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Conversations from the Inclusive Coasts and Seas workshop series on equity in marine science

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Abstract

Over the course of six weeks, Minorities in Shark Sciences (MISS) and Project SIARC (**S**harks **I**nspiring **A**ction and **R**esearch with **C**ommunities) held a series of workshop sessions called *Inclusive Coasts and Seas: Connecting Diverse Voices by MISS x SIARC*. The purpose of the workshop series was to provide training, networking, listening, and discussion opportunities for marine scientists committed to making their research and conservation work more inclusive and accessible. In this white paper, a sub-group of the delegation shares a summary of the content covered during different sessions within the workshop series and reflects on the key learnings. By bringing together these reflections, the delegation hopes to provide insights for others interested in committing to improving inclusivity in their work, particularly those early in their careers or in their work to better inclusion, and to contribute to global conversations on equitable work in the sphere of marine science and conservation.

Positionality statement

The writing group that produced this white paper came together through a collaborative workshop series called *Inclusive Coasts and Seas: Connecting Diverse Voices by MISS x SIARC*. The writing group of eleven is from 8 different countries across 4 continents. All members of the groups are involved in the marine science and conservation sphere in various capacities, including postgraduate study, science communication, biological and social science research, equity, rights, social safeguarding, community organizing, and policy engagement. Across these activities, members of the group work together with a spectrum of key actors, including communities, schools, fishers, researchers, charities, and governments. The workshop series and overall production of this white paper have been coordinated by MISS & Project SIARC.

Minorities in Shark Sciences (MISS) is a non-profit organization based in the United States. It was founded by four Black and mixed-race women in shark science in June 2020. The mission of the organization is to increase equity and accessibility in shark science and marine conservation, with an emphasis on supporting scientists and emerging scientists with the intersecting identities of being gender minorities and Black, Indigenous, or People of Color. MISS believes that diversity among scientists leads to diversity in thought, which leads to innovation.

Project SIARC (Sharks Inspiring Action and Research with Communities) is a multidisciplinary project, combining biological, physical, social and engineering sciences. The project vision is that threatened sharks, skates and rays and diverse coastal communities benefit from an inclusive approach to marine conservation & research in Wales. Project SIARC works with coastal communities around Wales, including commercial, charter and recreational fishers, community groups, citizen scientist volunteers, primary schools, and researchers. The project is led by Zoological Society of London (ZSL) and Natural Resources Wales (NRW) and is completed in partnership with six Delivery Partners (Bangor University, Blue Abacus, North Wales Wildlife Trust, Shark Trust, Swansea University and Minorities in Shark Sciences) and several Affiliates and Collaborators. A key element of the way SIARC works is to spend

time critically reflecting on how we work and ensuring we take an intentional approach to working in a way that is inclusive. Our desire is that through collaboration and co-development with the communities we work with, we can help create change for the conservation field and the lives of people living in Wales.

1. Introduction

Marine science and conservation have historically evolved alongside systems of resource extraction, governance, and access that have not been equitably distributed. Early conservation and fisheries management approaches often prioritized ecological outcomes without fully accounting for the social, cultural, and economic contexts shaping human interactions with marine systems. However, a growing body of work emphasizes that effective conservation depends on integrating diverse knowledge systems, addressing historical inequities, and recognizing the interconnectedness of social and ecological resilience. As the field shifts toward more holistic and inclusive approaches, there is increasing recognition that who participates in science and decision-making fundamentally shapes both conservation outcomes and the sustainability of marine ecosystems. There are enormous benefits to making marine science and conservation practice more equitable. Greater diversity benefits conservation, with diverse teams resulting in better scientific practices and benefits to academic research such as increased paper citations [1, 2], novel approaches and innovation [3], improved problem solving, reduced bias and higher analytical rigor [4]. Discriminatory practices also impact the ecosystems in question. For example, a study of biodiversity in neighbourhoods that had been systematically excluded, or racially segregated, in California found that systematically excluded neighbourhoods had lower biodiversity than other areas, meaning that the inequitable distribution of land and resources not only affected the people in the communities, but overall ecosystem health [5]. As evidenced by this study, equity and inclusion have the dual impact of improving societal and conservation outcomes.

In addition, marine science is often underfunded in the Global South, and researchers have higher manuscript rejection rates and are under-cited when compared to those in the Global North [6, 7, 8]. Ocean science still has to reckon with its colonial legacy, where Western scientific ways of thinking continue to take priority over other forms of knowledge generation, and often carry out extractive and parasitic methods of data collection known as parachute science [9, 7]. Another aspect of this is the practice of creating Marine Protected Areas (MPAs) without proper consultation with local communities [10, 11] and the domination of the English language in literature and scientific conferences [12, 13].

Marine science as an academic discipline, is not a diverse field, which is mirrored by the biological and geosciences as a whole [14 - 16]. Geosciences and related disciplines are lagging behind others such as biomedical sciences, reflecting broader structural and historical inequities in access and participation [17,18]. Other marginalized groups also face challenges in marine science and the sciences at large.

Gender-based inequalities remain predominant. For instance, 78% of women in marine science have experienced sexual harassment, compared to 58% in academia overall [19]. Comparably, a study conducted in Brazil showed that 195 out of 260 ocean professionals and students reported experiences of harassment or bullying, with women representing 82.6% of reported cases [20]. These hostile environments are more evident during fieldwork and at-sea expeditions, where structural and/or (e.g., lack of safe working environments and accommodations on vessels [21]) cultural barriers, and persistent gender-biased superstitions continue to limit participation (e.g., women on board are considered bad luck [22,23]) and career progression [24, 25].

Many LGBTQI+ scientists also report that they do not feel welcome in their workplaces, with trans and gender-nonconforming scientists reporting lower morale and sense of belonging compared to their non-queer counterparts, with 40% of trans scientists and 20% of queer scientists experiencing exclusion at work [26]. Beyond overt symptoms of discrimination, many LGBTQI+ people feel pressured to hide their queer identities and sexuality in the workplace and educational settings, whether as students or as faculty members [27 - 29].

Additionally, scientists with disabilities, including neurodivergent individuals, experience stigma and ableism within scientific environments [30, 31]. These students are often prevented from fully participating in fieldwork or laboratory opportunities, and are more likely to leave higher education before completing their degrees than their non-disabled peers [32]. Conferences, professional development, and other networking spaces are often difficult to navigate, and, in many cases, exclusionary [33, 34]. At scientific events, limited accessible lodging and transportation, lack of sign-language interpreters, and absence of automatic captioning during presentations are among the barriers that further hinder equity and inclusion [35 – 37]. Beyond these challenges, the academic system (e.g. universities, scientific events, laboratories, fieldwork, and etc.) often fails to support families, with limited availability of child-friendly spaces, lactation rooms as well as rest and caregiving areas [38, 39].

