Strategic 101 Initiatives for Developing Capacity in Ocean Governance

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Introduction

This essay outlines challenges of future ocean governance and the strategic efforts of the International Ocean Institute (101) toward achieving the United Nations Sustainable Development Goals, in particular SDG 14, postulated at the Rio+20 Conference. Major challenges arise from marine and coastal environmental, policy, and knowledge issues related to the changing climate, pressures on coastal and ocean development, and the international management of limited ocean resources. These challenges call for strategic initiatives with a focus on international ocean governance and developing capacity for effective local institutional arrangements, together with integrated ocean literacy and human resource development programs that incorporate research and promote continuous improvement.

Strategic 101 Principles—Looking Back, Looking Forward

Elisabeth Mann Borgese, the founder of the 101, emerged as an energetic proponent of a new ocean governance paradigm during the late 1960s. She saw the ocean as a significant frontier of humankind for the realization of a shared, secure zone and peaceful space for nations to behave and interact in a manner consistent with sustainable marine environmental use beyond national borders. She espoused the concept of ‘sustainable management’ based

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1 “Sustainable Development Goals,” United Nations, http://www.un.org/sustainabledevelopment/sustainable-development-goals/, last visited 13 February 2018.
2 This essay presents the personal views of the authors and does not necessarily represent the views of the International Ocean Institute.
on equity and on a participatory, bottom-up system of decision-making as the future of ocean governance. The realization of the principles described below characterizes the IOI’s perspective on the future of ocean governance and lays the foundation for the establishment of IOI strategic initiatives.3

**The Principle of Common Heritage of Mankind.** In 1967, Malta’s Ambassador to the United Nations, Arvid Pardo, urged the UN General Assembly to recognize that resources of the seabed beyond the limits of national jurisdiction are the common heritage of mankind.4 Pardo’s initiative led to global efforts toward advancing the United Nations Convention on the Law of the Sea including the principle of the common heritage of mankind and reserving the ocean for peaceful purposes. As a common heritage space, the IOI supports the idea that the ocean cannot be owned, that all nations share ocean resources benefits and do not allow military installations in territorial commons areas, and that the ocean must be preserved for the benefit of future generations.5

**Coastal and Ocean Security.** For the IOI, the concept of coastal and ocean security includes social and human rights, as well as consideration of economic and environmental priorities of coastal communities. Regional co-operation for peaceful purposes, including joint surveillance and enforcement of regulations on peaceful uses and humanitarian operations, offers safeguards for regional security under the United Nations Agenda for Peace.6

**Sustainable Development.** The contribution of the ocean to the sustainable development of living and non-living resources is fully recognized in SDG 14, ‘Life below water’, with the stated goal to “conserve and sustainably use the oceans, seas and marine resources for sustainable development,”7 while reducing negative anthropogenic impacts. The ocean provides sustainable nutritional sources from capture fisheries and aquaculture and makes a significant contribution to food and water security. Continued growth of energy from

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3 E. Mann Borgese (ed.), Peace in the Oceans: Ocean Governance and the Agenda for Peace Proceedings Pacem in Maribus xxiii, Costa Rica, 3–7 December 1995, Intergovernmental Oceanographic Commission Technical Series No. 47 (Paris: UNESCO, 1997).
4 United Nations General Assembly, “Agenda Item 92,” Twenty-second Session, First Committee, 1515th meeting, 1 November 1967, http://www.un.org/depts/los/convention_agreements/txts/pardo_ga1967.pdf.
5 J. Frakes, “The Common Heritage of Mankind Principle and the Deep Seabed, Outer Space, and Antarctica: Will Developed and Developing Nations Reach a Compromise?” Wisconsin International Law Journal 21 (2003): 409–434.
6 United Nations Secretary-General, “An Agenda for Peace,” UN Doc. A/47/271, S 2411, 17 June 1992.
7 “Sustainable Development Goals: Goal 14—Life below water,” United Nations Development Programme (UNDP), http://www.unpd.org/content/undp/en/home/sustainable-development-goals/goal-14-life-below-water/, last visited 13 February 2018.
coastal and offshore regions in the form of hydrocarbons, the petrochemical sector, and renewable energy from wave, tidal, and wind power means that the ocean is key to sustainable energy development. As one of the world’s largest industrial sectors, travel and tourism have an important ocean presence encompassing cruise ships, sport fishing, sailing, surfing, swimming, sun-bathing, and eco-tourism, together with the supporting industries, and increased opportunities for sustainable coastal economic development. For the IOI, the sustainable development of all the aforementioned activities—now and in the future—are dependent on a system of responsible ocean governance.

