Capacity and capability gaps: needs for integrated assessments

Dr Karen Evans, Group of Experts, the second Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects

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frontiers in Marine Science

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Linking Capacity De GOOS Monitoring N Achieve Sustained C Observation

Nicholas J. Bax[1,2]*, Ward Appeltans[3], Russell Bra
Piers Dunstan[2], Quentin Hanich[6], Harriet Harden
Patricia Miloslavich[1,8], Frank Edgar Muller-Karge

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ersity of Tasmania, Hobart, Aust

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The role of the social sciences in capacity build in ocean and coastal management

Hance D. Smith*

Department of Earth Sciences, Marine and Coastal Environment Group, Cardiff University, PO Box 914, Cardiff CF10 3YE, UK

Abstract

Consideration of the role of the social sciences in capacity building in ocean and c management is grouped into four main themes. The first part of the paper deals wi nature and record of the social sciences in studies both of and related to coastal manage The major fields are treated in turn, and include psychology, social anthropology, soci politics, economics, archaeology geography and history. Wider inter-relationships a these subject disciplines are also discussed, together with relationships with other fie knowledge, especially the natural sciences. The second section deals with ocean and c management itself, viewed on two levels, namely, the technical management level conc primarily with the physical interactions between human activities on the one hand, ar natural environment on the other; and the general management level which focuses mai decision-making, the nature of the organisations involved, and related policy and pla matters. The third theme is concerned with the specifics of how the social sciences feed in capacity building processes, ranging from conventional discipline-based education, esp at tertiary level; through applied short courses for practitioners at all levels of manage The roles of the differing organisations involved are considered, together with tec developments, for example, in information technology. Finally, a number of issues are which arise from the preceding discussion. These include an assessment of the c contribution of the social sciences at an academic level; the nature of social s applications in a management context; and relationships with capacity building proces

*Tel.: +44-2920-875569; fax: +44-2920-874326.
E-mail address: smithhd@cardiff.ac.uk (H.D. Smith).

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Climate Change, Sustainable Development and Coastal Ocean Information Needs

T. Malone[a,*], M. Davidson[b], P. DiGiacomo[c], E. Gonçalves[d], T. Knap[e], J. Muelbert[f], J. Parslow[g], N. Sweijd[h], T. Yanagai[i] and H. Yap[j]

[a]University of Maryland Centre for Environmental Science, United States
[b]NOAA Coastal Services Center, United States
[c]NOAA Satellite Oceanography and Climatology Division, United States
[d]UIEE/ISPA, M@rBIS Program, Portugal
[e]Bermuda Institute of Ocean Science, Bermuda
[f]Departamento de Oceanografia, Brazil
[g]CSIRO Marine and Atmospheric Research, Australia
[h]Council for Scientific and Industrial Research, South Africa
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Ocean science research is key for a sustainable future

Martin Visbeck[1,2]

Human activity has already affected all parts of the ocean, with pollution increasing and fish-stocks plummeting. The UN's recent announcement of a Decade of Ocean Science provides a glimmer of hope, but scientists will need to work closely with decision-makers and society at large to get the ocean back on track.

The ocean covers 71% of the Earth's surface. It regulates our climate and holds vast and in some cases untouched resources. It provides us with basics such as food, materials, energy, and transportation, and we also enjoy the seascape for religious or recreational practices. Today, more than 40% of the global population lives in areas within 200 km of the ocean and 12 out of 15 mega cities are coastal. Doubling of the world population over the last 50 years, rapid industrial development, and growing human affluence are exerting increasing pressure on the ocean. Climate change, non-sustainable resource extraction, land-based pollution, and habitat degradation are threatening the productivity and health of the ocean (Fig. 1). It is in this context that over the last few years, scientists and societal actors have organized a bottom-up movement, which has ultimately led to the United Nations General Assembly proclaiming a Decade of Ocean Science for Sustainable Development (2021–2030). In the process, governments, industry, and scientists have raised awareness of the rapid degradation and over-use of the ocean. The final document from the Rio+20 summit, The future we want[1], made extensive reference to the ocean, and the Global Ocean Commission articulated the need for more effective global ocean policies[2]. Moreover, the 2030 Agenda for Sustainable Development includes an explicit ocean goal (SDG14)[3,4] that led to the first-ever UN Ocean conference[5] to support its implementation. The ambition of the Decade of Ocean Science is to now use this gathering momentum to mobilize the scientific community, policy-makers, business, and civil society around a program of joint research and technological innovation[6]. I see reasons for optimism in four main areas. First, there is a tremendous opportunity to connect ocean sciences more directly with societal actors by promoting integrated ocean observation and solution-oriented research agendas (Fig. 2). Also, rich and poor nations are increasingly engaging in capacity development and resource sharing. And finally, the UN system and coastal states have a unique chance to seriously collaborate in multi-stakeholder processes to advance maritime spatial planning and effective ocean governance.

A more integrated and sustainable ocean observing system

The Decade of Ocean Science will encourage actions towards a more integrated and sustainable ocean observing system to facilitate ocean discovery and environmental monitoring. The vast volume of the ocean and its complex coastlines are neither fully observed nor adequately understood. In particular the deep sea is a frontier of ocean sciences, where internationally

[1]GEOMAR Helmholtz Centre for Ocean Research Kiel, Wischhofstr. 1-3, 24118 Kiel, Germany. [2]Kiel University, Christian-Albrechts-Platz 4, 24118 Kiel, Germany. Correspondence and requests for materials should be addressed to M.V. (email: mvisbeck@geomar.de)

Filling the gaps in capacity and capability development:

there are no short term fixes

requires commitment by all parties

not only in development but also maintenance

OCEAN LITERACY

an awareness and understanding of the role of the ocean in maintaining life on the planet

OCEAN LITERACY = VALUING THE OCEAN

OCEAN LITERACY = RESPECTING AND PROTECTING THE SERVICES THAT THE OCEAN PROVIDES

OCEAN LITERACY = UNDERSTANDING THE IMPACTS OF UNSUSTAINABLE USE AND ACTING ON THE OUTPUTS FROM ASSESSMENTS

OCEAN LITERACY = SUPPORTING ONGOING ASSESSMENTS AND THE SCIENTIFIC NEEDS TO SUPPORT THEM

Improving ocean literacy:

all aspects of society and community

youth – our future politicians, policy makers, scientists, business owners, industry leaders, insurers

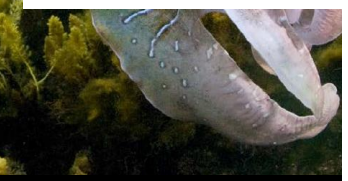
catalysts for transformative change

Improving ocean literacy:

no one approach will be effective

multi-pronged and targeted across

- demographics
- communities
- degree of connectivity



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Thankyou for listening!

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CSIRO Oceans and Atmosphere, Hobart, Australia
Karen.Evans@csiro.au
https://people.csiro.au/e/k/karen-evans

@eclecticsoup