BLUE ECONOMY IN THE EURO-MEDITERRANEAN: IMPLICATIONS OF THE POLICY PARADIGM

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Policy paradigms and related social debates influence the development of policies beyond agenda setting. As the blue economy concept becomes one of the key concerns for the global marine and maritime domain, including in the Euro-Mediterranean region, the question arises as to its significance. This article aims to evaluate the transformational potential of that policy paradigm. To do so, it firstly analyses how the concept of blue economy is interpreted in the regional context, and secondly, it considers the anticipated impacts of blue economy onto other policy priorities, in particular, that of enhanced regional cooperation. The blue economy notion is expected to reinvigorate the discussions on sustainable development in the region and have a harmonising effect on regulation and governance amongst the states. It is also expected to have an incentivising effect on commercial and research ventures, including capacity building of the region's human capital. However, blue economy and its associated financing, institutional setting and the focus on innovation are unlikely to change the course of improving co-ownership. This remains a challenge for the region.

Key words: Blue economy, blue growth, Union for the Mediterranean, regional cooperation, regional integration, policy paradigm, innovation



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INTRODUCTION

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'Blue economy' or 'blue growth' is the most recent approach to shape the marine and maritime spaces of both the Union for the Mediterranean (UfM) and the European Union (EU), respectively. It builds on the mainstream policy discourses that promote environmental concerns in the context of their potential for the economy and extends the attention previously devoted to terrestrial ecosystems to the marine and maritime spaces. The 'blue economy' paradigm has effectively raised the profile of the seas and oceans in global, regional and subregional contexts. This is fully reflected in its integration in the Sustainable Development Goals (SDG, number 14) and a number of other policy documents at the highest level.

Blue economy (which will, in turn, be related to and differentiated from blue growth) is a case of a policy paradigm. Recognising it as such, we know that it significantly frames policymaking at various levels. Not only does it communicate the goal and instruments of a policy, but it also defines the very understanding of a problem, alongside values, beliefs and terminology used for justifying a certain policy (Hall 1993, 279). As a powerful ideational tool, it constraints and determines the scope for political action (Sedelmeier 2001). Policy paradigms continue to be a meaningful factor in measuring progress towards policy goals and policy coherence (Nuttal 2005; Gauttier 2004) as well as in explaining policy change (Berman 2013; Baumgartner 2013).

A relevant question in the examination of policy paradigms is the extent to which they undergo a modification (or not) of their meaning as they spread across governance levels with very different available policy tools, mandates and ambitions. The focus on the transformational nature of a policy paradigm brings into relevance the literature on policy transfers (Dolowitz and Marsh 1996; Rose 1991; Benson and Jordan 2011), more precisely 'soft' forms of transfers involving ideas and concepts (Stone 2004).

This article will seek to contribute to determining the conditions for successful policy accommodation as judged by those

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engaged in it (Dolowitz and Marsh 2000, 17). The premise is that adjusting the transfer of a policy, instrument or paradigm to the specific nature of the receiving regime is conducive to its success (Dolowitz and Marsh 2000, 19–20: Penca 2016).

This article thus takes an interest in the transformative journey of blue economy and its impact. This paradigm emerged in the international environmental policymaking and spread therefrom both horizontally to other international avenues and vertically to the EU and the Euro-Mediterranean context. This article observes the implications of such a journey on the existing policies. How does the paradigm change as it trickles down in governance levels? Do actors deploy it to serve their needs?

This article uses the methods of thick description and historical evolution to uncover the transfer of the 'blue growth' paradigm from the global (UN) to the regional level (Euro-Mediterranean). The paradigm is of key significance to the latter because the sea represents the nexus of regional cooperation. The purpose is to reflect on the capacity of the Euro-Mediterranean region to not only passively receive the policy paradigm but also absorb it in a way that benefits its established priorities. The question guiding the analysis is, if 'blue growth' is a needs-based invention, how did the Euro-Mediterranean region shape it to serve its long-standing goals of stability and integration? How is it being interpreted in the regional context to reflect regional specificities?