*Education and Development of Human Resources.* Education and the development of human resources is the most important contribution of ocean development to the economic security of states. The IOI affirms that the rich resources acquired by states through their exclusive economic zones (EEZs) can only be realized through skilled human resources with scientific, technological, and management capacities for the ocean. This realization highlights interdisciplinary training and education and emergent forms of ocean governance and information technology associated with sustainable ocean management. The IOI is committed to providing ocean literacy in support of future ocean governance.

**Major Challenges for Ocean Governance**

The IOI’s recently consolidated global network of operational centres and focal points, as well as its reorganized financial administration and management structures, are aimed to cope with the emerging challenges to the future of ocean governance. These major challenges are categorized as marine and coastal environmental, policy, and knowledge challenges.

*Marine and Coastal Environmental Challenges.* Uncontrollable environmental events affect the marine and coastal ecosystems and may have detrimental consequences on the physical environment. Environmental challenges arise from (i) global warming trends from the increasing presence of greenhouse gases in the atmosphere; (ii) increased frequency and severity of coastal storms; (iii) resource shifts attributed to changes in stock abundance, and spatial and seasonal redistribution of marine species; and (iv) increased human activity in the coastal zone. Extreme environmental events pose a serious threat to coastal and ocean security, and diminish management efforts to maintain sustainable development activities.

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8 See “Global Travel and Tourism Industry—Statistics & Facts,” *The Statistics Portal*, https://www.statista.com/topics/962/global-tourism/, last visited 13 February 2018.
Policy Challenges. The changing coastal environment presents acute management and policy challenges and threatens coastal community sustainability. Policy is required to institutionalize the principle of the common heritage of mankind through enforcement of the concepts of the peaceful uses of regional seas for sustainable development and maritime zones of peace. Ocean governance policy based on the strategic IOI principles of sustainable development and our common heritage recognizes (i) the need to define community priorities, vulnerability, resilience, and adaptive capacity over strategic planning periods; (ii) the establishment of a hierarchical chain of local, regional, and national decision-making authority; (iii) the development of ocean and coastal management plans based on precautionary and ecosystem-based approaches, as well as preparedness measures and emergency plans for extreme events; and (iv) the institutionalization of an ocean literacy program.9

Knowledge Challenges. Research and training are required to support policy challenges. Knowledge challenges influence the IOI principles of education and development of human resources. Ocean governance research presents particular challenges for (i) establishing a new ‘ocean information baseline’ to enable closer coastal community engagement and participation for collecting and validating unique local data; (ii) developing interdisciplinary and local adaptation strategies;10 (iii) defining coastal community preparedness measures to account for physical, socio-economic, and cultural human impacts; (iv) developing new institutional arrangements to deal with the preparation, emergency planning, and decision analysis for extreme events; and (v) integrating stakeholders in education, training, and applied research processes. IOI resources focus on ocean governance training, education, and capacity development initiatives supported by pertinent publications and public outreach, and facilitated by international partnerships.

Strategic IOI Initiatives

The IOI principles and the marine and coastal environmental, policy and knowledge challenges act together to determine strategic IOI initiatives for ocean governance. The IOI initiatives respond to the challenges by (1) developing capacity toward defining an effective ocean governance

9 D.E. Lane, C. Mercer Clarke, D. Forbes and P. Watson, “The Gathering Storm: Managing Adaptation to Environmental Change in Coastal Communities and Small Islands,” Sustainability Science 8, no. 3 (July 2013): 469–489.
10 D.E. Lane, “Planning in Fisheries-related Systems: Multicriteria Models for Decision Support,” in Handbook on Operations Research in Natural Resources, eds., A. Wentraub et al. (Springer, 2007), 237–272.
institutional framework; (2) providing ocean literacy in support of national institutions and for the ongoing delivery of applied ocean research; and (3) improving international outreach and communication.

Developing Capacity for Ocean Governance Institutions. The IOI affirms the need for new ocean governance institutions for all coastal nations and commits to supporting initiatives that align the IOI principles to institutional development. Ocean governance institutions respond directly to major policy challenges. Through its strategic outreach programs, the IOI supports the establishment of ocean governance institutions characterized by levels of local, regional, and national authority, supporting legislation, collaborative arrangements, and the appropriation of funds for management operations and research.

The ocean governance institution is authorized through established strategic ocean management plans based in statutory law with a clear mandate and the authority and responsibility to make decisions. Decision-making in the institution includes the capacity to evaluate and analyse options through effective strategic planning, while monitoring and tracking measures the impacts and outcomes of decisions taken. Local institutions are responsible for decision-making on sewage treatment, water management, coastal development and zonal planning, access and allocation for inshore and nearshore fisheries and aquaculture and energy projects, marine conservation planning, and commercial and recreational marine activities. At the regional and national levels, governance mechanisms are established for integrating local coastal and ocean management plans, formulating and implementing national oceans policy, and the assurance of prioritized resources for implementation. The budgets of ocean governance institutions for coastal nations are designed to achieve the goals of SDG 14 and their designated mandates. Sources of budgetary funding for ocean governance institutions should be prioritized by national governments.

