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REPORT 2021

EMPOWERING WOMEN FOR THE UNITED NATIONS DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT

WMU-SASAKAWA GLOBAL OCEAN INSTITUTE

Pêches et Océans
Canada

Fisheries and Oceans
Canada

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FOREWORD

Cleopatra Doumbia-Henry
President, World Maritime University

As the President of the World Maritime University (WMU), it is my pleasure to share a few remarks on the topic of women's empowerment at this first year report of the Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development Programme. This Programme is generously supported by Fisheries and Oceans Canada (DFO). I had the pleasure to launch this Programme with the Honourable Director General for the Canadian Hydrographic Service DFO, Dr. Genevieve Bchard, on the occasion of the Third WMU Women's Conference Empowering Women in the Maritime Community, hosted in Malm in 2019. We also need to acknowledge the steadfast support of Dr. Arran McPherson, Assistant Deputy Minister, Ecosystems and Oceans Science, Canada.

The Maritime Labour Convention as a Gender Neutral Treaty

I joined the University to serve as the first female President in the summer of 2015. Prior to joining WMU, I served as the Director of the International Labour Standards Department of the International Labour Office (ILO) in Geneva, Switzerland. In this role, which I held over a number of years, I was able to push forward with the agenda to ensure that all instruments adopted by the ILO were gender neutral.

One of the responsibilities I assumed and led during my time at the ILO was the design, development, adoption and promotion of the ratification of the 2006 Maritime Labour Convention (MLC, 2006/the Convention). I was able to mobilize governments around the world to ratify and implement the MLC,

2006 in law and in practice, and to guide the ILO Committee of Experts on the Application of Conventions and Recommendations, which has the responsibility for monitoring compliance by ILO member States. I was able to see the entry into force of the MLC, 2006 before my retirement and continue to follow its developments.

The MLC, 2006 is one of the most gender sensitive instruments adopted for the maritime sector. Article III of the Convention provides that each member State that ratifies it must ensure that its laws and regulations include the fundamental right to the elimination of discrimination in employment and occupation. The MLC, 2006 does not use the term "seaman" or "seamen". It is totally gender neutral. Throughout the entire 100-page Convention, the terminology consistently used is that of "seafarer" or "seafarers" in all language versions. The term "seafarer" is defined in the Convention as "any person who is employed or engaged or works in any capacity on board a ship to which the Convention applies".

The MLC, 2006 provides that "separate sleeping rooms and sanitary facilities must be provided for men and women". The Convention further provides that relevant facilities must be provided for women both onshore and onboard ships. Amendments were also made concerning eliminating shipboard harassment and bullying, specifying the implications for health and safety that require "investigation" by shipowners. These requirements must be included in national laws and regulations to prevent discrimination based on sex in recruitment and placement. This is a change that is hoped

will influence future international maritime instruments developed by other international organizations, including the International Maritime Organization (IMO).

Women's Empowerment at WMU

During the 37 years that it has provided education, nearly 1200 female graduates of WMU have gone on to work in various government agencies and institutions. Some of them hold very senior positions, which is an important indicator of progress. The Programme on empowering women in marine science will add a new chapter to these achievements. Through this Programme, we are committed to contributing and facilitating the empowerment of women in the conduct of ocean science, as well as in delivering science-based decision-making processes in ocean governance systems.

We are about to enter the first United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade). This is a once in a lifetime opportunity for us to create a new foundation, across the science-policy interface, and to strengthen the management of our oceans for the benefit of humanity. We can only achieve this if all of us are working together. This includes efforts from both women and men. We need everyone onboard for this particular voyage.

It is undeniable that there is still gender discrimination and gender blindness in ocean science. We need to find and create opportunities for women to realize their full potential. A key aspect related to this Programme is to identify institutional opportunities for empowering women at a range of important ocean science and governance bodies. In this report, we have included contributions from a number of international organizations that are playing a major role in the implementation of the UN Ocean Decade. The contributions will feed into the team's work to design an action plan for empowering women in ocean science for the UN Ocean Decade.

Here at the University, the research team has been making significant progress in conducting literature reviews and data collection, and moving towards data analysis and discussion. We need strong theories and methodologies to guide us through the research work. It is important that we understand how to define gender and gender equality, where and how we collect gender-disaggregated data, and what indicators we need to measure progress. Beginning in year two, the team will conduct interviews with identified international organizations using prepared questionnaires.

Beyond the University, we organized an important side event, Capacity-Building, Gender Empowerment and the BBNJ Agreement, at the United Nations in September 2019 and brought together key international organizations and many delegates participating in the BBNJ process. We are confident that through our efforts, with the help of Canada, Sweden, Ireland, CARICOM and the core Latin American States, among others, the draft BBNJ Agreement will have gender specific provisions. As all of you know, this will be a first in the Law of the Sea! We can all make a difference.

The Way Forward

We must acknowledge that we are facing serious challenges today and that COVID-19 could potentially slow progress in taking forward gender equality. We are fortunate that the University is based in Sweden, one of the leading countries in terms of integration of gender equality at the national level and in its agenda. There are many other countries and regions that are way behind, even in terms of acknowledging that gender inequality is an issue and one that calls for urgent action.

We still have a long way to go to achieve gender equality in all walks of life, including ocean science. I would like to share a quote from the late Justice Ruth Bader Ginsburg on her response concerning gender equality on the United States Supreme Court:

“So now the perception is, yes, women are here to stay. And when I’m sometimes asked when will there be enough [women on the supreme court]? And I say when there are nine, people are shocked. But there’d been nine men, and nobody’s ever raised a question about that.”

With that promising picture in mind, I encourage you to read on about the review of the first year under the Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development Programme.

Together, we can make a difference.

EMPOWERING WOMEN AND THE UN OCEAN DECADE

Ronán Long

Director, WMU-Sasakawa Global Ocean Institute, WMU

Perhaps it is appropriate to start this piece by recalling the recent passing of our great friend and mentor the late Dr. Biliانا Cicin-Sain, President of the Global Ocean Forum, and past Director of the Gerard J. Mangone Center for Marine Policy and Professor of Marine Policy at the University of Delaware. For many of us, Dr. Biliانا Cicin-Sain was the very personification of women's empowerment, and had a formative influence on a whole generation of ocean experts. She took particular pride in the establishment of the WMU-Sasakawa Global Ocean Institute and participated at four very memorable events. Her *raison d'être* was very much to combat the devastating impacts of human activities on the environment and to redress global inequalities in relation to ocean science, especially in relation to needs of developing countries. She was a powerful and independent voice in international affairs, advocating for greater participation of women and youth in decision-making and ocean and climate activities. Time and again throughout her remarkable career, Dr. Biliانا Cicin-Sain demonstrated brilliant leadership on the setting and implementation of international goals in relation to education, gender equality, health, and environmental sustainability. Her legacy influences all aspects of our work.

In this context, the WMU-Sasakawa Global Ocean Institute is very privileged to lead an important research and capacity-building programme on Empowering Women for the UN Decade of Ocean Science for Sustainable Development (the Programme).¹ This Programme is generously supported by the Department of Fisheries and Oceans Canada (DFO). This report draws together the findings of three project related workshops and contains papers by the team of scholars and PhD candidates responsible for research and capacity development. Added to this are insightful contributions written in a personal capacity by representatives of our implementation partners, namely: the Intergovernmental Oceanographic Commission of UNESCO (IOC), the International Council for the Exploration of the Sea (ICES), the Food and Agriculture Organization (FAO), the International Seabed Authority (ISA), the United Nations Division for Ocean Affairs and the Law of the Sea (UN DOALOS), the International Union for Conservation of Nature (IUCN), Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), Fisheries and Oceans Canada, the Ministry of Foreign Affairs of Sweden, as well as the High Seas Alliance.

One of the great strengths of the Programme is that WMU has the opportunity to engage in extra-mural advocacy initiatives at

¹ Further information can be found from the Programme's website: <https://empoweringwomen.wmu.se/>.

Dr. Biliana Cicin-Sain at the WMU Global Ocean Conference, Malmö, Sweden 2018.

intergovernmental conferences and technical workshops hosted by UN system bodies.² This included delivering a well-attended side event at the penultimate session of the Intergovernmental Conference (IGC) on the conservation and sustainable use of marine biological diversity beyond national jurisdiction (BBNJ).³ These advocacy opportunities have been used to draw attention to the importance of including women's empowerment norms in the draft BBNJ Agreement, along with establishing a mandatory and sustainable funding stream for capacity-building including training activities for women scientists.⁴

The Programme has the ambitious aim of ensuring that gender equality is a central pillar of all UN Ocean Decade actions. In this respect, a key aspect of our work is engaging with the wider scientific community through an Advisory Body and Stakeholder Forum, thereby raising international awareness of the importance of having specific targets for the empowerment of women scientists as one of the objectives of the UN Ocean Decade. Ultimately, the Programme is

directed towards the drafting of a Strategy and Action Plan that make practical and policy relevant recommendations for improving gender equality in ocean science and science dependent governance systems.

In this context, the dynamic and interactive nature of our workshops is beginning to pay dividends. In particular, there are good practice examples set out in this publication of practical solutions that enhance education and work opportunities for women scientists, as well as remove barriers that restrain women from career fulfilment. The contributors share remarkable insights based on wide-ranging experience on how to drive reform successfully through information sharing, policy setting, awareness raising, mentorship and training initiatives. The women's empowerment challenges vary from country to country and indeed within intergovernmental and non-governmental organizations. Moreover, apart from noting that women scientists have been at the forefront of the fight against COVID-19, one of the most valuable insights from the third workshop is that women across the

² See, Workshop Report: Biodiversity Beyond National Jurisdiction: Towards the Development of a Balanced, Effective and Universal International Agreement, (Malmö: World Maritime University, 2020).

³ Ibid.

⁴ R. Long, "Beholding the Emerging Biodiversity Agreement Through a Looking Glass, and What Capacity-Building and Gender Equality Norms Should Be Found There", in M. Nordquist, R. Long (ed), *Biodiversity Beyond National Jurisdiction: Intractable Challenges And Potential Solutions* (Leiden/Boston: Brill/Nijhoff, 2021) 241-272.

world have borne a large part of the burdens imposed by the COVID-19 pandemic, especially in Least Developed Countries and Small Island Developing States. Our proposed Strategy and Action Plan will also have to take into consideration external factors and constraints, as well as mechanisms that counteract disempowerment.

The contours of what should be contained in the Strategy and Action Plan are becoming clearer in light of the deliberations and exchange of views undertaken at the workshops.⁵ There is general consensus that it should set down a range of actions for the individuals, the institutions and for governments, as shown in Figure 1 below. Specifically, it should provide a framework for advocacy and awareness raising among individuals about the importance of proactive approaches to empower women, along with pathways and processes to remove barriers that impede equality. At various levels, it should provide guidance on the collection, analysis and dissemination of data on the levels of women's participation in ocean science. Furthermore, the Strategy must promote institutional responses to disparities and inequalities by implementing gender-responsive policies that focus on measurable outcomes including the adoption of workplace strategies that reconcile work with family life regardless of gender. At all levels within governmental, inter-governmental and non-governmental organizations, it must

encourage all entities to advocate for the inclusion of gender equality provisions in international instruments such as the draft BBNJ Agreement mentioned previously. Furthermore, all institutions and organizations must embrace affirmative actions that ensure effective women's representation in decision-making and senior leadership positions.

The importance of the objectives of the Programme should not be understated, especially since equal rights of men and women is a fundamental objective of the Charter of the United Nations.⁶ Many international agreements and declarations have sought to advance the goal of gender equality with varying degrees of success. Much remains to be done in the law of the sea, ocean affairs and within marine scientific research communities across the world.⁷ Moreover, the 1995 Beijing Declaration and Platform for Action is almost coming of age with the entering into force of the United Nations Convention on the Law of the Sea in 1994.⁸ There is thus a compelling case that equality between women and men in marine scientific research ought to be one of the fundamental objectives of the UN Ocean Decade. In this regard, women will be empowered when they participate to their full potential in the conduct of marine scientific research and when they are represented at all levels in science governance structures and fully engaged throughout decision-making processes. The UN Ocean Decade

FIGURE 1

5 Initial thinking was presented by R. Long, "Empowering Women for the UN Decade of Ocean Science for Sustainable Development" IOC-UNESCO The Ocean Decade Virtual Series, Paris, France. 10 November 2020.

6 Charter of the United Nations (adopted 26 June 1945, entered into force 24 October 1945). Preamble.

7 Gabriele Goettsche-Wanli, "Gender and the Law of the Sea: A Global Perspective", in Irini Papanicolopulu (ed), *Gender and the Law of the Sea* (Brill/Nijhoff, 2019), 25-82.

8 United Nations Beijing Declaration and Platform for Action. Fourth World Conference on Women. Adopted on the 15th of September 1995, available at: https://www.un.org/en/events/pastevents/pdfs/Beijing_Declaration_and_Platform_for_Action.pdf.

provides a golden opportunity to advance gender equality and the empowerment of women scientists through concrete actions. The Global Ocean Science Report provides an ideal outlet for reporting on progress, as does the Global Ocean Assessment Report.⁹

Figure 2 below serves as an illustration of a proposed blueprint and implementing an Action Plan for empowering women for the UN Ocean Decade at an institutional level. First, there is a need to collect baseline data on the performance of institutions and other entities to understand the status quo. This information and other research findings will support the setting of general and specific objectives for achieving gender equality. The process must promote openness, transparency and responsibility, as well as ensure that all decision-making and management actions are informed by gender equality objectives. The progress is followed by regular monitoring programmes that evaluate performance on the attainment of specific equality objectives, as well as the reporting and reassessment of objectives. The proposed blueprint is iterative and should entail the delivery of gender equality actions in all aspects of the work under the UN Ocean Decade.

Significantly, one of the early findings of the research Programme is that a number of intergovernmental organizations are on the pathways to success. Thus, for example, the International Seabed Authority

is implementing a transformational agenda on women's empowerment that may well serve as an international benchmark for other multilateral, regional and national bodies concerned with ocean science and the realization of women's rights.¹⁰ Indeed, the ISA was the sole intergovernmental organization to register a voluntary commitment aimed specifically at enhancing the role of women in marine scientific research through targeted capacity-building initiatives during the high-level United Nations Conference to Support the Implementation of the Oceans Sustainable Development Goal.¹¹

Overall, we are pleased with the progress on the Programme and hope that our readers take onboard some of the research findings and key messages from our distinguished contributors.

FIGURE 2

9 IOC-UNESCO (2020). Global Ocean Science Report - The current status of ocean science around the world. Paris, UNESCO Publishing, available at: <https://en.unesco.org/gosr>. United Nations, The First Integrated Marine Assessment (United Nations and Cambridge University Press 2016), available at: <https://www.un.org/regularprocess/content/first-world-ocean-assessment>.

10 International Seabed Authority. *Enhancing the role of women in marine scientific research through capacity-building*. Ocean Action No. 15467, available at: <https://oceanconference.un.org/commitments/?id=15467>.

11 R. Long, Z. Sun, M. Rodrigues Chaves, "Gender Leadership and the United Nations Decade of Ocean Science: Pioneering Role of the International Seabed Authority", in M. Nordquist and M. Lodge (eds), *Legal, Scientific and Economic Aspects of Deep Seabed Mining* (Leiden/Boston: Brill/Nijhoff, 2021) (forthcoming). See the contribution from Marie Bourrel-McKinnon on "Women's Empowerment and Leadership at the International Seabed Authority" in this publication.

The people we need for the ocean we want

KEY FINDINGS

- 1** Gender equality must be a central pillar for the implementation of the UN Ocean Decade.
- 2** Ocean science, management, and governance systems need the full and fair engagement and participation of women at all levels.
- 3** The collection of baseline gender-disaggregated data is critical to monitoring and evaluating the progress on empowering women.
- 4** Active leadership is required to support an enabling environment for pursuing gender equality and gender mainstreaming in all aspects of ocean science and science-dependent governance systems.
- 5** Affirmative action policies that respect gender equality and value women's participation in ocean scientific research, especially at decision-making and leadership positions, are vital for the success of the UN Ocean Decade.
- 6** Gender equality is not only about numbers and targets; it is about transforming an organization, individuals and the collective culture, to reduce implicit bias, encourage inclusivity, and create an enabling environment for all.
- 7** Intergovernmental organizations must create career paths for women and establish enabling environments that encourage, support, promote and retain women in senior positions.
- 8** Specific commitments are needed from organizations to monitor and report on the implementation of gender equality policies and other interventions to enhance transparency, accountability, and opportunity for all.

BIOGRAPHIES

Doumbia-Henry, Cleopatra

Dr. Cleopatra Doumbia-Henry (LL.B, LL.M, Ph.D International Law) joined WMU as President in the summer of 2015. Prior to joining WMU, she served as the Director of the International Labour Standards Department of the International Labour Office (ILO) in Geneva, Switzerland. Dr. Doumbia-Henry began her career at the University of the West Indies, Barbados, as a lecturer in law. She later worked with the Iran-US Claims Tribunal in The Hague, The Netherlands and then joined the ILO in 1986 where she served both as a senior lawyer of the Organization and in several

management positions. She was responsible for developing the ILO Maritime Labour Convention, 2006 and remained responsible for it until she joined WMU. Since the late 1990s, she led the ILO participation in a number of IMO/ILO interagency collaborations on several issues of common interest to the International Maritime Organization (IMO) and ILO, including the Joint IMO/ILO Ad Hoc Expert Working Groups on Fair Treatment of Seafarers and on Liability and Compensation regarding Claims for Death, Personal Injury and Abandonment of Seafarers.

Webb, Allison

Allison Webb is currently the Lead for Canada's team on the UN Decade of Ocean Science for Sustainable Development at Fisheries and Oceans Canada (DFO). Allison started her career in Ottawa as part of the Management Trainee Program then worked in 6 departments before coming to DFO. She has held a variety of Executive roles including Director, international Fisheries (Asia Pacific/ US Bilateral Relations), and Regional Director, Policy and Economic Analysis. Most recently, she has spent 3 years as the Director of Aquaculture, Pacific Region. She also feels fortunate to have worked on interchange with the Government of Chile, Ministry of Fisheries in 2005 and from 2015-2017 for the State of Victoria Fisheries Agency

in Australia where she was the Director Fisheries Management and Science. Allison holds a Masters Degree in Canadian Studies from Carleton University in Ottawa as well as a Bachelor of Arts Degree from Mt Allison University in Sackville, NB. She also has a partial degree in Fisheries and Aquaculture from Vancouver Island University. Having been born with wanderlust in her heart, Allison is always up for any travel – near or far and is happiest when she's planning her next big trip. She can also be found at her cabin in the backcountry hiking or snowshoeing. She also tries to keep active running, stand up paddle boarding and rounds out her interests with cooking and following the arts.

Ågren, Helen

Helen Ågren is the Ambassador for the Ocean at the Swedish Ministry for Foreign Affairs. Ms. Ågren has been working at the Swedish Government Offices since 2000 in various positions on issues such as green economy, consumption and production, climate mitigation and adaptation, research, innovation and local investment programmes. She has extensive experience working for Sustainable Development through the UN,

OECD, EU, Nordic Council of Ministers and at national level. She chaired the Swedish Governments Council for Sustainable Development between 2005-2007 and has held advisory positions to Statistics Sweden on the National Environmental Accounts. She represents the Government in the Supervisory Board of the Blue Action Fund. Ms. Ågren studied chemistry at Stockholm University.

Troisi, Ariel Hernán

Ariel Troisi holds a degree in Physical Oceanography, Instituto Tecnológico de Buenos Aires, and a MSc degree in Science and Technology Policy and Management, Universidad de Buenos Aires. He joined the Argentine Navy in 1988 as Oceanographer, and has a longstanding and proactive involvement in marine scientific research, project management and associated services, as well as in the Intergovernmental

Oceanographic Commission IOC of UNESCO (including, inter alia, sustained observations, data management, capacity development and transfer of marine technology). In 2019 he was elected as Chairperson of IOC. He serves as Technical Secretary, Servicio de Hidrografía Naval, Argentina (2020), and Technical Coordinator of National Commission for the Outer Limit of the Continental Shelf (2012-).

Barjandi, Elnaz

Ms. Elnaz Barjandi is Project Engagement and Implementation Officer at the WMU-Sasakawa Global Ocean Institute. She supports the Institute's operational delivery and implementation of research programmes/projects aligned with the WMU Ocean Research Agenda. Elnaz further coordinates the Institute's outreach such as conferences and events, as well as the submission of Institute's annual reports to donors. Prior to joining WMU, Elnaz worked at the United Nations Development Programme (UNDP) in Copenhagen, Denmark, as Operational, Administrative & Finance support at the Office of Information Technology and Management (OIMT). She supported the

units operations and HR, and coordinated the ICT and Green Energy service delivery to UNDP Country offices world wide aligned to the UN Sustainable Development Goals (SDGs). Elnaz has a BSc. and MSc. in International Business and Politics from Copenhagen Business School (CBS). Further, she is an alumni of the Rhodes Academy of Ocean Law and Policy 2019. Elnaz academic and professional experiences has heightened her knowledge and interest for international sustainable development, international diplomacy and strategy, ocean governance, as well as capacity building, organisation and leadership for human empowerment and equality.

Bourrel-McKinnon, Marie

Marie Bourrel-McKinnon is working at the International Seabed Authority (ISA) as the Senior Policy Officer and Special Assistant to the Secretary-General where she has led the development of the first Strategic plan and High-Level Action Plan for 2019-2023. She is also responsible for mainstreaming and monitoring capacity- building/development activities and led the review of all capacity-building programmes implemented by ISA between 1994 and 2019. Marie is the focal point for gender equality and empowerment and leads the implementation of the ISA's commitment to "Enhancing the role and participation of women in deep-sea research" (#OceanAction15467). Prior to

joining ISA Marie worked for the Pacific Community (SPC) as Legal Adviser for the maritime transport programme and for the SPC-EU Deep Sea Minerals project. Marie also worked for governments, non-governmental organizations and the private sector in the field of shipping, law of the sea, ocean management and marine policy in the South Pacific, Africa and Europe. Marie holds a PhD in international law and two Master of Laws degrees (Law of the Sea and shipping; International Law and Economics). She has published more than thirty articles on the international law of the sea, international and environmental law, oceans policy and related issues.

Brusendorff, Anne Christine

Anne Christine Brusendorff has been serving as the (1st female) ICES General Secretary since 2012. She is promoting integrated ecosystem understanding, with the aim to develop integrated ecosystem assessments (IEAs) in regional seas. This work responds to societal needs for impartial evidence on the state and sustainable use of our seas

and oceans. ICES is providing the scientific evidence needed to implement the ecosystem based approach, meeting conservation, management and sustainability goals. Ms. Brusendorff holds a PhD in International Law of the Sea and International Environmental Law, and joined ICES following her time as the (1st female) HELCOM Executive Secretary.

Buckingham, Susan

Susan Buckingham is a gender expert, with specific reference to gender in environmental action, policy and decision making. She has recently worked on EU waste and marine initiatives: as the gender expert on Urban Waste evaluating waste reduction initiatives, including initiatives for the cruise sector; and on the Advisory Board of Baltic Gender, a project developing gender equality in marine research and higher education. Susan has

also worked with the UNDP, UNEP, and in Pakistan, as well as across Europe. She is widely published (the revised second edition of her book 'Gender and Environment' was published in 2020), and has a public profile through the BBC and print media. Susan also contributes to the work of women's charities, and organizations promoting gender and environmental justice.

Epps, Minna

Minna Epps is the Director of IUCN's Global Marine and Polar Programme. She is very engaged in the Global Ocean Agenda, representing IUCN in various fora and high level networks including; High level Panel on Sustainable Ocean Economy Advisory Network, Friends of Ocean Action, WWF Sweden Board of Directors, ASC Technical Working Group on Mangroves and Wetlands, Chair of the Blue Natural Capital Funding Facility Executive Committee. Minna has over 20 years of experience in international

environmental work primarily in the marine field; with everything from field work in Madagascar to policy work in Geneva. She brings her experience from the Marine Stewardship Council, European Commission, UNEP, WTO, IUCN, and conservation NGOs. Minna is a marine biologist with studies from Imperial College, Rhode Island School of Oceanography and UC Berkeley. She is also a trained communication professional with vast experience in strategic communication and running campaigns.

Germani, Valentina

Valentina Germani is a Senior Legal Officer (Programme Advisor) in the United Nations Division for Ocean Affairs and the Law of the Sea, Office of Legal Affairs of the United Nations, in New York. Her current work in oceans and the law of the sea focuses mostly on capacity-building (as Programme Advisor of the United Nations – Nippon Foundation Programmes), ocean and climate change and marine biodiversity beyond national jurisdiction. From 2010-2012 she was

a Legal Officer at the Secretariat of the UN Framework Convention on Climate Change, in Bonn, Germany. Prior to joining the United Nations in 2001, she was assistant lecturer in International Law of the Sea and International Environmental Law at Queen Mary University of London and at the University College of London. Valentina holds an LL.B from the University of Cardiff, Wales, and an LL.M from the London School of Economic and Political Science.

Goettsche-Wanli, Gabriele

Gabriele Goettsche-Wanli is an independent international lawyer. She retired from the United Nations in 2020 after more than 32 years of service. She served as Director of the United Nations Division for Ocean Affairs and the Law of the Sea (DOALOS), Office of Legal Affairs (OLA), for over 6 years. Apart from three years when she served as Chief of the Treaty Section, OLA, she devoted most of her career in DOALOS to the provision of assistance in the implementation of the United Nations Convention on the Law of

the Sea and the United Nations Fish Stocks Agreement, as well as in supporting the General Assembly and its processes in considering oceans and the law of the sea, including the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. Ms. Goettsche-Wanli has actively promoted gender equality and the empowerment of women at sea, including through World Oceans Day 2019, and writing about gender and the law of the sea.

Isensee, Kirsten

Kirsten Isensee has been a Programme Specialist at the Intergovernmental Oceanographic Commission of UNESCO since 2012. Her work focuses on Ocean Carbon Sources and Sinks, trying to distinguish the natural and anthropogenic influences on the marine environment in support of the 2030 Agenda for Sustainable Development. She provides technical

assistance to activities promoting women in ocean science and facilitates collaboration between scientists, policymakers and stakeholders, via networks such as the Global Ocean Acidification Observing Network, the International Blue Carbon Initiative and the Global Ocean Oxygen Network. She received her diploma and her PhD in Marine Biology at the University of Rostock, Germany.

Jarnsäter, Jill

Jill Jarnsäter is the Senior Secretary at the WMU-Sasakawa Global Ocean Institute where she supports with the administrative services to the Director, the Head of Research and Research Officers. Jill holds a BSc. in Gender Studies and a MSc. in Human Ecology from the Department of Human Geography at Lund University, Sweden where she has studied a range of interdisciplinary subjects spanning the sustainable development field with a particular focus on fishing management, social sustainability, environmental justice, diversity, identity and environmental exploitation related to human behaviour. Before joining WMU, Jill worked at IUCN

(International Union for Conservation of Nature) in Malaga, Spain from 2017 where she worked as Ecosystem Department program assistant. Her previous work experiences also covers teaching, gender-consulting, documentary filmmaking, photography, lecturing at ECPAT and working as divemaster and keen ambassador for ocean related issues. Additionally, she has lived abroad in countries such as Denmark, Australia, Argentina and most recently Spain. She has a fundamental interest in better understanding the dynamics of marine social-ecological systems, especially how they adapt and are resilient to change through time.

Johannesen, Ellen

Ellen Johannesen is a PhD Candidate at the World Maritime University. A Canadian who has spent the past 14 years in Copenhagen, Ms. Johannesen has worked in maritime science administration as the Coordinating Officer at the Secretariat of the International Council for the Exploration of the Sea

(ICES) since 2009. With an interdisciplinary background, her professional interests include international marine science cooperation and administration, the ecosystem approach, and more recently considering the role of gender in ocean science.

Kalas, Peggy

Peggy Kalas is an environmental lawyer with over 25 years of experience working on international environmental policy issues. Since 2014, Peggy has directed the High Seas Alliance, an international coalition of over 40 environmental non-governmental organizations, focused on improving ocean governance and organizing coalition efforts at the United Nations and in world capitals to obtain a new global treaty for the conservation of marine life in our ocean's global common that comprises nearly half the planet. Prior to leading the Alliance, Peggy served as the UN Coordinator of the Deep Sea Conservation Coalition, orchestrating

efforts at the United Nations to secure a UNGA resolution limiting deep sea bottom fishing in international waters. She also practiced international law at private firms in New York City and Washington, DC. Peggy holds an LL.M. in International Law from New York University School of Law, a Juris Doctor, with honors, from the University of Maryland School of Law, and a bachelor's degree from the University of Notre Dame. She also served as Editor-in-Chief of the Maryland Journal of International Law, and has authored numerous articles on environmental governance, and resides in New York.

Kitada, Momoko

Momoko Kitada is a former seafarer and joined WMU in 2011. She is as an Associate Professor and has served in the Secretariat of the WMU Women's Association (WMUWA) since 2014. She has 16 years of research experience regarding women in the maritime and ocean sectors. Dr. Kitada teaches subjects in Maritime Education and Training (MET) as well as social and human elements of Maritime Energy Management (MEM). Dr. Kitada leads WMU's collaboration efforts with the IMO in terms of women's integration in the maritime sector and assists WMUWA in connection with other IMO regional support networks. She worked as a principal

investigator for the IMO consultancy work on Global Strategy for Women Seafarers. Dr. Kitada is also a co-principal investigator of the project on Empowering Women in the UN Decade of Ocean Science for Sustainable Development. Dr. Kitada's edited works include the conference report on the Third WMU International Conference on Empowering Women in the Maritime Community (2019); the WMU Journal of Maritime Affairs: Special Issue on Empowering Women in the Maritime Community (2019); and "Maritime Women: Global Leadership" (2015, Springer).

