exploitation of marine resources. It refers to economic growth within the marine sector that does not lead to the degradation of marine ecologies. The idea of Blue Growth now prominently features in proposals of, amongst others, the Food and Agriculture Organization (FAO) [2], the Norwegian government [3], and the European Commission (EC) [4].

Distinctive of the term is that it disclaims the incommensurability that is often presumed between capitalism and ecological sustainability [5]. Just as with other related ideas, such as 'Green Capitalism' [6,7], 'Green Growth' [8], or 'Ecomodernism' [9], Blue Growth is underpinned by a discourse [10] that frames a trajectory of development that can realize greater revenues from marine resources while at the same time preventing their degradation, overuse, and pollution.

Although Blue Growth is mostly defined as (economic) growth within the marine sector, some advocates use it to spearhead 'new' activities of the 'blue economy', because these activities are considered to have growth potential [11,12]. In this light, there seems to be little or no potential for Blue Growth in the so-called 'traditional sector' of capture fisheries [13]. Yet, other proponents of Blue Growth nevertheless choose to include capture fisheries. Some only consider the potential of capture fisheries for human consumption [14], while others include all types of capture fisheries [4].

The aim of this paper is to explore the ambiguous role of capture fisheries in propositions for Blue Growth by asking how relevant capture fisheries is for Blue Growth and vice versa? To answer this question the paper first highlights how and if proponents of Blue Growth include capture fisheries. It then considers the (limited) potential for growth in this marine sector by analytically distinguishing between extensive and intensive growth trajectories. Using this distinction, the paper illustrates growth trajectories in capture fisheries that could qualify as Blue Growth in two very different fisheries: The Swedish bleak roe trawl fishery in the Bothnian Bay and the Norwegian whitefish fishery in the Barents Sea. Comparing these cases highlights three aspects that are indicative for growth of capture fisheries in marine environments that qualify as 'fully fished' and/or 'overfished' [2]. These include: a) adding value through certification; b) technological development to make

* Corresponding author at: Stockholm Resilience Centre, Stockholm University, P.O. Box 1096, Stockholm, Sweden.
E-mail address: wijnand.boonstra@su.se (W.J. Boonstra).

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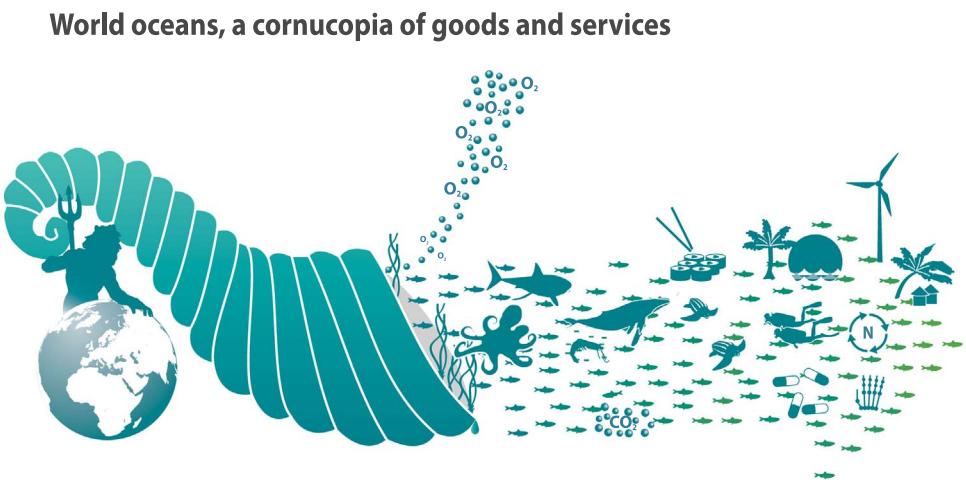

Fig. 1. Oceans as cornucopia [23 p. 7; GRID-Arendal].

more efficient use of resources used up in the fishing operations, and to upgrade their fish as commodity; and c) high level of specialization. Based on this analysis the paper concludes that it is not only possible but also important to consider the relevance of capture fisheries for Blue Growth initiatives.