Unpaid work remains a persistent feature across environmental and natural resource fields, where early-career pathways are often shaped by expectations of voluntary labor, internships, and short-term contracts [40]. These dynamics are particularly pronounced in work connected to blue and green spaces, where passion for conservation and stewardship is frequently leveraged to justify precarious or unpaid roles [41]. While such experiences are often framed as opportunities for skill-building and entry into competitive fields, they can also reproduce structural inequalities by limiting participation to those with the financial means to absorb these costs [42].

Within marine science and conservation, these patterns are especially evident, reflecting broader challenges related to access, equity, and inclusion in ocean-related careers. The tendency of the environment and conservation field [43] to expect periods of unpaid work, particularly from those early in their career, can be an immense barrier to starting and/or continuing with a career in this field. Half of early-career researchers (ECRs) surveyed had undertaken uncompensated work that did not result in career progression [44], which can lead to the exclusion of certain socioeconomic groups. ECRs

sometimes experience career setbacks due to territorial hoarding of information and bullying by more senior team members, especially if they are from a marginalized background [43]. This is made worse by the fact that these issues are often overlooked in science [45]. The negative impacts of dealing with such issues were faced most acutely by women and non-binary people [44].

Shark science remains particularly problematic with regards to diversity: programs like Shark Week up until very recently mainly featured white men from the Global North, mirroring the current state of academia and the ways in which parachute science has become commonplace [46]. An analysis of Shark Week 2020 found that only 12 out of 88 people who featured throughout all the programs were women, and none of them were mentioned in the descriptions of any of the programs. Only six people of color were included in these 88 and four of those were celebrities or hosts who do not have a shark science background [46]. Rather than isolated cases, these patterns extend beyond media representation into scientific societies and across academic and professional settings. Shiffman et al. [19] show that, despite the increase in diversity in membership, this has not translated into leadership roles within the American Elasmobranch Society. Decision-making positions remain concentrated among a small group of white-presenting members over time. These structural imbalances are actively reinforced by documented cases of misogyny, discrimination, harassment, and bullying, constraining participation and long-term career development within shark science [47]. These patterns are also present in field-based research. Hyrycena et al. [48] document the experiences of shark scientists from Global South countries who work under challenging conditions and limited financial support while navigating asymmetrical power relations within collaborations. Unethical and exploitative practices further marginalize local researchers and place disproportionate burdens on ECRs. Such conditions weaken trust, strain collaborative efforts, and constrain pathways to local leadership. At the same time, these issues have begun to drive important changes within this field.

There is progress happening in the field, with a greater emphasis on amplifying the voices of marginalized groups, acknowledging bias, and making research tools and practices equitable and accessible [1, 13, 49 – 51]. Initiatives such as the Thalassophile Project, which aims to improve accessibility to the ocean for those who are deaf or visually impaired [52], are important and necessary. Alongside this, a growing number of programs and networks, like Minorities in Shark Sciences, Black Women in Ecology, Evolution and Marine Science, Black in Marine Science, Minorities in Aquaculture and Minorities in Aquarium and Zoo Sciences, are working to diversify marine science by creating mentorship opportunities, providing financial support for underrepresented students, and facilitating access to field and laboratory training that might otherwise be inaccessible. Targeted fellowships, grants, and paid internship schemes have also been introduced to reduce reliance on unpaid labor, including programs such as the Marine Conservation Action Fund (MCAF) of the New England Aquarium, which supports ECRs from low- and middle-income countries. In parallel, community-led research initiatives increasingly center Indigenous and Local Knowledge (ILK) systems in conservation planning and decision-making.

Efforts to improve representation are also evident in science communication and public engagement, where campaigns and collectives are actively working to highlight diverse role models and challenge longstanding stereotypes about who can be a marine scientist. Similarly, the development of open-access resources, low-cost technologies, and remote participation tools has helped broaden access to data, training, and collaboration, particularly for researchers in the Global South. While these initiatives represent meaningful steps forward, their long-term impact depends on sustained institutional support and a continued commitment to addressing the structural barriers that shape participation in marine science and conservation.

However, there are still issues within this progress, namely ECRs being burdened with EDI work because these inequities disproportionately affect them, but their more established counterparts have the privilege to ignore such issues. Similarly, members of marginalized groups feel pressured to mentor younger students [19] as well as expectations of members of marginalized groups to persistently take the burden of educating those around them.

2. Design and Purpose

This white paper has been brought together as an output of *Inclusive Coasts and Seas: Connecting Diverse Voices*, a six-week workshop series that ran from January to February 2025 and provided participants from across the world with networking and knowledge-exchange opportunities, focused on skills development and learning from others' experiences. The series was run by Minorities in Shark Sciences (MISS) and Project SIARC (Sharks Inspiring Action and Research with Communities), based in the US and Wales, respectively, with the session themes and content co-developed and delivered with the delegation.

No one initiative can change a whole system. However, this workshop series aimed to provide participants with a space to come together to learn and reflect, with the overall goal of facilitating learning and experience exchange, creating a space to share different lived experiences, and supporting the improvement of participants' work and ways of working. Summaries of each session and associated reflections are provided in this paper, with the goal that learnings and reflections from this series can be applied elsewhere.

In total, 60 spaces were advertised for the series, and the application process was used to guide the initial design of the workshop series. Once successful applicants were selected, further requests for input were made to the group to identify who would be interested in contributing to sessions based on the identified priority themes for the workshop sessions.

In an effort to ensure representation from members of the global shark science community, that applicants who have previously been underrepresented in similar initiatives attendance were prioritized, and that barriers could be addressed and removed from the point of planning, information on nationality, language preferences, ethnicity, and employment status/profession was requested. As such, applicants were asked to indicate their country of origin, their country of work, whether they identified as

Indigenous, and whether they identified as a Person of Color. The call for applications was advertised for six weeks via mailing lists, social media, and targeted emails to key networks and professionals in marine conservation, shark sciences, and those working on equity in environmental-focused spaces.

3. Inclusive Coasts and Seas: Connecting Diverse Voices Workshop Series - delivery

In total, 65 applications were received from individuals from Brazil, Canada, Colombia, Egypt, Germany, India, Ireland, Italy, Latvia, Malaysia, Maldives, Mexico, Nigeria, Pakistan, Poland, Russia, Sri Lanka, the UK, and the USA. Applicants were working in Brazil, Canada, Chile, Egypt, France, India, Ireland, Malaysia, Maldives, Mexico, Nigeria, Norway, Pakistan, Singapore, Spain, Sri Lanka, the UK, and the USA. Following the application process, 59 series applicants were allocated spaces.

In order of delivery, the sessions within the series covered:

- Allyship
- Project Management
- Grant Writing
- Approaches to Inclusive Conservation and Embedding Justice
- Equity, Inclusion, Access, and Justice in Research and/or Conservation
- Fishing Community Perspectives and Integrating Local Ecological Knowledge (LEK) into Science and/or Policy
- Qualitative Research
- Community Organizing and Engaging Key Actors
- Science Communication
- Quantitative Research Skills
- A Final reflections session

Although 59 applicants were successful and invited to register for the set dates, only 48 registered to attend. Registered participants were primarily from the UK and the USA, with more than 10 representatives from each country. Singapore, Canada, India, and Spain each had more than two representatives, and there were a number of single-country registrations from Brazil, Sri Lanka, Chile, France, Malaysia, the Maldives, Nigeria, Thailand, Norway, and Mexico. On average, there were about 21 attendees per session in the six-week program.