Kısakürek Ibsen, Basak

Having specialized in isotope biogeochemistry, Dr. Basak Kısakürek Ibsen worked as a marine scientist in England and in Germany in her early career. In 2011, she took up a science officer position at the COST (European Cooperation in Science and Technology) Office of the EU in Brussels, Belgium. Since

her return to Germany, she has been working at GEOMAR Helmholtz Centre for Ocean Research Kiel. Between 2016-2020, she was the scientific manager of the EU-funded project, "Baltic Consortium on Promoting Gender Equality in Marine Research Organisations" (Baltic Gender).

Long, Ronán

Professor Ronán Long is the Director of the WMU-Sasakawa Global Ocean Institute at the World Maritime University in Malmö, Sweden, and holds the Nippon Foundation Chair in Ocean Governance and the Law of the Sea. He is the author/co-editor of 14 books and over 100 scholarly articles on oceans law and policy. He read for his PhD at the School of Law Trinity College Dublin, he has been a Senior Visiting Scholar-in-Residence at the University of California, Berkeley, and a Visiting Scholar at the 'Centre for Oceans Law and Policy' at the University of Virginia. Additionally, Professor Long teaches on the Law of the Sea programme at Harvard Law School. Prior to his academic career, he was a permanent staff member at the European Commission and undertook

over 40 missions on behalf of the European Institutions to the Member States of the European Union, the United States of America, Canada, Central America as well as to African countries. During his previous career in the Irish Naval Service, he won an academic prize at Britannia Royal Naval College and held a number of appointments ashore and afloat, including membership of the Navy's elite diving unit. As a keen yachtsman, he has represented Ireland at the top competitive level in offshore racing. Professor Long is passionate about the law of the sea, conservation and global sustainability, as well as the implementation of the 2030 Agenda for Sustainable Development.

Neat, Francis

Professor Neat has a broad research background in freshwater and marine ecosystems and management. His research has spanned Zambia, Mexico and Italy and most extensively the NE Atlantic as a researcher (fisheries ecology) at the Scottish Government's Marine Laboratory in Aberdeen. Prior to joining WMU he was Head of Strategic Research at the Marine Stewardship Council (MSC) in London. There he led a programme of research, monitoring and evaluation of the global impact of the MSC. He has specialized in research on deepwater marine ecosystems and the migration patterns and population

structure of fish. His research has been applied to marine management and policy development, including the implementation of a network of Marine Protected Areas and the development of EU policy on deep-water fishing regulations. His research also led to discoveries of novel deep-water habitats including sponge reefs and cold seep ecosystems. He has published around 80 peer review papers and undertaken extensive science advisory work for the International Council for the Exploration of the Sea and the European Commission at the UN. He has a particular interest in the marine ecosystems, fisheries and management of the High Seas.

Ojwala, Renis Auma

Renis Auma Ojwala is a PhD Candidate at the World Maritime University. Her research topic focuses on "Evaluating Gender Equality in Ocean Science for Sustainable Development in Kenya." Renis holds a Bachelor of Science Degree in Applied Aquatic Science from Egerton University and a Master of Science Degree in Limnology and Wetland Management - a Joint International Master of Science Programme from BOKU University in

Vienna Austria, Egerton University in Kenya, and UNESCO-IHE (Currently, IHE-Delft) in The Netherlands. Renis is passionate about gender equality and women's empowerment in Ocean science and fisheries research related fields and has worked with various institutions such as Egerton University, World Wide Fund for Nature (WWF-Kenya), Victory Fish Farms and National Museum of Kenya.

Rodriguez-Chaves, Mariamalia

Dr. Rodríguez Chaves has more than fifteen years of experience working with environmental nongovernmental organizations and as an independent consultant on diverse environmental topics. She has a Law Degree, and a Master's Degree in Environmental Law, from the University of Costa Rica; and a PhD degree from the School of Law of the National University of Ireland, Galway (NUIG). She successfully accomplished

the United Nations-Nippon Foundation of Japan Fellowship, and is the Deputy Global Representative of its Alumni network. Currently, Mariamalia is a Post-Doctoral Fellow researcher in the WMU-GOI Empowering Women programme, and a consultant for the High Seas Alliance, where she works closely with the Latin American countries participating in the BBNJ negotiations.

Schofield, Clive

Professor Clive Schofield is Head of Research at the World Maritime University-Sasakawa Global Ocean Institute in Malmö, Sweden, a Visiting Professor with the Australian Centre for Ocean Resources and Security (ANCORS), University of Wollongong (UOW), Australia, a Distinguished Fellow of the Law of the Sea Institute at the Law School of the University of California Berkeley and teaches on the Law of the Sea programme at Harvard Law School. His research interests relate to international boundaries and particularly maritime boundary delimitation and marine

jurisdictional issues on which he has published over 200 scholarly publications. Clive is an International Hydrographic Office (IHO)-nominated Observer on the Advisory Board on the Law of the Sea (ABLOS) and is a member of the International Law Association's Committee on International Law and Sea Level Rise. He has also been actively involved in the peaceful settlement of boundary and territory disputes by providing advice to governments engaged in boundary negotiations and in dispute settlement.

Sun, Zhen

Dr. Zhen Sun is a Research Officer at the WMU-Sasakawa Global Ocean Institute at the World Maritime University in Malmö, Sweden. Her main research interests include the law of the sea, international regulation of shipping, maritime security, and the protection of the marine environment. Prior to joining WMU, Dr. Sun was a Research Fellow at the Centre for International Law (CIL), National University of Singapore between 2013 and 2018. She was a member of the CIL Ocean Law and Policy team, in which she worked on a wide range of subjects in the law of the sea. Dr. Sun was the researcher-in-charge for a number of research projects and capacity building activities at CIL, including projects funded by the Singapore Ministry of Foreign Affairs and the Maritime and Port Authority of Singapore. She has contributed

to the editorial work of book projects at CIL and published a number of book chapters and journal articles on various topics including legal issues in the Arctic, the interaction between UNCLOS and the IMO, straits used for international navigation, maritime security and the protection of submarine cables. Dr. Sun received a Bachelor of Laws Degree from Hainan University and an LLM in International Law from China University of Political Science and Law in China. She received an LLM in Public International Law (with distinction) from the University of Edinburgh and a PhD from the University of Cambridge. Dr. Sun is also the co-principal investigator of the Programme on Empowering Women for the UN Decade of Ocean Science for Sustainable Development.

Svensson, Lisa Emilia

Lisa Emilia Svensson has 20 years of professional international experience in environment, trade, human rights, and broader sustainability issues. She is a trained diplomat and has worked in various capacities in the Swedish Foreign Service since 2000 and was appointed Ambassador in 2010. As Sweden's chief negotiator to OECD to lead the revision of the OECD Guidelines, she was part of the successful core team behind the Swedish Campaign for the UN Security Council. She was assigned as Ambassador for Ocean at the Ministry of the Environment in 2012-2015.

While at the European Commission she was chief of negotiations for sustainable development chapters. Addressing development chapters in the EU's Free Trade Agreements with for ASEAN, MERCOSUR and EPAs- ACP. Dr Svensson lead the marine work at UNEP including coastal ecosystem, global pollution and the regional seas programme. She holds a doctorate in Political Economy and has been posted in New York, Washington D.C., Paris, Stockholm, Brussels and Nairobi.

Tandstad, Merete

Merete Tandstad is the Coordinator for the EAF-Nansen Programme at the Fisheries Division of the Food and Agriculture Organization of the United Nation (FAO) in Rome, Italy. She provides overall leadership and coordinates Programme activities with the Programme implementing partners (Norad and IMR) and the 32 partner countries in Africa and the Bay of Bengal to promote an ecosystem approach to fisheries and knowledge-based decision making. Mrs Tandstad, a marine scientist by training, holds over 20 years of experience with

FAO, in roles related to ocean governance, fisheries management and the delivery of scientific advice, including through the Fishery Committee for the Eastern Central Atlantic (CECAF), and on deep-sea fisheries and biodiversity. Promoting women's empowerment and strengthening human and institutional capacities for fisheries research and management are key goals in her current work and the aim to achieve sustainable fisheries management for the Programme's partner countries.

Watson-Wright, Wendy

Dr. Wendy Watson-Wright is a member of and Gender Focal Point of the United Nations Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), a body established in 1969 to advise the UN system on marine environmental issues. She served as the first female Executive Secretary and Assistant Director General of UNESCO's Intergovernmental Oceanographic Commission (IOC-UNESCO) in Paris from 2010 to 2015 and was the inaugural CEO of the Atlantic Canadian-led Ocean Frontier Institute (OFI) (2016 – 2019). For most of her career, Dr. Watson-Wright held various

senior positions within Fisheries and Oceans Canada, including eight years as its Assistant Deputy Minister of Science. She has been on a number of boards and panels including the Board of Governors of the International Ocean Institute (IOI), the European Marine Board External Review panel (Chair), the Belmont Forum Review Panel for the global Collaborative Research Action on Ocean Sustainability (Chair), the Scientific Advisory Board of the Wendy Schmidt Ocean Acidification X-Prize, and the Prince Albert II of Monaco Foundation (Canada). A Killam scholar, she has a Ph.D. in Physiology from Dalhousie University in Nova Scotia, Canada.

KEYNOTE ADDRESS

Canada's Initiative to Promote the Empowerment of Women under the UN Ocean Decade

Allison Webb

Lead, United Nations Decade of Ocean Science for Sustainable Development, Fisheries and Oceans Canada

Hello to you all from Vancouver, Canada, where I would like to acknowledge that I am on the traditional lands of the Musqueam, Squamish and Tsleil Wau-tuth Indigenous peoples. Happy International Women's Day to all of you awesome women out there and all of you who stand with us!¹

On this day, but also every other day, this is a critically important topic and I feel passionate about this as a female leader in the Government of Canada. Today, I wish to talk about what Canada has done and plans to do in regard to gender equity in the context of the UN Ocean Decade.

For those of you who are not as familiar with the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade) (2021-2030), the Decade provides a once in a lifetime opportunity for us to work together to leverage all of our expertise to reverse the decline in ocean health by generating the science needed to support the sustainable development of our shared ocean. This is a huge opportunity, but

also a daunting challenge and truly requires "all hands-on-deck" to be successful.

Right now, I think it is fair to say that not everyone who needs to be with us is already "on deck". This is not limited to women. The UN Ocean Decade will need to tackle this culture change to be successful and we will need to consider how to have participation across genders, geographies and areas of expertise to be truly inclusive.

When we consider women in leadership roles and in science, the statistics show that we still have a long way to go to get to a place where women can fully contribute to their maximum potential. This is also different depending on where you live. Specially, we aspire to be in a future state where women are equally represented in leadership roles regardless of geography.

Many of you may be very familiar with the "leaky pipeline". To close this gap, we need a multi-pronged approach and need to be deliberate about how best to achieve

¹ The Keynote Address was delivered at the International Women's Day Webinar on "Women in Leadership: Paths Through Education" organized by the World Maritime University, 8 March, 2021, available at: <https://www.wmu.se/news/women-in-leadership-paths-through-education-webinar>.

this objective. We need to be bold, to be revolutionary and bring everyone along with this change.

In that vein, I wish to talk a bit about the work that Canada is supporting on Gender Equity through the UN Ocean Decade. Increasing gender equity is a key priority for Canada. We are focusing on empowering women by removing barriers to their participation in ocean science as well as policy-making and management to support the objective of sustainable development.

How will we do this?

We will take action in a number of areas:

- **Continue to elevate female leaders** to provide exposure, opportunities to enhance skills and to build professional networks through all stages of their careers;
- **Host events that promote gender equity/leadership that are accessible to all**, and with a view to providing inspiration, concrete tools and networking opportunities. We have already co-hosted events on 10 November 2020 and 11 February 2021 and invite you to join us in our 8 March event that follows this event focused on women and leadership;
- **Raise gender as an important consideration across all UN Ocean Decade initiatives, in order to hard**

wire this objective into the culture of the ocean community by doing the following;

- Collecting gender data and identifying metrics related to gender because without this, we do not know where our starting line is and where we are trying to go.
- Building on best practices in Canada, including promoting the use of gender based analysis in all the work of the UN Ocean Decade to ensure that gender is a proactive and fundamental consideration in the design, development and implementation of all initiatives from research to policy implementation.
- **Fund projects that advance gender equity and encourage others to join us to leverage our contributions**
 - For example, the Canadian Hydrographic Service is working with the International Hydrographic Organization to increase the presence, participation and leadership of women in hydrography.
 - I am also pleased to highlight DFO's collaboration with the **World Maritime University** who are leading work to help us understand the state of gender equity at the start of the UN Ocean Decade and to identify barriers for women in ocean science and in science-based policymaking processes.

I was asked for some thoughts about the pandemic and gender equity. One of my observations is that COVID-19 has created a situation with virtual meetings that has democratized participation – which should provide women with more opportunities for involvement than prior to COVID-19. Whereas before, only the very lucky and often privileged could attend international meetings/conferences, virtual meetings allow for broader participation and more voices including those that are more diverse and that can help in shifting the dominant conversation and outcomes.

I think it is too early to truly understand the effect of the pandemic, but I think that this is one of the silver linings of COVID-19 while recognizing that other impacts are not as positive. I challenge all of us to continue to think how we can use technology to support more empowerment of women in our design of events/projects during the pandemic and post-pandemic environment as we learn from this experience.

Lastly, beyond the technology, I encourage you personally to take on the role of champion for gender equity wherever you are in the career or organization. We can all show leadership in our actions – big and small – and together they will make a difference.

You can count on Canada's leadership to ensure that we harness the potential of

women across the globe. We hope that you will join with us to lend more voices to this important work through the UN Ocean Decade and I look forward to working with WMU and other partners to advance gender equity.

Thank you for the opportunity to share my thoughts about this important topic with all of you. My hope is that we have started a conversation that will continue long past today and ripple through the work of the UN Ocean Decade, building more and more momentum towards a tidal wave of change.

Sweden's Feminist Foreign Policy

– Why and What Does it Mean?

Helen Ågren

Sweden's Ambassador for the Ocean,
Ministry of Foreign Affairs, Sweden

Introduction

The ocean is our lifeline in all aspects. It is impossible to overstate its importance for maintaining a clean and healthy ocean. It provides humans with food, employment and other financial opportunities, and transportation, as well as being the mediator for the climate and the entire earth system. Nevertheless, the importance of the ocean has often been overlooked in national policies and international attention. Efforts made to understand life on land far exceed those made to understand life below the surface. There are huge knowledge gaps about the deep ocean, even with modern technology. Too often the ocean and its role on this planet are neglected or forgotten when we discuss biodiversity, economic recovery, food security, or peace and security.

The role of women and girls is another important issue that has been historically overlooked and understudied, also in the context of ocean sustainability and inter-state relations. Women and girls play a major role in society and still often carry out most of the unpaid care work. Yet there are huge knowledge gaps that hinder understanding of the role of women and girls in all sectors, let alone the efforts needed to promote gender equality.

The lack of participation and representation of women in ocean affairs deserve more attention. In my view, it is hugely important for the Gender Programme at

WMU-Sasakawa Global Ocean Institute to investigate the role of women scientists under the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade).

Historical Development

Gender equality is at the core of Swedish society and social policy. Ever since the early 1970s, it has been a separate political and public policy objective. Since 1994, the main national strategy has been focused on gender mainstreaming. All national policies that influence living conditions are implemented from a gender perspective. The overriding goal is that both men and women should have equal power to shape the society and their lives.

In Sweden, there are six targets in gender equality. The first is equality in terms of power and influence, which refers to the equal rights and opportunities to be active citizens and to contribute to shaping the conditions of lives and decision-making in all sectors of society. The second is economic equality, and the equal right to the same working conditions and opportunities to economic independence throughout life. The third is equal education, which means men and women have equal rights and opportunities when it comes to education, their study choices, lifelong learning and personal development. The fourth is to strive towards equal distribution of unpaid home and care work. The fifth is equal health, such

as the same access to good health conditions and to be offered care and help on equal terms. The sixth is the end of gender-based violence. Women, men, boys and girls should have the same right to physical integrity.

Looking back at historical developments, that gender equality reforms in Sweden that took place from the early 1920s up until the 1970s included the recognition of the right to vote and other legal rights, and the right to join the workforce. And from the 1970s, new reforms included approaches to facilitating women's participation in the labour market, such as expansion of childcare and gender-neutral parental leave, and individual taxation instead of family taxation. In the 1980s, we saw the expansion of gender research, and legislation to prohibit gender discrimination in the workplace. From the 1990s up until today, issues such as equal pay for equal work and representation in boardrooms and politics are high on the agenda. The sexualization of women in the media is also a major topic of debate. Crucially, we have moved from words to action in recent years, with the Swedish Parliament adopting comprehensive legislation addressing sexual violence, rape and harassment. The narrative has widened and there are many other public debates, in light of gender equality and the MeToo movement, on how to best continue to mainstreaming gender considerations into all aspects of Swedish policies and society.

The feminist foreign policy was first launched by Foreign Minister Margot Wallström in 2014, to respond to the status of gender inequality in the world. The policy choice was first met with mixed reactions but is now mostly acknowledged with interest and appreciation. Our former Foreign Minister Wallström often quotes: "First they ignore you, then they laugh at you, then they fight you, and then you win."

We are slowly moving in the right direction on many fronts, but huge gaps and challenges remain. Systematic subordination, oppression and violence still mark the daily lives of countless women and girls around the world. The COVID-19 pandemic jeopardizes the fragile gains that have been made on gender equality. This year, we have seen an increase in gender-based violence, unemployment in sectors dominated by women, and increased stress and hazards in health care, where women make up 70 per cent of workers globally.

Swedish Feminist Foreign Policy

The feminist foreign policy is based on the

Professor Ronán Long and Ambassador Helen Ågren at the Third WMU International Women's Conference: Empowering Women in the Maritime Community, Malmö Sweden, 2019.

"Three Rs", or more accurately the lack of them in society.

1. Lack of Rights

Discrimination against women and girls means that they, still today, do not enjoy equal human rights. Take the right to education for example: it is true that more girls are going to school today, but at least 63 million are still denied basic education. Girls and women in many parts of the world do not have the right to decide about their lives. Every day, 47,000 girls under the age of 18 are married off by their family members. And one in three women worldwide has experienced physical or sexual violence.

2. Lack of Representation

Discrimination against women and girls means that they, still today, lack representation in all aspects of society and thereby lack influence to shape society. Major decisions are made without the participation of women. This is most obvious in peace processes. Additionally, across the world – and in most governments and international bodies – the highest positions are still held by men. Sweden, for example, has not yet had a female Prime Minister. And to take, for example, the Commission on the Limits of the Continental Shelf – one of the bodies established by the United Nations Convention on the Law of the Sea – all 21 members elected for the years 2012 to 2017 were men. In 2017, the first female member was elected, Dr. Wanda-Lee De Landro-Clarke from Trinidad and Tobago.

The same situation can be observed in the private sectors. For example, at the Stockholm Stock Exchange, only around 10 per cent of the companies have a female CEO.

Isabella Lövin, Deputy Prime Minister of Sweden (2016 – 2021) & Ambassador Helen Ågren

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when it comes to ocean science and governance. Clearly, we need to demand and secure gender mainstreaming in the planning, implementation of all initiatives associated with the UN Ocean Decade. There are several areas in which a gender focus could be introduced or enhanced.

First, we should use a gender lens when identifying knowledge gaps and challenges, and setting priorities for sustainable development in the ocean sector. For instance, which gender aspects are relevant when we study sources of pollution (land and sea), their potential impacts on human health and ocean ecosystems? Are there any specific products or sectors that require more gender-based analysis? Are we using the average male as a norm when we look at the potential human health impacts from pollutants, such as the threshold values for toxic substances in seafood? Do we need to apply a gender perspective when we analyse and develop solutions?

Second, we should support and promote the gathering of sex- and age-disaggregated data and statistics when studying social and economic issues in relation to the ocean and the ocean-based sectors. Without this data, it would be difficult to develop solutions that can benefit both men and women equally; that take into consideration the experiences of different parts of the population.

Third, transforming data and knowledge to sustainable solutions and policies requires not only substantial expansion of ocean science capacity, but possibly also the empowerment of women in other areas, such as leadership or finance and economics. A holistic perspective on ocean science and other related competencies are needed to get the most out of the UN Ocean Decade.

Fourth, we should secure representation and participation in a more gender-equal manner in different ocean bodies and processes, including decision-making bodies.

The Swedish Government is currently developing its strategy for how it could contribute to the UN Ocean Decade. It is important to strengthen our work at the national and subnational level, and to contribute to other regional and global efforts to promote gender equality and empower women and girls. We are working to develop a framework and also to coordinate the functions for Swedish stakeholders to contribute and meet the wider agenda to ensure that the UN Ocean Decade is a success, including with respect to gender-specific targets and empowerment initiatives.

3. Lack of Resources

As is well documented in specialist studies, most countries have at least one legal difference between men and women that has the effect of limiting women's opportunities for resources. For example, women may lack rights to inheritance, land, and other access to resources.

Sweden wants to put an end to this discrimination against women and girls. Through its feminist foreign policy, Sweden has broadened its work in development cooperation and for the rights' agenda to include all the other parts of the foreign policy agenda. Using the three R's, Sweden is striving to mobilize the whole Foreign Service, including our embassies worldwide, to raise the issue of gender equality and drive this agenda forward. This approach means that the feminist foreign policy is not a fixed package. It keeps developing with the needs and with the challenges.

Implications for the UN Ocean Decade

Based upon our experience in Sweden, it is easy to conclude that without access to basic education, sexual reproductive health and rights, equal pay, access to childcare, and increased equality when it comes to domestic work, it would be difficult to achieve equal representation and resources

Gender Equality in the Context of the United Nations Decade of Ocean Science for Sustainable Development

Ariel Hernán Troisi

Chairperson, Intergovernmental Oceanographic Commission (IOC) of UNESCO

Gender equality is a human rights principle, a precondition for sustainable, people-centred development, and a goal in and of itself. Gender equality means equal rights, responsibilities and opportunities for women, men, girls, and boys. It implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men.

For the United Nations Educational, Scientific and Cultural Organization (UNESCO), gender equality is one of its two global priorities. UNESCO's vision of gender equality is in line with relevant international instruments, such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Beijing Declaration and Platform for Action. It is also informed by reflections concerning the post-2015 development framework.

In this context, the Intergovernmental Oceanographic Commission (IOC) of UNESCO works towards providing strong role models for women in science, building the capacities of women in ocean-related disciplines, and supporting the unique contributions of men and women to generation and dissemination of scientific knowledge to advance sustainable development, stop and revert the decline of the ocean's health, and contribute to the

sustainable management of the ocean. The Global Ocean Science Report (GOSR) offers a global record of who, how, and where ocean science is conducted: generating knowledge, helping to protect ocean health, and empowering societies to support sustainable ocean management in the framework of the United Nations Agenda 2030. The GOSR identifies and quantifies the key elements of ocean science at the national, regional and global levels, including workforce, infrastructure and publications.

Before GOSR there was no global mechanism for assessing and reporting on the level of human capacity, technology and investment, and the needs of nations in ocean and coastal science, observations and services.

The first edition of GOSR, published in 2017, is the first collective attempt to systematically highlight opportunities as well as capacity gaps to advancing international collaboration in ocean science and technology and providing information relevant for the Sustainable Development Goal 14, target 14.a on scientific knowledge, capacity development and transfer of marine technology.

One of the key findings of the GOSR 2017 report is that there is more equal gender balance in ocean science than in science

overall. The results of the survey indicated that female scientists comprised on average 38 per cent of the researchers in ocean science (IOC-UNESCO, 2017¹), about 10 per cent higher than the global share of female researchers (UNESCO Science Report; UNESCO, 2015²).

Using data extracted from lists of participants in international conferences and symposia between 2009 and 2015, the GOSR 2017 shows that there was either parity or stronger representation of men in all the ocean categories and regions under consideration. Parity was reached, for example, in the ocean science category “human health and wellbeing”, while in other categories such as “ocean technology and engineering” and “ocean observation and marine data” women made up less than 25 per cent of participants.

Another finding of GOSR 2017 was that new ways of empowerment were needed, tailored to ocean science and its categories, taking into account country specifics. It was also concluded that gender equality should be an integral part of capacity development actions and initiatives in every field of ocean science. The GOSR 2020 edition is being framed

around and to feed into the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade) 2021–2030. It will provide critical baseline information on existing human and technical capacity before the Decade begins, and its new focus areas include an extended gender analysis in ocean science human resources. GOSR 2020 gives results in terms of gender balance in ocean science compared to science overall that are similar to those in the GOSR 2017. The average proportion of female researchers in ocean science was 38 per cent of the total.

However, analysis of the same categories and regions as in GOSR 2017 found that the proportion of female participants in international conferences and symposia between 2015 and 2018, by ocean category and by region, was always higher than in the previous assessment (2009 to 2015). The key issues raised by the GOSR 2020³ include the child-care conference conundrum faced by parent-researchers. Mothers are very often at a disadvantage because of biological, prejudicial and socially driven childcare demands – in particular pregnancy, breastfeeding and childminding.⁴ This will require actions such as developing family-friendly environments (e.g. childcare grants and on-site childcare), as well as establishing codes of conduct, including anti-harassment policies.

In order to overcome existing limitations and barriers, efforts should be made to mainstream strategies to enforce gender equality in the organization of conferences, to ensure that female scientists are guaranteed proper visibility as featured speakers, as well as to achieve the required representation of female scientists in all categories of ocean science (currently, female scientists are under-represented in areas such as ocean crust and marine geohazards, and ocean observations).

Furthermore, to allow business and policy stakeholders to benefit from the intellectual potential of women, efforts will be required to feature women in ocean science and to promote their research; this is currently

1 Valdes, Luis (2017) *Global ocean science report: the current status of ocean science around the world*, Intergovernmental Oceanographic Commission. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000250428_eng.

2 United Nations Educational, Scientific and Cultural Organization (2015) *UNESCO science report: Towards 2030*, UNESCO. Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000235406>.

3 IOC-UNESCO. 2020. *Global Ocean Science Report 2020—Charting Capacity for Ocean Sustainability*. K. Isensee (ed.), Paris, UNESCO Publishing. Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000375147>.

4 Rebecca M. Calisi and a Working Group of Mothers in Science PNAS March 20, 2018 115 (12) 2845–2849; first published March 5, 2018; Available at: <https://doi.org/10.1073/pnas.1803153115>

neglected. It is indeed imperative to continue gathering gender-disaggregated data on ocean-related sciences, as it is not possible to manage properly that which we do not measure.

Mainstreaming gender equality throughout the UN Ocean Decade will help ensure that, by 2030, women as much as men are driving ocean science, observations and management, helping to deliver the Ocean We Need for the Future We Want. In this respect, the UN Ocean Decade is based on the key principles of inclusivity, equity and diversity, and strives to identify and remove barriers to gender inequality throughout all its elements, from the composition of the governance structures to decisions on endorsement of projects or actions.

The UN Ocean Decade will make significant contributions to a large number of UN Sustainable Development Goals including SDG 5 on gender equality. It will do this by enhancing opportunities for women and girls in ocean science, promoting ocean literacy initiatives, and raising the profile of female ocean scientists and professionals. In this regard there will be a specific focus on least developed countries (LDCs) and small-island developing states (SIDS). The capacity development principles and strategic approach of the Decade make specific

reference to the need to redress gender imbalance at all levels, from schools to higher education and professional development.

The UN Ocean Decade further aims to increase the attractiveness and accessibility of ocean science professions to girls and women by providing the right skills and increasing awareness of the opportunities that exist. From the outset, a number of events have been planned to facilitate discussions within the Decade community about gender issues and the specific ways in which the Decade can achieve its goal of gender inclusivity and equity. These include a dedicated webinar on gender issues as part of the Virtual Ocean Decade Series, and a celebration of ocean science as part of UNESCO's Girls in Science day in February 2021.

Quoting UN Secretary-General, António Guterres, on the World Oceans Day 2019,

“Governments, international organizations, private companies, communities and individuals are urged to promote gender equality and the rights of women and girls as a crucial contribution to meeting ocean challenges”.

PART I – OVERVIEW

Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development Programme

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The World Maritime University (WMU) is a postgraduate university founded in 1983 within the framework of the International Maritime Organization (IMO), a specialized agency of the United Nations. As IMO's the focal point for capacity-building, WMU's mission is to be a world-class centre of excellence in postgraduate maritime and oceans education, professional training and research, with a particular emphasis on promoting sustainable development.

The research and capacity-building programme on Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development (the Programme) is generously supported by the Department of Fisheries and Oceans Canada (DFO). The Programme is delivered through the WMU-Sasakawa Global Ocean Institute (GOI), an integral part of WMU, established in 2018. The GOI undertakes research, education and capacity-building on issues of global importance with particular reference to the UN 2030 Agenda for Sustainable Development. The research work under the Programme is conducted by an interdisciplinary team, including faculty and research staff at WMU, a legal and governance trained Post-Doctoral Fellow

and a senior gender research expert, as well as two PhD student researchers, whose inclusion supports the capacity-building goal of the Programme.