This article is structured as follows: The next (second) section locates the emergence of the blue growth paradigm in the context of environmental discourses on the economic case of protection of the environment. The third section tracks the dissemination and implementation of blue economy within the UN, the EU and the Euro-Mediterranean policy structures, noting how its interpretation was tailored to the regional circumstances. The fourth section concentrates on the resulting opportunities in the Euro-Mediterranean region, including the complexities involved in transitioning to blue economy. The fifth section discusses the impact of a qualitative shift introduced by the blue economy paradigm in the context of the established regional priorities of regional integration and cohesion. Finally,



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the conclusion evaluates the impact of the blue economy paradigm, suggesting that it represents a push for renewed cooperation in the region but with a limited transformational power.

THE EMERGENCE OF BLUE ECONOMY

The notion of 'blue economy' (also 'blue growth') entered the agenda of environmental and mainstream policy just as the notion of 'green economy' was consolidated. Whilst this might seem like a swift change of discourse, the two notions, in fact, form part of the same movement. It is useful to see green economy as a framing notion and blue economy as its application in sectors related to the marine and coastal environment (UNEP 2012). For that reason, a review of the meaning of green economy provides an inevitable background to the description of blue economy.

Green economy emerged in global policy discourses in the run-up to the so-called Rio+20 conference to take place in 2012, twenty years after the landmark United Nations Conference on Sustainable Development (1992), which defined the political goal of sustainable development and gave it a legal character (FIELD 1994; Sands 1997). The Rio+20 conference was intended to reinvigorate the commitment to sustainable development. However, in contrast to the optimistic and cooperative political climate of the early '90s (Elliott 2013, 48), the preparation for Rio+20 was heavily marked by the global economic downturn that emerged in 2008 and a sense of uncertainty as to the impact of recession on the environmental governance.

In such a period, there were few better ways for environmental actors to be heard than to appeal to the policymakers in a concern for the economic dimension of sustainable development. The proponents of the green economy concept presented the economic recovery and environmental concerns as mutually reinforcing. In other words, they built an economic case for protection of the environment. Emphasis was placed on the effective communication of scientific language into one that decision-makers and perhaps also the general public can readily understand. This relied on the enhanced economic valuation of



nature (TEEB 2010; NC 2004) and the promise of economic boost and jobs offered by the environmental industries (UNEP 2011).

Green economy was eventually adopted as one of the two central themes for the Rio+20 conference (UN GA 2010; UN GA 2011), causing some unease as to its relationship to the established objective of sustainable development. Whilst sustainable development remained the key target throughout the preparatory and final conference documents, the discursive twist was nevertheless significant. At the global level, it reintroduced the perennial North-South tensions, and it distracted from the appeals for less materialistic and more holistic human-environment relations (Morrow 2012). At the level of national policy options, scholars contest the instrumentalisation of nature and natural resources and the increased role for markets on the account of stronger public regulation (Penca 2012). Despite these concerns, the adoption of green economy as a direction in environmental governance paved the way for the wide dissemination of its language by international organisations, governments and nongovernmental actors (ibid.).

It was in the process of the current brown economy becoming, at least rhetorically, replaced by the green one that some states felt excluded. These were Small Island Developing States (SIDS).¹ The realities of SIDS are marked by small but growing populations; small domestic markets; little to no opportunity to create economies of scale; expensive infrastructure and high dependence on international trade; limited resources; high communication, transportation and energy costs; often heavy reliance on imported fossil fuels and finally, fragile environments and susceptibility to natural disasters, vulnerability to climate change and sea level rise. They are also characterised by their disappointing progress towards sustainable development since the Rio Summit in 1992 and their continued vulnerabilities, which are aggravated by the climate change (CSD 2010). The

¹ Roughly, 38 UN member states are members of the grouping, in addition to 20 non-independent territories, such as Puerto Rico, Martinique or Cayman Islands. SIDS have maintained the role of a negotiating block, especially in the climate change negotiations.