4. Vignettes reflecting on conversations

The following series of vignettes and reflective commentaries on each session has been brought together to capture key themes from discussions, delegation reflections, and the learnings exchanged. Each subsection is structured as follows:

- a short introduction to the subsection theme;
- a vignette of the session prepared by a member of the delegation who was part of leading the session;
- a reflective commentary prepared by a member of the delegation who was not involved in leading the session.

The following vignettes are presented in the order in which the workshop series was delivered. A vignette and the accompanying reflective commentary are not presented for Quantitative Research Skills, as the session focused on practical skills development rather than the discussive workshop format used in other sessions. The series was structured in such a way as to ensure it 'flowed' from topic to topic. A glossary is provided as an annex to this white paper (Annex 1) along with an annex of relevant resources and key messages (Annex 2) linked to the workshop themes and complementary to the white paper reference list.

Although the themes of this workshop series, and therefore this white paper, have been split into sections, by nature, all themes link back together. In bringing together this paper, the writing group and wider delegation hope to contribute to discussions on designing, developing, and delivering inclusive approaches to marine science and conservation, and to offer personal reflections on learning, as well as reflections drawn from across the series.

4.1 Allyship

What is meant by the phrase 'Allyship' and what is the difference between performative allyship and being an active ally were central themes throughout the workshop series, and a core theme to start the series with. In the early sessions of the workshop series, a set of 'ways of working' (Annex 3) was established and evolved to maintain a space that focused on sharing, learning together, and holding space for different ideas, voices, and discussions.

4.1a Allyship Session - Vingette

When discussing allyship, it is important first to understand some key terms—first, privilege—an unearned advantage given to some people but not everyone [see 53]. The key here is *unearned*. Nothing a person has done warrants this advantage; it is passively acquired. This brings us to power—the ability to control or affect a situation. Power can be *earned* but is often connected to privilege. Third is oppression —a systemic and pervasive force in society that harms those without certain privileges. Someone being acted on by oppression may be referred to as a marginalized person. An *ally* is someone who uses their power or privilege to fight against systems of oppression. Being an ally requires action. Simply having privilege or power does not make someone an ally; what makes them an ally is how they use their position to challenge oppression. In contrast, being marginalized is not about taking action; the system acts upon the person regardless of what they do. People are complex and can hold both privileged and

marginalized identities depending on the situation. At some point, everyone will be in a position to act as an ally. Allies play a critical role in resisting oppression because 1) they often have more time and energy since they are not constantly battling systemic barriers, 2) that particular system is not holding them back, and they can move more freely, and 3) they may be shielded from some of the backlash or risks that marginalized people face. When acting as an ally, you will make mistakes. What matters is apologizing, correcting yourself, and moving on. Also, be mindful of how your actions affect the communities you are trying to support—never drag someone into a fight they did not ask for. Allyship looks different for everyone and changes depending on the situation. Allies should evaluate the best course of action on a case-by-case basis—and understand that sometimes they will get it wrong. Allyship does not have to be grand. It can be as simple as asking a question or saying, “We don’t say that here,” or “I do not think that’s appropriate.” These small acts can disrupt harmful mindsets. Other meaningful actions include amplifying marginalized voices and volunteering time—not only with organizations but also by helping with everyday tasks that marginalized people are unfairly burdened with in both personal and professional spaces.

4.1b Allyship Session - Reflective Commentary

The allyship element of the workshop clearly distinguished between identifying as an ally and actively practicing it. Rather than being a fixed label, allyship is best understood as an ongoing practice that requires intentional action. It involves recognizing individual privileges and power one may hold and using them responsibly to challenge inequities and support marginalized or oppressed individuals and communities, who often have less time, energy, power, and influence. A key point covered within the terminology is intersectionality, which is the concept that people(s) can be subject to multiple systems of oppression that can feed into each other. This was an eye-opener for several participants in the session.

Allyship cannot be passive. Holding inclusive values is not enough. What defines an ally is the actions they take, and this is what the discussive sections throughout this session clearly outline. These can range from simple interventions, such as challenging inappropriate language or assumptions, to more sustained efforts, e.g., amplifying marginalized voices and ensuring inclusive participation in decision-making. The session emphasized that such actions need not always be grand, but should be done correctly. Small, consistent acts of allyship can have a significant cumulative impact.

The session was humbling in that it highlighted the importance of recognizing that mistakes are inevitable. What matters is accountability, the ability to listen (and hear), to apologize correctly when necessary, and to adapt behavior in response to feedback. This perspective reinforced humility as an essential quality of allyship and highlighted the importance of centering the needs of marginalized communities rather than one’s own comfort or recognition. The session and discussion therein also stressed that progress, including delivering conservation action whilst creating psychological safety, is not possible without allyship. While individual actions are critical, allyship gains strength when it is embedded in shared cultures and practices. The establishment of inclusive practices discussed within

the workshop illustrated how to create spaces that encourage mindful dialogue, respect diverse perspectives, and support constructive learning. In this way, allyship extends beyond personal actions to shaping inclusive environments and systems.

In reflection, the session taught the group that allyship is a learned, continuous, active commitment. It clearly emphasized the need for attentiveness, humility, and the deliberate use of privilege to disrupt inequity across every aspect of our lives. A valuable takeaway from the workshop is that this should be practiced consistently at both the individual and organizational levels; allyship has the potential to make equity and inclusion a lived reality.

4.2 Project Management

Project management is a process for planning and delivering an activity. Planning for any research, community activity, or event involves project management, and the scale of an activity can range from a day in the field to planning the delivery of a multi-partner, multi-national workshop or project. This session focused on the fundamentals of project management and reflective discussion regarding inclusive values and ways of working.

4.2a Project Management Session - Vingette

Project management is about facilitating the day-to-day running of a project, ensuring the smooth implementation of ideas and activities, designing and managing budgets, collaborating effectively, supervising and supporting others, achieving goals with minimal stress, and practicing active listening, communication, and leadership. There are several different project management methodologies such as Agile, Waterfall, Scrum, Prince 2 and Six Stigma as well as useful tools for project management such as Trello, Microsoft Project and Monday.com.

At the core of these different methodologies are a set of steps, though they are not necessarily sequential:

- **Initiate** (scoping ideas, actor mapping, establishing environmental and social safeguards and ways of working, and fundraising);
- **Plan** (co-development, agreeing on objectives and activities, establishing roles and responsibilities, risk management, and designing evaluation approaches);
- **Deliver** (creating and maintaining up-to-date work plans, collaboration, communication, inclusive management, monitoring progress and budgets periodically) and finally;
- **Monitor and Adapt** (monitoring, evaluating, learning, and adapting delivery, effective feedback mechanisms, integrating learning into future work).