The Programme has two separate, but interrelated strands of research, both of which relate to women and ocean science. The Programme will endeavour to promote gender equality in ocean science activities at all levels, including indigenous communities. The first strand of research pertains to the role of gender equality and the empowerment of women in the conduct and delivery of ocean scientific research, in particular biological and physical sciences. These disciplines include, for example, fisheries science, oceanography, and the scientific investigation of climate change on the oceans. This will complement existing international initiatives underway, including those conducted under the auspices of Intergovernmental Oceanographic Commission (IOC) of UNESCO and the International Seabed Authority (ISA), in the broader context of the United Nations Decade of Ocean Science for Sustainable Development (the UN Ocean Decade). This avenue of research will seek to identify barriers to the participation of women in

the conduct and delivery of ocean science, along with formulating strategies to remove or overcome these barriers. Ultimately, the objective of this aspect of the research is to assist in creating professional pathways that eliminate bias against women and advance gender equality and empowerment of women, and thus enhance women's participation in ocean science.

The second strand of the research relates to the role of women in the delivery and use of ocean science in ocean policy and governance processes. This includes the role of women in the mediation of ocean science outcomes for regulatory or advisory purposes, including by means of ocean science diplomacy. This aspect of the research focuses on recognizing the role of women in the management of marine spaces, ecosystems and resources – contributions that are often underplayed or ignored. Moreover, the research will explore and promote the role of women in ocean science governance bodies where women scientists are woefully underrepresented, particularly in leadership and decision-making roles. The research will identify barriers to women's participation and explore options to overcome these obstacles. The objective of this strand of research is to develop tools

and strategies that advance gender equality and the empowerment and participation of women in ocean science and ocean science-informed governance more generally.

It is envisaged that the research under this Programme will involve a comprehensive and systematic critique of the scholarly literature, as well as contributing to that specialist literature. It will also include a thorough survey of the practice of major international bodies and non-governmental organizations to understand the status quo of gender equality in ocean science. The research team will work closely with the Programme implementation partners and consult and engage with the High-level Advisory Group and stakeholder forums to generate best practices and identify opportunities for women's empowerment. The research outcomes will ultimately inform the formulation of a proposed Strategy and Action Plan for women's empowerment in the UN Decade of Ocean Science for Sustainable Development.

Launched during the preparation phase of the UN Ocean Decade (2018-2020), the Programme aims to provide a strong foundation to promote gender equality and the empowerment of women in ocean science through 2030.

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A local scientist from South Africa joining a research survey with *Dr Fridtjof Nansen* in the east coast of South Africa in 2018.

Gender Equality at the Heart of the United Nations Decade of Ocean Science for Sustainable Development

Francis Neat

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Recent decades have seen heightened international concern about the state of the world's ocean and a growing awareness of humankind's fundamental dependence on the ocean for supporting all life and the global economy. This realization was brought to a head in 2016 at the United Nations, with the publication of the First World Ocean Assessment that concluded that we were rapidly running out of time to manage the oceans sustainably. The following year, in response to this, and in recognition of the role of science in sustainable ocean management, the United Nations General Assembly announced that a Decade of Ocean Science for Sustainable Development would begin in 2021 and run through to 2030. The United Nations Educational, Scientific and Cultural Organization's (UNESCO's) Intergovernmental Oceanographic Commission (IOC) was tasked with coordinating the "UN Ocean Decade" with the overall aim of developing the science we need to transform the ocean we have into the ocean we want. The ocean we want should be clean, safe, healthy, diverse, productive, accessible and engaging to all.

The UN Ocean Decade aims to catalyse all areas of ocean science, generate knowledge, create opportunities for sustainable ocean business and reverse the decline in global ocean health. The UN Ocean Decade is a convening framework for scientists and

stakeholders from all ocean sectors, who have the common goal of delivering practical science-based solutions to achieve the UN Sustainable Development Goal 14 (Life Below Water) and the 2030 Agenda.

Central to the achievement of the transformational vision and ambitions of the UN Ocean Decade is human behavioural change, and at the heart this lies equality, diversity and inclusivity. The history of ocean science is far from equal, diverse and inclusive and there are many challenges that remain to be overcome with respect to ethnic diversity, gender equality and developing country capacity development. The Decade implementation plan directly addresses this and highlights the need to "strive for generational, gender and geographic diversity in all its manifestations". Gender equality transcends ethnicity, geography and age, and as such is the most fundamental aspect of societal equality.

The UN Ocean Decade offers an unprecedented opportunity to fast-track gender equality in ocean science at all levels, and to achieve it by 2030. This means building gender equality into its implementation and action plans as a cross-cutting principle at the core of its operations and endorsements. To ensure that the Decade succeeds in this respect, dedicated and independent gender studies and research are needed to collect baseline gender-disaggregated data,

Catching, tagging and releasing a common skate to understand their movements and genetics within a marine protected area in Scotland

to monitor and evaluate the impact of the action plans, and to actively promote the cause. The WMU Empowering Women for the UN Ocean Decade Programme, in many ways a pilot programme, has set that action in motion and has the ambition to pave the way for a more powerful and comprehensive research programme to ensure that the Decade achieves the goal of gender equality at all levels of ocean science by 2030. The project is working directly with IOC-UNESCO and with key inter-governmental

organizations and institutions involved in designing, implementing and supporting the UN Ocean Decade. The research aims to collect baseline data on gender balance and investigate barriers to participation for women and the difficulties women face in career progression. Ultimately the research seeks to provide solutions to overcome such challenges and catalyse change within the institutions to strive toward gender equality and drive the UN Ocean Decade toward its goals.

Introduction to Gender Equality in Ocean Science

Susan Buckingham

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Science is gendered in many different ways: in who does it, who services it and in the matter of the science itself. Many people involved, however, think that science is not gendered at all and, further, that scientific achievement is simply rewarded “on merit”. Ocean science is no different to all other physical and natural sciences in this. The following considers gender equality, and exposes how concepts such as merit, and the repetition of singular and poorly defined statistics, can serve to undermine equality. It then reflects on how more attention to sex and gender in research methodologies can make them stronger, and proposes how feminist theories that recognise the researchers’ subjectivity can make for more robust science.

Numerical and Substantive Equality

European data for science and engineering show that there is a marked discrepancy in who studies at different levels, and that the gender gap widens with seniority in the research job market.¹ The gap is narrowing,

but so slowly that it will be many decades before numerical equality is achieved.

Globally, the Overseas Development Institute (ODI) reports that 35 per cent of science, technology, engineering and mathematics (STEM) students in higher education are women, but that this average contains significant variations, from more than 50 per cent in some Latin American and Middle Eastern countries to below 20 per cent in other world regions.² Because of a dearth of routinely collected sex-disaggregated data, spurious figures achieve apocryphal status in a short space of time. Take, for example, the 38 per cent that is claimed with increasing authority to be the share of women in ocean science, and sometimes used to argue that ocean science’s performance is “better” than other sciences, when it was merely a count of women who attended ocean focused international conferences.³

But while numerical equality is a start, it is not enough as it does not guarantee that women have an equal voice and the same status as men, nor equal decision-making

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- 1 European Union, Directorate General for Research and Innovation. *2018 SHE Figures 2018 – Gender in Research and Innovation*, available at: <https://data.europa.eu/euodp/en/data/dataset/she-figures-2018-gender-in-research-and-innovation>.
 - 2 Marcus, R., 2020 *Reducing gender inequalities in science, technology, engineering and maths*. London: ODI, available at: <https://www.odi.org/blogs/16653-reducing-gender-inequalities-in-science-technology-engineering-and-maths>.
 - 3 IOC-UNESCO. 2017. *Global Ocean Science Report - The current status of ocean science around the world*. L. Valdés et al. (eds), Paris, UNESCO Publishing. 24, available at: <https://unesdoc.unesco.org/ark:/48223/pf0000250428>

Underwater Lab

power. Being the only woman in the room – or on the boat – can put a huge burden on that woman to be the lone spokesperson for her sex, and is often isolating. A “critical mass” of women is thought to provide the supportive context necessary for women (or any minority group) to be able to contribute openly and confidently. Asking how much is a “critical mass” is a bit like asking how long is a piece of string, but for a while it has been considered somewhere around 30 per cent. The European Commission’s policy regarding research is now to aim for a gender balance of between 40 per cent and 60 per cent.⁴ The EU formally adopted gender mainstreaming a year after the 1995 UN Beijing Platform for Action on Women recognized the need for gender equality to be considered at every stage of policy making. Together with Chapter 24 of Agenda 21, adopted by the United Nations Conference on Environment and Development in 1992, the Platform for Action stressed the importance of gender equality in environmental decision-making: to respect women’s own and collective experiences of managing the environment as well as their particular exposures to environmental problems. The

United Nations Decade of Ocean Science for Sustainable Development comes rather late (by almost 30 years) to considering and promoting gender equality, but hopefully one advantage of this is being able to learn from the experiences of implementing Agenda 21, the Platform for Action, and much more recently the Gender Action Plan agreed by the UNFCCC in 2014. None has been plain sailing.

Intersectionality

Like numerical equality, on its own, critical mass is not enough either. Who exactly are the women forming the critical mass? If none of them has children, or other care responsibilities, and they have had a smooth and uninterrupted career (not unlikely since it is difficult to navigate an academic career while taking maternity leave, and being available for collecting children from school and various activities – Scandinavian parental support notwithstanding), then is this real equality? Making space at the table, in the lab or on the boat for women needs to engage with how to enable flexible working, as well as how to make spaces safe for all

4 For an example of the “critical mass” thought necessary, see WISE on STEM subjects, 2019, available at: <https://www.wisecampaign.org.uk/news/wise-says-uk-needs-30-of-women-in-core-stem-as-it-publishes-its-annual-analysis-of-ons-data/>; for EU policy on gender balance in its research programmes, see EU, 2020, available at: <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/promoting-gender-equality-research-and-innovation>.

women: women with caring responsibilities as well as those with none; women from indigenous communities and from different ethnic and religious traditions; women of all sexual orientations; trans women as well as cis women; women with different physical abilities; and so on. Of course, this is necessary for men too, and changes of policy regarding inclusiveness and flexible working also favour men who have also been marginalized by their family responsibilities, race, ethnicity, sexuality or disablement. It also enables men with partners to share family and household responsibilities fairly.

Gender Equity and Equality

Working towards gender equality requires gender equity; that is, creating the conditions for women to achieve equality, not treating women as if they were replicas of the current dominant group of men. Gender equity therefore recognises that care responsibilities often prevent women from taking on a particular role, or going for promotion. One strategy to achieve gender equality is the Scandinavian model of providing parental leave that is protected for men and women separately, thereby enabling the sharing of caring. The UK research assessment exercise allows for new parents (overwhelmingly mothers in the UK context) to submit fewer research outputs in recognition of maternity leave (paternity leave is still much shorter). Recognizing that menstruation can be debilitating for some women, some countries (e.g., Japan, South Korea, Taiwan, Zambia) have legislated for “period leave” which does not erode available sick leave.

All environments in which ocean scientists work should be safe and respectful, from higher education, research and policy-making institutions, to external conferences, meetings and field work settings. Creating a safe place for women to work requires men to behave in respectful ways towards women, as well as towards each other. There need to be clear guidelines for appropriate behaviour, and penalties for infringing this, including channels through which women can safely complain without compromising their careers. A recent report from a scientific polar research ship, which cautioned women on board not to wear “tight clothing” on the grounds that it might become a “health and

safety” issue for women living amongst men who would not be able to control themselves on a long voyage, seems to treat safety and freedom from attack as a personal responsibility for the potential victim.⁵

A Question of Merit?

All of this requires us to question how the “merit” and competitive tendency which candidates display in order to get the PhD scholarship, early career job, professorship, committee membership or promotion might be gendered. “Merit” can be seen as a quality which reflects those who are doing the selection and recruitment; a narrow view of the experiences and mindset needed for multidisciplinary research, such as research on ocean sustainability. Arguably, we rely on conventional forms of “merit” in a perilous time of environmental catastrophe, not least for the oceans, to our detriment. It has not been able to prevent us from reaching this point. We therefore need as diverse and eclectic a range of views and approaches as possible to transform the ocean from “what we have, to what we want”.⁶

So, what does “merit” in a research career look like? If the answer is continuous employment with linear progression, studying or working in “prestigious” universities, regular and frequent output of research papers, and leadership of research projects, then this is likely to work against women, as it works against all indigenous expertise and those from black and minority ethnic backgrounds. Indeed, reviews of IPCC authorship and US environmental organizations find these dominated by a majority of white males. The lack of women, particularly women of colour, and of indigenous people cannot adequately be explained by an absence of “merit”.⁷ Genuine merit would reflect a much richer and diverse range of experience and expertise in appointments, promotions, publications and so on.

Sex and Gender in Research

Without the habit of thinking about sex and gender in research, it is easy to assume that it would not feature in marine research. Even setting aside issues of who does the research and how their subjectivity might

5 Harvey, C. 2020 No “hot pants”: Sexist rules for women on Arctic expedition *E&E News* September 8, 2020, available at: <https://www.eenews.net/stories/1063713099>.

6 Intergovernmental Oceanic Commission, 2020. *The Science we need for the ocean we want. The United Nations Decade of Ocean Science for Sustainable Development*. IOC-UNESCO.

7 Gay-Antaki, M. and Liverman, D. 2017 “Climate for women in climate science: Women scientists and the Intergovernmental Panel on Climate Change” *PNAS* 115,14: 2060-2065; Taylor, D. 2014 *The State of Diversity in Environmental Organizations* Green 2.0 Working Group.

influence the research parameters (everyone – even scientists – starts from somewhere, from the time they identify the research topic), recognizing the sex of what and who is studied is material.

This approach characterized political ecology, which studied power relations governing local ecologies by studying the (male) “head of household”, commercial farmer, or village chief. It was not until feminist political ecologists started asking questions about gendered power structures and women’s (often unpaid) work that a fuller picture of how power intersected with local environments emerged.⁸ Gendered Innovations – the web-based resource which has pioneered gender sensitive research awareness – charts numerous research projects which have ignored sex to the detriment of their research. For example, it reports that there is less known about disease processes in females because female animals are less used than males in research. Further, studies in males have been found to be generalized to females and conditions that occur more often in women compared to men have been studied in mostly male animals.⁹ In fact, one of science journalist Angela Saini’s interviewees for her book *Inferior* told her that “studying one sex is as good as studying the other” (to which Saini added, “the other being usually male”).¹⁰

This tendency has also been noticed in marine sciences, where there is a lack of sex-disaggregated data. Despite marine organisms having different reproductive attributes (female, male, hermaphrodite), sex is rarely noted as a characteristic when studying the impact of environmental conditions on organisms. For example, while the few studies that have studied sex and response to environmental conditions have found a persuasive link (ocean acidification and global warming have resulted in higher female to male ratios in oysters and turtles, respectively), only 3.9 per cent of ocean

acidification studies assessed sex-based differences.¹¹ This has implications for our understanding of these organisms under changing conditions, and possibly of ourselves.

It Matters What Ideas We Think Other Ideas With¹²

Feminist researchers were the first to insist that all researchers start from somewhere – they are not gods - and this “somewhere” will influence them to a greater or lesser degree. The previous section has illustrated the outcomes of partial perspectives. It is actually more honest to clarify those starting positions, so that readers (and indeed, the scientists themselves) can recognize potential biases and influences. Dorothy Smith wrote about the impossibility of knowing the world from anywhere other than within that world; Donna Haraway claims a feminist objectivity which recognizes where you are seeing from, and how this can only be partial. Evelyn Fox Keller argued that a “feminist empiricism” should strive to introduce “the female into science as part of what should be studied, who studies it and how it is studied”. More recently, Sandra Harding has advocated a “strong” or “maximal” objectivity in collecting and interpreting data within its social context.¹³

So, to launch the United Nations Decade of Ocean Science for Sustainable Development in a way which empowers women and strives for gender equality, we should do no less than ensure that women and men from a wide range of backgrounds fairly share all research and governance positions. We need to consider the sex and gender perspective in all research, while admitting to our subjectivities so that we can conduct and write honest, robust science that benefits all the societies that we can collectively represent.

8 Rocheleau, D., Thomas-Slayter, B. and Wangari, E. 1996 *Feminist Political Ecology, global issues and local experiences* London: Routledge; Rocheleau, D. 2015 “A situated view of feminist political ecology from my networks, roots and territories” in Harcourt, W. and Nelson, I.L Eds *Practising Feminist Political Ecologies* London: Zed Books pp29-66.

9 Gendered Innovations in Science, Health and Medicine, Engineering, and Environment, Animal Research: Designing Health & Biomedical Research, available at: <http://genderedinnovations.stanford.edu/case-studies/animals.html>.

10 Saini, A. 2017 *Inferior: The True Power of Women and the Science that Shows It* London: 4th Estate, p57.

11 Gender Action, 2020 Healthy Oceans, Seas, Inland Waters...and its gender implications European Union: Gender Action, available at: https://genderaction.eu/wp-content/uploads/2020/09/HE_Mission_Oceansgender.pdf.

12 Haraway, D. 2016 *Staying with the Trouble – making kin in the Chthulucene – Experimental Futures*. Durham, North Caroline, USA: Duke University Press.

13 Smith, D. 1974 “Women’s perspective as a radical critique of sociology” in Keller, E.F. and Longino, H.E. eds 1996 *Feminism and Science* Oxford: Oxford University Press; Haraway, D. 1991 *Simians, Cyborgs and Women* London: Free Association Books; Keller, E.F. 1982 “Feminism and Science” in Keller, E.F. and Longino, H.E. eds (1996) *Feminism and Science* Oxford: Oxford University Press; Harding, S. 2015 *Objectivity and Diversity: Another Logic of Scientific Research* Chicago, IL: University of Chicago Press

Lessons from the Maritime Sector

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Gender equality has been a long-standing issue in the maritime sector. The sector has been characterized as extremely male-dominated. For example, the number of women seafarers is estimated as 1 or 2 per cent of the total seafaring population.¹ Surprisingly, this figure has not improved over the last 28 years. The maritime sector showcases how difficult it is to remove barriers to achieving gender equality over decades.

Indeed, the maritime industry presents a pattern of horizontal gender segregation, with women in the minority in the sector. Oceans are generally perceived to be a male territory of work despite the fact that a considerable number of women engage in seafood harvesting, diving (for example, in Japan and South Korea), fish processing and selling, and other aquaculture industries. Generally, working at sea or in port is regarded as physically demanding. Today, due to automation and shore-based remote operating systems, this myth is no longer true of all tasks at sea or in port. The number of women in shore-based maritime sectors is increasing, while the number remains low for sea-going professions. The WMU's MSc students are all maritime experts in their respective countries, and in the Class of 2021

female students account for 3 out of 9 in the port management specialization, and 7 out of 13 in the ship management and logistics specialization. Likewise at undergraduate level, at maritime education and training institutions around the world, logistics and management courses tend to attract more women (about 30 per cent) than navigation (about 10 per cent) and marine engineering (about 10 per cent) courses.² Why are sea-going careers not attractive to women, compared to shore-based maritime careers, like ship management?

Seafaring reflects a masculine or very macho culture, which assumes that women are not suitable for working at sea. Gender stereotypes exist, and sexual harassment is occasionally reported but often untold. In 2017, more than 1,150 Swedish women seafarers shared their stories of serious harassment through the Swedish #MeToo (#lattaankar). It is not easy for only one woman to work at sea among male colleagues and be accepted as part of the crew. Women seafarers tend to be careful about their behaviour and attitudes so that they are not considered "trouble-makers". In such a work culture, what is not acceptable ashore (such as harassment, bullying and discrimination by gender, race,

¹ See the IMO's gender programme available at: www.imo.org/en/OurWork/TechnicalCooperation/Pages/WomenInMaritime.aspx, as well as the BIMCO/ICS Manpower Report (2015).

² Country reports from the IMO Regional Conference on the Development of a Global Strategy for Women Seafarers, 16-19 April 2013.

and nationality) can be compromised at a personal level for the sake of job security.³ These workplace problems should be dealt with by employers, namely shipping companies. Why is this so difficult?

Survey data collected from shipping companies operating in Malaysia reveals that out of 15 shipping companies, only two companies adopted a gender-equal employment policy and only two (one with and the other without the policy) recruited women seafarers.⁴ Shipping companies are not always keen to hire women seafarers, because women may be seen as socio-cultural risk factors. First, women's entry to a male world may create a disorder to the shared male identity at work and their gender reminds of the existence of a heteronormative sexuality. Second, shipping companies may believe without justification that women are more vulnerable to accidents and work difficulties, and thus could feel their presence as additional burdens and unwanted responsibilities. As Pateman's sexual contract theory explains, a woman's "body" as a bearer of sexuality becomes an important element of her employment contracts in male-dominated work environments, such as the maritime sector.⁵

This concern about the "body" can be extended to seafarers in general. Seafarers are expected to be healthy and must present medical proof to guarantee their good health before going on board. Once they work on ships, it is again their responsibility to maintain their healthy body. If they get sick or injured, they will be simply replaced with a new healthy crew member at the next port. In other words, an unproblematic body is an individual problem and the current system favours shipping companies in avoiding their responsibilities over the crew and exploiting seafarers as a disposable commodity. In this employment practice, the efforts by the companies to develop human resources tend to be low and facilitating and thus, prioritizing gender equality is difficult. Industry-level coordination is necessary to co-develop gender equality policies and implementation plans. In addition, governments should encourage shipping companies to promote gender equality and create incentives and rewards to role models of the industry.

The maritime industry's attitude of not welcoming women professionals seems to affect how the industry communicates with women and girls about their career opportunities. Indeed, women and girls are often not informed about the maritime industry as a career choice. Like ocean and marine sciences, maritime sciences are one of the academic disciplines for those who wish to work in the maritime industry after graduation. They include courses of navigation, engineering, logistics and business. Here, it is interesting to note that maritime sciences are frequently called marine sciences, but are different from oceanography, marine biology, and other aquatic sciences. The courses offered by maritime education and training institutions may be called marine engineering, marine transport and logistics, marine insurance, marine pilotage, marine salvage, marine accident investigation and so on. At the Shanghai Maritime University, women cadets who enrolled in BSc navigation or marine engineering courses were required to take 12 additional units in international shipping management and pay double the tuition fees of male cadets. This different expectation for women cadets came from the assumption that women were unlikely to be hired by shipping companies after graduation, and

- 3 Carballo Piñeiro, L. & Kitada, M. (2020). Sexual harassment and women seafarers: The role of laws and policies to ensure occupational safety & health. *Marine Policy*, 117, DOI: 10.1016/j.marpol.2020.103938.
- 4 Ong, H. A. (2019). *Gender equality in the Malaysian Maritime Sector: Religious influence on empowering women at sea*. MSc dissertation. WMU.
- 5 Pateman, C. (1988). *The Sexual Contract*. Stanford University Press.

thus women needed another degree to safeguard their employment in the maritime sector.⁶

This general discouragement to women entering the maritime sector also implies a lack of support for the retention of women professionals in the industry. Women cadets and early-career seafarers often find it difficult to continue working at sea when they are married or have children. Absence from home for several months is considered to be a challenge in work-life balance. Many women seafarers quit working at sea and find a shore-based job when they have family to look after.

This “interruption” phase of women’s maritime career paths also acts as a barrier to them pursuing higher ranks, such as Captains or Chief Engineers. Though promotion in the ship hierarchy is open to both women and men, women are unlikely to climb the ladder to the top of the echelon, because of socio-cultural expectations of gender roles and women’s decisions to prioritize family over work. Holding the highest rank of work experience at sea often helps seafarers to find a well-paid job and senior position in the shore-based maritime industry. Women – who are likely to lack this status and experience – are generally disadvantaged when it comes to finding work with decent salaries.

In summary, there are various barriers to women in the maritime sector, including the occupational culture reflected by masculine norms and values, sexual harassment and discrimination, the lack of gender equality policies, and the lack of awareness and support of women to pursue maritime careers. Various initiatives have been launched to reduce these barriers and promote women in the maritime sector. One of the most significant initiatives was the International Maritime Organization’s (IMO) 2019 World Maritime Day theme: “Empowering Women in the Maritime Community”. Echoing the IMO’s theme, the Third WMU International Women’s Conference was held in April 2019 and resulted in a set of conclusions to drive actions among various stakeholders.⁷

The common challenge to understanding gender issues in the maritime sector is the lack of data from the training institutions to the industry, from seafarers and port workers to government workers and industry managers and decision-makers. Comprehensive analysis is needed of the issue, using a variety of methodologies, including quantitative, qualitative, legal, and indigenous approaches. With science-driven approaches, we will be able to discuss with evidence how gender equality is relevant to the future of the maritime industry.

6 Pike, K., E. Broadhurst, M. Zhao, P. Zhang, A. Kuje, N. Oluoha (2016). The Gender Empowerment and Multi-Cultural Crew (GEM) Project Report for the ITF Seafarers’ Trust. Solent University, available at: www.solent.ac.uk/research-innovation-enterprise/documents/gem-full-report.pdf.

7 WMU. (2019). *Third WMU International Women’s Conference on Empowering Women in the Maritime Community, Conference Report*. Available at: https://commons.wmu.se/lib_reports/62/.

Baltic Gender Project

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Solving the grand challenges lying ahead in the marine environment requires scientific excellence. This can only be achieved by harvesting the full capacities of women and men at all levels of research. However, like in most fields in natural science, women are underrepresented in marine sciences, especially in leadership positions. Despite the active policies and efforts of the past decades, there is a lack of progress in increasing overall institutional gender equality. Invisible barriers and gender-based bias still persist.

In the framework of the Baltic Gender project (www.baltic-gender.eu), eight scientific institutions¹ from five countries in the Baltic Sea region worked together towards the empowerment of women in marine sciences and the achievement of systematic institutional changes, particularly through the implementation of Gender Equality Plans (GEPs), over the course of four years (2016-2020).

By bringing the leaders of the future, the decision makers of today and agents of change together in various activities, and offering numerous opportunities for networking, Baltic Gender **empowered**

women and scientific communities in marine sciences. An international mentoring programme provided early-stage women researchers with personal guidance, opportunities for networking and financial support to secure additional qualifications. Numerous workshops and training sessions were organized in the institutions on various topics, such as unconscious bias, gender dynamics in recruitment, gender-conscious teaching and gender aspects in research projects. A spin-off initiative, stimulated by a Baltic Gender training series on sexual harassment, focuses on preventing sexualized violence on seagoing expeditions. A number of user-oriented products² developed by this initiative have been being tested on scientific cruises since August 2020. In addition, the careers of successful women scientists and engineers as role models, as well as the experiences of female and male researchers in sharing the care of children and elderly in the family, have been portrayed in a blog.³

An important source of insight and legitimacy for the work undertaken in Baltic Gender was the establishment of a set of **quantitative and qualitative indicators**⁴ against which actions could be assessed and gender-

1 Available at <https://www.baltic-gender.eu/consortium>

2 Hamann, Kristin, Lorenz, Nikole and Schroller-Lomnitz, Ulrike and GEOMAR Helmholtz Centre for Ocean Research Kiel, Briesse Schifffahrts GmbH & Co. KG, Team Gender Equality (2020) *Dealing with sexualized violence on expeditions*. Available online at: <https://oceanrep.geomar.de/49888/>.

3 Baltic Gender blog. Available at: www.oceanblogs.org/balticgender/.

4 Kısakürek, Basak (2019) *Updated handbook of gender-sensitive indicators in the Baltic Gender project*. Baltic Gender Coordination Office, Kiel, Germany. Available at: <https://oceanrep.geomar.de/48716/>.

related changes could be monitored. Data for the indicators were collected twice from review of the legal and policy frameworks⁵ in the partner countries were reviewed, and this was followed by in-depth analysis of the status of gender equality in the partner institutions using the indicators as well as questionnaires and interviews. Subsequently, Baltic Gender produced a detailed list of recommended actions for implementation of the GEPs. Following these recommendations, the marine institutes of the Estonian and Lithuanian partners implemented their first GEPs in autumn 2018. The other six partners, which already had GEPs at the start of the project, have incorporated the Baltic Gender recommendations during their institute-specific timelines of revision.

Baltic Gender facilitated **structural changes** through the identification and promotion of best practices in its partner institutions. At the mid-term of the project, a brochure⁶ was produced with best practice examples of actions and measures that support equal chances, gender-fair structures and transparent processes in marine sciences; whether in recruitment, decision-making or allocation of resources. Consequently, institution-specific recommendations were made to the partners on how to improve their structures. After one year, an assessment was made and a second brochure⁷ was published, which presented new gender equality measures that were developed in the final phase of the project by partner institutions.

Gender perspectives in the content of marine research were addressed via GenderWave,⁸ a new methodology that guides marine scientists through a set of questions and examples to help them contemplate how gender might be relevant for the design, implementation and outcomes of their projects. In addition, a handbook on gender-sensitive teaching⁹ was printed and provides a framework for lecturers in marine sciences as well as in other fields of science,

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technology, engineering and mathematics (STEM) to develop gender-sensitive curricula and teaching practices.

In summary, Baltic Gender has had a high impact via its engagement with its consortium partners and other stakeholders in marine sciences, as well as with interested members of the public. It has also been effective in creating high-quality and open access resources, which meet the needs of those who work to reduce structurally determined gender inequality. In particular, Baltic Gender has increased the visibility of gender equality and lent additional credibility to new and existing structures that support women in its partner institutions.

5 Thege, Britta and van Elsacker, Mareike K. (2018) *National Legislations on Gender Equality with a focus on the implementation of Gender Equality Plans in Higher Education: National Legislations on Gender Equality with a focus on the implementation of Gender Equality Plans in Higher Education*. Baltic Gender Coordination Office, Kiel, Germany. Available at: <https://oceanrep.geomar.de/43127/>.

6 Kamm, Ruth and Weber, Ines (2018) *Gender equality in marine sciences: Best practices on structural change*. Baltic Gender Coordination Office, Kiel, Germany. Available at: <https://oceanrep.geomar.de/44349/>.

