

Subsection 5B

One Health

Introduction

One Health, defined by the One Health High-Level Expert Panel (OHHLEP, 2022) as an integrated, unified approach that is aimed at sustainably balancing and optimizing the health of people, animals and ecosystems, is a useful framework for identifying the linkages and interdependencies in socioecological systems that go beyond the human economic activities described in subsection 5A. This concept is based on several fundamental principles including equity, inclusivity, equal access, parity, socioecological equilibrium, stewardship and transdisciplinarity. The World Health Organization recognizes its particular relevance to food and water safety, nutrition, the control of zoonoses, the management of management and the combating of antimicrobial resistance.

Subsection 5B, One Health, of the third World Ocean Assessment, contains a consideration of issues with strong social dimensions such as human health and well-being, equity, gender and Indigenous, traditional owner and local community knowledge, in tandem with issues that have significant social impacts, such as the role of ecosystems in the carbon cycle, ocean hazards and the effects of the coronavirus disease (COVID-19) pandemic.

Marine ecosystems play a significant role in the capture, storage and sequestration of carbon and, therefore, on potential climate change mitigation (see subsect. 5B, chap. 1). Hence, the role of marine ecosystems in the carbon cycle is intrinsically related to ecosystem health (see sect. 4), the modulation that climate change exerts in maritime economic sectors (see subsect. 5B) and on global society, as detailed in the remaining chapters of the present subsection. The ocean also provides benefits for human health (see subsect. 5B, chap. 2), such as seafood, marine-derived pharmaceuticals or opportunities for exercise, and supports spiritual, cultural and recreational services, benefits for mental health or enhancement in social cohesion that contribute to better well-being (subsect. 5B, chap. 3). However, human activities are putting these benefits at risk through a diverse array of human pressures, such as climate change, coastal development and pollution.

The ocean is also a source of important natural hazards (see subsect. 5B, chap. 4), operating at different temporal scales and having different types of impacts. Minimizing these impacts requires different mitigation, adaptation and management measures, higher-level overarching governance and institutional and social transformations.

The benefits obtained from the ocean, their deterioration by human activities, natural hazards and even the violation of human rights are unequally distributed across global society (see subsect. 5B, chap. 5). Inequality is facilitated by inadequate governance and decision-making processes that remain insufficiently participatory and inclusive, and with social equity, justice and human rights inadequately integrated. This unequal distribution of benefits and disbenefits is particularly conspicuous in the case of gender (see subsect. 5B, chap. 6), across sectors such as ocean science, fisheries and aquaculture, and for Indigenous and traditional local communities (see subsect. 5B, chap. 8).

The COVID-19 pandemic has affected people's relationship with the ocean, with some changes possibly becoming permanent. Furthermore, some consequences remain uncertain and underscored. The pandemic

provoked high risks of infection and prolonged confinement periods in vessel crews. It also caused disruption to ocean research and observation. On the other hand, human pressures were temporarily reduced, benefiting marine ecosystems.

Lastly, Indigenous, traditional owner and local community knowledge is increasingly acknowledged as an alternative collective source of information complementary to non-Indigenous or classical scientific information. Indigenous, traditional owner and local community knowledge must be better integrated in governance processes and in future World Ocean Assessments.