The ‘participational structures’ at the local governance level are pioneered by Agenda 21 and its concepts of “integrated coastal and marine management.” This collaboration brings together local government, non-governmental organizations, academic institutions, political leaders, business and professional communities, the media, and the public at large in the decision-making process. Collaborative policy ensures that decisions are compatible with the core cultural values of the coastal communities and the integration of traditional indigenous knowledge. Collaborative ocean policy also integrates natural science with social science information.

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11 United Nations Secretary-General, supra note 6.
The IOI seeks to extend its mission to promote effective ocean governance institutions and structures internationally. The IOI has the unique opportunity to define ocean governance institutions and provide assistance to coastal nations as they prepare their new institutional arrangements. This role aligns the IOI training and education program with the delivery of policy and knowledge responses to the stated challenges. Based on the fundamental principles of the IOI’s vision, mission, and goals, an international network of ocean governance institutions is envisioned as the key delivery of Elisabeth Mann Borgese’s legacy. For the IOI, ongoing institutional funding is assumed from IOI’s main donor, the Ocean Science and Research Foundation, to maintain IOI’s independence from changing political trends and economic agendas.

Ocean Literacy and Support for Research. Education, training, and applied research in coastal and ocean science, engineering, management, and socioeconomics support the ongoing activities of ocean governance institutions and the ocean industry. Ocean governance institutions embrace careers in the ocean sector developed by virtue of education and training programs. The IOI, as an experienced and credible ‘honest broker’, holds a strong strategic position as an international leader for the delivery of global ocean education and training in support of ocean governance institutions and in response to knowledge challenges. Accordingly, the IOI mission to “conduct training and education for developing capacity to meet the crucial demand for knowledgeable future leaders in ocean governance” is critical. The IOI strives for accreditation and certification of its training courses to ensure that they remain a global benchmark for high-quality, state-of-the-art capacity development programs in ocean governance education. This includes expanding IOI outreach through Internet-based training offerings, and open access to relevant documents and research papers through the IOI-supported publications World Ocean Reviews and the annual Ocean Yearbook.

Finally, the IOI actively relies on coastal and ocean natural and social science researchers in the presentation of its training and education programs. While not a central activity of the IOI, inherent research capacity is retained through affiliation with universities hosting IOI centers and through networks of senior research fellows and international and regional ocean institutions. These ties ensure that cutting-edge information and current scientific, legal,

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12 “IOI Vision, Mission and Goals,” International Ocean Institute (IOI) (2015), https://www.ioinstitute.org/about-1/vision-mission-and-goals/.
13 Id.
14 “Publications,” IOI (2016), https://www.ioinstitute.org/publications-1/; see also World Ocean Review website, https://www.ioinstitute.org/publications-1/ and Ocean Yearbook website, https://brill.com/view/serial/OCYB.
and policy developments are integrated into all practical IOI activities to support ocean governance.

**International and Alumni Outreach.** As a strategic priority, IOI maintains memoranda of understanding with key partners in the sphere of ocean affairs, capacity development, and education. Experts who lecture in IOI training courses ensure that current scientific and political knowledge is included in our courses. The IOI promotes responsible ocean governance at all levels of co-operation, for example, the United Nations, the Commonwealth, national development agencies, and regional initiatives. The IOI enjoys special consultative status with the United Nations Economic and Social Council and with other UN specialized agencies.

The IOI’s network of thousands of alumni comprises country leaders, ministers, ambassadors, scientists, politicians, negotiators, and leading employees of government authorities and academic institutions. Many IOI alumni are professionals in maritime affairs and are dealing daily with issues related to ocean governance. As a strategic initiative, the IOI will increase its efforts to mainstream experience and knowledge of alumni back into IOI’s activities and training offerings. This will benefit the developing international ocean governance community and future IOI course participants.

**Summary**

The future outlook of the IOI in participating in the delivery of ocean governance is optimistic. Elisabeth Mann Borgese inspired the vision, mission, and goals of the IOI to consider the ocean as a common heritage for humankind and to adopt the *Agenda for Peace*. Through its strategic initiatives for developing capacity in ocean governance, the IOI takes up the challenge to influence coastal nations toward establishing ocean governance institutional arrangements and delivering the goals of SDG 14. The IOI’s capacity to deliver its ocean literacy mission is dependent on the international community’s willingness to prioritize the place of the oceans, to establish an international network of ocean governance institutions, and to support ocean education and applied research.