SIDS have higher incomes than other least developed and land-locked developing countries but have a narrow resource base. In the future-oriented discussions on sustainability, they insisted on ensuring a greater role of oceans, and especially fisheries, in sustainable development (ENB 2011).

Originating from SIDS, the blue economy discourse emphasised the invaluable significance of oceans and seas for the health of the planet and its economy and the potential of the marine and maritime sectors to contribute towards sustainable and equitable development. The discourse proposed to think positively about the defining obstacles to sustainable development. It invited SIDS to realise their potential by relying on the remarkable per capita marine resource area, constructing it not only in terms of the water column but also in terms of the seabed and air above the water surface. Blue economy also had an external dimension; it underlined the significance of these states in the international context.

Against that background, SIDS lobbied for the spread of the idea of blue economy and managed to succeed. The paradigm managed to gather considerable support in policy circles before the Rio Summit, both amongst countries and UN institutions (UNEP et al. 2012). Whilst the final document of Rio+20 failed to mention blue economy as such, the section on oceans and seas is relatively long and contains some of the most ambitious language of the entire document, mentioning a number of challenges in oceans and seas governance and expresses strong commitment towards SIDS (UN 2012, 158–180).

The relevance of blue economy certainly extended beyond SIDS and pertains to any coastal state and to the areas beyond national jurisdiction. Considering that areas beyond national jurisdictions alone encompass 64% of the ocean's surface and 45% of the earth's surface, blue economy empowers the vast majority of the planet in meeting sustainable development needs. In addition, the promise of blue economy should appeal also to any remaining stakeholders as 'oceans, including humankind's common heritage of the High Seas, represent in many respects the final frontier for humanity and its quest for sustainable development' (UNEP et al. 2012).



It was perhaps precisely the broad relevance of blue economy that enabled the concept to gain traction in the aftermath of the Rio+20 summit. The most notable impact of the discourse of blue economy was the formulation of a Sustainable Development Goal (SDG) 'Life below Water' amongst the 17 SDGs, adopted in 2015. This goal aims, inter alia, to prevent and significantly reduce marine pollution; sustainably manage and protect marine and coastal ecosystems; minimise and address the impacts of ocean acidification; end overfishing and illegal, unreported and unregulated fishing; conserve coastal and marine areas; increase scientific knowledge and transfer sustainable marine technologies. The inclusion of the paradigm of blue economy into the 'global goals' secured it an almost universal and unchallenged position in the policy of any actor over the next years. The ability of the blue economy paradigm to bode well with a number of goals, from economic to conservation and social, played a role in its popularity.

TRANSFER OF THE BLUE GROWTH CONCEPT

The blue economy paradigm diffused across the different for a different goal. Each avenue used the opportunity to push for a paradigm shift that puts its goals at the centre. One of the earliest institutional respondents to the calls for adoption of the blue economy approach was the Food and Agriculture Organization (FAO). For FAO, the blue growth approach resonated with its ongoing efforts relating to sustainable fisheries. FAO launched an internal 'Blue Growth Initiative' in 2013 and used it to boost its messages of sustainability and to further promote the Code of Conduct for Responsible Fisheries (adopted in 1995) as well as other relevant instruments, such as voluntary guidelines on small-scale fisheries (FAO 2015). FAO's understanding of blue growth also meant a strengthened promotion of aquaculture and certification schemes and an opportunity to showcase other sustainability practices or develop new ones, such as marking fishing gear, innovative water-saving aquaculture farms or financing instruments, such as green bonds (FAO n/a).



The EU turned the notion of blue economy into a comprehensive 'long term strategy to support sustainable growth in the marine and maritime sectors as a whole' (EC n/a A). Blue economy became the EU's maritime dimension of its internal strategy titled 'Europe 2020', which focused on smart, sustainable and inclusive growth. The EU's interest was in marrying the discourse of the maritime and marine opportunities with its own priorities, predominantly innovation and job creation. That focus on economic benefits was reflected also in the fact that the EU named its strategy blue growth.