2. Blue Growth and capture fisheries

Blue Growth is adopted by a diverse group of actors involved in fisheries exploitation and management, including governments, corporations, and non-governmental organisations. Despite the different backgrounds and agendas that these actors pursue, the idea of Blue Growth is based on a set of understandings that all of them underwrite in one way or the other. In what follows the most important of these understandings will briefly be described, starting with three definitions of Blue Growth:

> "[…] *smart, sustainable and inclusive economic and employment growth from the oceans, seas and coasts*" [4 p. 8].

> "[…] *economic activity* […] *in balance with the long-term capacity of ocean ecosystems to support this activity and remain resilient and healthy*". [15 p. 7].

> "[…] *the sustainable growth and development emanating from economic activities in the oceans, wetlands and coastal zones, that minimize environmental degradation, biodiversity loss and unsustainable use of living aquatic resources, and maximize economic and social benefits.*" [12 p. 4].

What these definitions share is the idea that economic activities and growth are not antithetical to ecological conservation and sustainability but rather complementary, or even reinforcing. The assumption about the commensurability of economic growth and ecosystem health differentiates the Blue Growth discourse from sustainability discourses which problematize 'traditional' economic growth based on capitalism [16–18]. Not surprisingly, critics of Blue Growth question this assumption [13,19–22].

Moreover, as will be seen shortly, the Blue Growth concept is emphasizing market-based incentivization as central mechanism to commensurate economic growth with sustainability of marine environments. With this focus the discourse differentiates itself again from other sustainability discourses that see governmental interventions as necessary for accommodating both economic and ecological wellbeing [10]. Admittedly, the lines differentiating Blue Growth ideas from other sustainability ideas can often not be neatly drawn. This is also apparent from the three definitions highlighted above. The EC and FAO definitions include 'social wellbeing' and 'inclusive growth', while these aspects are absent in the definition provided by the Economist Intelligence Unit. Yet, despite these differences there is a core of ideas, concepts and categorizations – a discourse – that are shared by most Blue Growth advocates, and which will be briefly described in the following.

2.1. Technological optimism

A central aspect of the Blue Growth discourse is its technological optimism. The way to commensurate economic growth with ecological sustainability is through new technological advances and innovations. The idea is that so-called 'green' technology is more energy efficient and less harmful to the marine environments:

> *"Green technologies include low impact, fuel-efficient shipping methods; innovative multi-trophic aquaculture production systems using environmentally friendly feeds; reduced energy use and greener refrigeration technologies; and improved waste management in fish handling, processing and transportation."* [23 p. 8].

Along a similar line, the European Commission in their documentation points out that *"biotechnological developments may have beneficial effects by reducing energy and water requirements, recycling costs of chemical products and greenhouse gas emissions."* [4 p. 22]. The optimism about technological possibilities creates the impression that with Blue Growth economic developments can be 'decoupled' from the marine environment i.e. more efficient technology helps to increases economic productivity without using more natural resources [see also 9]. For the Economist Intelligence Unit [15] this raises the question to what extent Blue Growth initiatives are susceptible to 'blue washing'? Is the attention to Blue Growth nothing more than spin and a PR effort to create the false perception that products and services are environmentally friendly?

2.2. Blue cornucopia

The discourse around Blue Growth also frequently presents the marine environment as containing an *"underexplored and potentially lucrative opportunity for wealth creation"* [15 p. 15]. Several metaphors accompany this assumption whereby the oceans and seas are represented as *"development spaces"* [24 p. 3], an *"investment opportunity"* [15 p. 16], and finally and most tellingly a *"cornucopia"* (see Fig. 1). The distinctiveness of these metaphors becomes especially apparent when compared to images of the marine environment that are used in alternative discourses; images which include, amongst others, *'sanctuaries'* (Greenpeace), *'wastelands'* (Sea Anglers' Conservation Network), or a *'sea of plastic'* (Ocean Cleanup and The Plastic Soup Foundation).