

Blue Economy and research in social sciences and humanities

Toward a multidisciplinary approach

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ABSTRACT

Blue Economy identifies the complex of theoretical and applied studies, experimental and not, related to the sea and its ecosystem. The mentioned studies require not only a special commitment of experimental scientists but also the contribution of researchers in the human sciences (historians, philosophers, humanists, art historians) and in the social sciences (policy science scholars, sociologists, jurists), those who can add knowledge relating to the outcomes connected with the use of resources, to the writing of rules, to interventions, education, and training to address and support social behaviours.

KEYWORDS: Blue Economy, social sciences, humanities, sustainability, training.

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1 INTRODUCTION

The scientific research on the sea has often been characterized by a strong centrality of the so-called “hard”, “experimental” disciplines, or using a well-known acronym, the STEM disciplines. However, the need to tackle complex issues related to the economic and social development of the sea, and the need to create paths for the sustainable use of resources, has brought the concept of Blue Economy to the attention of the public.

Blue Economy identifies the complex of theoretical and applied studies, experimental and not, related to the sea and its ecosystem. The centrality of the Blue Economy was particularly accentuated in the period characterized by the COVID-19 pandemic, which urges policy makers, stakeholders, and scholars from public and private research organizations to deal with problems deriving from the use of resources in emergency periods. This effort requires not only a special commitment of experimental scientists but also the contribution of researchers in the human sciences (historians, philosophers, humanists, art historians) and in the social sciences (policy science scholars, sociologists, jurists), those who can add knowledge relating to the outcomes connected with the use of resources, to the writing of rules, to interventions, education, and training to address and support social behaviours.

In this respect, it is worth to point out the importance of the Mediterranean within the Blue Planet Economy. According to the last Blue Economy Report of the European Commission published in 2020¹, the gross value added (GVA) of the sector is 218 billion. The Atlantic Ocean represents 36% of the Blue Economy field, the North Sea 31%, and the Mediterranean 29% (59.6 billion). The total employment of the Blue Economy is five million people, and the Mediterranean area represents 40%, with 1.78 million employees, while the Atlantic Ocean represents a percentage of 29% of the employment and the North Sea 20%.

Looking at Italy, the Report indicates 525,216 employees in the established sectors of the Blue Economy, which generate 23.3 billion of GVA and contribute with 2.3% of the national jobs, and 1.5% of national GVA (p. 19). One sector dominates: Coastal tourism with 59% of Blue Jobs and 45% of GVA, followed by Maritime Transport and Marine living resources.

2 COMPLEXITY

One key feature of the Blue Economy is the complexity of the problems to be addressed. Thinking about migration, local economies, ports and logistics, fisheries and aquaculture, growth, and resilience of economic systems, we can recognize that all the mentioned themes need new solutions to increase the sustainability, to develop and introduce innovation (both technological innovation and social innovation), and human capital with adequate knowledge and skills. To put it differently, the complexity of the themes and problems to deal with always requires a vision that integrates different perspectives deriving from different disciplinary areas, assuring at the same time the policy coherence within the portfolio of the policy instruments used.

If we focus our attention on research and development, the required transition is from multidisciplinary approaches (trying to solve problems through the juxtaposition of different knowledge under a “silos” approach) to interdisciplinary approaches (where the aim is to deal with the integration of different disciplines) and, in perspective, to the realization of a new trans-disciplinarity perspective oriented toward problem solving (reformulation of the problem due to its complexity to encourage innovation). Therefore, one new question for researchers in social science and humanities (SSH) fields should be: what is the contribution of your work to sustainability? And the answer to this question should consider not only the contribution to

¹ European Commission (2020). The EU Blue Economy Report 2020. Luxembourg: European Union. Figures refer to 2018.

understanding a phenomenon (why) but also to help solve/alleviate a social problem (what) and to figure out concrete solutions (how).

3 THE SPECIFIC CONTRIBUTION OF SSH RESEARCH

The theme of the sea is a key example of how important is the research in the SSH fields to tackle social problems. Blue Economy is a global economic model dedicated to creating a sustainable marine ecosystem by transforming previously wasted substances into profitable commodities.

If we need innovation to achieve the goal of eco-sustainable growth, one first and important step is to share knowledge between the different actors involved (for instance sharing access to data implementing an open science perspective) and to promote cultural innovation, a new way of thinking, the so-called “blue thinking”, that is to think that protecting the environment is not a constraint but it has to be seen as an opportunity. The mentioned achievements are strongly connected with cultural changes, which allow the emergence of new behaviours, values and attitudes, and research in SSH is very keen to produce them.

Social sciences and humanities are of crucial importance to deal with topics such as migration; increasing inequalities, which are even stronger because of the impact of COVID-19; a shared governance to contrast the fragmentation of the actors playing a role in the Blue Economy; the design of new indicators for evidence-based policies, looking not only at the input-output measures but also at the outcomes of public policies and the impact they have had.

Education and training are at the core of this process, and in this respect the actions foreseen in the Italian National Plan for Recovery and Resilience (PNRR) are moving in the right direction. What the Blue Economy field needs is not only education related to school or university. Training involves efforts toward dedicated programs for advanced post-graduate training, where doctoral positions play a major role to build professionals with highly skilled profiles, whose value can be extremely important in different working contexts beyond the academic ones.

Training also involves interventions for lifelong learning, and a strong directionality to increase the digital skills of the population and the soft skills – the combination of individuals’ skills, social skills, communication skills, personality traits, attitudes, mentality, career attributes, and capability of interaction with stakeholders.

CNR is at the forefront of all the mentioned efforts, and this book indicates few examples of actions, competences, and results produced. All these activities and results can contribute to build a new research agenda for the sustainability of the sea.