The EU's goal was also to create synergies and coherence with its existing policy approaches. Given an extremely cross-cutting nature of blue economy, creating links and coherence was not difficult. For instance, the existing Marine Strategic Framework Directive, which aimed at protecting the marine environment since 2008, became one of the centrepieces of the EU's legislation on blue growth. It was revised in 2017, when it was enhanced by the Maritime Spatial Planning Directive (2014/89/ EU) for an effective management of seas. The EU also wanted the blue growth strategy to support its (strong) climate policy (EC 2012). There were a number of overlapping goals in that regard. For instance, reducing the pressures from climate change on seas was an obvious goal for both blue growth and the climate policy. Equally important was creating ample opportunities for clean energy production at and from sea or making the seaborne transport, which has lower carbon emissions than land transport, even more efficient.

The EU indicated five priority areas, namely, ocean energy, aquaculture, maritime tourism, blue biotechnology and seabed resources (EC 2017a). In addition, the EU earmarked considerable funds for ocean-related research. Research activities have been seen as modes of unlocking blue growth, both to improve the knowledge per se and to assist industry in developing new products and services (EC n/a B). However, it should be noted that the resources devoted to the exploration of the sea were geographically unevenly divided. The Mediterranean region received only a smaller percentage of those channelled to the Atlantic for the focal initiative in coordinating research and



innovation activities. Whilst the AtlanOS project received 20.65 million euro for four years (distributed amongst 62 partners) for the project on ocean observations for a better management and sustainable exploitation of the maritime resources, the Bluemed project concentrating on the Mediterranean was worth 3 million euro (involving 11 partners).

The EU research funds have been complemented by those devoted to implementing and operationalising the blue growth agenda in specific sectors, such as aquaculture, coastal tourism, marine biotechnology, ocean energy and seabed mining. The private sector lagged behind and was continually encouraged to invest itself (EC 2017b). The EU's vision was for blue growth to deliver on results through (an interplay of) both advancement of knowledge and implementation of innovation.

Undoubtedly inspired by the EU's enthusiasm for blue growth, the Union for the Mediterranean held the first Ministerial Conference on Blue Economy in November 2015. The final declaration from that meeting recognised the importance of the blue economy 'to promote growth, jobs and investments and reduce poverty, whilst safeguarding healthy seas and developing a clear vision for the sustainable and integrated development of marine and maritime sectors at national and sea basin level' (UfM 2015). The statement was developed against the concern about 'the impacts of uneven economic development, disparities in research and innovation capacity, skills mismatch of the labour force, slow uptake of clustering and networking and limited access to finance' (ibid.). As such, the declaration did not define blue economy but instead situated promising economic sectors 'in the context of sustainable development'.

Overall, the Euro-Mediterranean regional understanding of blue economy developed with an ambition to have a positive distributional effect and reduce disparities. It was seen to represent an integrative tool for the region, increasing both the interconnectedness amongst industries, human activities and the ecosystems and the cooperation amongst countries. This is certainly in line with the existing priorities of the regional cooperation.



The Ministerial Declaration, with its concrete and wide-encompassing recommendations, acted as an action plan. The UfM set up a working group, tasked with identifying and promoting already running projects of relevance to blue growth and shaping future actions without duplicating existing efforts. A milestone in the blue economy agenda was the organisation of a Regional Stakeholder Conference on Blue Economy in 2017 with the purpose of exchanging information, views and best practices and discussing cooperation opportunities amongst current initiatives. The event was attended by over 350 representatives of governments, academia, businesses and experts from all the sectors of blue economy across the region. The purpose was to have the discussions feed into the next ministerial on blue economy, scheduled to occur in 2018 but postponed at least until 2020.

PRIORITY AREAS IN THE MEDITERRANEAN

The wide-encompassing nature of the blue economy paradigm implies an opportunity for innovation, for sustainable development and for contribution to the region's economy in a wide number of sectors. Amongst the many, the UfM has determined three leading 'blue' sectors based on their value added and jobs generated: tourism, maritime transport and fisheries and aquaculture (UfM 2017). With the Mediterranean coasts accounting for 30% of global tourist arrivals, producing over 3.3 million jobs and 140 billion euros of gross value added, tourism leads by far. These principal sectors are followed by shipbuilding and ship recycling, blue energy (production of renewable energy from wave, tidal, thermal and biomass sources), bioprospecting and deep-sea mining (Ibid.). The opportunities induced by blue economy lie in scaling up sustainability practices, especially drawing on innovation and cleaner production.