7 Chiarinotti, Marta and Weber, Ines (2020) *Progress in gender equality: New practices on structural change in marine sciences*. Baltic Gender Coordination Office, Kiel, Germany. Available at: <https://oceanrep.geomar.de/50878/>.

8 Valve, Helena (2020) *GenderWave: A digitoal to support incorporation of gender perspectives into marine research and innovation*. Baltic Gender Coordination Office, Kiel, Germany. Available at: <https://oceanrep.geomar.de/50308/>.

9 Thege, Britta, Schmeck, Marike and van Elsacker, Mareike (2020) *Gender-Sensitive Teaching: An introduction for teaching staff in STEM*. Baltic Gender Coordination Office. Available at: <https://oceanrep.geomar.de/50001/>.

PART II – RESEARCH COMPONENTS UNDER THE EMPOWERING WOMEN FOR THE UN OCEAN DECADE PROGRAMME

Gender Mainstreaming in Ocean Governance and Science Bodies

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One of the key objectives of the WMU-GOI Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development Programme (the Programme) is to propose a Strategy and Action Plan to help deliver equal opportunities for full participation and leadership by women at all levels of ocean science and science-dependent governance systems.

The Programme has two main building blocks: a) the role of gender equality and the empowerment of women in the conduct of ocean science; and b) gender equality in the regulatory and ocean science governance systems that coordinate, manage and mediate ocean science. To undertake the research associated with these strands, the Programme has a dedicated gender

team composed of two PhD students, one Post-Doctoral Fellow, WMU professors and researchers, and an external gender expert.

The Programme envisions a diversity of outputs, including scholarly publications; the organization of international conferences and seminars; capacity building of the research team; and an action plan and blueprint on empowering women in the UN Decade of Ocean Science, among others.

Dr. Rodríguez Chaves focuses her work specifically on the second building block of the Programme. In this regard, the research explores the role of women in governance bodies that mediate the delivery of ocean science into policy action, and is intended to advise and promote transformative change

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Dr. Sylvia Earle visiting MarViva

actions. Therefore, engagement with key institutions on gender-related initiatives is critical.

In this context, the institutions addressed by this research strand include both intergovernmental organizations (IGOs) and non-governmental organizations (NGOs). The specific organizations covered are the International Seabed Authority (ISA), the Intergovernmental Oceanographic Commission (IOC) of UNESCO, the United Nations Food and Agriculture Organization (FAO), the United Nations Division for Ocean Affairs and the Law of the Sea (DOALOS), the Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), the High Seas Alliance (HSA) and the International Union for Conservation of Nature (IUCN).

The research includes a baseline study on key research issues relating to these IGOs and NGOs from materials and literature that are publicly available. A follow-up field trip for data collection with these organizations was delayed due to the travel restrictions imposed in response to the COVID-19 pandemic.

The following elements were prioritized to be identified within each of the IGOs and NGOs being studied:

- Gender policy and action plans.
- Gender focal points.
- Capacity building/education programmes.
- Official commitments on gender and oceans.
- Publications and events.
- Women's participation within governance structures and decision-making bodies/Member States.

So far, information has been examined from three of the IGOs, and the subsequent details in this section refer to IOC, ISA and FAO. All three IGOs have a **Gender Policy** in place and **action plans or strategies** regarding gender equality. Nevertheless, it would be desirable if updated statistics on the implementation of gender targets or indicators were reflected in their websites.

These IGOs have designated **gender focal points**. On this point, however, there are different formats on how such focal points operate. For example, ISA has a designated person and UNESCO's Gender Equality Division supports IOC's focal point mission, while FAO has a network of gender focal point officers at the Headquarters, and decentralized offices that devote a percentage of time to promoting gender equality in their technical areas of work.

All the IGOs have **capacity building/education programmes**, with some more specialized than others on marine science. In addition, all the IGOs have publications on gender equality, and organize various types of events to **raise awareness** on women's empowerment.

In relation to **official commitments on gender and oceans**, only ISA has a specific voluntary commitment to enhance the role of women in marine scientific research, submitted during the Ocean Conference in 2017. On the other hand, FAO and IOC adopted commitments responding to broader gender strategic objectives from United Nations agencies. Nevertheless, these IGOs need to actively work – jointly with their Member States – towards effective representation of women in decision-making bodies and senior leadership positions, as the information available in this regard shows fewer women holding such positions.

In closing, the Empowering Women for the UN Ocean Decade Programme is intended to promote transformative change on gender equality and women's empowerment in science bodies. This has vital international importance, as there is widespread gender blindness in the Law of the Sea and related instruments governing ocean science.

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PrepCom BBNJ Workshop, Costa Rica

Understanding the Role of Gender in the Practice of International Marine Science – The International Council for the Exploration of the Sea (ICES) as a Case Study

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I joined the WMU-Sasakawa Global Ocean Institute in November 2019 as part of the Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development Programme sponsored by DFO Canada. My PhD Research is tentatively titled *Understanding the role of gender in the practice of international marine science - The International Council for the Exploration of the Sea (ICES) as a case study*. ICES is an intergovernmental organization comprising 20 member countries, a platform for marine science coordination in the North Atlantic Ocean, and a network of more than 6,000 scientists. More than 1,500 experts participate every year in ICES' work. As the Coordinating Officer at ICES Secretariat, I am using an action research approach to help understand, evaluate and contribute to the gender-mainstreaming journey ICES has recently embarked on.

Research and Motivation

This workshop *Identifying Institutional opportunities and Challenges for Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development* is an important opportunity for promoting inter-institutional learning and knowledge exchange on gender mainstreaming in the intergovernmental institutions that contribute to ocean

governance. Reflecting back on the events that helped inspire my research proposal I can clearly see links with specific similar events, where the interaction between institutions helped to inspire me to help make change within ICES. At the September 2018 meeting of the ICES Executive Committee, it was agreed to specifically include reference to gender in the ICES Strategic Plan. Two months later, as part of LME:LEARN – a multi-partner project involving ICES that I was part of, funded by the Global Environment Facility – I attended the International Waters Conference, and there I participated in a workshop on the importance of gender-disaggregated data in a transboundary water system. That workshop helped me to understand ICES as “gender-blind” and that if one of the goals of the Strategic Plan is to be more gender-balanced, the only way to monitor progress is also by collecting gender disaggregated data.

In April 2019, as I helped the ICES General Secretary to prepare for her presentation at the Third WMU International Women's Conference on Empowering Women in the Maritime Community, I conducted a quick count (using one year of participation data) of the men and women in the decision-making committees of the organization. This preliminary analysis confirmed my impression that women are currently

underrepresented in leadership positions, national representation (20 per cent female representation), as well as the Chairs of Expert Groups (30 per cent female representation).

The United Nations Decade of Ocean Science for Sustainable Development is an opportunity to move towards greater gender equality in ocean sciences to help provide the enabling conditions for the transformational science needed to contribute to the 2030 Agenda for Sustainable Development and to help secure ocean health. ICES is also considering what role it will play in contributing to the aims of the UN Ocean Decade.

Objectives of my research:

- To examine the role of gender in international marine science research in the North Atlantic Ocean;
- To raise awareness of gender equality as an important aspect in the conduct of marine science; and
- To make practical and relevant recommendations for improving the gender balance in marine science.

Building on an existing database of international participants in a science network, my

project will use a feminist action research approach to collect and analyse gender-disaggregated participation data. Qualitative methods will be used to further examine the issues and identify which institutional interventions can empower women in ocean science.

Action Research

Feminist Action Research is an appropriate methodology for my case study, as it addresses imbalances of power, evident following the initial gender ratio assessment of recent ICES activities. The research itself aims to catalyse change, a recognized objective of my research. Feminist Action Research is also critical of neutrality, an important consideration in a study of scientists – where the pursuit of objective truth is still a dominant paradigm. Action research is well summed up by Patricia Maguire who stated “The task of Action Research grounded in feminism is consequently to interrupt and reveal mechanisms that create and maintain gendered power asymmetries”.¹

I am in an unusual situation as both a researcher of and an employee within the

¹ Maguire, as summarized in Amundsdotter, E. (2006) “Interactive Research for Gender Equality in Workplaces” in Nielson, K., and L. Svensson. (eds.), *Action and Interactive Research beyond Practice and Theory*, (pp. 277-295), p.277.

organization. This could be viewed as a difficult balance to achieve due to potential conflicts of interest. However, this dual role matches well with action research. As a feminist and a science administrator, my experience provides me a unique viewpoint to identify opportunities for change – a “Warrior within” as described by Sandler in her analysis of the interaction between feminists and bureaucracies and how they influence each other.²

Why We Need More and Better Data: The Importance of Gender Statistics

The online course created by UN Women and Paris 21 “Communicating gender statistics for gender equality”³ gave four main reasons why gender statistics are important:

- They are tools for monitoring progress towards gender equality.
- They promote understanding of the situation of women and men.
- They help to advance analysis and research on societal concerns.
- They help with the creation and measurement of sustainable development policies.

In ocean science, we are still lacking a good overview of how many women and men are participating, and a concerted effort is needed for the collection of gender-disaggregated data. This information is critical for ocean sciences, in order to help monitor progress, raise awareness, ensure that the perspectives of all genders contribute to the science needed for the ocean we want, and inform the development of policies and interventions that will help empower women and make ocean science more equitable and effective.

Focus on Baseline Data

The ICES network works to develop data, science and advice, to contribute to the sustainable management of seas and oceans. There is currently no overview of how many of these researchers are male and female. Since 2014, ICES has been developing its Resource Coordination Tool (RCT) – a database of all experts, affiliations, and participation in its activities. Gender disaggregated data has not previously been collected, but there is a plan to do so from 2021. By adding gender to the parameters of data collected on the

participants in ICES activities, the database has the capacity to provide important baseline information to help understand the existing gender ratio in the organization, which works at an international level.

As little gender-disaggregated data has been collected or considered in the history of the ICES administration, I am exploring methods that will help provide a baseline of data on the composition of men and women participating in ICES activities over the past five years. Software packages are readily available that can infer gender based on first name.

I have been working with one called genderize.io. In a pilot process, I have been working on the dataset of ICES Annual Science Conference abstract submission data. Using this method has allowed inference of gender for 96 per cent of names. This approach must be used cautiously, as it limits gender to the binary of male and female, but it is helpful for making the gender ratio of the ICES community visible, and moving forward, ICES will collect gender-disaggregated data beyond the binary.

This initial analysis of baseline gender ratio information for participation in ICES activities will inform the qualitative/action research part of my project.

Beyond Numbers: The Qualitative Research Approach

The numbers that will be provided through the baseline analysis of men and women in the ICES community will only tell part of the story. A feminist action research approach requires going beyond quantitative methods, using qualitative approaches to bring voice to the experiences of those who participate in the research.

Such experiences of men and women are an important part of understanding the role of gender in ICES and how to overcome existing barriers to gender equality. The next phase of my research will be to identify and develop the qualitative methods that will be critical in revealing the mechanisms that contribute to the ongoing imbalances of power. Listening to the experiences of scientists and experts that form the ICES community will provide the context for designing actions that will help us on the path towards greater equality.

2 Sandler, J. (2015) The “Warriors Within”: How Feminists Change Bureaucracies and Bureaucracies Change Feminists. In: Baksh, R., & W. Harcourt. (Eds.), The Oxford Handbook of Transnational Feminist Movements. (pp.188-214). DOI: 10.1093/oxfordhb/9780199943494.013.011.

3 Paris 21 Academy. (2020) Communicating gender statistics for gender equality. Available at: <https://academy.paris21.org/en/course/communicating-gender-statistics>.

Gender Equality in Ocean Science for Sustainable Development: Analysis of the Ocean Science Institutions in Kenya

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Introduction

My PhD research is informed by two UN initiatives; the UN Sustainable Development Goals (SDGs) and the newly proclaimed UN Decade of Ocean Science for Sustainable Development (UN Ocean Decade). For the SDGs, the focus is on Goal 5 (Gender Equality) and Goal 14 (Life Below Water).

Here, I adopt the definition of gender equality used by the World Bank Group, FAO and IFAD as “equal participation of women and men in decision-making, equal ability to exercise their human rights, equal access to and control of resources and the benefits of development, and equal opportunities in employment as well as all other aspects of their livelihoods”.¹

Life Below Water relates to conservation, and to sustainable use and management

of marine and coastal ecosystems. Indeed, there are gendered aspects of ocean science and management which are crucial in sustaining the health and integrity of marine ecosystems.² However, SDG 14 appears gender-blind; has no gender-specific indicators, and gender equality is not mentioned in its targets.

According to Agarwal (2018), SDG 14’s silence on gender could be detrimental to enhancing ocean conservation and management, because women are overwhelmingly the primary users of marine resources.³ It is therefore a priority to make women’s contribution and participation towards ocean science visible and valued.⁴ Women need to be involved at all levels of use, research, conservation, management, and leadership in ocean science to achieve SDG 14.⁵ Besides, the UN Ocean

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- 1 World Bank Group, FAO, & IFAD (2015). Gender in Climate-Smart Agriculture: Module 18 for the gender in Agriculture Sourcebook.
 - 2 Guest, H., Lotze, H. K. & Wallace, D. (2015). Youth and the sea: Ocean literacy in Nova Scotia, Canada. *Marine Policy*, pp 98-107; Claudet et al. (2020). A Roadmap for Using the UN Decade of Ocean Science for Sustainable Development in Support of Science, Policy, and Action.
 - 3 Agarwal, B. (2018). Gender equality, food security and the sustainable development goals. *Current Opinion in Environmental Sustainability*, 34:26-32.
 - 4 Matsue, N., Daw, T. & Garrett, L. (2014). Fish Traders on the Kenyan Coast: Livelihoods, Bargaining Power, and Participation in Management. *Coastal Management*, 42(6):531–554. Available at: <https://bit.ly/3fri0Be>
 - 5 Clancy, K. B. H., Nelson, R. G., Rutherford, J.N. & Hinde, K. (2014). Survey of Academic Field Experiences (SAFE): Trainees Report Harassment and Assault. *PLoS ONE* 9(7): e102172.

Decade is developing its focus on creating gender balance in ocean science through capacity development to improve women's representation and participation.⁶

Kenya has been chosen for a case study on gender equality in ocean science because it is one of the models for the Blue Economy Initiative championed by FAO in 2018, as a strategy for achieving integrated, sustainable, and socio-economically sensitive management of oceans.⁷ Moreover, Kenya is a low-middle income country whose economy is large, diversified and reliant on its coastal waters and fisheries as major contributors.⁸ Kenya has performed dramatically in terms of bridging the gender gap, according to the World Economic Forum's Global Gender Gap report. Ongoing, entrenched gender inequalities can be linked to broader inefficiencies in the institutions and weak policies.⁹

Gender equality is a cross-cutting theme for all SDGs – especially SDG 14 – yet it has not been attained in Kenya.¹⁰ The current Global Gender Gap report shows significant inequalities between males and females in educational attainment, health and survival, economic opportunities and participation, as well as the wage pay gap. The country was ranked 109 out of 153 countries in 2019.¹¹

Social norms and patriarchal structures in Kenya severely limit women's active engagement in fisheries and ocean-related industries, which in turn affects their engagement in decision-making processes.¹² In particular, there are cultural and superstitious claims attributed to taboos that prevent women from going out to sea. For example, some cultures associate women boarding fishing vessels with bad luck.¹³ Consequently, women are more likely to

participate in secondary sectors than in primary sectors, which are often exclusively reserved for men. According to FAO, 75 per cent of all women in the fishing industry in Kenya were found to be involved in fish processing and marketing.¹⁴ However, their contribution to this industry is still not well-recognized by policy-makers and managers.¹⁵ Additionally, the contribution of women's groups taking part in ocean conservation work along the Kenyan coast is often overlooked, such as Baraka Conservation Women Group, Kibuyuni Women Group, and Msitu Women Group. Despite women's substantial contribution to leadership

Pulling up fishing nets, Kenya and ocean management processes, their

- 6 Ryabinin, V. (2020). United Nations of Ocean Science for Sustainable Development 2021-2030 Implementation plan. Preprint submitted for peer review.
- 7 FAO (2019). Thematic evaluation series Evaluation of FAO's Work on Gender, (February). Available at: <http://www.fao.org/3/ca3755en/ca3755en.pdf>.
- 8 Diwakar, V., & Shepherd, A. (2018). Understanding Poverty in Kenya A multidimensional analysis Report, (December), 1–53; USAID (2018). Kenya and East Africa: Gender Equality and Female Empowerment. USAID Fact Sheet. pp.1-4.
- 9 SNV (2017). Analysis of the policy environment for women's economic empowerment, Kenya: Enhancing Opportunities for Women's Enterprises program knowledge series.
- 10 Kawarazuka, N., Locke, C. & Seeley, J. (2019). Women bargaining with patriarchy in coastal Kenya: Contradictions, creative agency and food provisioning. *Gender, Place & Culture. A Journal of Feminist Geography*, Vol. 26: 384 - 404.
- 11 World Economic Forum (WEF) (2020). *The Global Gender Gap Report 2019*. Geneva: WEF.
- 12 UN Women (2016). Facts and Figures: Economic Empowerment.
- 13 Koralagama, D., Gupta, J. & Pouw, N. (2017). Inclusive development from a gender perspective in small-scale fisheries. *Environmental sustainability*, 24: 1-6; CISP (2018). Women of the Blue Economy. Gender Equity and Participation in the Management of Water Resources: Lessons from the Coast of Kenya and Somalia. Comitato Internazionale per lo Sviluppo dei Popoli (International Committee from the Development of Peoples).
- 14 FAO (2013). Good practice policies to eliminate gender inequalities in fish value chains. FAO. Rome, Italy.
- 15 FAO (2013); USAID (2018).

representation in decision-making and management positions remains very low in all the sectors of ocean science,¹⁶ particularly in Kenyan institutions mandated to utilize, conserve, research and manage marine ecosystems. Lastly, the Intergovernmental Oceanographic Commission (IOC)-UNESCO has called for capacity development for local scientists, to reduce reliance on international advisors by the end of the Decade of Ocean Science. This research will act as a baseline study in Kenya to establish the data on gender in ocean science and the challenges women face in training and workplaces.

According to UNCTAD, Kenya does not have adequate expertise in natural sciences, including ocean science.¹⁷ The country faces a challenge in regard to the low enrolment rate of female students in the science, technology, engineering, and mathematics (STEM) disciplines in higher education: 27 per cent compared to the global average of 35 per cent.¹⁸ The figure is far less than the 33 per cent clearly articulated as a requirement in Kenya's 2010 Constitution, and there is a pressing need for special attention and investigation to establish the cause of this discrepancy.¹⁹ This figure could be even lower in academia, research, and government offices mandated with ocean science, however this is not known: the lack of gender-disaggregated data in ocean science to show trends in the representation of women in ocean-related disciplines in the universities as well as in professional positions is a major problem.

I intend to evaluate the extent of gender inequalities and their impacts in ocean science in Kenya. Moreover, I will investigate gender ratios in ocean science research across the ocean institutions at different levels, and evaluate gender equality initiatives implemented at the national, local and community levels and their impacts. The factors that will be studied are the enrolment, retention, and completion of female and male students taking ocean-related courses in the universities together with academic staff working in these areas, as well as the recruitment, retention, and advancement of ocean scientists in Kenyan research, conservation and management institutions.

The study will contribute to a better understanding of obstacles to achieving gender equality in ocean science in Kenya, and ultimately to the UN Ocean Decade. This study will also explore not only the descriptive but also the substantive representation of women to evaluate what happens beyond the numbers, and to discover the full potential and active participation of women in ocean science at all levels and across all positions.

Research Objectives and Questions

The study aims to describe and evaluate the extent of gender equality in ocean science for sustainable development in Kenya. The research will identify barriers to gender equality, and make recommendations on how to achieve SDG 5 in the context of the UN Ocean Decade.

This will be achieved through the following specific objectives: (i) to understand the representation and contributions of women and men in ocean science at all levels across educational, research and management institutions in Kenya; (ii) to apply Feminist Political Ecology to understand the forms of gender inequalities and the intersects between gender with age, education, ethnicity and class across ocean science institutions in Kenya; (iii) to evaluate gender-related policies against international standard guidelines and their impacts in ocean science institutions in Kenya; and (iv) to examine the barriers to gender equality in ocean science in Kenya. The aforementioned research objectives will be achieved by addressing the following research questions: (i) how does gender representation vary across ocean science career levels and institutions in Kenya? (ii) To what extent does the theory of Feminist Political Ecology explain inequalities, differences and power distribution at workplaces in the ocean science institutional environment in Kenya? (iii) how do age, education, ethnicity and class intersect with gender to influence the achievement of gender equality in Kenya? (iv) What are the impacts of the gender-related policies to women's contributions in the ocean science institutions in Kenya? and (v) What are the

16 CISP (2018).

17 UNCTAD (2018). Achieving the targets of Sustainable Development Goal 14: Sustainable fish and seafood value chains and trade.

18 Mbirianjau, L. W. (2016). Exploring enabling interventions for increasing female students' access and participation in science, technology, engineering and mathematics (STEM) disciplines in Kenyan public universities. PhD Dissertation, Kenyatta University; UNESCO (2019). Girls' and women's education in science, technology, engineering and mathematics (STEM).

19 JP GEWE (2015). Final evaluation of the Government of Kenya (GoK)/United Nations (UN) Joint Programme on Gender Equality and Women's Empowerment, pp. 1-33.

barriers to gender equality among staff participating in ocean science disciplines in Kenya?

Research Methodology

The study will be conducted in all the ocean science institutions in Kenya from local to international organizations. The institutions will be categorized based on their mandates: universities, research, conservation, and management sectors. Ten out of twenty-three public universities in Kenya offer ocean science-related courses. Other institutions will be chosen according to their influence and interest in education, conservation, research, and management in ocean science disciplines.

This research will employ a mixed-method approach using both qualitative and quantitative data collection, including secondary data gathering, semi-structured questionnaires, interviews, and focus group discussions. I also plan to conduct a pilot study of one of the selected universities, which will then be used to refine my research in the other nine universities, as well as national and international organizations. The study will begin with a literature review on women's and men's contribution to ocean science, together with web-based searches of relevant institutional web pages to assess the influence and interest of the institutions in ocean governance. Following this, the questionnaires will be sent to key personnel

in universities as well as other institutions to collect empirical data to triangulate the secondary data.

The questionnaire will be designed to gain information on gender ratios, recruitment and retention of employees at all levels in each ocean science discipline, as well as recruitment and retention of students. This will help in the analysis of the gender balance within institutions. Data on perceptions and experiences will be obtained through in-depth interviews and focus groups respectively.

The study will adopt Feminist Political Ecology (FPE) as a theoretical framework to understand gender equality in ocean-related fields. FPE will explain the link between the gender division of labour and power relations in access to resources and how women and men are, in turn, affected differently by these factors.²⁰

In conclusion, this study will contribute to academic research by providing baseline data on gender in ocean science in Kenya as well as contributing to the FPE theory which has been used in natural resource management fields. In addition, it will also contribute to gender policies by understanding their current status particularly the existing ocean institutional policies and their effectiveness/impacts, and generating recommendations to improve the existing ones or formulate better policies.

20 Sundberg, J. (2017). Feminist Political Ecology. International Encyclopaedia of Geography: People, the Earth, Environment, and Technology.

Boats in Lake Victoria

PART III – WORKSHOP REPORTS FROM THE EMPOWERING WOMEN FOR THE UN OCEAN DECADE PROGRAMME

FIRST INTERNAL PROGRAMME WORKSHOP REPORT

29 January – 4 February 2020

World Maritime University-Sasakawa Global Ocean Institute,
Malmö, Sweden

Description of the Workshop

The team of colleagues working on the Programme “Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development” (the Programme), sponsored by the Department of Fisheries and Oceans Canada (DFO), met over five days in Malmö, Sweden for a workshop marking an important milestone in the Programme. The workshop included the colleagues from the World Maritime University (WMU)-Sasakawa Global Ocean Institute (GOI or the Institute) and faculty members of WMU, as well as external gender expert Professor Susan Buckingham. Together, they explored the current state of research related to gender, empowerment, and participation in ocean scientific research, and coordinated planned research and tasks in support of the Programme. Through a series of roundtable sessions, workshop participants worked through an agenda that dealt with both conceptual and practical considerations. This report describes the discussions and outcomes of those sessions.

Introduction and Overview

At the introductory session, participants received a brief introduction to WMU and GOI, including the strategic research agenda and the related projects at the Institute. The briefing also included an overview of the academic requirements for the Programme.

The PhD students under the Programme will produce a compilation-style PhD dissertation, with 4-5 scholarly publications expected. As a result of WMU seeking Swedish university accreditation, the PhD in Maritime Affairs programme is now aligned with the Swedish PhD requirements. One of the main changes that affects the two PhD candidates is that they are required to undertake elective courses totaling 40 European Credits (EC). This provides an opportunity for tailoring learning opportunities for students, while also contributing to the aims of the Programme.

In support of the Programme, the team will undertake research with a focus on gender equality and the empowerment of women in the conduct and delivery of ocean scientific research, in particular in relation to fisheries, oceanography, and climate change. The United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade) and Transforming our World: the 2030 Agenda for Sustainable Development (Agenda 2030), as well as the interrelated Sustainable Development Goals are all important opportunities and motivation for taking on this research. The ocean is a social-ecological system that requires interdisciplinary approaches to tackle its challenges, in order to manage human activities in sustainable ways. Given the stated connection to the UN Ocean Decade, the Programme is taking marine and maritime

intergovernmental organizations as a starting point for the baseline study, while also hoping to link beyond the international level, to national and local community scales.

Literature Review

Gender is a cross-cutting theme of the UN Ocean Decade, and reviewing related academic literature is a natural starting point for considering further research and actions needed. The literature review will contribute to the development of a “baseline study”, which will assess the status of gender equality and women’s empowerment as it relates to ocean scientific research.

Participation and Data Collection

Baseline Study

The issue of a baseline study was discussed at length in this session of the workshop to get clarity on what kind of data is actually needed for this initial stage of the Programme. The baseline study will focus on collecting and analyzing existing data to determine the current situation/status of gender equality and women’s empowerment, as well as of women’s participation in ocean scientific research, policy development and governance for sustainable development. After the discussions, it was suggested that the baseline study could be developed from the literature review in the form of a brief report reviewing a range of sub-topics.

It was agreed that the report should also relate to the planning for the UN Ocean Decade. The study will act as a tool to assess project progress, and will build on the gaps identified.

It was agreed to consult the High-level Advisory Group (made up of representatives from, inter alia, the Intergovernmental Oceanographic Commission of the United Nations Educational Scientific and Cultural Organization (IOC-UNESCO); the International Council for the Exploration of the Sea (ICES); the International Seabed Authority (ISA); and the Food and Agriculture Organization (FAO) and relevant stakeholders to solicit their views on priority issues on the Programme at this preliminary phase. The review of the active participation and contributions of the intergovernmental organizations to the UN Ocean Decade will be an important part of the baseline study. Therefore, it was agreed that these organizations should be contacted and more information gathered on their roles and intentions concerning achieving these overarching goals.

Data Collection and Assessment

The data collection and assessment were considered as the most challenging part of the research because there are many different opportunities for data collection. Professor Susan Buckingham presented an overview of approaches to collecting gender data, discussing broader methodologies on what, and how, data should be collected, what constitutes the data, data collection methods, restrictions on obtaining data and data analysis.

In this session, it was pointed out that participants will need to map the targeted organizations and the availability of the data as well as any legal procedures needed to get access to the data. In addition, it was recommended that the participants should explore the concept of gender equality by identifying relevant policies and their indicators of effectiveness. In the presentation, it was highlighted that the types of information constituting gender data include support for women and men, empowerment of women, women’s representation and women’s participation and work in ocean scientific research.

It was also suggested to consider the methodologies for data collection such as what data counts, and the verification and interpretation of data. Data analysis could apply mixed methods (qualitative and quantitative) including triangulation. Communication was also found to be key as part of data analysis and should be always

gender-sensitive in written and/or visual format. Research should be communicated with the public in an accessible and visual way. The data should include the representation of both women and men in ocean science and solidarity, and consider accountability, community and access to education.

United Nations Decade of Ocean Science for Sustainable Development

The UN Ocean Decade will take place between 2021 and 2030 to unite and mobilize ocean stakeholders to deliver around seven “societal outcomes” and describe the “ocean we want”.

- 1) A clean ocean where sources of pollution are identified and reduced or removed.
- 2) A healthy and resilient ocean where marine ecosystems are understood, protected, restored and managed.
- 3) A productive ocean supporting sustainable food supply and a sustainable ocean economy.
- 4) A predicted ocean where society understands and can respond to changing ocean conditions.
- 5) A safe ocean where life and livelihoods are protected from ocean-related hazards.
- 6) An accessible ocean with open and equitable access to data, information and technology and innovation.
- 7) An inspiring and engaging ocean where society understands and values the ocean in relation to human wellbeing and sustainable development.

Gender is a cross-cutting theme of the UN Ocean Decade, and provides a good platform for engaging with the organizations represented in the Advisory Group and Stakeholder Forum. The team took note of the planned Regional Workshops in 2020, and reviewed the IOC-UNESCO 2017 Global Ocean Science Report. It was noted that the sections that report demographic information – “who is doing ocean science?” – including gender are not well reported. There is a growing need for greater efforts to collect standardized gender-disaggregated data: this could be strengthened by actions through the Programme and in collaboration with the Advisory Group and Stakeholder Forum.