During the session, discussions focused on sharing experiences and reflections on approaches, barriers and challenges, tools and key skills, lessons learned, and, in particular, what inclusive project management should or could look like. For the group, a particularly important part of project management that feeds into inclusive approaches was communication. What approaches are taken to ensure fair and just decision-making should be carefully considered when it comes to planning and delivering activities - who is or is not involved in decision-making and sharing of resources, for example. Particular challenges highlighted by the delegation included: a) lack of specific skills development for junior roles, where they may be expected to manage themselves without much guidance or support and b) how, at times, project outputs do not align or bring about change at a level which acknowledges and addresses historic and systemic challenges; particularly when decisions are being made or projects and activities are being designed without the voices of key actors being included and valued.

4.2a Project Management Session - Reflective Commentary

In practice, project management is complex; managing the various moving parts while maintaining organizational values and goals can pose numerous challenges. Working styles, communication preferences, and priorities may not always align, and compromises are often necessary. This highlights the importance of ensuring that one is adaptable and inclusive when growing their project management skills, and able to respond to and incorporate feedback with an agile, reflective approach.

In particular, this session focused on the steps of project management and how intertwined they are - that, at all stages of project creation and management, care needs to be taken when considering key actors, workplans, deadlines, and more. At all stages, project creation benefits from multiple sources of input, whether determining potential collaborators, developing an outreach strategy, or ensuring that project delivery goes smoothly. Effective project management depends on communication, trust, a strong organizational structure, and setting realistic goals with clear expectations and realistic timelines. When people feel trusted with, and motivated in, the roles they have been assigned, and when managers are willing to delegate and adapt, projects are more likely to have a broader and more powerful impact.

MEL plans - ‘moderation, education, and learning plan’ or a ‘monitoring, evaluation, and learning plan’ are essential to ensuring that a project stays on track, not just for the target demographic of the project's scope, but also for those working on it. Along with a work plan and budget, it helps keep everyone on the same page and on track, and allows them to assess the project's successes and challenges. This, too, serves as a way to gather and track feedback to improve future projects. Overall, inclusivity in project management relies on the team's willingness to grow together, communicate and trust each other, and maintain their commitment to meeting project objectives.

4.3 Grant Writing

This session walked through the grant-writing process and provided an overview of effective application creation and considerations regarding ‘how to ensure grant submissions are developed inclusively’. A priority of this session was to facilitate knowledge exchange among delegates, reflecting that grant writing can be nerve-wracking, daunting, and intimidating, particularly when the success of a grant application can directly affect people's employment, livelihoods, or access to future opportunities.

4.3a Grant Writing Session - Vingette

Cohesive and informed grants start with preliminary research that may include, but is not limited to, literature reviews, needs assessments, focus groups, interviews, statistics, and historical data analysis. Being able to cite these sources in a grant application ensures that future projects are evidence-based and provides context for the necessity of the project, while relating it to various communities and their values. The key to inclusive fundraising is ensuring that those likely to be affected by the grant outcomes are part of the submission process from the outset. In designing focus groups, important questions to ask include: ‘who is impacted by possible outcomes of this work’, ‘who has been underrepresented in discussions regarding similar activities to date’, and ‘are different voices being fairly represented in shaping this grant application’, to ensure that proposed activities continue to work towards more inclusive practices.

Participants of the session were provided with Project Reference Sheets (to capture a project idea, tagline, summary, target groups affected, values, goals, team and collaborator structure, and activities proposed) that would help them plan out a grant application and support them to communicate this to others (Annex 4) clearly. During the workshop, a key discussion was the need to identify what success looks like for all involved and how this should be determined as part of building a grant, i.e., having a clear and shared ‘vision’. Community connections were especially highlighted as important, reflecting the value of genuine collaborators' feedback, references, and input for successful research and conservation outcomes. Grant-writing is as much about bringing about a successful project as it is about building and maintaining sincere relationships with those affected by the project, its methodology, and its scope.

4.3b Grant Writing Session - Reflective Commentary

The grant writing process can be laborious but rewarding, both emotionally and financially. A strong, inclusive project management approach is essential for effectively creating and managing grant applications. In addition, the time it takes to input into the creation of a grant should not be overlooked. To approach grant writing and fundraising inclusively, it is important to have open and transparent communication pathways and well-communicated timelines to ensure fair participation.

Given that a significant majority of work in the marine field and the wider conservation field is grant or philanthropically funded, it is important to ensure that the key pillars of working inclusively are built into both the funding process and the planned activities. To truly integrate key actors’ ideas and voices and

share decision-making power, it is important to start conversations early and keep clear, accessible records of ideas raised, decisions made, and justifications for these. During the session, a range of discussions focused on ensuring due diligence as well as building funder relationships and connections - reflecting that it is important to find the right fit, both to increase chances of success but also to avoid wasting the time of researchers, project staff, community collaborators or partners, and relevant actors. In addition to whether the grant available is relevant to the project idea, a key part of the due diligence process is determining the appropriateness of a funder - are their values and ethos shared? What have they funded previously? The same applies to choosing partners and collaborators.

Several pertinent takeaways on barriers were discussed, particularly regarding funder directories, language and wording, and risk assessment. Whether a funding catalog would be a useful resource was considered. A significant amount of time spent fundraising is either finding appropriate grants to apply to in the first instance or responding to calls for applications that have incredibly short turnaround times, which in turn can shut out groups or individuals who do not have the capacity to engage on such short timescales. The language and wording required in some funding applications must be both succinct and technical; particular attention is needed to craft the text to ensure that key risks perceived by both the applicant and the application assessor are addressed and mitigated. Consideration of risk in this context should not stop at financial aspects, but also at social aspects, both for the project and for those impacted or influenced by the project's delivery.

4.4 Approaches to Inclusive Conservation and Embedding Justice

Exploring ‘what does inclusive conservation mean’ took many forms throughout this session, but at its core were interpersonal connections, interactions, and collaborations.

4.4a Approaches to Inclusive Conservation and Embedding Justice Session - Vignette

When you start working in a collaborative setting, it is important to reflect on any constructive and destructive group behaviors you may exhibit [54]. Being mindful of these from the beginning helps you lean on your strengths and mitigate your less desirable tendencies. Constructive group behaviors include: cooperating, clarifying, inspiring, harmonizing, risk-taking, and process-checking. *Cooperation* means taking an interest in others’ views and adapting to group needs. *Clarifying* involves listening, summarizing, and focusing discussions. Those who *inspire* encourage participation and energize the group. *Harmonizers* support cohesion and collaboration. *Risk-takers* take bold steps, even risking personal discomfort for the group’s benefit. *Process-checkers* keep the group organized through agendas, deadlines, and structure. While these behaviors help group dynamics, some come more naturally than others. At the same time, we may fall into destructive behaviors that stem from our

personalities. Destructive behaviors include: dominating, rushing, withdrawing, discounting, digressing, and blocking. *Dominators* take up too much space or talk over others. *Rushers* push the group forward too quickly, silencing others. *Withdrawers* disengage and stop participating. *Discounters* minimize others' contributions, and *blockers* shut down ideas without offering alternatives. Talking about these behaviors at the start and revisiting them throughout the collaboration helps keep dynamics healthy.