Nevertheless, a challenge remains as to how to justify the development of the sectors in a 'blue' and sustainable way with their projected growth (of tourism flows, density of maritime transport, demand for energy, exploitation of hydrocarbons and minerals under the Mediterranean seabed, etc.), all of which will



result in increased environmental pressures. This is particularly pressing as the Mediterranean is a semi-closed sea with fragile ecosystems. Their vulnerability is further aggravated by the sensitivity of this region to climate change. The Mediterranean ecosystems have been assessed to be amongst the most severely affected by global climate change (IPCC 2014).

The difficulty of securing benefits for sustainable development from, or in, blue economy is demonstrated through the case of fisheries. Across the world, fisheries are set against the incredibly complex interplay of ecological, socio-economic, political factors and also scientific uncertainty. Governance of fisheries in the Mediterranean is particularly complicated by a high rate of diversity of species and numerous jurisdictions. Here, bad fisheries management that hauled over decades has taken a high toll. The Mediterranean has the highest rate of unsustainably harvested fish populations in the world (FAO 2018, 40-1), with specifically alarming rates for certain species of high commercial value and the Eastern Mediterranean (Tsikliras 2015; Vasilakopolous, Maravelias and Tserpes 2014; Tsikliras, Donouli and Tsalkou 2013). Additionally, there is an element of uncertainty as stock assessments for most Mediterranean species are not routinely performed and their true condition is difficult to assert.

The transformation to sustainability in the fisheries sector will have to encompass many aspects. Most simply, it will seem to imply a move from a context where innovation meant 'fish more' to a context where it means 'fish better and fish less'. This is a contested and unpopular objective and entirely contingent on political action. The well-known solutions of stopping damaging fishing techniques (especially bottom trawling), reducing overcapacity (also by removing harmful subsidies that contribute to it), ending overfishing (by following the scientific advice) and enhancing enforcement remain important. However, all of them demand more or less radical structural changes.

One promising direction is to empower small-scale fisheries, consisting of artisanal, subsistence and recreational fisheries (Pauly 2018). Small-scale fisheries have the advantages of being more selective than large-scale industrial fisheries and



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use less fuel (Guyader 2013). They are also better at delivering the protein to the local markets as opposed to some industrial fisheries that use a good portion of the fish they catch for feed. Small-scale fisheries seem to generate more jobs whilst acting as custodians of the sea. The Mediterranean has traditionally had a high number of small-scale fishers, which have played a significant role in ensuring the social and environmental sustainability. Empowering them would require an improved governance framework, granting them both better access to fish and to the markets (FAO 2014). In the Mediterranean, there is a long way to go (Said et al. 2018).

Another direction for blue growth is aquaculture (Massa, Onofri and Fezzardi 2017). This has grown rapidly over the past decades and currently represents about 40% of the market for fish. Because of pressures on wild stocks and increased demand for protein, it is projected to continue growing and represent over half of the fish to humans by 2030 (FAO 2018, 184-185). This increases the need to address the current challenges of fish farms. The known risks include pollution from organic waste, the use of antibiotics to prevent diseases, the possibility of farmed fish to transmit diseases onto wild fish, the possibility of farmed fish to escape and thus affect the genetic pool of wild fish and the pressure on wild stocks created by the increased demand for fish meal. The opportunities of blue economy are precisely in monitoring and minimising these impacts, designing more efficient farms, reducing pollution, creating innovative alternatives in feed and conducting surveillance of the impact of farms on ecosystems. Social innovation and behavioural change can play a part in the management of fisheries and aquaculture, for example, by including less popular species in the diets and thus reducing the pressure on the few common ones.