Action Plan, Recommendations and Blueprint

The team acknowledged that the key elements for a strategy and action plan

for empowering women in the UN Ocean Decade will need to be identified. The gender action plans developed for the United Nations Framework Convention on Climate Change could be a source for inspiration.

The team reviewed a draft outline of a baseline study and developed a blueprint that will cover the elements of an Introduction; Gender Equality and the Empowerment of Women; Marine Science and the UN Ocean Decade Ahead; The Intersection of Gender Studies and the UN Ocean Decade; Women and the Conduct of Ocean Science; Ocean Governance Bodies and Marine Science; Non-Governmental Organizations and Civil Society Dimensions; and Pathways to Empowering Women and Removing Barriers to Equality. The team members were assigned responsibility for each of these elements and the baseline study will be submitted to the donor.

Way Forward

The team members will seek active participation in the 2nd Global Planning Meeting for the UN Decade of Ocean Science for Sustainable Development, Paris, France, 18-20 March 2020 (postponed due to the COVID pandemic).

The Programme team will host the next Women’s Empowerment workshop by late June 2020 (in Malmo, Sweden).

SECOND INTERNAL PROGRAMME WORKSHOP REPORT

Identifying Gender Equality Opportunities for the UN Ocean Decade

15 – 18 June, 2020

World Maritime University-Sasakawa Global Ocean Institute,
Malmö, Sweden (Virtual)

Description of the Workshop

The Programme team of “Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development” (the Programme), sponsored by the Department of Fisheries and Oceans Canada (DFO), met online for four days to engage in the second workshop, marking another important milestone. The workshop brought together colleagues from the World Maritime University (WMU) -Sasakawa Global Ocean Institute (GOI or the Institute) and faculty members of WMU, as well as external gender expert Professor Susan Buckingham, to explore the current state of research and projects related to gender, empowerment, and participation in ocean scientific research.

Through a series of roundtable sessions, the workshop participants reviewed the progress of the research work under the Programme, examined opportunities for enhancing gender equality in international organizations, discussed good practice from relevant research projects such as Baltic Gender, and worked through an agenda for further research work. This report describes the discussions and outcomes of those sessions (with the exception of research updates from the PhD students and the Post-Doctoral research fellow, which have been presented separately in this volume).

Introduction and Overview

Programme Overview

The workshop started with welcoming remarks and a round of introductions of the Programme team members, welcoming the onboarding of the Post-Doctoral research fellow, Dr. Mariamalia Rodriguez-Chaves, who started in March 2020.

The Director of GOI, Professor Ronán Long, gave an overview of the implementation of the Programme, recalling the milestones

achieved so far, such as the inauguration of the Institute in 2018 with the support of various allies, including the City of Malmö, the Nippon Foundation, the Government of Canada, the Government of Sweden and others.

The Programme team had a first Gender Workshop at WMU, which took place in January 2020. One of the key objectives of this Programme is to develop a Strategy and Action Plan for the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade). The Programme has two components, the research of the PhD students, and the exploration of gender equality within a selected group of Intergovernmental Organizations (IGOs) and Non-Governmental Organizations (NGOs). Finally, the interdisciplinary characteristics of the team and gender expertise strengths the Programme and its various action lines.

Design of the Workshop

Dr. Zhen Sun, Research Officer and Co-Principal Investigator, explained the design of the Second Workshop, which had the objective of setting out the groundwork already completed by the Programme members and of advancing on the questionnaire and data collection for IGOs and NGOs, with the view to find best practices and solutions regarding women’s empowerment.

Brief Updates of the PhD Research Progress

The PhD Supervision team – Professors Momoko Kitada, Francis Neat and Susan Buckingham – are working closely to support the PhD students in their research.

Great progress has been made since the PhD students began in November 2019. Both students are preparing their first progression seminar, and have been focusing on reading gender theories and the connection between marine ocean science and gender.

There have been challenges associated with the remote/virtual reality way of working engendered by COVID-19, but there have been great advances in the research. Among others, Professor Buckingham's expertise and guidance to the students have been critical to the Programme, and have helped the Programme team during its implementation.

Gender Theories and Its Application to Literature Reviews

Professor Buckingham's presentation started addressing the topic of literature review as an ongoing process. Literature review needs to be comprehensive to enable it to identify research gaps, and to provide context and benchmarks. In this context, "*having a theory*" matters to the research, as it is the foundation that will support it, and also provide a critical lens. Various *gender and feminist theories* were introduced by Professor Buckingham, which address explicit and critical analysis on gender dynamics with a commitment to political and social change. The theories also influence the methodologies.

The presentation addressed the role of participants (traditional/indigenous/local knowledge) in the development of the research, and suggested the valuable practice of recognizing what the researcher can give back to the collaborators, as they are co-producing knowledge within the research, using different methods such as interviews, participatory ethnographies and others.

Specifically, in relation to theories, the presentation addressed **ecofeminism**, which has a cultural/essentialist strand. It looked at women's characteristics, the way they engage with nature, the natural connections between women and nature through their bodies, maternity and agriculture. This relationship should give women the authority. However, this theory has been challenged by **liberal feminism**. The latter tries to uplift women to equal men's power positions which has the danger to destroy our environment.

The **social constructivist** version of ecofeminism, which has endured and is the more powerful explanation recognizes that women's power is determined by prevailing social constructs. In this interpretation, women are seen as closer to nature and/or vulnerable to environmental problems because of their lower status in society. It highlights that the same processes that destroy nature, maintain gender inequality. How should society change within the lens

of this theory? For example, work should be revalued in different ways (share paid/unpaid work, gender pay-gaps, and gender representative decision-making).

Feminist political ecology was a response to political ecology in the 1980s. It acknowledges ecofeminism, and studies ecological problems and processes through power structures, gender divisions of labour, investment, legislation, and other aspects. More specifically, **feminist political ecology** states that men or women engage in particular works/resources, and that there is a principle of gender complementarity under uneven relationships.

Another theory explored in this session was **feminist participatory action research**, which highlights that feminist ideals can create an environment that is inclined towards a participatory approach. The ownership of the research is shared with the participants, and therefore questions have to be respectful of the participants' voices, inclusive, and cognizant of how the research will use that knowledge, as well as taking into account critical reflexivity.

Legal Feminist Theory

The presentation by Dr. Rián Derrig - Post-Doctoral Fellow for WMU/H2020 BugWright2 Programme began with a reflection on the importance of an emotional reaction, in order to determine the theory the researcher will choose. The presentation addressed two main themes in legal feminist theory:

1. Analyzing legal concepts and categories

Concepts and categories such as States, security, migrant and non-State actors are not neutral. They deeply reflect the social context in which they were created.

Legal concepts have a non-neutral character, and therefore it is relevant to identify how gender operates through law in international organizations – for example participation as an observer in conferences – and to observe practices and social context when gathering information.

2. Analyzing representation of women

It is relevant to identify where and to what extent women are represented. Statistics on women's participation in events are informative, but greater efforts should be made to identify intangible experiences of women in specific fields of law, for example the identification of silences and and deprioritization of women's voices.

Lessons from Participation in the Baltic Gender Project Final Webinar

Baltic Gender is an EU-funded project that involves eight scientific institutions in five countries around the Baltic Sea that are working to reduce gender inequalities in marine science and technology. Further information on the Project can be accessed on the website: www.baltic-gender.eu/.

The Programme team participated in the Baltic Gender project's final workshop, held by a public webinar, with the discussion section moderated by Professor Susan Buckingham.

The main aims of the Baltic Gender project are: a) to promote gender-balanced career advancement in marine science and technology; b) to establish strategies for promoting a family-friendly working culture; c) to identify meaningful and effective structural changes in the partner institutions, leading to an improvement of gender equality; d) to develop methodologies for the enactment of gender-sensitive marine research; e) to build competence and skills in gender-sensitive teaching methods; f) to initiate gender-focused training and mentoring in or across all partner institutions, and g) to develop recommendations to guide the implementation of Gender Equality Plans.

The Programme team discussed the **lessons learned/key takeaways** from the roundtable

workshop discussion following the webinar, and the key elements are summarized below:

- 1) There is a strong link between the work done in the Baltic Gender project and the Programme. The Baltic Gender project did not link directly to the UN Ocean Decade and SDGs, though the connections are evident. Although the Baltic Gender project was focused on academic institutions, the webinar was helpful for providing a broad sense of theory, knowledge and practical examples. There are many takeaways and outcomes relevant for the Programme that can be built on to help find solutions for project stakeholders.
- 2) Existing gender equality plans, documentation of structural changes, gender awareness training, and the sexual harassment code of practice are all valuable sources of information that should be reviewed and drawn from. The Baltic Gender project developed gender-sensitive indicators that provide a helpful framework and support for monitoring; this is an important foundation that can be built on in support of the UN Ocean Decade. The **GenderWave tool** was developed as a digital tool to support incorporation of gender perspectives into marine research and innovation, and it supports gender awareness in data collection and best practice. All of this documentation and the outputs can help to inform the development of an action plan that is specific and can be implemented on a practical level.
- 3) A need to dig beyond the existing data was identified. There are also assumptions that pregnancy and having children are the main cause of the "leaky pipeline", in which women are decreasingly represented in the highest levels of academia and science decision-making bodies. There are likely structural causes that also contribute to preventing equal representation of women. Further consideration is needed of how to address structural processes and issues, in order to develop suggestions for change aimed at removing impediments and barriers to the advancement of women.
- 4) One suggestion for a more gender-sensitive approach to recruitment was blind review, to potentially improve current gender imbalances. However, this would be difficult to implement in the current system, especially for academics, where publication records are a key indicator.
- 5) Sexual harassment was identified as a current research gap. Baltic Gender also considered safety at sea, and noted a lack of data on sexual harassment. Although it would be desirable to have incidents better documented, evidence

may not be needed to take action. Emphasis should be placed on reporting of harassment incidents to understand prevalence and need for action. However, given that there is a reluctance to report incidents, preventive measures are also important as part of occupational health and safety, and potentially a more impactful way to take action. In the maritime sector, preventive measures are included in the International Convention for the Safety of Life at Sea (SOLAS), but SOLAS does not specify sexual harassment. Carballo and Kitada (2020) have recently published *Sexual harassment and women seafarers: The role of laws and policies to ensure occupational safety & health*, Marine Policy 117:103938 DOI: 10.1016/j.marpol.2020.103938. The sexual harassment issue should be included in the Programme's questionnaire (see below).

Finalizing the Draft Questionnaire

Dr. Mariamalia Rodriguez-Chaves has been leading the development of the questionnaire, which will be the main instrument for collecting data from international organizations and other Programme stakeholders. The interview strategy will be to stimulate a conversation, with guiding bullet points provided to help orient respondents. Respondents will include senior and junior employees in the IGOs and NGOs. The outputs will be reported back to the respondents.

The lessons learned from the Baltic Gender project will help to inform the conversation preparation. It was suggested to probe with questions on how long gender focal points and measures have been implemented, and which events helped to initiate their development. It was also suggested that sexual harassment policy should be discussed with IGO and NGO respondents to understand if they have specific protocols to address this issue.

Leadership was highlighted as a key to effecting change: initial analysis of the IGO and NGO structures and power imbalances may help to inform the selection of respondents. Organizational structures can have a major influence on power imbalances between genders. If possible, the Programme should consider how to analyze or assess the role that the structure of an organization can have on preventing or helping women advance to decision-making roles.

The guiding topics and frame for discussion will be revised and circulated to the Programme team members for further comment.

Closing of the Workshop

Final remarks were provided by Dr. Cleopatra Doumbia-Henry, President of the World Maritime University. Her remarks acknowledged the leadership of Professor Ronan Long, Director of the WMU-Sasakawa Global Ocean Institute. Dr. Doumbia-Henry noted that in the maritime and oceans sector, equality is achievable, but further work is still needed.

Dr. Doumbia-Henry referred to the International Labour Organization standards where gender equality is central: for instance, in the context of equal pay and the role of women, as well as maternity leave protection. Dr. Doumbia-Henry reaffirmed her personal commitment as a champion for gender equality. The UN Ocean Decade provides an opportunity for a new foundation but requires the mobilization of all qualified resources. The historical lack of gender equality in science needs to be addressed, and the work of the Programme will be an important contribution.

The partnership between WMU and DFO Canada is contributing to women's empowerment. WMU is committed to women's empowerment in all aspects of its mission. The WMU team has also been championing gender-specific provisions as part of the negotiations on an internationally binding instrument on Biodiversity Beyond National Jurisdiction.

The President thanked the Programme team, noting the special circumstances and need to adapt to remote meetings and teaching due to the COVID-19 pandemic. The workshop lays important foundations for further engagement with stakeholders, for making progress in the framework of the Programme, and for making progress more broadly on gender equality.

Way Forward

The next Women's Empowerment workshop is planned for 28-30 September 2020 (virtually – Malmö, Sweden), and will include engagement with external actors.

THIRD PROGRAMME WORKSHOP: INTRODUCTION

Identifying Institutional Opportunities and Challenges for Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development

28 – 30 September, 2020

World Maritime University-Sasakawa Global Ocean Institute,
Malmö, Sweden (Virtual)

From 28-30 September 2020, the World Maritime University (WMU)-Sasakawa Global Ocean Institute hosted a virtual workshop in support of the research and capacity-building programme, Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development. The workshop was the third to take place in support of the programme that is funded by the Department of Fisheries and Oceans Canada (DFO). The main topic of discussion was identifying institutional opportunities and challenges to empower women scientists in a range of science and ocean governance bodies, as well as in non-governmental organizations.

The aim of the workshop was to inform project partners of progress made to date, as well as consult with international organizations and non-governmental organizations regarding their practices and views on how best to advance the empowerment of

women scientists for the UN Ocean Decade. In addition to DFO, high-level speakers and participants included representation from Sweden's Ministry of Foreign Affairs, the Food and Agriculture Organization (FAO), Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO), United Nations Division for Ocean Affairs and the Law of the Sea (DOALOS), International Seabed Authority (ISA), International Council for the Exploration of the Seas (ICES), International Union for Conservation of Nature (IUCN), Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), GEOMAR, High Seas Alliance, and the Unama'ki Institute of Natural Resources (UINR).

The following contributions are shared by the speakers in a personal capacity based on their presentations and discussion at the Third Workshop.

ICES Experiences with Gender Equality

Anne Christine Brusendorff

General Secretary, International Council for
the Exploration of the Sea (ICES)

The International Council for the Exploration of the Sea (ICES) is delighted to be participating in this important research and capacity-building programme. I would like to share some of ICES' experiences on gender equality and the empowerment of women scientists.

ICES is an intergovernmental organization (IGO) that provides an international platform for scientific cooperation. It draws on a pool of 6,000 experts from more than 60 countries. Like many intergovernmental organizations, the ICES Secretariat does not appoint its delegates and experts; rather this is the responsibility of the member countries. This is at least partly responsible for the history of male dominance in ICES. However, the ICES Secretariat has the capacity to highlight the importance of gender equality, to raise awareness, to influence current practice, and to issue policies and procedures to better address gender representation.

In recent years ICES has seen progress toward better female representation – and greater awareness of the importance of gender in the practice of marine science – largely thanks to a dedicated staff member, Ellen Johannesen, who champions the cause of gender equality. Ellen is uniquely placed to do so as someone with in-depth understanding of how the organization works, integrity and respect from her colleagues. Ellen now has the opportunity to take this to a higher level with her enrollment as a

doctoral student in this programme of the Global Ocean Institute at the World Maritime University. When it comes to empowerment of women in marine science, ICES offers huge potential to have positive impact and amplification through its extensive network.

The focus on gender equality within ICES as part of my leadership was not triggered by one specific incident. When I reflect back, I think of both major and small incidents that together revealed the need for specific action. It could be an entire wall in the ICES headquarters prominently displaying pictures of previous ICES presidents (all male). Or complaints from male staff members when a recruitment panel consisted entirely of three women. Or when there is resistance to ensuring gender balance in scientific committees responsible for developing programmes and inviting speakers at ICES sponsored events. Or it could also be why you – as opposed to your male colleagues – persistently are only presented by your first name, while everybody else also has a surname. Or some condescending remark from a male colleague after your presentation, such as “you have a really pleasant voice, so it’s nice to listen to you”. It all adds up and requires change.

It is important to be positive to seek change, and this needs a good-humoured team of colleagues, who care, engage, and dare to put forward their views, who support each other, and receive support from management where

needed. This has been of primary importance in the process that we have carried out within ICES. We have slowly been making changes in the right direction (for instance in 2018 we updated the Rules of Procedure to include gender-neutral language), so that formally we are on the right track and sending the right message about who is eligible for which specific positions.

ICES is yet to have a formal gender policy or appoint a gender focal point, and we are interested to learn of such experiences from the other IGOs during the course of the workshop. The ICES Executive Committee has linked the provision of impartial marine scientific evidence with the need for gender balance within our Strategic Plan. There was initial resistance to the inclusion of language specific to gender, with comments that there was no issue within ICES, but we persisted and it is now in the high-level ICES strategic plan. In addition, ICES now has a policy for participants in ICES activities that we refer to as *ICES Meeting Etiquette*, which outlines how to engage and to treat each other with respect. We are currently reflecting on why we have separate policies, or whether it would be more appropriate to merge those principles with our existing Code of Conduct, lifting this to a higher level, as all ICES meetings begin with a reference to the Code of Conduct and must abide by this.

ICES still has some way to go to achieve equal gender representation, with many top-level positions still never having been filled by a woman. However, we do have some good recent examples, with myself as the first female General Secretary, and the ICES Outstanding Achievement Award having been awarded to women two years in a row (2019 and 2020). Problems

remain with member countries on gender representation of delegates and experts. It is paramount that the ICES Secretariat leads by example. While overall there are more women than men employed in the Secretariat, there is still an imbalance when it comes to gender distribution between “professional” and “general service” staff categories. Addressing this will require greater attention in the recruitment process, and providing specific mention in job vacancy announcements that ICES is an equal opportunity employer.

We will soon start to collect gender-disaggregated data. A quick count of male and females (in 2019) reveals that women make up only 30 per cent of ICES expert group chairs, 20 per cent of national representatives on the Committees and Council, and 14 per cent of the Executive Committee. This unfortunate situation is similar to many organizations; the higher up in the organization you look, the less women there are. Although some of the elected positions obviously cannot be influenced directly, there are actions that can be taken to help address this. Female delegates can be contacted to make them aware of upcoming elections and encourage them to apply. Working with male allies at the organization’s management level can also provide encouragement, in order to stress that this is not just a woman-to-woman discussion, but that it is actually important for the organization to have qualified representatives of all genders. But you can also follow up woman-to-woman, to discuss whether it’s appropriate to nominate yourself for election, and whether it’s appropriate to vote for yourself when there is an election (and of course it is, because this is what men do as well).

Other examples include promotion of female chairs of strategic initiatives in the organization. It is important to work directly with potential candidates to explain the workload; that there will be secretariat support and group members to conduct the work. In my experience women are very conscious about their capacity to contribute among many competing work and home-life priorities and also their capacity to fulfil the objectives of the initiative. ICES has some way to go towards more balanced gender representation throughout the organization, but the conversation has started and progress is being made, most of all through the work being done by the World Maritime University and the Global Ocean Institute, and through the research being conducted by Ellen Johannesen. And I really look forward to our continued cooperation in this field.

Women's Empowerment and Leadership at the International Seabed Authority

Marie Bourrel-McKinnon

Senior Policy Officer – Special Assistant to the Secretary-General, International Seabed Authority (ISA)

Women's empowerment and leadership are critical objectives of the International Seabed Authority (ISA). These objectives have acquired a new sense of urgency since the current Secretary-General, Mr. Michael Lodge, took office in January 2017, and with the formal endorsement of ISA's members through the adoption of the ISA Strategic Plan¹ and High-Level Action Plan² for 2019-2023.

Objectives for women's empowerment are operationalized at two levels. First, at the organizational level, there is a focus on recruiting women at senior level positions. As a result, today 60 per cent of ISA staff are women with many in senior positions. Furthermore, several administrative policies were adopted recently, such as providing accommodation for breastfeeding in the workspace. This policy allows new mothers to work during a critical phase of childcare.

Second, as a part of the ISA programmatic mandate, the question of women's empowerment and leadership is also a priority in the context of the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade). The ISA commitment is strongly rooted in its position

as one of the three institutions established by the 1982 United Nations Convention on the Law of the Sea (UNCLOS). The ISA regulates and oversees the management of seabed exploration and exploitation activities in the Area. An important aspect of this mandate is also to ensure that seabed activities are undertaken with due consideration for the protection of the environment and the conservation of marine biodiversity.

Another critical responsibility of ISA, as set out by UNCLOS, is to promote and encourage the conduct of marine scientific research. In fulfilling that responsibility, ISA is mandated to coordinate the dissemination of the research results when available, as well as to build the capacity of developing States to actively participate in marine scientific research programmes carried out in the Area. The final part of the ISA mandate is well known, which is to ensure that the proceeds from the activities undertaken in the Area are shared for the benefit of humankind, in the form of monetary and non-monetary benefits.

The formalization of these commitments, specifically that of enhancing the role and participation of women from developing

1 See International Seabed Authority (ISA) Assembly, ISBA/24/A/10, 27 July 2018, Decision of the Assembly of the International Seabed Authority relating to the strategic plan of the Authority for the period 2019–2023.

2 See ISA Assembly, ISBA/25/A/15, 24 July 2019, Decision of the Assembly of the International Seabed Authority relating to the implementation of the strategic plan for the Authority for the period 2019–2023.

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States, are facing particular difficulties in accessing senior positions and realizing their full potential as professionals. This is a loss for each of these countries as well as for the international community at large. It is also an impediment for developing States to fully benefit from the opportunities offered under Part XI of UNCLOS. The ISA is trying to address these shortcomings at the highest level possible by orienting the decision-makers towards the adoption and implementation of proactive and positive measures.

Another important and fundamental area of our approach relates to **capacity development** and is aligned with our principal commitment to empower women scientists from developing countries. Capacity development is at the core of everything that we do in ISA. We have enacted multiple strategies that enable us to progress on this commitment, including by mapping existing resources and countries, developing dedicated initiatives and identifying and overcoming impediments to career advancement.

Why are trained women scientists, who are extremely good at their jobs, not given senior or leadership positions? To address this issue, one of the first measures undertaken was to put in place positive measures to ensure that all contractor training programs are gender-sensitive, particularly in regard to the opportunities and scientific training offered to participants, and as legally required under UNCLOS.

Another important element is the call by the ISA Council in 2019 to require all contractors to establish anti-sexual harassment policies on research vessels. This led to significant progress on this issue and consequently, the majority of all exploration contractors undertaking activities in the Area are complying with this requirement.

The third thematic area, **sustainability and partnerships**, aims to establish communities of practice and dedicated forums for young professionals. This is to create opportunities, specifically for young women professionals, to discuss their careers with senior women scientists and to understand how they can overcome challenges. We are working to develop these communities of practice, with the further goals of facilitating a network and a culture of mentorship amongst women scientists across the world.

The last thematic area is **communication and outreach**. The critical focus here is to highlight women's accomplishments and

States in deep-sea research through capacity building, is closely linked to the first United Nations Ocean Conference, held in New York in 2017. At that time, the ISA was the only international organization to register voluntary commitment specifically dedicated to women's empowerment and leadership in research, with a particular focus on deep sea research. Somewhat surprisingly, although 500 of the 1,500 voluntary commitments that were dedicated to capacity-building, this was the sole one aimed specifically at women's empowerment.

Since 2017, the ISA commitment has been operationalized in four thematic areas illustrated in the figure below.

In the **policy** area, the aim is to raise awareness amongst decision-makers about the importance of women's empowerment and leadership in the context of the implementation of UNCLOS, and in particular in relation to deep-sea research. Due to multiple factors (cultural, religious, etc.), women, especially women from developing

align this focus with our ongoing efforts to increase deep-sea literacy. A key message for our outreach is that there are great opportunities for women in ocean science related professions.

Below are the progress and the milestones achieved by ISA since the registration of our voluntary commitment at the UN Ocean Conference in 2017. In 2018, we launched an important initiative in partnership with the office of the High Representative of Least Developed Countries of the United Nations to establish a platform where decision-makers of permanent missions in New York are made more aware of the challenges faced by women scientists from developing countries.

Our work on this partnership is undertaken in conformity with the ISA's Strategic Plan and High-level Action Plan for 2019-2023, respectively adopted in 2018 and 2019. The latter sets down specific key performance indicators and high-level actions. The first step was to review all capacity-building and other initiatives implemented by ISA since it was established in 1994. We completed this

fascinating review in 2020, and it proved to be extremely insightful in terms of identifying challenges faced by women scientists over the past two decades. The report on this review is available on the ISA website.³

Just before the pandemic of COVID-19 prevented travel and confined us to our homes, we organized the first-ever workshop on Capacity Development, Resources and Needs Assessment, held in Kingston in February 2020. Professor Ronan Long presented the women's empowerment programme underway at the World Maritime University-Sasakawa Global Ocean Institute. The workshop was attended by a diversity of stakeholders, including ISA members, observers, contractors, NGOs, partners, the scientific community and former trainees.

The workshop resulted in the adoption of an outcomes document, including recommendations to advance the commitment of empowering women scientists, and ensure leadership roles for women scientists from developing countries, as part of ISA's mandate.⁴

3 ISA, *Review of capacity-building programmes and initiatives implemented by the International Seabed Authority 1994-2019*, July 2020, available at: <https://www.isa.org.jm/node/19694>.

4 ISA, *International workshop on capacity development, resources and needs assessment*, 2020, available at: <https://isa.org.jm/files/files/documents/Workshop%20report%202%20ebk.pdf>.

FOUR-TIER APPROACH

"Empowering women for the UN Decade of Ocean Science"—WMU, 29 September 2020

ISA has registered 7 voluntary commitments to support the implementation of SDG14

- 1 Enhancing the role of women in marine scientific research
#OceanAction15467
- 2 SG's Award for Excellence in Deep-Sea Research
#OceanAction15796
- 3 Deep-sea long-term observatories
#OceanAction17746
- 4 Deep-sea taxonomic atlases
#OceanAction17776
- 5 Abyssal Initiative for Blue Growth
#OceanAction16538
- 6 Supporting Africa's Blue Economy
#OceanAction16374
- 7 Mapping Africa's deep-sea resources
#OceanAction16494

ISA contributes to 9 of the 17 SDGs

Professor Ronán Long, Director, WMU-Sasakawa Global Ocean Institute & Ambassador Georgina María Guillén Grillo, Permanent Representative of Costa Rica to Jamaica and Permanent Mission to the International Seabed Authority

The Secretary-General took up this initiative and developed a report on the programmatic approach for capacity development for the ISA. The report was considered and adopted for implementation by the ISA Assembly in December 2020.⁵ It is also now fully embedded in the ISA Action Plan developed in support of the UN Ocean Decade, which was also formally adopted by the ISA Assembly in December 2020.⁶

These strategic documents provide a strong backbone for this empowerment process. I am also proud to say that the Secretary-General has been recognized in 2020 as a Gender Champion. Now, through this network of leaders, he can push forward the gender agenda supporting women scientists from developing countries. The

contribution and commitment of ISA is also relevant to landlocked developing countries, as it addresses the challenges faced by women scientists from these countries in the context of the Roadmap for Accelerated Implementation of the Vienna Programme Action for Landlocked Developing States.

In conclusion, I would like to highlight the impact of the different capacity-building strategies implemented by ISA. Between 1994 and 2019, more than 190 women scientists have been trained out of a total of 400 trainees. Much has been accomplished, and yet much is to be done on this vital work of empowering women. We look forward to working with all of you in this endeavour.

⁵ See ISA Assembly, ISBA/26/A/18, 17 December 2020, Decision of the Assembly of the International Seabed Authority relating to the implementation of a programmatic approach to capacity development.

⁶ See ISA Assembly, ISBA/26/A/17, 17 December 2020, Decision of the Assembly relating to the action plan of the International Seabed Authority in support of the United Nations Decade of Ocean Science for Sustainable Development.

Women's Empowerment in Ocean Science: Challenges and Opportunities in the Context of IOC-UNESCO

Kirsten Isensee

Programme Specialist and Gender Focal Point, Intergovernmental Oceanographic Commission (IOC) of UNESCO

This piece reviews the policies and practice at the Intergovernmental Oceanographic Commission (IOC) of UNESCO in relation to encouraging women and empowering women in ocean science. In particular, it discusses the challenges and opportunities faced at IOC concerning the empowerment of women in both the conducting of ocean science and the making of science-based decisions at different levels. With a view to providing an insight into some of the current initiatives, it also highlights the plans and actions at IOC for supporting and implementing the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade).

Transforming Our World: the 2030 Agenda for Sustainable Development

The 17 UN Sustainable Development Goals (SDGs) and 169 SDG targets are intended to stimulate global actions in areas of critical importance for humanity and the planet to transform our world. Of relevance to this discussion, Goal 14 is focusing on the ocean and Goal 5 is on gender equality, with the two SDGs closely connected to each other. That said, the implementation actions for achieving Goals 5 and 14 should be more integrated in the context of specific objectives of the UN Ocean Decade. Significantly, the work of the IOC directly

contributes to 13 out of the 17 SDGs.

Among these, SDG 14 guides the work of the IOC in areas of cooperation, capacity development, transfer of marine technology and science-based policy advice. In the area of capacity development, there is an important component of gender equality in ocean science. In addition, the IOC – as the responsible body for designing and implementing the UN Ocean Decade – places considerable emphasis on meeting the needs of developing countries and least developed countries to ensure universal participation in and utilization of ocean science.