Another key step is aligning expectations. The group should come together to decide how tasks are assigned, clarify any cultural norms or procedures, and discuss how contributions will be credited. This should be a collaborative process where everyone feels heard. To create an inclusive space, it is also essential to be mindful of bias. Several patterns of bias exist, and a number of these were presented to attendees within the session, including four described by the Center for WorkLife Law (worklifelaw.org): Prove-it-Again, Tightrope, The Parental Wall, and Tug of War. *Prove-it-Again* refers to stereotyping some groups as less competent, making them constantly prove themselves. *Tightrope* highlights how certain groups face a narrower range of acceptable behaviors. *The Parental Wall* affects people both with and without children, as others make assumptions about what they can or should do based on parental status, often with gendered implications. *Tug of War* describes how bias can create conflict within marginalized groups, even causing people to exhibit bias toward others like themselves. Being mindful of group dynamics, biases, and expectations helps ensure everyone feels valued, heard, and included. It is also critical to include people impacted by or knowledgeable about the initiative from the beginning—not as an afterthought.

4.4b Approaches to Inclusive Conservation and Embedding Justice Session - Reflective Commentary

Effective collaboration is only ever enhanced by a diverse cohort of people; each person brings to the space a world of values, lived experiences, and ideas that can be markedly different from their peers'. When discussing issues perpetuated by historic power imbalances or systemic oppression, the groups affected should be at the forefront of the conversation and given the time and space to articulate their knowledge from the outset of the collaboration fully. Their stories, histories, and contributions, especially when discussing difficult topics that directly affect them, can be inherently traumatic. They deserve to be heard, the accounts trusted, and their lived experiences believed without justification or questioning. To be inclusive, environments must be genuine and tolerant of everyone's opinions and ideas. A space should be mindful of different cultures, upbringings, and opportunities within the group; an effective facilitator or notetaker should be conscious of who in the group is speaking, who is comfortable taking up space, and if anyone, whether through bias, oppression, or personality, is uncomfortable. Therefore, establishing collaboration strategies from the start creates an environment where individuals feel included, allows each person to play to their strengths, work to their full potential, and be aware of their destructive tendencies, enabling them to be held accountable. This is a rewarding and effective strategy to enhance conservation practices. To disrupt systems of oppression, they first need to be addressed, making unconscious biases conscious. Uncomfortable conversations may and should arise as a result,

but fundamentally, the voices from these conversations should be amplified and properly represented. How these individuals are compensated should also be considered - to ensure that inequities and power dynamics are not being reinforced. Addressing both constructive and destructive behaviors from the beginning and aligning expectations will be beneficial to the project's overall success in the long run. This also mitigates the potential for communities to be spoken for, or through by organizations rather than in genuine collaboration, leading to future collaboration and overall greater success for people and planet.

4.5 Equity, Inclusion, Access, and Justice in Research and/or Conservation

Achieving equity, inclusion, fair access, and justice in research and conservation action is not just about whatyou do, but also how you do it. It is about working in a particular way, with a particular approach, ensuring that the way you work with others meets shared values and that working inclusively is forefronted at all times. It is about sharing space, working transparently, being reflexive, and owning up to and learning from mistakes. These themes were discussed at length in both this session and other sessions.

4.5a Equity, Inclusion, Access, and Justice in Research and/or Conservation Session - Vignette

When working in the EDI space, the term ‘space’ comes up a lot. For this delegation, this phrase evokes different themes: breathing space; quiet space; creative space; space at the table; having or giving someone a comfortable place to share their views; brave space; holding space; sharing space; learning space; and safe space. The diversity of views of what ‘space’ is highlights the importance of being considerate of the space you are working in when conducting research, engagement, and conservation activities. It is important to consider the following when considering whether a just and fair approach is embedded in the work you do:

- Who is present in a given space and who is not.
- What are some assumptions you are making about the other people here?
- Who created this space? Who makes decisions?
    - Is how people communicate in the space clearly established? Do people know what the rules of engagement are and how they are upheld? Are expectations clear?
    - Do you feel comfortable speaking up if asked to do so? Do you think other people feel safe and comfortable here?
    - What are some barriers you can identify here?

- Whose experiences are you hearing about? What are you learning here?

Few spaces are inherently good or bad; nearly all spaces hold nuance because people are complicated. Instead of trying to create safe spaces, focus on working towards spaces of growth together; what is safe for one person is not inherently safe for another. The marine science and conservation field is undergoing a rapid shift toward more inclusive practices. On reflection, this delegation did not feel that the marine science and conservation field is inclusive. In particular, there is a distinct lack of inclusivity and prevalent misogyny, skepticism, and exclusion based on identity, lack of transparency, a need for mindset shifts, a need for culture change, and prevalent privilege divides linked to cultural identity and lack of representation in the field. Change is happening, though, with groups actively working to shift the dial, but this is still the exception rather than the norm. For those striving to shift this dial the space can be hugely rewarding, intentional and meaningful, but can come with a risk to self, due to challenges around engaging with people or community organizing approaches being viewed as 'nice to have,' but not a necessity or priority in several global contexts, or the need to draw from and share what may be traumatic personal experiences to help drive change. Furthermore, the 'charge' of driving change or calling out inequity remains largely on the shoulders of those who feel the impacts of non-inclusive working, decision making, or practices the most - leading to fatigue and at times frustration.

4.5b Equity, Inclusion, Access, and Justice in Research and/or Conservation Session - Reflective Commentary

Working in marine conservation, delegates expressed that there is more of a focus on outcomes. Many delegates reported thinking more about *what* they are trying to do rather than taking the time to really reflect on *how* they are doing it and the impact that this has on those around them. Through the session and exercises, many delegates began to appreciate that the process – the relationships, the values, and the space it creates for others – is just as important as the outcome. Delegates walked away, taking a big step backward to make time (and space) to challenge themselves, reflect on how they can better support others or make spaces more inclusive, and build the courage to own their mistakes. In science, we often talk about collaboration but do not always examine who gets to be at the table or who feels safe speaking. While the field has a long way to go, delegates have had experiences in spaces where people truly listen, where there is room to grow, to challenge and be challenged, and importantly, to be honest.

4.6 Fishing Community Perspectives and Integrating Local Ecological Knowledge (LEK) into Science and/or Policy

In this session, the delegation were joined by fishers from the USA, Brazil, Wales, Nigeria, India and Sri Lanka who spoke on themes related to Local Ecological Knowledge (LEK); working with marine science and conservation practitioners and researchers; barriers to being part of marine science and

conservation initiatives; and reflected on experiences from relationships with marine science and conservation practitioners and researchers.