The opportunities generated by blue economy are in conceiving the existing problems in a solution-oriented way. They point to the scope for optimising production, planning and consumption processes; approximating regulatory approaches and increasing stakeholders' cooperation for innovation-based growth. These are plausible impacts, but they are mostly focused on economic growth and do not necessarily translate into



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sustainable development, one of the key goals for the region. To accomplish that, blue economy needs to remain focused on the social goals, such as improved health and well-being, poverty reduction and social inclusion. It also needs to further promote the use of ecosystem-based approach and planning tools (such as Integrated Coastal Zone Management) and conceive environmental conservation as investment (UNEP/MAP 2016). Important aspects of sustainable development agenda are also strong involvement of all stakeholders, cooperation, solidarity, equity and participatory governance.

Does the innovation and solution-oriented nature of blue economy inherently lead to more cooperation in the region? The next section explores this question.

BLUE ECONOMY AND REGIONAL COOPERATION

This section will discuss the impact of the blue economy paradigm on the goals of the Euro-Mediterranean region. Since the beginning of the political process in the Euro-Mediterranean region, the emphasis was on fostering regional integration and cohesion, ultimately with the idea of establishing peace, democracy, cooperation and prosperity (Barcelona Declaration 1995; Joint Declaration 2008). The emergence of blue economy as a paradigm pertaining to a shared resource, the sea, inherently tests the success of the regional governance in those aspects. Whilst a comprehensive analysis of the ways, through which the adoption of blue economy is affecting cooperation in the Euro-Mediterranean region, is beyond the scope of this article, the key lines of that influence are outlined below. They are clustered into the impact on funding of research, capacity building, industrial opportunities and regulation. The starting point for the comparison in the description below is the existing cooperation between the EU and non-EU Mediterranean states.

One of the most obvious and immediate impacts of the blue economy paradigm has been an overhaul of the research agenda to give more salience to marine and maritime issues. Research cooperation in the Euro-Mediterranean region is running via the Partnership on Research and Innovation in the



Mediterranean Area (PRIMA) and the EU's research and innovation programmes (the current one being Horizon 2020). Whilst the EU's research programmes are funded by and open to the EU member states and the associated countries (Tunisia, Turkey and Israel), PRIMA is a role model of true co-ownership between certain EU and non-EU Mediterranean countries, both in terms of the determination of objectives and contribution of funds.²

The growing emphasis on blue economy has resulted in increased resources devoted to research projects in the marine and maritime fields. The principal initiative by the EU for promoting the blue economy in the Mediterranean Basin is the Bluemed Coordination and Support Action, financed by the Horizon 2020 budget. Cooperation amongst the Mediterranean countries is at the heart of the initiative, but this is understood to run first from an intra-EU consensus and only in the second instance from the wider regional consensus. The original consortium members are European. However, as of 2018, Bluemed started to extend its cooperation to the South Mediterranean countries, which have been invited to contribute to the key document of the action – Strategic Research and Innovation Agenda (SRIA). They have largely adopted the existing priorities of the SRIA and contributed some new proposals. Overall, the priorities of the EU partners, notably also the European Commission, remain central. In that regard, the pilot activity of the Bluemed is focusing on addressing plastic pollution. The relevance of which for the Southern Mediterranean states and actors is less clear.

The extent to which increased attention to blue economy has actually resulted in an increase in concrete cooperation between researchers is, however, largely in service of funding available. At the moment, the majority of research funding for blue economy comes from the EU's Horizon 2020 calls. PRIMA initiative has not explicitly expanded its scope, and the most recent calls for research projects (2019) have still been unambiguously centred

² PRIMA is a role model of co-founding and true co-ownership between certain EU and non-EU Mediterranean countries, including the determination of objectives. There were initially 14 countries participating, but the number has since grown to 19.



on terrestrial aspects of food, energy and water. Furthermore, the UfM's endorsement of blue economy was intended to draw mostly on the deployment of the EU instruments (Twinning Technical Assistance, European Neighbourhood Instrument, European Regional Development Fund, Horizon 2020 etc.). All the UfM countries agreed that in the context of blue economy, the EU internal policy tools were important to establish concrete and sustainable cooperation partnerships with mutual benefits (UfM 2015). This is in line with the UfM's general operational mode: UfM does not generate funds or act as a donor but functions as a catalyst for implementation of selected regional projects, including by helping them to fundraise (UfM n/a). For the promotion of work in the area of blue economy, the UfM itself has been a recipient of two grants, namely, by the Swedish International Development Cooperation Agency and by the European Executive Agency for Small and Medium Size Enterprises (EASME).