FIGURE 1: Proportion of women in higher education and research, 2013

As shown in Figure 1 (UNESCO, 2015), there is a leaking pipeline in relation to the number of women that complete higher education and research in all science categories but do not go onto to successful scientific careers. Many factors contribute to the leaking pipeline phenomenon. For example, a major consideration is whether the working environment, both in-house within an institution and internationally, are gender-friendly. In my view, it is important for research programmes that are underway, including the Empowering Women for the UN Decade of Ocean Science Programme at the WMU-Sasakawa Global Ocean Institute, to identify the barriers that impede women from successful career paths in marine science and to find solutions accordingly.

The Global Ocean Science Report (GOSR) 2020, published in December 2020, revealed that women continue to be underrepresented in ocean science, particularly in the highly technical categories. However, though gender equality in ocean science is far from having been achieved, reaching it is a realistic challenge. Female ocean science personnel range from about 7 per cent (Democratic Republic of the Congo) to 72 per cent (Ireland) of all ocean science personnel, including researchers and technical support staff in the different countries. The global average stands at 37 per cent. Half or more of ocean science personnel are female in countries such as Angola, Bulgaria, Croatia, El Salvador, Ireland, Poland and Turkey.

FIGURE 2. Proportion (% of total HC) of female ocean science personnel and female ocean researchers in 2017. In the absence of data for 2017, the latest available year is shown in brackets (GOSR 2020).

Source: Data based on the GOSR2017 and GOSR2020 questionnaires.

Empowering Women in Ocean Science at IOC

On many levels, the IOC also faces the challenge of how to enhance the participation and representation of women in its work and in ocean science at large. For example, most of the female employees at IOC are engaged in administrative work rather than holding professional positions. The situation is improving slowly but there is much more work to do to improve gender equality at the IOC. Crucially in this regard, gender equality is one of the two global priorities of UNESCO that is supported by its staff and member States. UNESCO as a whole is committed to adopting and implementing more strategic ways of addressing gender equality across all areas of its work. One of the strategies to this end is close collaboration with external partners on national, regional and international levels.

IOC implements various approaches to measuring progress on women's empowerment in ocean science at a global level. To measure change in women in ocean science, IOC uses the GOSR questionnaire (mentioned above) obtaining primary data and information of women in ocean science directly from the countries, and the GOSR analysis of women participating in international conferences. Through these sex-disaggregated data, IOC is able to understand the status quo of women's participation in these international conferences, including the age groups, and the role they played, such as invited speakers, attendees or presenters. These data could also give a quantitative hint about where we are in terms of gender equality on a regional basis.

On the practical level, IOC actively encourages participation by female scientists in its capacity-building activities. For example, the OceanTeacher Global Academy has established a good portfolio of gender equality in delivering a wide range of training programmes through classroom training (face-to-face), blended training (combining classroom and distance learning), and online (distance) learning.¹ Both women and men are featured equally in expert group work at IOC, including an equal role as chairperson.

As a dedicated effort to empower women in the UN Ocean Decade, IOC is committed to delivering a number of efforts to raise awareness and enhance women's participation and representation at all levels. These efforts are part of the call for the UN Ocean Decade programmes, with the aim

of mainstreaming ocean science and gender equality activities throughout all programmes. In partnership with Fisheries and Oceans (DFO) Canada, IOC hosted a webinar on 10 November 2020 on Making Waves for Ocean Science: Empowering Women in the Ocean Decade. IOC, supported by international experts, is contributing to the International Day of Women and Girls in Science on 11 February 2021, to encourage and highlight good practice on gender equality and – in light of the UN Ocean Decade – to guide institutions and funders to focus on gender in ocean science. A key highlight relates to the role of IOC at UNESCO and drawing attention to the importance of empowering women in ocean science for International Women's Day on 8 March 2021.

Challenges of Women's Empowerment in Ocean Science

Through its various initiatives IOC is undoubtedly fostering change. At the same time, it is undeniable that female scientists are still underrepresented in many categories of ocean science, such as technology development and ocean observation. It is clear, as demonstrated in the assessments published in GOSR 2020, that achieving SDG 14 requires more women to take up leadership positions at policy and governance levels. There is a need to address the leaking pipe phenomenon, where many women participate in the early stages, but the working environment fails to provide the support needed for them to continue on those careers in marine science. Being a marine scientist can be challenging. Both the studying and working environment have to adapt to women's lives to support their participation. This is clearly a key element of building a more inclusive and supportive work environment.

Moreover, society has to move beyond what has been documented in the educational achievements of women and translate them into equity in participation in policy and governance frameworks, and into strategic decisions about inclusivity and mainstreaming gender equality in ocean science, management, conservation interventions, policy and treaty negotiations. Only when women are represented in higher positions will we arrive at the point where the work environment is inclusive and gender equality is no longer an issue. One can take the management of fisheries as an example to illustrate the latter point. Women suffer more adverse effects from structural inequalities

¹ OceanTeacher Global Academy, available at: <https://classroom.oceanteacher.org/>.

in the fisheries value chain, and are more vulnerable to the degradation of the marine resources due to gender-blind policies, and to gendered access barriers to items like credit, education and so on. Women lack access to influence ocean governance, which might be another major factor relenting to a full participation of women in ocean science and in the application of its findings.

In summary, the experience in fisheries is not unique or unusual in that gender access barriers are slowing down the equalizing of representation of women in ocean science and in ancillary careers in ocean affairs. Furthermore, as various reports show, the ongoing COVID-19 pandemic has specifically hampered and continues to affect girls' and women's education and careers; thus will have a long-lasting effect on their participation in ocean science in the future.

Opportunities for Women's Empowerment in Ocean Science

The UN Ocean Decade can play a major role in promoting gender equality in ocean science. It is important for the Decade programmes to mainstream women's empowerment, in particular in the offering of training activities related to ocean science, such as technical programmes. Education is a powerful tool for breaking down career barriers to women's participation in ocean science. It is also important to be culture sensitive in offering these training activities. IOC will continue to work with local and regional partners to ensure that these activities are adapted to different countries and regions. Our experience to date demonstrates that the inclusion of women and girls in education and capacity-building opportunities for the blue economy has led to the involvement of more women in blue growth sectors, such as shipping, mining and research.

The implementation of SDG 14 should be more integrated with SDG 5. It is important that we move from gender-equality blindness to equality-activating policies, creating an enabling framework to make it possible for women to participate in ocean science and in the delivery of evidence-based policies and decisions. The hiring process, for example, should apply more gender-balanced criteria in addition to age index and publications.

Another powerful tool for encouraging women's participation in ocean science is to use role models and to establish mentoring programmes. Many distinguished women have made great achievements in various settings and cultures. It is important to acknowledge their achievements and to let their success in ocean science influence the choices of the next generation, including providing early career support.

With these dedicated efforts, we could hope the UN Ocean Decade would play such a role to achieve gender equality in ocean science, and that in 2030 this leaking pipeline will not leak any more, and that it will be straight.

Mainstreaming Gender Equality in Fisheries at the Food and Agriculture Organization of the United Nations

Merete Tandstad

Coordinator of the EAF-Nansen Programme,
The Food and Agriculture Organization of the United Nations (FAO)

Introduction

The Food and Agriculture Organization of the United Nations (FAO) is a specialized agency that leads international efforts to combat global hunger and malnutrition by improving food and nutrition security. The Organization has a mission to strengthen global governance, and the managerial and technical capacities of member States, as well as to lead consensus building towards improved conservation and sustainable utilization of natural resources. The FAO's work on gender equality and women's empowerment has evolved over many years, leading to its first policy on gender equality being formulated in 2012. In 2013, gender was established as a cross-cutting theme to be systematically addressed in all of the Organization's strategic objectives. The new FAO Policy on Gender Equality 2020-2030 has recently been endorsed by the FAO Director-General. The policy provides the Organization with a corporate framework to orient its technical and normative work towards clear gender equality objectives.

How is FAO Promoting Women's Empowerment in Fisheries?

The FAO Fisheries Division has developed various strategies in support of gender equality and women's empowerment. The *Voluntary Guidelines for Securing Small-Scale*

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Sorting the catch in the wet lab on board the research vessel *Dr Fridtjof Nansen*, 2018.

Fisheries in the Context of Food Security and Poverty Eradication were endorsed in 2014, with a specific chapter on gender equality in small-scale fisheries and follow-up activities for its operationalization. Additionally, in 2015 FAO developed *Guidelines to Enhance Fisheries and Aquaculture Statistics through a Census Framework* to improve gender disaggregation in reporting statistics on fisheries. Some of these statistics are highlighted in FAO's flagship publication *The State of World Fisheries and Aquaculture 2020* (SOFIA 2020),¹ which shows differences in gender representation in fisheries in the various regions of the world. In 2017, Towards Gender-Equitable Small-

¹ Available at: www.fao.org/documents/card/en/c/ca9229en/.

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Taxonomy training course held in Myanmar in 2019

© FAO/DR KWAME KORANTENG

Hawa and Estelle showing plankton samples at the GCLME productivity laboratory, University of Ghana, Legon.

© MD ABDULLAH AL-MAMUN

Sorting the catch onboard the 2018 research survey with Dr Fridtjof Nansen in the Bangladesh waters.

Scale Fisheries – A handbook In support of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication was developed to support gender-equitable small-scale fisheries by enhancing the understanding of their gender dimensions, with a focus on the specific role and conditions of women in small-scale fisheries. The FAO Fisheries Division implements strategies on gender equality and women's empowerment within its field programmes working all over the world.

EAF-Nansen Programme

The EAF-Nansen Programme "Supporting the Application of the Ecosystem Approach to Fisheries Management Considering Climate and Pollution Impacts" is funded by the Norwegian Agency for Development Cooperation (Norad) and executed by FAO. The Programme supports 32 coastal

countries in Africa and the Bay of Bengal in implementing an ecosystem approach to fisheries management. It encompasses three main areas of work: science, fisheries management, and capacity development for fisheries research and management. The Programme has developed a gender strategy for the promotion of gender equality and women's empowerment in fisheries research and management, that is designed to mainstream gender at different levels in the Programme. Progress towards implementation of this strategy is evaluated in relation to specific gender indicators that have been inserted directly into the Programme's results framework.

Capacity development is essential for ensuring that women and men are equally empowered in fisheries-related research and management. The EAF-Nansen Programme has developed several capacity building strategies, including both on-the-job and specific training initiatives related to its areas of work, to enhance both technical and managerial capacities of the Programme partner countries and organizations. With respect to science, these training initiatives range from training in application of specific methods such as onboard survey methods, taxonomy of fish and invertebrates and broader aspects, such as cruise leadership, as examples.

A specific course on the importance of women's involvement in various activities to promote gender equality has been provided to both the Programme staff and partner

countries and organizations. However, participation indicators reveal that although the promotion of women's participation has always been embedded in all the FAO's activities, there is still work to be done to achieve gender parity in these activities, in leadership roles and in decision-making for fisheries management.

Experience shows that it is crucial to create awareness in all partner countries, to ensure that they fully understand the importance of this perspective and facilitate, as much as possible, the submission of gender-balanced nomination lists from partner countries for attendance at Programme events. In the context of ocean science, it is also interesting to consider the representation of female scientists in marine surveys on the Programme's research vessel *Dr Fridtjof Nansen*.

Programme records show that almost 700 scientists have been trained in various ocean research disciplines on board the vessel since the current phase of the programme that started in 2017. However, there are regional differences in participation on the surveys, with some regions having higher numbers of female scientists than others. This could be attributed to various factors, including cultural settings, which influence the gender balance of research staff available to support these activities in different regions.

Looking more broadly at the FAO Fisheries Division, when I arrived in 1995, a very low percentage of staff were women. In 2020, about 25 per cent of staff involved in technical work (the regular programme) are women. Notably, the majority of female staff are mid- to lower-level employees. It was not until very recently that the FAO Fisheries Division employed its first female director. The FAO Committee on Fisheries (COFI), which is governing the global discussion forum for fisheries matters, has only appointed one female chair since its inception in 1965. Thus, despite progress, there is still a way to achieve parity. The path to higher career development is often challenging and not always straightforward. It was a complicated move to go from being a junior professional to being a programme coordinator. Support from both male and female fellow workers and senior management has been key to finding the motivation for career progress.

Ways to Overcome Impediments to Career Advancement for Women

Firstly, investments need to be made in mainstreaming gender in the recruitment and management of staff. This will enable

the identification of gender-specific priorities and anything else that is required in order to improve the recruitment or promotion of women to decision-making positions, which are currently dominated by men. Additionally, it is important to raise awareness on gender biased caused by cultural norms, and rooted in formal and informal settings, institutions and in policies.

Secondly, the nature of the work, which includes frequent travel and distance from other family members, highlights the importance of access to family-oriented solutions and policies such as childcare and partner's support. This is a very important consideration and can have a monumental impact on career decisions, depending on the stage of one's career.

Thirdly, training and mentoring are crucial to career progress. Currently, there are no formal mechanisms at FAO focused on supporting women in this aspect. And there is a need to reflect on how to empower young female professionals who enter the Organization in order to facilitate their professional growth and to instill confidence in them to take up more responsibility.

Finally, it is important to consider cultural aspects. Male-female power relations in the fisheries sector vary greatly between different parts of the world. Gender representation is highly variable at different levels of both fisheries research and management across different regions. This challenge, if not surmounted, will perpetuate gender inequality among participants and human resource pools, keeping elusive the goal of gender equality.

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Women from a local fishing community in Benin are sorting the catch coming from the beach seine fishery.

GESAMP, Gender Equity and the UN Decade of Ocean Science

Wendy Watson-Wright

Member and Gender Focal point, Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP)

Diversity Builds Value

According to a 2016 study by the Peterson Institute for International Economics, businesses that move from having no female leaders to having a representation of 30 per cent realized on average a 15 per cent increase in net revenue.

The Organisation for Economic Co-operation and Development (OECD) estimates that by 2030 the ocean economy could reach over US\$3 trillion in net value to the global economy. Assuming the Peterson study is accurate, we could substantially boost that projection by having more women in ocean leadership roles, and women are clearly up to the task. However, the World Economic Forum's 2020 Global Gender Gap report suggests it will take close to a century – ninety-nine and a half years – to achieve full parity at the current pace. Clearly, we need to step this up!

Progress is slow and fragmented. For instance, the Canadian Broadcasting Corporation news recently highlighted *"Women on Arctic research mission told not to wear tight-fitting clothes"*. I had thought that marine science was moving progressively ahead regarding sexual harassment, especially on board research vessels, but this headline from 28 September 2020, suggests we still have a long way to go.

Women in Science: The Leaky Pipeline

We have seen the Women in Science leaky pipeline graphic from the UNESCO Science Report 2015 (See Figure 1, page 74).

We know in overall terms the number of women working in science and research is much less than those who graduate in science. Most of the drop-off occurs approximately at the beginning of childbearing years and has been attributed by many to a lack of support within various institutions – especially in academia – for family care.

According to the first Global Ocean Science Report published by the Intergovernmental Oceanographic Commission (IOC), 38 per cent of researchers in ocean science were women. However, for the subset of countries reviewed by this report, the range for female participation in ocean science varies from 4 per cent to more than 62 per cent. In addition, while the number of member States submitting data has increased, it is still a struggle to gather accurate data at member State level.

I was the lead reviewer for the document, *Gender Equity in Ocean Science*, which was commissioned by Fisheries and Oceans Canada (DFO) as Lead of the Ocean Observation Action Group for the Commonwealth Blue Charter. (See Part

V – Appendices, page 109) This research offers best practices, profiles and case studies from around the globe, as well as recommendations for improvement. Many of those are similar to the recommendations that we are hearing here. I commend DFO for producing the document, as well as its author CarolAnne Black, who I am delighted to see is a contributor to this WMU-Sasakawa Global Ocean Institute publication.

What is GESAMP?

GESAMP is the United Nations Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection. It is an interagency body that has been advising the UN system since 1969. Currently there are 10 sponsoring agencies and programmes, which have responsibilities relating to the marine environment (Figure 2). Essentially, they use GESAMP as a mechanism for coordination and collaboration. The Secretariat is hosted by the International Maritime Organization (IMO).

The purpose of GESAMP is to provide authoritative, independent and interdisciplinary scientific advice to organizations and governments to support the protection and sustainable use of the marine environment. For example, the contaminants issue mentioned by Ambassador Helen Ågren falls squarely in the middle of GESAMP's mandate.

GESAMP has been very productive over the years, having produced more than 52 in-depth studies, involving more than 500 scientists from at least 50 countries. Today, GESAMP itself comprises 14 experts who act in an independent and individual capacity, and we are in the process of trying to augment this number, drawing from a wide range of relevant disciplines and geographic areas.

How GESAMP Functions

GESAMP's studies and the assessments are usually carried out by dedicated working groups, most of whose members are not sitting members of GESAMP but are part of the broader GESAMP network. The working groups set up by GESAMP carry out the individual studies and assessments requested by one or more of the sponsoring organizations. These working groups are made up of leading global experts, which broadens the GESAMP network activities and allows expertise to be tailored to meet the needs of specific projects.

What are the criteria for GESAMP working groups? The major ones are expertise and enthusiasm. I say enthusiasm, because this

FIGURE 2

is not paid work. Everybody does this on the side of their desks or *pro bono*. However, in designating members, GESAMP does strive to ensure geographical, gender and inter-generational diversity. Prior to and during our virtual annual meeting we had very animated discussions on how best to achieve diversity, and naturally we are going to continue the conversation during the course of our intersessional work.

In terms of experience, of course, the sponsoring UN agencies have their own equity, diversity and inclusiveness policies, or equity, diversity and inclusion (EDI) initiatives, as do other UN bodies.

Achieving Gender Representation

For GESAMP, intense conversations regarding diversity began in earnest at the beginning of the century, following the independent review of progress on this issue during the late 1990s. The results were published in a 2001 report entitled 'The New GESAMP', which was followed by a strategic plan with the same name in 2005.

I am not sure that GESAMP needs structural change. However, the greatest challenge, as opposed to impediment, is how best to identify and engage with the relevant experts and to ensure that those who are invited to become GESAMP members come from a variety of regions and represent different age and cultural groups. There are many opportunities to address the situation, and governments, institutions, agencies, members, and the marine scientific community itself, certainly have essential roles to play in this regard. Perhaps the most critical procedural issue for GESAMP as an organization is to establish rigorous but equitable processes for nominations, as well as for vetting the potential members of the various working groups.

Maya Gabeira, Guinness record holder for the largest wave surfed – unlimited (female), 73.5 ft/22.4 m high, Feb 2020. Through public petition, Maya Gabeira persuaded the World Surf League (WSL) and Guinness World Records (GWR) to establish a separate women's category for the largest wave surfed in 2018.

In GESAMP there is a sincere wish to improve our gender representation; and I have included some comments from GESAMP chairs:

“Women do not want to get the job just because they are female: that is insulting”, David Vousden (current chair)

“...before 2000 there was certainly no intent by GESAMP to not include women more, it simply was not thought about much”, Robert Duce

“I suspect most men don't have a clue about the barriers women face in advancing their careers”, Peter Kershaw

I certainly thank them for their generosity. One of the most powerful statements came from Mike Huber, a past chair and now member emeritus, when he said:

“Powerful women don't need empowerment – they need male-centricity to be depowered. In other words, get out of the way”.

GESAMP and the UN Ocean Decade

Gender equality is a big part of the United Nations Decade of Ocean Science for Sustainable Development, and the Decade strives for generational, gender and geographic diversity in all of its manifestations. So too does GESAMP. I am pleased to note that GESAMP is working closely with the IOC Secretariat to discuss GESAMP's role in the UN Ocean Decade.

Of note, Dr. Cleopatra Doumbia-Henry, President of WMU, said at this workshop that one of the outcomes we need to see for the Decade is more women ocean scientists, and I would add to that “from different regions, backgrounds and generations”. We need those additional female scientists to be recognized and included in globally important initiatives like this one.

And I truly believe that the saying, **“Equality for women is progress for all”**, which was the theme of the 2014 International Women's Day, is absolutely true.

I close with the inspiring milestone of a young Brazilian woman, Maya Gabeira, who surfed the highest wave in the women's category in February 2020, just proving once again that women are indeed up to the task.

Gender Equality and the Empowerment of Women at the United Nations and in the Context of UNCLOS: Experiences and Challenges

Valentina Germani

Senior Legal Officer (Programme Advisor), United Nations Division for Ocean Affairs and the Law of the Sea (DOALOS)

The United Nations Division for Ocean Affairs and the Law of the Sea (DOALOS) is part of the Office of Legal Affairs of the United Nations Secretariat. DOALOS supports the work of the General Assembly and its subsidiary bodies related to ocean affairs and the law of the sea, and it also acts as secretariat for the United Nations Convention on the Law of the Sea (UNCLOS), and the 1995 Fish Stocks Agreement.

Clearly, it is difficult to discuss the practice of the United Nations (UN) as a whole, given the wide range of both experiences and challenges relating to gender equality and the empowerment of women in the different entities within the Organization. This paper will provide an overview of the framework developed by the United Nations in this area, with examples based on the Office of Legal Affairs, along with reflections from DOALOS in the context of the subject matter of this workshop.

Overview of the United Nations Framework on Gender Equality

The Charter of the United Nations, a founding document of UN, addresses the issue of gender equality. In particular, Article 8 provides that the UN shall place no restrictions on the eligibility of men and women to participate in any capacity, and

under conditions of equality in its principal and subsidiary organs. Reference can also be made to Article 101, which addresses staff selection in the UN. That article does not refer expressly to gender equality, instead focusing mostly on geographical balance in the selection of staff. Importantly, it also says that selection takes place on the basis of regulations established by the General Assembly, and the latter do address gender equality.

It is important to recall the Beijing Declaration and the Platform for Action, which saw its 25th anniversary in 2020. It is also important to recall this, because the Beijing Declaration really provides the platform for action by addressing a number of specific topics, which would be applicable also in the context of oceans affairs and ocean sciences. For example, it addresses issues of education and training of women; the role of women in the economy; women in power and decision-making; and the institutional mechanisms that are necessary to support all of these issues. The Beijing Declaration is a milestone achieved on many levels and it provides the framework for action, not only for the UN system but for member States as well. Indeed, these commitments that member States have agreed to are directly relevant to redressing the challenges discussed in this workshop. For example, the many issues

relating to ensuring equal representation of women in national delegations, providing opportunities to women in ocean sciences, and also the need to nominate female candidates to various bodies. If the framework was given full effect, it would definitely also resolve many aspects associated with gender inequality, and the member States of the United Nations are aware of that need. In some of the most recent resolutions on the implementation of the Beijing Declaration and on the revitalization of the work of the General Assembly, member States have addressed these challenges, including by welcoming the increasing number of women candidates nominated for subsidiary organs of the General Assembly, acknowledging that there has been progress in promoting greater gender balance, and in encouraging member States to continue work in these areas.

Another very important element of the UN framework was the establishment of UN Women in 2010. This is the United Nations entity for gender equality and the empowerment of women. The organization has a solid mandate to assist States and the UN system to implement goals on gender equality and the empowerment of women. As such, it is a whole entity that is dedicated to the empowerment of women. At the level of the work of the UN Secretariat and the Secretary-General (SG), the current SG Mr. António Guterres has pushed for a System-Wide Strategy on Gender Parity and a UN system-wide action plan on gender equality and the empowerment of women. The gender parity at the UN has been a personal priority for Mr. Guterres, who describes it as follows:

“Gender parity at the United Nations is an urgent need – and a personal priority. It is a moral duty and an operational necessity. The meaningful inclusion of women in decision-making increases effectiveness and productivity, brings new perspectives and solutions to the table, unlocks greater resources and strengthens efforts across all the three pillars of our work.”

One of the SG’s top priorities when he took office was to address the various

initiatives that had been developed across the UN system, with a view to bringing these together into a System-Wide Strategy on Gender Parity. This has included setting targets and monitoring the implementation of those targets, particularly in relation to leadership, accountability, senior management, recruitment and retention, as well as creating an enabling environment.

An important part of the Strategy and the work in the Organization is to monitor and report on achievements, as demonstrated in the latest Secretary-General report on the improvement in the status of women in the United Nations system.¹ There is some good news in this latest report – for example, the representation of women in the professional and higher categories in the UN system had increased to 44.2 per cent by December 2017. It is important to recall that when reporting started in 2007, that percentage was 38 per cent. In addition, for the very first time in UN history, there is parity among the Assistant Secretary-General and Under-Secretary-Generals. The latter development can really be seen as a direct result of the efforts of the SG in line with his commitment to reach parity at the highest level of the UN by 2021.

It needs to be recognized that while there has been progress in reaching the goal of 50-50 gender balance, there are also areas and levels in which there is very slow and uneven progress, and in particular, in the mid-management level. So while there is now parity at the highest level and there is progress at the lower entry levels, the middle levels are those where there is not so much progress. Hence, the report contains a number of recommendations on how to address shortcomings. These include: more rigorous implementation and harmonization of existing policies, such as special temporary measures; strengthened accountability mechanisms; enhancement of career development; and the creation of an enabling environment, such as fostering an inclusive workplace that attracts, retains and advances women and supports all staff in balancing the obligations of home and professional life. In this regard, Temporary Special Measures for the Achievement of Gender Parity (ST/AI/2020/5) have been implemented since September 2020, with the aim of ensuring that qualified female candidates are selected for new posts. In fact, even before the posting of job openings, entities that have not reached the 50:50 ratio are asked to identify

1 United Nations General Assembly, A/74/220, 23 July 2019, Improvement in the Status of Women in the United Nations System, Report of the Secretary-General.

qualified female candidates. In filling job openings, female candidates that have the same qualifications must be selected for the post. It is hoped that this pragmatic approach to temporary measures will ensure the attainment of the 50:50 gender goal.

Experience of the Office of Legal Affairs

Gender representation in the Office of Legal Affairs (OLA) is also indicative of both positive outcomes and ongoing challenges. On the international staff side, 60 per cent are men and 40 per cent women, with the highest positions occupied by the former. It needs to be pointed out that the data provided do not exclusively reflect the staff of the Office of Legal Affairs. There are some other entities that are also included here - for example, the mechanisms that have been established for Syria and Myanmar.

On the positive side, the OLA has its own gender strategy, which foresees that the Under-Secretary-General (USG) is an international gender champion, which among other things means that he will only sit on panels where there is gender parity. There is a gender focal point at the OLA level, as well as alternate focal points at the OLA unit level. DOALOS has one woman and one man as alternate focal points, as it is important to recognize everybody's role in collective efforts at empowerment. Moreover, in the past couple of years, all OLA staff have had to include a goal specifically on gender in their staff performance assessment. This means that we are individually also working towards gender equality and empowerment of women. Significantly, the OLA gender strategy covers recruitment, retention and talent management aspects, and it introduces a gender element in the mentoring programme.

Experience in DOALOS

DOALOS has undertaken various initiatives in its work pertaining to gender equality and the empowerment of women. In the field of capacity-building activities, DOALOS aims to ensure gender parity in the selection of fellows. One of the well-established fellowships, implemented through a partnership with the Nippon Foundation and numerous academic institutions, is known as the UN-Nippon Foundation (UNNF) Fellowship Programme.

Of the 165 awards to date, 75 have gone to women (45%). More recent fellowships implemented since 2018 in the context of the partnership with the Nippon Foundation

have a very good representation of women. The UNNF Thematic Fellowship resulted in 18 women (53%) receiving awards out of the total of 34, and the UNNF Critical Needs Fellowship has made 16 Awards so far and 9 of them were to women (56%). Another example is the BBNJ Training, which so far has had 44 women (44%) among the 99 participants.

At DOALOS, we do not just look at our role in promoting gender equality in terms of numbers: that is not the overall goal, it is just one indicator. We have also implemented a number of gender-specific training in the context of the activities organized for the fellows, and for the alumni of our programmes. For example, in 2018, at one of our alumni meetings held in Nairobi, Kenya during the Sustainable Blue Conference, we organized a side event to the Conference on the topic of unlocking the potential of inclusive blue economy, with gender and capacity imperatives. Through these practical initiatives, we really try to train and develop individuals who are more aware of gender issues in ocean affairs.

In the broader context of DOALOS activities, the 2019 theme of World Oceans Day (a General Assembly mandated celebration which takes place every year on 8 June)

was Gender and the Ocean. A number of insightful discussions and panels were held that addressed the very many different and complex aspects of gender and oceans.

Furthermore, the Pool of Experts of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects, includes 30% women, or 238 women experts among the 791 experts. In the call for appointments of additional experts for the Pool of Experts, there is specific language recommending States and the relevant organizations to give due regard to gender balance in the appointment of experts. Here is a good example of best practice that is, and should be, increasingly applied across relevant nomination processes.

Experiences in the Context of UNCLOS Bodies

UNCLOS establishes a number of bodies including the Commission on the Limits of the Continental Shelf, which is composed of 21 Commissioners, representing many different disciplines of ocean sciences. There are currently two women in the Commission, making up around 10 per cent, who were elected by the Meeting of States Parties at the last election of the 21 members of the Commission in 2017. As of 1 October 2020, following the last election in August, five women were elevated to the bench of the International Tribunal for the Law of the Sea, which is composed of 21 Judges also elected by the Meeting of States Parties to UNCLOS. While evidently gender equality is a goal yet to be achieved in the context of these bodies, these recent developments are showing progress in this regard.

Finally, in the context of the Meeting of States Parties, the Rules of Procedures were recently revised to reflect gender-neutral or gender-inclusive language, hence implementing the requirements contained in the UN Guidelines on the use of gender-inclusive language in UN documents.