4.6a Fishing Community Perspectives and Integrating Local Ecological Knowledge (LEK) into Science and/or Policy Session - Vignette

Fishing communities have developed valuable Local Ecological Knowledge (LEK) over centuries due to their close connection with marine ecosystems. This knowledge includes insights into species behavior, ecosystem processes, and sustainable harvesting strategies [55]. These elements are essential for effective fisheries management and biodiversity conservation. The combination of LEK with 'traditional' formal scientific approaches and policy enhances understanding of local ecological processes and supports adaptive, community-involved governance. However, this LEK has not always been valued in the same manner as some quantitative research approaches.

In this session representatives of fishing communities from various countries shared their perspectives on conservation and management while providing valuable LEK insights. It is important to understand these perspectives and attitudes towards conservation efforts to find common ground and build effective management strategies that work for the impacted communities. Many Sri Lankan fishers today are more interested in the quantity of catch rather than quality, which can deplete fish stocks and undermine demand for high-quality seafood [56]. Such a trend can undermine sustainability but also lower economic value and food security for coastal communities so it is important to understand this perspective and take it into account when exploring regulatory solutions. In Brazil, fishers have been in conflict for over two decades with scientists, government authorities, and conservationist NGOs over fisheries regulations. These tensions began with the fishing moratorium established by the Normative Instruction No. 05 in 2004 [57], which prohibits the capture, landing, and commercialization of several aquatic species, including sharks and rays [58]. Subsequent regulations, such as the Ordinance No. 445 and No. 354 [59, 60], expanded these restrictions over time. In the United States, fishers similarly provide nuanced observations of ecological change, noting shifts in shark species composition over time, such as declines in tiger sharks and increases in sandbar sharks following protective regulations. Fishers present at the session from both Brazil and the United States expressed frustration with some of these regulations because what they are seeing on the water and the challenges they are dealing with don't feel as if they are being taken into account by regulatory bodies. This discontent emerges in social media posts by Brazilian fishers, where they question both the conservation status of prohibited species and the effectiveness of current restrictions. They share videos of large numbers of sharks and rays being discarded at sea during their fishing operations, exposing what they perceive as a loss of food and income [61].

A fisher in Mexico highlighted the socio-economic realities of the profession, describing fishing as financially unstable and dangerous, while also expressing interest in transitioning toward tourism-based

livelihoods. The decline of fish species is having a real impact on the lives of fishers across various countries. From Wales, a fisher shared observations of long-term declines in species abundance, changes in vessel presence and size and changes in target fisheries. In Nigeria, fishers report declining shark sizes, increased effort required to catch sharks, and the impacts of industrial development, such as noise pollution and offshore infrastructure, on shark presence. At the same time, the LEK of fishers in Sri Lanka has also been instrumental in filling in gaps in scientific observations, particularly for endangered and threatened species. For example, although sawfishes in Sri Lankan waters were generally believed to be locally extinct, some fishers have reported occasional sightings. They also share traditional knowledge indicating that sawfish rostra were historically used as fencing material, suggesting that there was once a more widespread sawfish population. Though there are no recent scientific reports to corroborate these sightings, this type of traditional knowledge plays a role in guiding conservation-relevant management and shaping protection practices for fisheries and associated species in Sri Lanka [62, 63]. Fisher knowledge of the coast of Wales has been critical in identifying the continued presence of angel sharks, a species previously thought to be locally absent [64]. Coordinating with fishers has also led to increased release rates of vulnerable species in Brazil and improved post-release survival in the United States by adapting gear and handling practices, informed by both experience and collaboration with scientists.

These cases highlight both the tension between formal management approaches and fishers and the opportunities to leverage LEK, which is often underutilized or overlooked in policy decisions. Incorporating LEK could improve resource management by aligning regulations with fishers' knowledge and experiential understanding of seasonal patterns, species behavior, and ecosystem changes, as well as both their economic and cultural values. Recognizing and integrating those most impacted by and connected with these ocean resources not only enhances ecological sustainability but also fosters greater trust and cooperation between local communities and governing institutions while improving fishers' attitudes toward regulatory measures.

Fishing communities around the world, especially in developing countries, face numerous challenges, including overfishing, illegal and unregulated fishing, post-harvest losses, rising fuel costs, and the impacts of climate change. In many regions, the lack of current and reliable stock assessments hampers progress in sustainable fisheries management. Furthermore, poor handling techniques and inadequate storage conditions on fishing boats often result in significant quality losses, diminishing the economic value of the catch. This situation sometimes forces communities to depend on lower-value products. These issues underscore the urgent need to integrate fishers' practical knowledge with scientific data to create effective and culturally appropriate management strategies that address both ecological and socio-economic circumstances.

Connecting the visions of fishing communities and their LEK with traditional scientific practices and policy institutions can enhance the resilience and adaptability of fisheries management. By integrating these diverse knowledge systems, co-management strategies can be developed that prioritize local insights, improve data quality, and increase compliance with regulations. Such inclusive approaches

facilitate the sustainable use of resources, support biodiversity conservation, and ensure the economic viability of fishing communities. Ultimately, this empowerment helps these communities become more resilient to environmental changes and economic pressures.

4.6b Fishing Community Perspectives and Integrating Local Ecological Knowledge (LEK) into Science and/or Policy Session - Reflective Commentary

As various forms of knowledge building and dissemination become more widely accepted as bolstering scientific understandings rather than countering them, it becomes increasingly clear that community observations and lived experiences need to be integrated into all aspects of research. Community members, too, are key actors who inform where, how, and why research must be done. Including them in the process from the start ensures that research is holistic, relevant, and applicable, and that next steps can be drawn from conclusions. This approach underscores the importance of collaborative working, where time is intentionally spent listening to one another and fostering two-way knowledge exchange.

Learning about LEK and how communities of local fishers can be involved in research and policy-making provides a deeper understanding for any marine scientist of why social science and understanding must be integrated into their work. It also highlights how, by working together, it is possible to generate collaborations that deepen both the work and scope of what researchers and fishers aim to achieve. Sharing knowledge allows researchers to better understand what they aim to achieve through their work, and it empowers fishing communities by providing them with knowledge and support to continue their work sustainably. Central to this is co-design, ensuring that communities feel genuinely part of the process rather than subjects of it, and recognizing that education is foundational for all parties involved. Building trust among scientists, policymakers, and fishers is essential, particularly as these groups often share common values, including a deep appreciation for marine life, such as sharks. Creating spaces where fishers can share their perspectives openly is equally important, as they do not always have opportunities to speak and be heard in this way.

It is important to highlight the impact of community collaborations with scientists and policy-makers. In a world that prioritizes academic knowledge and published research over community anecdotes and generational understandings, there is a real danger in creating and/or deepening divides between local communities and governing bodies. A lack of communication and transparency can further damage these relationships, exacerbating historical class and often racial tensions and leading to inequitable policies and unsustainable practices. Conversely, when researchers actively engage with communities, returning regularly, working alongside them, and building long-term relationships, these collaborations can thrive. Working in synergy across fishers, government officials, and researchers strengthens both the process and outcomes of conservation and management efforts. As such, integrating empathetic LEK methodology into research and policy-making helps close these gaps, providing local fishing

communities not just with a seat at the table, but with a meaningful role in shaping what that table looks like.