A related frontier where the impact of blue economy can be observed is capacity building. The rise of blue economy has very much been used to position science and knowledge at the centre of ocean-based sustainable economy. At the global level, that resonates with the preparations for the UN Decade of Ocean Science for Sustainable Development (2021–2030). At the regional level, it resonates with the ongoing commitment to decreasing the disparities in capacities in the region. In the Euro-Mediterranean, training programmes have been established specifically to train students, researchers and practitioners with interdisciplinary skills and operational approach to increase the employability in blue economy sectors. Some have only been open to EU member states,³ whilst others have made a mixed participation of Northern and Southern individuals a defining element.⁴

⁴ See the blue growth training programmes by the Euro-Mediterranean University (EMUNI) and Italian National Institute for Oceanography and Applied Geophysics.



³ See 'Call for Proposals for EU Grants under the European Maritime and Fisheries Fund, Blue Careers in Europe', https://ec.europa.eu/easme/sites/easme-site/files/call_for_proposals_blue_careers.pdf.

Cooperation between the stakeholders in the region can surely be boosted away from public funding via commercial/industry projects. The EU is trying hard to mobilise the corporate sector to invest into blue growth.⁵ The possibilities to tap in this regard relate especially to the use of technology (in maritime transport, exploration of the seabed, improvement of geographic information systems, renewable energy, biotechnology etc.). Assessing the extent of these collaborations is difficult to estimate, especially in this early stage, when many market ventures in the EU are funded by public funds. This may change as they transit to a new step in the innovation phase.

Away from the market, the effect of blue economy on regional cooperation should be explored through the lens of increased regulatory harmonisation amongst the Euro-Mediterranean countries. The EU has explicitly decoupled blue growth from regulation and 'red tape'. In contrast to strengthening regulation, the EU highlighted the strength of 'removing those barriers and market failures that prevent innovation and investment' (EC 2017c). However, relating blue economy with reduction in regulation may be more of a rhetorical value. It is very clear that blue economy is not only about efficiency but also about improvements in governance, most of which will require regulatory action. The 2017 adjustments made to the existing Marine Strategy Framework Directive to protect marine environment, mentioned above, well demonstrate the continual need for reinforcement of legislation.

Apart from legislation, governance framework can be enhanced also by the use of other 'softer' ways, most notably flexible and participatory regulatory forms (Lenschow 2002), or privately developed standards (Fiorino 2006; Meidinger 2006; Gulbrandsen 2010; Black 2001). Sustainability standards have a role to play in the effective implementation of sustainable development and have been expanding since 2000 (IISD 2016). They act as a benchmarking method and ensure the application

⁵ See events titled Our Ocean, Malta 5–6 October 2017 (available at http://www.ourocean2017.org) or BlueInvest2018, Brussels, 17 May 2018 (available at https://blue-invest-2018.b2match.io).



of desirable (blue) practices in the specific sector. Indeed, we can detect a rise of these in the region because of the expansion of blue economy, most notably for fisheries and aquaculture (IISD 2016) or tourism.⁶ These have responded to policy paradigms and are in interplay with, rather than a substitute for, regulation. For instance, fostering of sustainable aquaculture comes about not only by the reduction of bureaucratic barriers to investment but also by the creation of standards for the water quality or fish feed or by zoning fish farms into areas where they do not endanger freshwater resources.