Challenges to Achieving Structural Changes to Deliver Gender Equality and the Empowerment of Women

First of all, it's important to remember that it is not only about numbers and targets. It is really about transforming an organization – individuals and the collective culture – to make it bias-free and inclusive, and about creating an enabling environment for all – men, women and all other social groups that

need to be considered. There are challenges, especially as regards the creation of an enabling environment that supports change. Some guidelines have been developed and are being implemented at the UN to address these challenges, as outlined in the SG report and in the General Assembly resolutions mentioned previously.

One of the greatest challenges to achieving parity and the empowerment of women is the need to have a sufficiently committed cultural and environmental support system for achieving these objectives. This includes the following: workplace flexibility, family-friendly policies, and appropriate and enforceable standards of conduct. It is necessary for this kind of system to exist not only on paper but also to be fairly and consistently implemented, ensuring accountability at all levels for the achievement of gender equality goals.

In conclusion, I think in general the effective implementation of the Beijing Declaration and Platform for Action, and all the follow-up UN Assembly Resolutions, would support great progress. The structure for achieving gender equality is there, but it needs to be considered and implemented not only by gender specialists. We all need to look at and apply it, in order to achieve targets in our respective roles and areas of work. In the UN Secretariat more specifically, it is also a question of effective implementation of the Secretary-General's strategies on gender parity and all relevant guidelines.

Looking to the future, it will also be important to continue to develop and implement all related policies, for example policies on the prohibition of discrimination, harassment (including sexual harassment), abuse of authority, and family-friendly policies, including on parental leave and flexible working arrangements. Transformative change can only be achieved through the consistent and unbiased implementation of these policies.

The final matter that I want to mention in terms of challenges is one that I find very interesting. The SG's report mentioned above indicates that two of the most commonly reported challenges across the UN system were backlash from staff members and lack of buy-in from senior managers. This seems to indicate that one of the greatest challenges is really an individual cultural issue that needs to be addressed, so that all of us, women and men, can contribute and understand how and why it is important to work towards gender equality and the empowerment of women for the benefit of all.

IUCN's Experience on Achieving Gender Equality

Minna Epps

Director of Global Marine and Polar Programme,
International Union for Conservation of Nature (IUCN)

The International Union for Conservation of Nature (IUCN), established in 1948, is the largest environmental network in the world. It comprises both state members and civil society organizations, with 1,200 NGO members, 210 State and Government Agency members, and 17,000 experts organized into six commissions. The IUCN Council is the principal governing body of IUCN in between sessions of the World Conservation Congress – the general assembly of the Union's members. The Council comprises 38 members (of whom 10 – or 25 per cent – are women) including the IUCN President.¹ IUCN is further governed by its Resolutions and Recommendations, which are the body of IUCN's general policy. Motions are adopted by the Members' Assembly and contribute to the development of the general policy and the IUCN Statutes. Importantly, IUCN has observer status at the United Nations (UN) General Assembly.

The object of this discussion is to look at women in ocean science in general, but in particular to focus on gender equality within the IUCN context, touching on some of the measures already introduced and potential reforms, including structural changes that need to be made in the future with a view

to discussing opportunities for empowering women within the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade).

As a point of departure, it is relevant to cite the late United States Supreme Court Justice Ruth Bader Ginsburg who stated that:

“Women belong in all places where decisions are being made.”

Women in Ocean Science

It is interesting to note that this topic is not a new one. Women have been playing a role in ocean science for a very long time. For example, Jeanne Barrett sailed around the world on a scientific expedition and was recognized as the first woman to have completed a voyage of circumnavigation of the globe, albeit she did so in disguise as a male in order to become a member of Louis Antoine de Bougainville's colonial expedition on the ships *La Boudeuse* and *Étoile* from 1766 to 1769.

There is longstanding and genuine concern about the lack of statistics on representation of females as scientific researchers and

¹ The Council comprises: the President; 4 Vice Presidents (elected by the Council from among its members); the Treasurer; the Chairs of IUCN's six Commissions; 28 Regional Councillors: 4 for Africa; 4 for Meso and South America; 3 for North America and the Caribbean; 5 for South and East Asia; 3 for West Asia; 3 for Oceania; 3 for East Europe, North and Central Asia; and 3 for West Europe; 1 Councillor from the State in which IUCN has its seat (Switzerland); and 1 additional appointed Councillor.

within scientific institutions. Scientists recognize that it is important to collect and monitor data to understand the scope of an issue. In our context we need to understand where gender discrimination exists in the professional space, and the degree to which it exists. These baseline studies will lay the groundwork for developing more targeted initiatives to address inequality and to ensure that all scientists have equal opportunities to contribute to all fields. Clearly ocean science is no exception. One study points out that the number of female oceanography graduates in the United States stood at 2 per cent in 1970 and about 38 per cent in 2001.²

The Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO) has also indicated that women's participation can actually change over time, and there are also differences within the ocean science field. Nonetheless, there is a wide consensus that there is gender discrimination and lack of recognition, including acknowledgement of women in the scientific community historically.

Gender Equality at IUCN

IUCN has been a leader in women's empowerment and gender equality for many

decades, understanding that it is a key lever for positive change and for meeting the Sustainable Development Goals and enabling conservation. In addition, IUCN has quite a diverse membership, and has adopted and mandated resolutions on gender since 1984. Thus, it is unsurprising to note that IUCN initiated its first gender policy in 2007. Significantly donors, mainly Scandinavian donors, who promoted gender equality as a top priority and a requirement, drove this initiative forward within IUCN.

With the gender policy in place, the IUCN had to rewrite its own policy, which was predominantly done at programmatic level. In addition, in 2018, IUCN adopted its Gender Equality and Women's Empowerment Policy to strengthen gender responsiveness across the entirety of the project and programming portfolio. However, the organization understands that female representation matters at all levels. In particular, there is a need to ensure inclusion of diverse perspectives and different needs and solutions. Consequently, IUCN has mandates, regulations, guidelines and gender balance in the selection of council positions, its commission steering committees, and also member representation at national and regional levels.

IUCN now has a gender taskforce, and a specific global programme that also helps the Secretariat, the members and the Commission on Gender Mainstreaming at programme level. IUCN also provides project managers with tools for gender mainstreaming across the project cycle systems, and has recently created a gender marker to measure gender integration within IUCN projects.

Gender Equality Policies at IUCN

Within the institution, IUCN has implemented human resources policies that encourage gender balance and workforce diversity within the Secretariat and support equal pay. Additionally, IUCN has a Sexual Exploitation, Sexual Abuse and Sexual Harassment Policy, which includes compulsory training on these matters for new staff. Policy requirements are refreshed every year. IUCN also has a policy against harassment, including bullying and sexual harassment, for IUCN events. IUCN has, for example through Director General representation at the International Gender Champions network, endeavored to elevate attention to gender

2 Orcutt, B.N., and I. Cetinç. 2014. Women in oceanography: Continuing challenges. *Oceanography* 27(4) supplement: 5–13, available at: <http://dx.doi.org/10.5670/oceanog.2014.106>.

equality, particularly in the conservation and environmental arenas. It is important that these measures are in place.

Looking back at when these changes were introduced in 2019 – and in keeping with Mahatma Gandhi’s comment that “First they ignore you, then they laugh at you, then they fight you, then you win” – there was some resistance and people found it quite awkward to introduce a new culture in the workplace. In basic terms, like in any meeting or event, there are housekeeping rules. This involves reminding everybody of IUCN’s policy against harassment, and then also providing a telephone number and email addresses that can be turned to if they feel they have been treated disrespectfully. This is just one example of the important approach to housekeeping matters and it is now common practice throughout the organization. Nevertheless, although this practice is encouraged, still some people feel a bit awkward and out of place actually applying it.

There are other pertinent policies in place. The 2018 Talent Acquisition Policy requires that: “All efforts must be made to attain gender balance and workforce diversity within the Secretariat.” The Review Policy includes a section on: “Review of cases that they believe to be worthy of review for a potential ad hoc salary adjustment.” Here it can be noted that policy changes are not just related to gender, but relate to diversity as a whole. It must be emphasized that this does not mean that there is a quota to be filled *per se* within the organization. In 2018, for instance, there were six global thematic programmes and no female directors. As of 2020 this had changed to 50-50 breakdown of female and male directors. Again, it should be strongly emphasized that this is not a quota or a numbers game. Women who are in leading positions should not be made to feel that they were there because of a female quota, and feel that they have to work even harder than their male counterparts as a consequence of such misleading perceptions.

Pay Gap Analysis: Identifying Differences

The IUCN commissioned a pay gap analysis in 2018, as per the newly introduced policy of guidance as stated in IUCN resolutions. This should not be confused with unequal pay. The gender pay gap is the difference between the average pay of a male and

female staff member in an organization, regardless of the job that they are actually doing; while unequal pay is a direct comparison in which women are paid less than their male counterparts for carrying out the same type of work.

Across the Secretariat, there is not a big difference in gender balance: 48 per cent of staff are women. However, as of 2019, 66 per cent of senior positions were filled by males, compared to 34 per cent females. Moreover, at the highest leadership level, 75 per cent are male. Naturally, higher grades pay more than lower grades. Thus, the smaller the proportion of females who hold senior roles relative to the workforce as a whole, the greater the average gender pay gap. In essence, the gender pay gap may also be seen as a measure of the extent to which women are able to participate and progress in more management and leadership roles within an organization.

In response, IUCN undertook a survey of 800 staff in over 46 countries. Five predictor variables were included in the survey: age, years of experience with IUCN, educational attainment, grade and gender. These variables were designed to determine the level of contribution each had on a salary gap. While differences in salaries were observed in some countries, these were primarily caused by age, years of experience at IUCN, and the staff member’s grade. None of the differences in salaries were directly due to gender of the individual staff members. In effect, there was actually insufficient evidence to suggest that any conscious decisions were made to give higher or lower salaries based on gender. This is also attributed to staff members having gained experience prior to joining IUCN of course.

Significantly, hypothesis testing (t-test) of average salaries for male and female staff in 26 out of 30 countries indicated that there is no significant difference on the average salaries between genders.

Breaking up the data using the Oaxaca-Blinder method suggests that predictor variables could explain the pay gap in instances where differences on average salaries were observed.³ A synopsis of the country profiles in this regard is presented below.

- United Kingdom: Most entry-level professional (P1) grades are occupied by female staff members. While the

³ The IUCN grading (all professional categories and some more senior management) can be decoded as follows: P1 Professional 4-7 years’ experience; P2 Professional 8-10+ years; SP Professional with management responsibility; M Senior, Directors, Heads; D Global directors, Deputy DG and DG.

decomposition tests on other variables were inconclusive, there is a slight difference in salaries in favour of male staff, where the average age of entry-level professional (P1) female staff is 21 years lower than that of (P1) male staff.

- Switzerland: A higher number of male staff members occupy managerial position (SP) grades, while female staff occupy more positions at entry level (P1) and mid-level (P2). Despite the trends, the average salaries of men are higher at mid-level and the most senior (M1 and D) grades, while women have higher average salaries at entry (P 1) and managerial (SP and M2) grades. Differences in average salaries can be explained by differences in average ages within groups.
- Fiji: Gender distribution is almost even at mid-level and entry level (P1 and P2) grades and there is no noticeable difference in average salaries of men and women at these grades. However, differences in salaries were observed at the managerial (SP) grade in favour of female staff, and this is explained by the difference in average age: male staff members are on average 9 years younger than female staff.
- Costa Rica: As a whole, there is a higher number of female staff in Costa Rica. Specifically, more female staff occupy positions at mid-grade (P2) and above. Despite observed differences in average salaries in favour of male staff, this is explained by men having an average difference of 11 years' more experience at IUCN, than women.

What do the Results of the Survey Mean?

Equality, inclusiveness and respect for diversity remain pillars of IUCN's Code of Conduct. While pay gaps exist, gender itself does not contribute to the disparity. As such, there is no statistical evidence to infer that decisions to provide higher (or lower) salaries are directly influenced by the staff member's gender alone. The data also revealed that disparities may exist in favour of either gender.

IUCN will continue to monitor pay gaps and inequities and deliver results in a transparent manner. A culture of equity and equality will drive a positive change to our efforts in reducing and explaining the causes of pay gaps at IUCN. Implementing real measures will take time, resources and a change in mindset in our compensation practices, to be truly reflective of the Union that IUCN wishes to become.

Breaking Down the Barriers

Wider lessons can be derived from the experience of IUCN. A diverse and equitable culture change is needed to break down the barriers toward gender equality and this will not happen automatically. Organizations must take deliberate actions toward creating the desired culture, and take initiatives such as eliminating inequitable pay practices by having unbiased policies, protocols and processes. This is a starting point, but there also needs to be a commitment to addressing regressive, discriminatory, non-inclusive and outdated traditions. Furthermore, addressing outdated traditions will take a lot of different types of solutions and will take time, but as drivers of gender imbalance as a whole, they are very complex and consenting of past practices and a sense of entitlement. There is a lot to be done, but there is determination to take affirmative action now and find the right balance for the future.

As Professor Long and others noted earlier in the workshop, powerful women do not need empowerment; they need male-centricity to be de-powered. However, even if space is created for female leadership, many of the old entitlements, culture and attitudes still play deeply-rooted gender roles. For example, when I joined IUCN there were no gender pay gaps, but notably a lot of women with young children were working 80 per cent. In Switzerland, where IUCN is based, schools are closed on Wednesday afternoons, so typically women would take Wednesdays off but would put in the extra hours in the evenings and in the mornings, but only be paid at 80 per cent of their salary for doing 100 per cent of their work. However, I was able to overcome this within my team at IUCN by increasing official working hours to 100 per cent by introducing more flexible hours. However, this implies that there is not only a need for measures or policies to be adopted by the organization and for them to be institutionalized, but also a need for them to be put in a societal context beyond the institution.

Similarly, IUCN is co-hosting the International Marine Protected Area Congress (IMPAC) in Canada, where childcare services will be available to facilitate women's participation at this important global event. Further, a lot can be achieved with new modalities, working virtually. As a young mum myself, travelling to the other side of the world when you're breastfeeding, is not easy. The option to join virtually, and other modalities, is therefore a great opportunity, as are more flexible working hours.

Opportunities for the UN Ocean Decade

What are the opportunities for the UN Ocean Decade? The Decade is a great opportunity to integrate the empowerment of women into ocean science. But there is a real need for this to amount to something tangible. There is an opportunity for collecting and monitoring gender-disaggregated data across institutions. Moreover, there is a need to better understand where and to what extent gender discrimination exists in the professional space. Furthermore, we need to ensure that all scientists have equal opportunities to contribute to the Decade. This includes identifying the kind of enabling conditions needed to make required changes happen, or shift – whether in policy, technology or different cultural norms – and how we can change those mind-sets in order to make science more equitable and benefit for all. Lastly, we need to develop a framework and a roadmap with tangible and measurable outcomes.

Finally, congratulations and thank you for taking leadership and having this workshop at the WMU-Sasakawa Global Ocean Institute. What I have here is actually a book, Good Night

Stories for Rebel Girls, which is a children's book packed with bedtime stories about the lives of 100 extraordinary women from the past and the present, illustrated by 60 female artists from all over the world. The most successful publishing project in crowdfunding, this must-have volume brings readers on an empowering journey, introducing them to the real-life adventures of trailblazing women from Elizabeth I to Malala Yousafzai. The unique narrative style of Good Night Stories for Rebel Girls transforms each biography into a fairy-tale, filling readers with wonder and a burning curiosity to know more about each hero.

I think this is about inspiring, and you need to start with the next generation. For this reason, I got this for my daughter. I've been reading it to her since she was two and a half years of age. She loves the stories, and they're real stories as well. Sylvia Earle is in there; and a lot of different examples. So I think that's very good - the only thing I would change, you know, if I would give out that book, I would say it's not just good night stories for rebel girls, it's stories for girls and boys. I think we make that distinction often to have this conversation with young girls, and you need to have it with young boys as well.

Women harvest seaweed for soap, cosmetics and medicine on a sea plantation, Zanzibar, Tanzania

Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development: “A Practitioner’s Perspective”

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Peggy Kalas
Director, High Seas Alliance

Peggy Kalas provided these views in her personal capacity, reflecting on women’s empowerment in the context of her experience with an NGO focused on global ocean issues, and the ongoing negotiations taking place at the United Nations for a legally binding instrument under the United Nations Convention on the Law of the Sea (UNCLOS) for the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (hereinafter “the BBNJ Instrument”).

What has always been an important conversation – the empowerment of women -- has become all the more critical now, in the time of COVID-19, where women have borne a disproportional share of increased responsibilities at home balancing working with childcare, tutoring, and home responsibilities. The wake of the “Me Too” movement has also provided much needed global impetus for change. As we enter the United Nations Decade of Ocean Science for Sustainable Development, there is no better time to address the empowerment of women scientists working in the ocean arena.

© HSA

The work of the High Seas Alliance (HSA), a partnership of over 40 environmental NGOs and the International Union for Conservation of Nature (IUCN), is to improve ocean governance of the high seas, particularly through the implementation of the BBNJ Instrument. Three formal negotiation sessions have been held from 2018 to the present, but the fourth and final slated session has been postponed until August 2021 due to the COVID-19 pandemic.

Leading up to and through these negotiations, HSA and civil society – which includes NGOs as well as academic and scientific organizations – have played a very active role providing policy advice and advocacy on technical issues related to the negotiations, as well as capacity building efforts through workshops held in partnership

High Seas Alliance representatives at the BBNJ Intergovernmental Conference

Ambassador Rena Lee, IGC President, and Dr. Cleopatra Doumbia-Henry, President of WMU

with numerous governments. The HSA also maintains an active communications campaign, building public awareness and high-level political support around the world on the urgent need to protect marine life in nearly half the planet through a new legally binding international treaty.

Pertinent to this discussion is that representation from HSA's member organizations who participate in our policy, advocacy, and overall campaign is comprised predominantly by women (75 per cent of the core team). Moreover, the HSA Board is also led by women, who make up 80 per cent of the members. The high ratio of women's leadership within HSA was not specifically by design, but rather evolved organically. In part, this may be a reflection of the nature of NGO employment, which tends to offer a more flexible work environment of the type that is sought out by many women, who continue to hold a greater proportion of childcare responsibilities in the home.

With regard to the development of capacity-building for women scientists in the ocean arena, the High Seas Alliance, with support from a private foundation, recently partnered with the Deep Ocean Science Initiative (DOSI) to establish a Travel Grant Program to award travel grants to enable deep sea scientists to participate and engage in policy meetings and conferences, providing them an opportunity to make inputs and ensure that

government decisions related to protecting the high and deep seas are informed by the best available science. While the pandemic has currently limited the operation of this programme, applications from under-served populations, including women, are particularly encouraged once travel restrictions are lifted in 2021.

One of the notable features of the treaty negotiations that have been ongoing for over a decade, is that the formal negotiations underway since 2018 have been primarily led by a strong female team including:

- 1) Ambassador **Rena Lee** (Singapore), President of the Intergovernmental Conference;
- 2) Ms. **Gabriele Goettsche-Wanli**, former Director of the UN Division for Ocean Affairs and the Law of the Sea (DOALOS), the de facto Secretariat of the negotiations; and,
- 3) Ambassador **Janine Coye-Felson** (Belize), Ambassador **Olai Uludong** (Palau), and Ms. **Alice Revell** (New Zealand), three out of four Facilitators leading the negotiations on the package elements of the Treaty.

During the preparatory phase leading up to the negotiations, a number of States raised the need to promote the role and participation of women during the Preparatory Committee meeting in 2017. It was proposed that this objective ought to be reflected in the

principles and approaches with respect to capacity building and the transfer of marine technology in the draft Agreement.

On 18 November 2019, President Rena Lee released a revised draft treaty text¹ that contained some provisions on the need for gender balance and inclusion of women, as provided below (emphasis added).

- Part V, Capacity Building and Transfer of Marine Technology:
 - Art. 42 (b): “*Enable **inclusive and effective participation** in the activities undertaken under this Agreement;*”
 - Art. 44 (3): “*Capacity-building . . . should be an effective, iterative process that is participatory, cross-cutting and **gender-responsive**.*”
- Part VI: Institutional Arrangements,
 - Art. 49 (2): Scientific and Technical Body: “*The Body shall be composed of experts, taking into account the need for multidisciplinary expertise . . . **gender balance and equitable representation.***”

Although the negotiations are ongoing, these provisions are “unbracketed” and have received a convergence of support thus far, and thus have a strong likelihood of remaining in the final text when the draft text is finally adopted by the intergovernmental conference. This will be the first global treaty focused on marine life in areas beyond national jurisdiction, and it is critical that it be future-proofed, to remain relevant not only for this decade but also for the decades to come, with provisions that promote and adequately recognize the need for gender inclusion and equitable representation.

In conclusion, gender imbalance and the need for women’s empowerment are not unique to science and the ocean community. Women are not a special interest group: we make up half the population of the globe. Women must support and embrace each other, and the best way to empower ourselves is through empowering each other. If diversity and inclusion are considered good practice in the corporate world, then surely this should apply to the ocean and our efforts to manage and protect it.

¹ Revised draft text, 18 November 2019. Available online at: <https://undocs.org/en/a/conf.232/2020/3>.

Women's Empowerment for the UN Ocean Decade: Power of Flexibility

Lisa Emelia Svensson
Ambassador

One's views are shaped by experience. Therefore, I wish to share some lessons derived from my experiences of working and engaging with different institutions, and share a few thoughts about what we could actually bring into the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade) in terms of transformative change on women's empowerment. In doing this, I wish to draw your attention to a number of key considerations that in my view ought to inform the gender capacity building and empowerment programme that is underway for the UN Ocean Decade.

First, the main challenges relate to incorporating gender considerations into communications, policies and political strategies in Intergovernmental Organizations (IGOs), governments and scientific organizations. In these spheres, women need to be far more vocal, more confident; we need to have networks, we need to be promoted, we need floor time and speaking engagements. And there are so many subtle, implicit questions here, that when you dig deeper it is actually much worse; more of a quality issue than quantitative fact and analysis. My experience is that younger women have bright ideas, write well and are very knowledgeable, with impressive educational qualifications. But it seems somehow that this early promise does not translate into occupying positions of power in decision-making later on.

This is clearly related to the importance of collecting and understanding gender-

disaggregated data, which we have mentioned during the course of the workshop. There is of course data and we have guidelines in many institutions for data collection, but we need to find data on what women are actually doing. Ambassador Helen Ågren mentioned that in Sweden we do not have that many women on executive boards, for example, in business. But when women are represented, the question is, what positions do they actually have? They are providing information, they are dealing with administration, they are the financial experts, but the more high-ranking positions are not to a large extent filled by women in decision-making roles. Therefore, it is not only about the percentage of women – it is actually what kind of positions they hold.

And I think this is exactly what I have experienced during the course of at least 15 years working in the ocean community. We have women, women are represented, but what kind of positions do the women hold? This should be a core focus of the WMU Empowering Women programme, in terms of designing outcomes. You need to weigh different positions and design strategies to ensure women get into the most highly ranked positions.

Another point is that women are working in very male-dominated structures. We might not think about it, but the structures, and the organizations that we are functioning in, are often made by men for other men. So, when we come in as women, we are

adjusting ourselves to a very male-dominated structure. But if we were reconstructing this, how would we like to construct or organize ourselves?

Again based upon my experience of dealing with organizations concerned with ocean affairs, we need much more flexibility, thinking more in circles than vertical hierarchy. Women have more of a holistic responsibility for other parts in life, focusing on work might be one part of a mosaic of responsibilities and duties. Hence, we should include incentives and support for flexibility as to manage life; including, for example, child care, a culture of supporting partners and societal structures. It is not only about a straightforward career - your work - it is also about the other parts of your life: friends, family, partners, and kids. How do you manage all these at the same time? Doing so often demands much more flexible structures. How can you structure a supporting environment for female careers? And I do think that this is quite important: to have a long-lasting career, you need to maintain the quality of the other aspects of your life. I think that is another dimension that in the long term would also benefit men.

The third feature that goes to the heart of a global programme for the UN Ocean Decade relates to culture. This might be more implicit to capture. Culture has an influence on factors such as: How do we think about

women? How do women speak? I have often been asked to change the way I talk, because it is not supposed to be like that because you are a woman.

Why are you laughing all the time, or why are you not laughing all the time? And I think those very small, subtle cultural perspectives are very implicit, but also have impact in the broader context. In what countries are women actually demanded or encouraged to lead the way forward? And these questions are once again sometimes not that easy to put on paper, because we do not want to be impolite or we do not want to pinpoint cultures and people. We might not always be aware of those implicit structures; hence an important part would be to bring it up in the limelight, pin-point what is not appropriate or appears to be biased or prejudiced. We need to be aware of the normative and coherent structure, to be able to change it.

Implications relating to these issues disempower women. We see examples of this in the science community. Messaging is very important in this regard. We need to use more dynamic and out-of-the-box thinking to change the course of the UN Ocean Decade, to ensure it is not male centric. Take the media for example: any glance at Twitter, Instagram, Facebook and other social media shows that it is often men talking about the most important topics in ocean science. We might want to include other people, just to change the picture, to circulate something other than images of structures dominated by older men.

Of course, we also have the panels and the "manels" in ocean science, meaning panels with mostly men. At the same time high ranked women are the audience but not invited in panels. I have been to so many ocean conferences where there are mostly older men, and I am fascinated because sometimes they are all retired, and you wonder, aren't there any other people that we can put up there? They have great experience, and I am sure that it is great to share this, but once again, why do not we just pull in a younger crowd, including women, and put them into those panels? Why does the panel not reflect a broader cultural context or the views of both genders on the big ocean science questions, for example? We tend to see the old given way, rather than inviting the new. As we often are told that the old hierarchical and power figures confirm the importance of the topic or the event. We should dare to get outside of the norm and focus on the issue at stake; who brings the best and brightest ideas to the table. Here I am certain that both men and women would be represented. If we

leave 50 per cent out – we are losing many potential bright ideas.

My fourth point relates to how to ensure that competition and collaboration are taken into consideration in the design and implementation of empowerment strategies. And I think also as a woman, while we should not be afraid to compete, too often we are competing with each other, all the while collaborating in other aspects. We should of course strengthen the collaboration among women, but also be aware that we need to compete, because the competition is of course part of demonstrating excellence, and driving the whole scientific agenda.

We also heard a lot about policies for women and gender policies, etc., and we often push the problems to an institutional level to be regulated by policies, frameworks, rules and regulations. But I think in this context, the emphasis on the individual cannot be strong enough, because I believe that individuals change the system, and not vice-versa. And that is why we need to have strong individuals that push these issues. And what that means of course, is that if you, as a woman working in an institution, really support younger women in your organization. This creates a lot of extra work for which one is not often thanked. It is a reason why these

informal networks need to be established, to share thoughts, and build a foundation that supports women. We all have a responsibility to encourage and support women.

My final consideration relates to developing countries and their role in the UN Ocean Decade. My experience is sometimes that women in developing countries are much more in the forefront, are working as ministers or in other senior positions. In the developed countries, including Sweden, we are seen as very strong on gender equality, and we are, but we do not always see the women out there having a strong voice. From a developing country perspective, a lot of work needs to be done. But in the Nordic countries as well, we also need to keep doing our homework, so that we also have strong leadership on such issues. In this context, the percentage of women and men in the alliance for the UN Ocean Decade is a crucially important consideration, but so are the qualitative aspects. The importance of having strong women leadership in the alliance should not be underestimated.

So these are a few thoughts that I wanted to share with you, and I am looking forward to contributing to this programme as we move forward with various UN Ocean Decade events.

Opening Remarks and Summary of the Roundtable Discussions

Gabriele Goettsche-Wanli

Former Director, United Nations Division for
Ocean Affairs and the Law of the Sea (DOALOS)

Opening of the Thematic Discussion

The roundtables provide us with an opportunity to hear from intergovernmental and non-governmental organizations as well as from GESAMP on the institutional opportunities and challenges for empowering women during the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade).

Gender equality is a fundamental human right and a critical goal of the 2030 Agenda for Sustainable Development. Notwithstanding the limited availability of research, analysis and data, I think we would all agree that it has yet to be realized within and beyond the United Nations. There are some important questions that need to be addressed in our workshop deliberations. How do we turn the tide and ensure that women in all regions are no longer underrepresented in the field of marine science? How do we ensure that an equal number of women and men are represented in science-dependent governance systems, including in leadership positions?

Equal representation is so critical. For example, there is probably a link between the limited number of women who were involved in the negotiations for the United Nations Convention on the Law of the Sea (UNCLOS), and the absence of a specific reference to women in that Convention. But while numbers are an important indicator of progress, achieving gender parity is not

just about numbers. The most difficult aspect to address is probably gender bias. Intergovernmental and non-governmental organizations and other entities have a very important role in counteracting this bias and in supporting the achievement of gender equality and the empowerment of women.

During my career at the United Nations, including as a former focal point for women in the Office of Legal Affairs, I witnessed how the United Nations system progressed in its actions to address gender equality and the empowerment of women. The establishment of UN Women was undoubtedly a milestone. Gender has increasingly been mainstreamed into UN-system programmatic activities, for example through law and policy, reports, studies, publications, awareness-raising events, education, capacity-building and financing.

But as has already also been noted yesterday, successful implementation of programmatic activities is not always entirely within the control of an organization. Apart from funding constraints, an organization also often depends on governments or other stakeholders to nominate female representatives for various bodies and activities, and such nominations are not always forthcoming.