4.7 Qualitative Research

One way to integrate community knowledge into research is through qualitative methods, which come in many forms. Qualitative approaches such as the Community Voice Method (CVM) focus on gathering, analyzing, and synthesizing research participants' experiences, perceptions, and behavior relating to particular questions. This session focused on perceptions of Qualitative Research approaches.

4.7a Qualitative Research session - vignette

During this session, participants defined qualitative skills as: interviews; language analysis; non-numeric variables; personal experiences and anecdotes; the *way* someone says something, not just what they say; focus groups; communication skills; ethnography and auto-ethnography; oral histories; ability to listen; identifying emotions and being able to interpret themes; and subtext to extract and better understand data.

When it comes to inclusive conservation and representation of diverse voices, qualitative skills and research methodologies are of great importance, as is analyzing data in an unbiased way. The advantages of using qualitative skills include gaining a better understanding, analyzing, and clearly communicating the context, importance, and impact of non-numeric data. Qualitative data can provide context to quantitative data, recognizing that people are not just numbers on a spreadsheet; it is the ‘why’ and ‘how’ behind larger datasets; it is a route to document and share important LEK that has been overlooked by many quantitative and ‘western’ research approaches. Through qualitative approaches, it is possible to build a deeper understanding of the important community, cultural, historical, and sociopolitical contexts relevant to where you are working, and to develop important skills for working respectfully with key actors. A key element of qualitative research is recognizing one's positionality:

- Do you recognize your own biases and how your own power and privilege have shaped your worldview and actively shape how you interact with people you work with?
- Do you have the right training?
- Are you analyzing your data in a way to manage both your own and others' biases?

Qualitative research is about making connections and values the quality of conversations over the volume of data. It supports the development of greater insight, impact, and context while helping build relationships. Qualitative research approaches can be harnessed to capture and share views to help co-design research activities and decision-making. However, it is important to build the right skills and ensure that a diverse range of voices is included, so that narrative outputs truly represent the key actors you are working with in ways that mitigate your own biases.

4.7b Qualitative Research Session - Reflective Commentary

It is important to acknowledge that qualitative research has sometimes been given a reputation of “soft science”, “too biased” to be of any use to “real” scientific research, as it is not based on “objective” numbers. This session highlighted all the ways those sentiments are misguided and how well-planned, thoughtful qualitative research can provide valuable information that numbers simply cannot. A real highlight of this session was the acknowledgment that social science is just as robust as other sciences, assuming proper methods are followed. Just like any scientific method, qualitative methods such as interviews or surveys need to be designed with care and attention, rather than treated as an add-on or box-ticking exercise. Another valuable takeaway from this session was the focus on how asking certain questions, as well as who is asking them, has a significant impact on the kind of data that is collected. While collecting qualitative data can provide valuable information about the socio-cultural and political landscape under study, it can also highlight the researcher's associated leanings and biases, which must be acknowledged through a positionality statement or theoretical framework. Ultimately, this kind of data cannot be considered a “silver bullet” for making conservation science more inclusive, as it can be used in an extractive, exploitative way. However, just like any other method, it can provide valuable insights that can benefit ecosystems and communities when carried out with thought and care.

4.8 Community Organizing and Engaging Key Actors

Engaging communities and key actors in any science research or conservation effort is important. By bringing people together around a common concern or goal, we begin to address the power imbalance in decision-making. Taking a community organizing approach, with a strong focus on participatory methods, helps build personal agency, challenge power inequalities, and draw everyone together into collective action. It ensures that local knowledge, values, and needs shape efforts to become more equitable and sustainable in the long term. Without inclusive engagement, science and conservation risk becoming top-down and harmful to the communities it aims to support.

4.8a Community Organizing and Engaging Key Actors Session - Vignette

During the session, four case studies of initiatives from around the world were presented, and it became clear that they all shared a common vision. One in which communities, be they fishers, marginalized communities, or members of the wider public, play an important role in the co-creation of science and conservation initiatives. The programs all communicated to the delegation the true impact of inclusive practice by demonstrating and sharing the importance of intentional design, active listening, and flexibility.

Building trust and developing plans for equitable ways of working together ensures that community voices are heard and guide decisions. However, successful engagement often takes time, and flexibility

is needed to ensure that all voices are included and given equal weight. Adapting discussions and actions to community interests rather than solely to scientific or conservation goals is essential. Inclusive engagement also draws on the need to understand the ‘audience’, the communities we work with, and the barriers they face, whilst showing respect for local traditions and language. In each case study, the need to make information accessible was clear. Interactive media, photography, videos, and infographics can often communicate messages in an impactful, digestible way that is not jargonistic. To ensure inclusivity, it is often necessary to use multiple channels of communication, including face-to-face and ongoing conversations.

Creating ongoing space for key actors and initiatives to learn and be curious together is important. It allows for the identification of concerns and challenges, in turn giving space for collaborative barrier removal and ways of working. Valuing and sharing knowledge and opportunities allow integration into each other’s activities and form the foundation for a relationship based on trust and respect.

4.8b Community Organizing and Engaging Key Actors Session - Reflective Commentary

Engaging communities is necessary to understand effective marine conservation strategies, but what was particularly powerful for the delegates was the importance of patience and earning trust. Many times, scientists walk into situations assuming that their credentials should automatically earn trust and a sense of authority. However, it is important to acknowledge, remember, reflect on, and, where appropriate, rectify the harm done to and within communities in the name of research and conservation. It is important to remember that trust is earned, and sometimes it takes significant communication, listening, commitment, and visibility for trust to begin to build. However, while trust can take a long time to build, it can be fractured in the blink of an eye. When engaging communities, following their lead and engaging with community leaders can be beneficial not only for building trust but also for truly understanding what the communities' needs are, rather than being an outsider who makes assumptions.

4.9 Science Communication

Science communication encapsulates the various ways in which people disseminate scientific knowledge to a variety of audiences, including by way of lectures, workshops, videos, podcasts, infographics, and more. Science communication, by nature, focuses on tailoring and delivering information in ways that engage the target audience, taking into account their goals and interests, and applying the Theory of Change and pedagogical principles. This session focused on ‘what is science communication’ and activities that considered how to build an inclusive, tailored science communication practice.

4.9a Science Communication Session - Vignette

Science communication is a genre that uses expected conventions–introduction, methodology, research summary, conclusions, call to action–to get people to care about and engage in the work researchers conduct. As such, it is also an ever-changing and fluid form of communication. To be inclusive, it should adapt to what both communicators and audiences need, addressing or responding to people's needs and values. Accessible science communication ensures that research reaches a wider audience and includes steps such as minimizing jargon and addressing barriers to access. It also recognizes that knowledge can be built in several ways and often uses engaging, interactive, and even hands-on approaches to understanding research.