Whether through public or private regulation, it is legitimate to expect a certain level of regulatory approximation in the Euro-Mediterranean, fostered by the existing trade relations and policy dialogue between the EU and Southern Mediterranean countries. The question remains as to the content of standards and the prevalence of individual regulatory approaches. Here, the EU is likely to play a more assertive role vis-à-vis the Southern Mediterranean countries because of its stronger internal regulatory competence that spills into its external policy (Van Vooren 2012). The EU's legislative framework is stronger than those of the neighbouring states in the areas related to blue economy, and a level of convergence is expected in the regulation, probably ratcheting up the regional baseline.

Despite the generally positive effect that blue economy is likely to have on the regional cooperation, we should note also the competitive potential of blue economy. Amongst the key concepts in blue growth is also innovation. It is understood broadly as encompassing technological breakthroughs, improvement in processes and business models and also non-technological advancements, including in the societies. According to some, innovation is, in fact, the objective and principle underlying the efforts in this regard (Pauli 2010). For the EU, innovation has gradually gained significance. Since roughly the beginning of the 21st century, it has become almost inseparable from science

⁶ See the project DestiMED, which is developing, harmonising and testing ecotourism standards, http://croatia.panda.org/en/what_we_do/seas/mediterranean_ecotourism_destination___destimed/.



and its external policy (Science and Public Policy 2002; Borras 2003). This trend has been further strengthened by the launch of the rhetoric of 'science diplomacy' by the EU Commission in 2015 (Penca 2018).

The caveat here is that the emphasis on innovation can act as a catalyst for both closer cooperation and competition. The two elements are not entirely new in the scientific relations amongst states and research collaborations (Flink and Schreiterer 2010). Nevertheless, whilst promoting blue economy as a regional goal, it is reasonable to expect that the countries and firms in the Euro-Mediterranean region are likely to retain certain (especially technology-related) knowledge also to themselves whilst also promoting their achievements. Finally, there is the challenge of harnessing innovation for poverty alleviation (Khavul and Bruton 2013), which is another important aspect of sustainable development in the region.

CONCLUSION

The emergence of the blue economy concept makes some headway into the sustainable development process not so much by inventing any new thinking but by extending the understanding of existing priorities to the seas and oceans. This has enhanced the political commitment for regulatory action and increased funding devoted to the seas. Such focus is particularly important in the Euro-Mediterranean, where the sea represents the material structure for cooperation. Indeed, in comparison with the framing at the global level of governance, the paradigm of blue economy in the Euro-Mediterranean has assumed a particularly strong potential for furthering cooperation and cohesion of the region, apart from sustainable development of individual states. In that respect, the meaning of the policy paradigm of blue growth in the Euro-Mediterranean region has a distinct character. It has demonstrated a pragmatic transformation during its diffusion across regimes and jurisdictions.

This article has explored the potential of blue economy to deliver the indicated promise in the regional context. It has outlined the expected harmonising effect on regulation and



governance as well as the incentivising effect on commercial and research ventures, including capacity building. The scope of ongoing activities that have been briefly outlined in this article is only anticipated to increase in the coming years as the blue economy consolidates in national and regional policies.

The real impact of the paradigm shift will, to a large extent, depend on the source and magnitude of funding invested into the cause. So far, the EU's financial contribution to the implementation of blue economy has been considerably larger than that of the Southern Mediterranean states. This has implied also a disproportional influence of the EU's priorities and approaches. Thus, whilst the blue economy has certainly had an integrative effect on the Euro-Mediterranean region, it is questionable whether it has improved co-ownership in its governance. The EU's ideational, as well as financial role, seems to continue to dominate, impeding the progress towards participation of the states and partners on more equal terms.

Co-ownership in the political process and equal funding are strongly interrelated elements of the desired governance model for the Euro-Mediterranean region. They have also continuously been a challenge, which neither the establishment of the UfM nor the emergence of blue economy was able to entirely overcome. The strong emphasis of blue economy on innovation, apart from sustainability, is likely to add a competitive layer to the cooperation amongst the states. At the same time, the innovation appeal of blue economy is capable of precisely bringing about the twist in the type of actors that are stepping forth. The enterprises with their operational, technology-focused (but less so environmental conservation-oriented) partnerships could take the lead instead of the political rhetoric of governments.

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