In addition, organizations such as the United Nations also need to lead by example and

ensure that their own structures, processes and practices support the achievement of gender equality, the empowerment of women, and the elimination of gender bias. Based on my own experience and what I learned from others, I would say that senior leadership is key for any organization or entity, as well as: strategic plans and policies with goals and indicators; periodic reporting and accountability mechanisms; awareness-raising and gender-focused training; gender focal points, preferably with gender balance; mentoring networks; gender-responsive HR policies and an effective performance management process; the availability of facilitative policies such as flexible work arrangements and family leave; as well as protective measures against discrimination, and zero tolerance of sexual harassment, harassment and abuse of authority. Moreover, I do believe that everyone needs to be involved at all levels and share responsibility for creating a safe, respectful, non-discriminatory, diverse, inclusive and enabling environment, in which all have equal access to opportunities and have their voices heard. Again, I emphasize that gender sensitivity training is critical for the achievement of successful outcomes to empowerment initiatives and gender equality.

Summary of the First Roundtable Discussion

At the outset, I would like to thank the participants for their excellent presentations and discussion, during which they outlined the challenges and opportunities for empowering women during the UN Ocean Decade. Among the

challenges that were highlighted were limited gender-disaggregated data, and the underrepresentation of female scientists in many categories of ocean science. It was observed that females were also underrepresented in science-dependent governance systems, including at the level of head of delegation, resulting in the limited participation of women in decision-making. In addition, staff within organizations were also not necessarily represented at the senior level. Furthermore, it was pointed out that some regions were particularly severely underrepresented, thus raising issues of capacity.

Other challenges that were identified included barriers to access to education and credit; invisibility of women due to gender-blind policies; the nature of the work, for example structural inequalities in the fisheries value chain; and women's vulnerability due to degradation of resources. The impact of the COVID-19 crisis in hampering girls' and women's education and careers was also highlighted.

The necessity of balancing gender with a breadth of geographical, cultural, age and expertise backgrounds was highlighted, as well as the need to address the lack of awareness of gender as an issue, also termed gender-blindness, and to address unconscious bias.

The measures that were proposed in the presentations and during the discussions – organized along the lines of the International Seabed Authority's four strategic blocks or thematic areas for empowerment – included

Speakers at the 2019 United Nations World Oceans Day celebratory event on the theme Gender and the Ocean

First Roundtable

the following: first, collection of and reporting on gender disaggregated data; and second, awareness-raising, communication and outreach activities, such as starting the conversation on gender and ensuring gender equal representation in outreach material and publications, as well as other tools including dedicated websites, testimonials, webinars, awards, and events such as International Day of Women and Girls in Science and International Women's Day. And I would add, United Nations World Oceans Day.

The third set of proposed measures highlighted by participants related to policy and law and included the adoption/ endorsement of a vision, and the inclusion of gender in the strategy and policy of an organization, as well as the adoption of an action plan for the organization's entity on gender by its governing body. Other proposed measures in this group included: development of policies and procedures that support gender equity and equality, empowerment and leadership; measurement of progress; mainstreaming gender into legal instruments, for example through guidelines and the use of gender-neutral language; and the inclusion of gender equality in the dialogue on Sustainable Development Goal 14.

The fourth set of measures that were identified and considered by the participants as important were aimed at building capacity, and included education and translation of educational achievements into equal participation in governance frameworks; an enabling framework to make such equal participation possible; opportunities for mentorship and leadership; encouragement to governments and other stakeholders to

nominate women for science-dependent governance systems; and appointment of and encouragement to women to run for elected positions, as well as the need to build women's empowerment in order to help them become leaders. The participants emphasized the importance of capacity-building programmes, and many mentioned the specific programmes their organizations had in place to support developing countries. Some of the participants mentioned how their organization gave preferential treatment to female scientists. The importance of mapping existing resources, developing dedicated initiatives and identifying blocking factors was underscored, as was the need for specific technical training for women to build their empowerment, especially in those areas where there was a dearth of information. It was pointed out that it was necessary to ensure that activities were culturally sensitive. The importance of partnerships and sustainability was also emphasized, including by engaging with institutions, for example universities, the private sector and government departments.

Participants also indicated that it was vitally important to maximize opportunities for building capacity. One way to do so was through the framework of other meetings. For example, it was noted that the inclusion of women and girls in education capacity-building opportunities for the blue economy had led to the involvement of more women in blue world sectors, including research. Mentorship, communities of practice and a dedicated forum could also support sustainability. The importance of training, including specific gender training for staff and the organization's partners, was also highlighted.

In addition, there was mention of the importance of protection measures in order to prevent sexual harassment, and how it was imperative to monitor workplace practices continuously.

It was noted that many of the aforementioned enabling and protection measures would also promote gender equality and the empowerment of women within an organization or entity. These included a vision, strategy and action plan for the organization; gender champions and gender-neutral language; and gender-friendly policies and procedures, such as flexible work arrangements and family-friendly policies. The need for more representation of women at the senior level and the creation of an enabling environment was identified. And in that respect, the need to mentor not only women but also men in leadership positions was highlighted.

I would like to end this summary of the first roundtable by recalling a quote in one of the presentations, namely that by a former chair of GESAMP, who said, “Powerful women don’t need empowerment - they need male-centricity to be depowered”.

Summary of the Second Roundtable Discussion

I would like to begin the summary of the second roundtable discussion by thanking the participants for their excellent presentations and discussion. The participants highlighted the benefits of gender equality and the empowerment of women and shared their views on the institutional challenges and opportunities for empowering women. Identified challenges included gender-bias, discrimination, cultural issues, underrepresentation and unequal representation of women in scientific and in decision-making bodies. It was noted that there was a lack of recognition of women by the scientific community.

Although “women belong in all places where decisions are being made” as noted by one participant, it was pointed out that women were underrepresented at intergovernmental meetings and also in the important capacity as head of delegation. We do have an exception in the High Seas Alliance, and it has been interesting to hear what perhaps might have also been a factor there - flexible work arrangements were particularly highlighted.

Participants noted that gender parity had not yet been achieved in the organizations themselves. In some cases, such parity had not been achieved at the senior level, in other instances at the middle levels. It was pointed out that some progress had been made where leadership had been a key enabler.

Other challenges that were identified included work-life balance issues and the impact of COVID-19. During the discussions it was emphasized that sometimes there was no support structure for women, and the issue of retribution, when women did speak up, particularly affected women in junior positions.

So, what can we do? In the presentations and during the discussion, participants shared current practices and measures within their organizations to achieve gender equality and the empowerment of women. Among these practices and measures the following were highlighted: first, collection and monitoring of gender-disaggregated data and getting a better understanding of equality metrics, which can help understand the scale of the problem and identify enabling conditions; and

second, implementation of legal and policy instruments.

It was noted that while there was no shortage of relevant legal instruments, effective implementation had not been achieved. Also, it was important to mainstream gender into legal and policy instruments. There were some examples given. The Meeting of States Parties to the UNCLOS recently updated its Rules of Procedure in order to reflect gender neutral or gender-inclusive language. The need for gender-responsive capacity-building and the transfer of marine technology was also specifically mentioned in the revised draft of an agreement under the UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.

The third set of current practices and proposed measures that were highlighted included the development and implementation of a strategy on gender parity by an organization. Such a strategy could include recommended actions to reach gender parity targets and include an accountability system applicable also at the highest level. It could also include measures for recruitment and retention of staff and how to transform the culture of an organization to make it bias-free, inclusive and enabling for all.

It was emphasized that gender equality was not only about percentages, numbers and targets. For example, women should not feel that they have to work harder than men.

Participants identified a number of enablers to achieving gender equality and the empowerment of women. Among

these were leadership, including gender champions; gender focal points; gender task forces; mentoring programmes; gender-friendly HR policies on, for example, equal pay, recruitment and retention; and talent management. I would also add here the importance of geographical diversity. Other enablers that were mentioned included workplace flexibility, including flexible work arrangements that benefit both genders; family-friendly policies; standards of conduct; as well as performance management. As regards the latter, it was noted that the inclusion of a gender-related goal in the annual work plans of staff members enabled the periodic assessment of their performance, and also underpinned the point that the responsibility to support the achievement of gender equality and the empowerment of women is a shared one.

Participants also drew attention to the critical role of policies on the prohibition of discrimination, harassment, including sexual harassment, abuse of authority and bullying within an organization and at public events. A good practice that was suggested was to formulate guidelines and to review these regularly. It was noted that a commitment was also needed to address repressive, discriminatory and outdated practices.

Another enabler that was mentioned was the need for structural change, for example through the establishment of an entity to work specifically on gender equality and the empowerment of women; the designation of a unit within either an organization or in a government; and the establishment of a departmental focal point. It was noted that since women were working, to a great extent, in male-dominated structures, women needed to think about constructing a

more flexible structure that facilitated work-life balance.

Participants underscored that building capacity was vital for the empowerment of women. The importance of capacity-building programmes was highlighted, in particular for women in developing countries. At the same time, it was also noted that there were actually more women in leadership positions in developing countries, and so capacity-building would probably also benefit women in developed countries. It was pointed out that financial support was also an important enabler.

But it was noted that women also needed to support each other. Participants mentioned that this could be done in different ways, for example by building specific women's networks and communities for women, which could provide support and empowerment, including through the sharing of information and strategies. It was noted that there was a specific NGO that was trying to do just that. But women also needed to be more dynamic and organize themselves in smaller communities, support each other in the workplace through mentorship and backing each other up, and be approachable for troubleshooting. The critical need for and value of such support was very much emphasized during the discussions.

It was pointed out that it was not only about communities – it was also about us, what can we as women do? We also need to help ourselves. We need to put ourselves forward for opportunities and express our opinions. We should not be afraid to compete. Individuals can change systems, not vice-versa. So we need strong individuals to push the system and establish a network for women.

The importance of awareness raising, communication and outreach events such as those undertaken at United Nations World Oceans Day 2019, which focused on gender and the ocean, was underlined, as was the valuable role of social media. It was noted that there were a number of solutions which would take some time to realize. In that regard, a quote by US Justice Ruth Bader Ginsberg was recalled:

“Dissents speak to a future age. It’s not simply to say, ‘My colleagues are wrong and I would do it this way’. But the greatest dissents do become court opinions and gradually over time their views become the dominant view”.

FURTHER DISCUSSIONS

1. What are the challenges to the IOC's commitment towards gender equality?

Historically, there has been a lack of representation of women in the ocean-related fields, particularly in decision-making roles. Since the 1980s, more women have completed degrees in ocean-related disciplines. The number of women who continued on to build a career path in these disciplines is also increasing. However, the level of participation of women compared to men in ocean-related fields is still unequal both regionally and internationally.

The UN Ocean Decade is about ocean science for sustainable development. The critical nature of this work means that we all need to work towards greater ocean literacy and awareness raising for all citizens. It is important to recognize and acknowledge the critical role that women play in all areas of our societies. We need to provide equal opportunities for all in order to leverage the necessary skills and participation required to change the status-quo. The IOC staff includes influential female scientists, as well as women leaders that have shaped the development of the organization, but our efforts to appoint and support women in higher positions must continue.

2. What is the percentage of member States that have contributed to the Global Ocean Science Report (GOSR 2020) and is the data accurate in reflecting state practice on gender equality?

Only 23 per cent of member States submitted data for the GOSR 2017. In comparison, the 2020 GOSR received responses from 50 out of 150 member States, or approximately 33 per cent. Although this number remains low, these 50 member States represent around 80 per cent of the contributions to ocean science.

During the data collection process for the GOSP 2020, it was revealed that many member States, particularly developing countries such as those from Latin America and the Caribbean, have difficulties obtaining gender disaggregated data in ocean science. The consequence is that the GOSP 2020, and other global and regional reports, do not reflect the overall situation of gender equality in ocean science. There is an urgent need for States and relevant international organizations to begin collecting and sharing gender disaggregated data in ocean science during the UN Ocean Decade. The IOC, for example, has introduced various indicators to collect

information during international conferences. The data includes the participant's country of origin, job title and position, age and seniority and their role at the conference.

3. Are there regional variations in implementation of the UN Ocean Decade, in particular on the gender equality issue?

The IOC is charged by the United Nations General Assembly to prepare the Implementation Plan of the UN Ocean Decade and to coordinate this preparation phase. The second draft of the Implementation Plan is under the responsibility of the Division of Ocean Affairs and the Law of the Sea (DOALOS) at the United Nations, to put it forward to the General Assembly for a decision. The General Assembly has since adopted Resolution 75/239 at the end of 2020 in which it took note with appreciation of the Implementation Plan, requested IOC to regularly consult with and report to member States on the UN Ocean Decade and its implementation, and invited UN-Oceans and its participants to collaborate with IOC on the UN Ocean Decade.

All countries and regions are encouraged to establish their coordination mechanisms, including creating the coordination structures,

in order to advance the agenda of the UN Ocean Decade. Gender balance is embedded into the overall objectives of the UN Ocean Decade. It must be acknowledged that there are significant differences between regions, and even within regions. Different countries and regions are expected to craft the coordination mechanisms that suit their particular needs.

Under the UN Ocean Decade, we seek to empower women as marine scientists and empower women as stakeholders. The Decade and its Implementation Plan consider and utilize various strategies, including stakeholder forums. The IOC has adopted strategies for capacity development and ocean literacy that will help all partners to identify and overcome barriers in terms of gender equality. All partners, States, international organizations, scientists, decision-makers and the global community must recognize the importance of women's empowerment and gender equality to build a sustainable ocean.

4. Do we have enough qualified women scientists to take on more important roles? How can member States be motivated to send a gender balanced delegation team to international organizations?

Available evidence suggests that there is a strong and competent pool of women who can take on important roles representing member States at the international level. Raising awareness among member States of the importance of gender-balanced representation can be encouraged by the Secretariats of international organizations. Tracking and reporting on progress, as well as gender mainstreaming, must be continued to improve the conditions and opportunities for the next generation of women.

A focus on empowerment of women requires consideration of the support women may need to advance to higher levels of representation. This may include a detailed description of work tasks and the expected time commitment, a deeper understanding and acknowledgement of the specific needs of women in these positions, and an explanation of the support the Secretariat can offer to meet those needs.

Reaching gender parity at the international level may require a longer time frame in some regions, countries, or institutions where there are fewer women with the necessary expertise. It is important to stimulate interest and build capacity in roles at all levels where women are under-represented.

5. How can the goal to promote gender equality be achieved in the implementation of the UN Ocean Decade? Could social science play a role?

Over and above the human rights issue of gender equality, developing evidence-based approaches for demonstrating the value of gender-equal teams is an opportunity for the UN Ocean Decade. There are studies that have demonstrated increased economic success linked to equal representation of women and men. People who work within gender-equal teams often find such a diversity of opinions valuable. It might be useful to build on these quantitative approaches and use established methodologies to further develop and measure the impact of gender equality. A social science perspective is often necessary to develop appropriate indicators.

Social science offers many tools for raising awareness about good initiatives and increasing the opportunities for both women and men in ocean science. The human

element, is at the heart of every activity happening in the oceans. The involvement of professionals with social science training is useful in both defining the problems, and finding the solutions, for gender equality. Interdisciplinary collaboration is key in the successful implementation of the goal of gender equality during the UN Ocean Decade.

6. Are there any good mentorship programme models to promote gender equality that could be introduced to support the UN Ocean Decade?

A mentorship programme as a strategy for promoting gender equality may cultivate future leaders in ocean science and increase diversity in the ocean science workforce. Mentorship programmes often result in effective collaborations that lead to innovative approaches and solutions.

Many intergovernmental organizations have mentorship programmes. For instance, UNESCO's mandatory gender and ethics training programme is for both women and men, though not specific to ocean science. Organizations with good models include the Department of Fisheries and Oceans in Canada and the International Seabed Authority (ISA). The ISA's Secretary-General, Michael Lodge, has been recognized as an international gender champion. He has enacted a remarkable initiative of raising the awareness of other male leaders on the importance of making space for women in their organizations and in the policy environment. Additionally, the ISA Secretary-General encourages women in junior positions to apply for more senior positions. This effort led to the appointment of the first female Director in the ISA. The ISA's example demonstrates the need to involve men in mentorship programmes, and to promote gender equality in all spheres and at all levels.

7. How to challenge the embedded feeling of male entitlement and privilege in a working culture?

In many organizations there are working cultures that support "old boy" networks, or male privilege, structurally or systematically within institutions, and may encourage unconscious biases. It is critical to implement policies and processes towards a gender friendly working culture, while taking into account the specific cultural context.

To achieve a high-level position as a woman in environments with working cultures that support male privilege is a challenge. In particular, for younger women who may be lower in the organizational hierarchy, there

may be a fear that confronting such an unhealthy working culture will have negative implications for their careers.

While strong leadership from women in institutions is necessary, mentorship may not be sufficient. Relevant policies, frameworks and regulations need to be in place to create a workplace culture that prioritizes gender equality. It is also important to have parallel leadership and support from women in other organizations who have successfully achieved high positions.

Moreover, we need to introduce incentives for women in high-level positions to support the career development of younger women professionals. For example, the establishment of a forum where women are recognized for their career achievements and success, rewarded for their mentorship activities, and encouraged to share both the positive and negative aspects of their professional experiences.

8. How to ensure full implementation and compliance of existing gender policy?

Despite the existence of many legal instruments for gender equality, we still face gender bias and worse, as well as policy implementation challenges, in the ocean sciences fields. In the context of the United Nations, the multicultural context is the vital feature of the organization, yet it can also be a challenge to implementing policy, especially gender policy, when deeply rooted cultural traditions undermine equality.

How does one respect cultural diversity and support gender equality? There are some "carrots", or incentives, like mentoring of both male and female young professionals by senior officers, together with the implementation of meaningful training opportunities. A "stick" approach refers to monitoring the implementation of policies, training and information and the establishment of a system of accountability at all levels of the organization.

The new generation of young professionals have different views on gender. It is important to listen to younger staff members. They have many things to teach us in this area. It is also important to reach out to and include our male colleagues. Bringing all of our people together creates an opportunity to build the mutual respect and trust necessary for great change.

We need to communicate and include all people in order to change perceptions and reap the benefits of creating a more culturally gender-mixed work environment. When

we work together, all of us can further, in our own contexts, a sustainable ocean governance.

9. How should sexual discrimination and harassment be addressed?

Organizations and institutions must have sexual discrimination and harassment prevention policies and measures in place, as well as directives that ensure their implementation. We have witnessed many cases where, despite the existence of anti-discrimination and anti-harassment policies, incidents did occur, and the victims of such actions were required to undertake lengthy processes to seek justice. As with all policies, cultural differences where certain actions might carry different interpretations and cause different reactions among different groups of people, must be reasonably taken into account.

A starting point could be for the organization and institution to establish a friendly and open environment where such issues are addressed. For example, a specific staff member can be designated as the person to go to when discrimination occurs. The role of senior staff members and mentors who can provide guidance and support to the victims, who may be in a junior position, is critical.

10. Women should support women, especially women in senior positions.

There are some cases where women believe that they need to be better than men, to work harder than men, to prove their value. On a certain level, some women also expect

women to be better than men, or to do more than men. Men, on the other hand, do not have such expectations towards themselves or one another. Both women and men should be valued according to the actions or work that they are undertaking. And both should be supportive of one another. We need to change this mindset of expecting “something extra” from the worker just because it was done by a woman. Equally important, men should understand the value of supporting women and working towards gender equality.

11. Gender Equality Practice at WMU

The World Maritime University (WMU) is committed to promote gender equality and women’s empowerment in all of our education and research programmes. The University has been a reflection of the maritime world, which has traditionally been dominated by men, but significant progress has been made during the past decade. That said there is still a lot of work to do to achieve gender equality.

On the staff level, 88 per cent of general service staff are women. Female faculty members on a professional track are only 26 per cent of the whole faculty. We continue to emphasize that priority will be given to women who excel in the competitions that we put forward.

On the student level, over 38 years of education, WMU has over 1181 female graduates out of 5392 alumni from 170 countries and territories. The intake of female students has increased over the past decade. Currently, approximately 35 per cent of new students are female. This is an effort that we will continue to encourage and advance. One of the important measures that we undertake is to provide more fellowships for women, and to invite countries and donors to fund women for fellowships that would enable us to recruit more women. We encourage our donors to fund women students, and we now have a few donors that exclusively fund women.

With regards to the research programmes, for example those undertaken at the WMU-Sasakawa Global Ocean Institute, we require a gender aspect to all our work. We are not undertaking the gender programme in isolation but are mainstreaming it into all our initiatives. Among the current 12 PhD candidates enrolled under our research programmes, we have eight female candidates. The emphasis on empowering women comes directly from the top and that has been inspiring for all of us. Empowering women is now central to everything we are doing in the Institute and the University.

Albatross bolus dissection with camp students of 8-9 years old

PART IV – A VOYAGE AHEAD

The World Maritime University (WMU) has a fine tradition of research and engagement on empowerment of women in the maritime sector. This foundation has made the University an ideal location for building upon several multilateral initiatives on the empowerment of women including most notably those supported by Canada. At the inauguration of the WMU-Sasakawa Global Ocean Institute (the Institute) in May 2018, Ambassador Heather Grant representing the Government of Canada expressed support for the establishment of a gender equality research programme at WMU.

Subsequently, the Programme on Empowering Women for the United Nations Decade of Ocean Science for Sustainable Development (the Programme) was officially launched in April 2019. After a competitive recruitment process, the Programme assembled a multidisciplinary research team with two PhD candidates, one Post-Doctoral research fellow, one external collaborator along with researchers and faculty members at WMU.

The Programme is rooted in the integration and mutual reinforcement of the United Nations Sustainable Development Goals 5 Gender Equality and 14 Life Below Water, with a particular focus on the implementation of the United Nations Decade of Ocean Science for Sustainable Development (UN Ocean Decade). The Programme is enhancing capacity to explore and promote

women's empowerment and gender equality in the conduct of ocean science and in science-dependent governance systems. Research findings will identify key barriers and good practice contributing to a proposed Strategy and Action Plan as programme outputs to help deliver equal opportunities for full participation and leadership by women at all levels of ocean science throughout the UN Ocean Decade. The Programme is enhancing ongoing collaborations with partners including government agencies, intergovernmental organizations, non-governmental organizations, research institutes, universities and individuals to deliver substantive research outputs contributing to transformative actions.

The team has received significant support from all partners since the launch of the Programme and have made considerable progress in implementing a comprehensive research plan. Some important milestones have already been achieved including: the completion of the first round of literature review; the identification and establishment of working relationships with an impressive number of implementation partners; as well as participation in a number of high level external research activities and the hosting of three workshops at the University.

Eight key messages, introduced previously on page 14, emerge from this publication to achieve gender equality and the empowerment of women as a core objective

of the UN Ocean Decade. These messages are based on the team's research findings, consultation with other research entities, as well as engagement and consultation with the Programme's implementation partners.

1. Gender equality must be a central pillar for the implementation of the UN Ocean Decade.
2. Ocean science, management, and governance systems need the full and fair engagement and participation of women at all levels.
3. The collection of baseline gender-disaggregated data is critical to monitoring and evaluating the progress on empowering women.
4. Active leadership is required to support an enabling environment for pursuing gender equality and gender mainstreaming in all aspects of ocean science and science-dependent governance systems.
5. Affirmative action policies that respect gender equality and value women's participation in ocean scientific research, especially at decision-making and leadership positions, are vital for the success of the UN Ocean Decade.
6. Gender equality is not only about numbers and targets; it is about transforming an organization, individuals and the collective culture, to reduce implicit bias, encourage inclusivity, and create an enabling environment for all.

7. Intergovernmental organizations must create career paths for women and establish enabling environments that encourage, support, promote and retain women in senior positions.
8. Specific commitments are needed from organizations to monitor and report on the implementation of gender equality policies and other interventions to enhance transparency, accountability, and opportunity for all.

The immediate next step for the team is to work with the implementation partners to collect data, both on women's participation in numbers and perspectives through interviews. After thorough consultation and data analysis, the research findings will lead to discussions on the most effective policies to combat impediments and to achieve gender equality in the ocean science communities and science-dependent governance bodies. The proposed Strategy and Action Plan for women's empowerment in the UN Ocean Decade will be submitted to the Programme implementation partners for their consideration and implementation. The team will continue to work with the Programme implementation partners and other stakeholders to raise awareness of the issue of gender equality and to promote gender mainstreaming throughout the UN Ocean Decade.

A fish dissection with camp students of 8-9 years old

PART V – APPENDICES

Gender Equity In Ocean Science: Amplifying Voices, Increasing Impact

The following is an excerpt from Gender equity in ocean science: Amplifying voices, increasing impact. A report published by the Commonwealth Blue Charter Action Group on Ocean Observation with funding from Fisheries and Oceans Canada. Find the full length document here: https://bluecharter.thecommonwealth.org/wp-content/uploads/2020/12/GenderEquityOceanSci_2020_10_24_CAB_DFO.pdf

■ Executive Summary

Women and those who identify as non-binary are underrepresented in ocean science globally, particularly in decision-making positions. To achieve sustainable ocean governance, increase innovation and discoveries, and ensure all the best people come to and stay in ocean science, gender equity is required.

This paper presents six recommendations to support gender equity in ocean science, developed through a literature review and 18 expert interviews with ocean leaders from 11 countries, representing ocean research, policy, and industry. The driver for this paper is Canada's commitment to gender equity as the Ocean Observation Champion of the Commonwealth Blue Charter. The recommendations may be applied beyond the Commonwealth, and interview participants that informed this paper are from Commonwealth and non-Commonwealth countries.

The key findings of this paper are:

- (1) many leaders are demonstrating best practices to increase opportunities for women and those who identify as non-binary in ocean science;
- (2) ocean science benefits from gender equity, and there are concrete steps that can make a difference; and,
- (3) for women and those who identify as non-binary to succeed in ocean science, requirements include building new or enhancing existing networks, supporting mentorship, and strengthening communities.

The recommendations of this paper are:

- (R1) ensure equity is considered in decision-making;
- (R2) collect gender-disaggregated data;
- (R3) create opportunities for mentorship and leadership for women and those who identify as non-binary;
- (R4) co-create ocean science management plans with women and those who identify as non-binary;
- (R5) facilitate capacity enhancement and exchange; and,
- (R6) support gender allies.

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MARITIME POLICY
MARITIME ECONOMICS
MARITIME ENVIRONMENT
MARITIME SECURITY
MARITIME INNOVATION
MARITIME LEADERSHIP
MARITIME RESEARCH
MARITIME EDUCATION
MARITIME TRAINING
MARITIME CERTIFICATION
MARITIME ACCREDITATION
MARITIME QUALITY ASSURANCE
MARITIME STANDARDS
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MARITIME CERTIFICATION
MARITIME ACCREDITATION
MARITIME QUALITY ASSURANCE
MARITIME STANDARDS
MARITIME BEST PRACTICES

*"We must turn the tide
on plastic pollution."*

- Kristal Ambrose

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WMU CONTRIBUTES TO “DANGERS AT SEA” EXHIBIT, MALMÖ, SWEDEN

The World Maritime University (WMU) is featured in the new “Dangers at Sea” exhibit at the Malmö Technology and Maritime Museum (Teknikens och Sjöfartens hus, Malmö Museer) within the overall “Women and Men at Sea” exhibit. WMU’s contribution to the exhibition includes the showcasing of Dr. Cleopatra Doumbia-Henry, President of the University, as well as four resident PhD students, one of which is Renis Auma Ojwala who is enrolled under the ‘Empowering Women for the UN Decade of Ocean Science for Sustainable Development’ Programme.

The Dangers at Sea exhibition focuses on the ocean and climate sphere, addressing both the past and the future with historic aspects highlighting dramatic events linked to extreme weather in the Malmö area. A future perspective turns the spotlight on Malmö as a coastal city of the future, assigned as an Ocean Action Hub. The exhibit is a collaboration between Malmö Museer, City of Malmö (Miljöförvaltningen) and the World Maritime University. It is expected to be featured from April 2021 until spring of 2022 at the museum as well as virtually.

The theme of **Challenges, Solutions, and Future Efforts** is explored through the presentation of profiles focused on each individual’s work and a personal audio track for each contributor including:

- **Dr. Cleopatra Doumbia-Henry**, the first female President of WMU and first from a developing country, highlighting the important work and global impact of WMU.
- **Ms. Kristal Ambrose** from The Bahamas, a renowned plastic pollution activist who contributed to the introduction of a national single use plastics ban in The

Bahamas. Her work has been recognised with a 2020 Goldman Environmental Prize.

- **Mr. SeyedVahid Vakili** from Iran and his research on reducing underwater noise pollution as it is detrimental to ecosystems and can change marine life both biologically and ecologically.
- **Ms. Renis Auma Ojwala** from Kenya and her efforts to promote gender equality and specifically to identify opportunities to advance the career of female ocean scientists in institutions in Kenya.
- **Ms. Zaidy Afrin** from Fiji and her efforts to improve “Life below water as a workplace” as advancing diver employment would mean more qualified divers to support the health of the ocean.

The *Dangers At Sea* exhibit can be explored virtually, browsing through the various contributions and sections of the exhibit as well as viewing the respective WMU profiles and listening to the audio clip stories.

To learn more about the overall exhibit and the various contributions, visit:

<https://malmo.se/Uppleva-och-gora/Konst-och-museer/Malmo-Museer/Utstallningar/Aktuella-utstallningar/Havets-faror.html>

About Malmö Museer and the “Women and Men at Sea” Exhibit

Malmö’s Technology and Maritime Museum is part of Malmö Museer, the largest museum in the south of Sweden. It features exhibits and items ranging from Nordic Renaissance castles to actual submarines as well as nature, wildlife, technology and maritime subjects. The Women and Men at Sea exhibit was inaugurated in 2020 and is currently showcasing five different exhibitions including “Dangers at Sea”, launched in April 2021.

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The World Maritime University was
established in 1983 within the framework
of the International Maritime Organization,
a specialized agency of the United Nations.