The ability to evaluate, reflect, and evolve presentation styles is key to building inclusive communication skills. The goal of science communication is to engage audience members in a call to action, which can take many forms: continuing to be curious; actively working to change habits; getting involved in one's local politics; funding further research; and more. Science communication is most effective when done with great intention and a deep understanding of one's audience.

This session included two activities: practicing an elevator pitch and generating a call to action. For the former activity, participants were encouraged not only to create an elevator pitch for their project or research but also to reflect on the accessibility of their pitch, the specific components they wanted to highlight, and the importance of seeking feedback from others. For the latter activity, participants added a call to action to their elevator pitches and were encouraged to think creatively about what engaging community members could look like. In both activities, participants were asked to think about their intended audience and how this affected their communication. Overall, this introduction to science communication highlighted the work that goes into effective research engagement and provided insight into some of the steps and reflections needed to constantly improve and grow as scientists.

4.9b Science Communication Session - Reflective Commentary

Science communication today is an active, multifaceted endeavor, ranging from lectures and workshops to podcasts, video productions, and infographics. Its primary function is to bridge the gap between complex research and the broader public, making scientific information accessible and relevant to diverse groups. This is not a one-off operation; it evolves in response to the communicators' and audience members' demands, reflecting and even sometimes shaping cultural values. This session emphasized the importance of making research accessible. Participants discussed how simplifying language and breaking down barriers to understanding can significantly broaden the audience for scientific information. The session also highlighted the benefits of active and experiential learning approaches, which can enhance engagement and offer alternative ways to build knowledge. Throughout the session, participants were reminded that effective communication relies on understanding the audience and being intentional with the message. Giving and receiving feedback and reflection are important themes that highlight the evolving nature of science communication. By actively seeking feedback and adjusting their methods, communicators can refine their practices to maximize their potential to engage the public.

By the end of the session, the key principles of effective science communication were highlighted. It became clear that successful interaction requires not only clarity and creativity but also a willingness to learn and adapt. As the field continues to progress, this self-reflection will be essential for scientists who want to connect their work with the broader world.

5. Reception to the Workshop Series

In the feedback, participants praised the range of content, particularly the session on allyship, which many found impactful in highlighting the need for ongoing learning on diversity and inclusion. They also appreciated hearing directly from fishers worldwide, finding their real-life stories insightful and moving. Many valued the opportunity to connect with like-minded individuals, develop new skills, and engage in meaningful discussions. Despite barriers such as time zone challenges, scheduling conflicts, and technical issues, the sessions were considered accessible (average rating of 4.2/5). Attendees highlighted the usefulness of workshop recordings and notes, which helped them catch up on missed content. They expressed a strong desire for future workshops with more group discussions, shorter session lengths, and better communication tools. Many were eager to apply their new knowledge to personal and professional growth, and they called for ongoing learning opportunities, including more guest speakers, real-life stories, and connections with underrepresented groups. Overall, the event was well-received, with feedback suggesting that the sessions fostered meaningful connections and promoted deeper conversations on diversity, inclusion, and the marine field's evolution.

If the series were to run again, several improvements would be made to enhance accessibility, engagement, and participation. Given that time zone differences were a primary barrier, future iterations would consider alternating session times across weekdays and weekends, and earlier or later time slots, to better accommodate a global audience. Session length would also be reduced (e.g., from three hours to two) to improve manageability and reduce fatigue, while allowing more dedicated time for interactive discussions. Earlier communication of session schedules and improved calendar integration would help minimize scheduling conflicts and reduce drop-off rates. While recordings and notes were valued, efforts would be made to increase engagement with these materials and explore options such as downloadable content. Additionally, opportunities for deeper participant involvement in planning and co-design would be expanded to address the moderate engagement rating (2.8/5 with 1 being not engaged, 3 being moderately engaged, and 5 being very engaged) and ensure all participants feel more actively included in shaping the series, not only those who were more actively involved in facilitation. Finally, building on a strong interest in continued connection, future iterations would incorporate ongoing engagement opportunities, such as newsletters, follow-up events, and both virtual and in-person formats, to sustain the community and learning beyond the workshop sessions.

6. Conclusion

As scientists, conservationists, and community members, we often speak about the ocean as a space that connects us all. However, as these vignettes have shown, access to that space, both physically and

professionally, remains uneven. Through the *Inclusive Coasts and Seas* workshop series, we were reminded that inclusion is not a static goal but an active, ongoing process, one that requires intention, understanding, and the willingness to listen and adapt.

Across every session, from allyship to project management and from community engagement to science communication, a consistent truth emerged: equity begins with how we work, not just what we work on. Creating fairer, more inclusive practices in marine science and conservation depends on our ability to build trust, share power, and center those whose voices have been historically unheard. Inclusion, when done sincerely, strengthens both people and the science itself.

This initiative highlighted the transformative power of shared learning, how progress unfolds when we make space for multiple perspectives, when mistakes are seen as opportunities to grow, and when collaboration is rooted in empathy rather than authority. These reflections are not just lessons from a workshop; they are approaches that highlight how conservation can be improved by ensuring that those most connected to the ocean help define the questions. They are reminders of what the future of ocean science can and should look like, one where knowledge is co-created, respect is mutual, and belonging is inherent.

The ocean connects every one of us. Our responsibility is to ensure that the ways we study, protect, and speak for it reflect that same interconnectedness. Inclusion is not the end of the work; it is the current that carries it forward.

Declarations

Acknowledgements:

This paper has been brought together as an output following the workshop series *Inclusive Coasts and Seas: Connecting Diverse Voices by MISS x SIARC*. The structure of the workshop series, and therefore the themes covered in this white paper, was shaped and delivered together by all workshop delegates. A subgroup of workshop delegates has prepared this white paper. The delegation of the workshop series would like to thank the invited speakers and delegation members who took part in planning and delivering the series, particularly fishers from the USA, Brazil, Wales, Nigeria, India, and Sri Lanka. The sharing of their expertise, personal lived experiences, and local ecological knowledge with the delegation was invaluable. The author group would also like to thank the wider members of the workshop series delegation, particularly Genece Grisby, and wider members of the Zoological Society of London team, particularly Matthew Gollock, Joanna Barker, and Lucy Archer, who offered a critical review of this article.

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Human ethics

Ethical approval for this research was provided by Zoological Society of London's Human Ethics Committee (ZSLHEC-015). All human-related procedures were performed in accordance with Zoological Society of London's Human Ethics Committee Guidelines.

Consent to Participate

All applicants applied for and registered to attend the Inclusive Coasts & Seas workshop series through an open application process. All applicants contributed to the design of the workshop, through the application process, and were provided with information regarding the finalised workshop structure prior to the series and proposed white paper output at the beginning of the series. Participants gave their informed consent to be part of this study.

Consent to Publish

Not applicable

Data Availability

The datasets generated during and/or analysed during the current study are available in the ICONIC Oceans repository and can be accessed at https://iconicoceans.misselasmo.org/ by creating a free account. Dataset title is "Inclusive Coasts and Seas workshop series evaluation."

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