

REPORTING FORM 2023

Please return completed form to imber@dal.ca by 10th March (in order to give everyone enough time to collate and read all the reports before the April SSC meeting)

REPORTING PERIOD: WHAT YOU HAVE DONE since the annual report submitted for the SSC meeting held virtually in August 2022 ([Link to past annual reports](#))

and **PLANNED ACTIVITIES** over the next year (and beyond if details available)

N.B. The form focuses reporting on the research objectives (2022-2025) of the Grand Challenges (in order to align with how we are addressing IMBeR's commitments defined in the 5-year review process to SCOR and Future Earth)

Thank you.

Human Dimensions Working Group (mainly focused on GC III)

Samiya A. Selim, Annette Breckwoldt, Prateep Nayak, Yinji Li, Priscila M. Lopez, Grant Murray, Henrik Österblom

1. Ongoing activities, in line with the IMBeR Grand and Innovation Challenges

(Among other uses, information will be used to update the Grand Challenge Factsheets)

1.a. Grand Challenge I

Understanding and quantifying the state and variability of marine ecosystems - with focus on Research Objectives 1 to 3:

Research Objective 1. Evaluate and predict the cumulative effect of multiple stressors

Research Objective 2. Integration of climate change and climate variability

Research Objective 3. Impacts on society – preparation for a changed future

N.a.

1.b. Grand Challenge II

Improving scenarios, predictions and projections of future ocean-human systems at multiple scales - with focus on Research Objectives 4 to 6:

Research Objective 4. Development of integrated data systems and approaches for predictions and projections

Research Objective 5. Development of predictive models and projections for use at regional scales

Research Objective 6. Development of alternative scenarios to bridge the gap between physical climate sciences and humanities

N.a.

1.c. Grand Challenge III

Improving and achieving sustainable ocean governance - with focus on Research Objectives 7 to 9:

Research Objective 7. Develop knowledge on best practices for multilevel governance approaches to ocean climate adaptation and mitigation

Research Objective 8. Develop understanding on key ingredients for transformation towards more sustainable, equitable and inclusive governance approaches to fisheries and aquaculture

Research Objective 9. Support implementation of post-2020 biodiversity targets for marine spatial planning and marine protected areas

The work of the HDWG and its individual members focuses on human-ocean interactions and interdependencies, especially across the research objectives 7 to 9, and stretching to IC 4. Our last year's agenda and planning around building capacity amongst local scientists and other local stakeholders (e.g. grassroots NGOs, MPA managers, others) culminated in a day-long workshop with 60+ stakeholders at the CSD Annual Conference on Sustainable Development. This took place in person at ULAB Bangladesh, and the event was attended by 3 HDWG members plus other partners from the NoCrises and V2V projects. Details of the program and outcome are attached (Appendix 1).

The ongoing projects [V2V](#), [NoCRISES](#), and [SOCPacific](#) (terminated in Nov. 2022), in each of which at least one members of the HDWG are involved, have had substantial individual output during the past year as well, as can be seen from the project websites and published materials. Each of these projects brought together a core part of the global ocean governance community to address GCIII, and accelerated progress towards contributing research objectives 7 to 9 over the year, as well as to each of the four priority objectives 2021-2025:

- Development of governance practices for transformative change;
- Development of knowledge co-production as a catalyst for sustainable governance;
- Identification of the effects of adaptive management responses and governance systems on human related risk exposure and impacts;
- Assessment of risks and vulnerabilities arising from new frontiers of economic exploitation of marine resources and synergistic impacts of climate change and use of the marine environment.

As HDWG, based on these projects and other collaborative activities, we continue asking how our science can indeed be (more) relevant for these local scientists and stakeholders – what science do they need for their everyday decision-making? And vice versa: how can we integrate their knowledge and experience into science dialogues and funding opportunities? This is what we understand by responsible and meaningful capacity development.

We continued working on the mission that was laid out at two online meetings in November 2021 and April 2022:

- In our projects, we target what stakeholders (including local scientists) really need to know from international science and conservation outputs.
- How can their everyday work be better supported by us and 'our' science?
- We will develop and shape a focus on how to best support local science and stakeholders to be better seen, better integrated, i.e. to make that much-needed step into being an integral part of those (national/regional/international) research projects of direct relevance to their everyday life and livelihood.

We did the first workshop addressing the above at the HDWG session: **Making our Science more inclusive and impactful**: <https://csd.ulab.edu.bd/csd-conferences/2022>.

How can global and local science and knowledge work together for capacity development at all levels that can inform practice, policy, and theoretical outcomes?

Overview: In recent years, many global/worldwide/ multicountry, multidisciplinary/ interdisciplinary research studies are being conducted giving an amazing opportunity for involved scientists to collaborate, learn, and create knowledge beyond their geographical and disciplinary boundaries. While such an expanding research 'ecosystem' generates fantastic knowledge products openly accessible, they are often in English, not a language or a format in which local stakeholders can readily access the knowledge.

This HDWG session therefore brought together knowledge producers/managers (essentially scientists working at the global level) and Bangladeshi stakeholders, such as NGOs, local government institutions, community leaders, and local scientists to answer the following questions:

- Q1) How does the global research/knowledge system look like?
- Q2) How it might be relevant to the local stakeholders (in this case from Bangladesh)?
- Q3) In terms of knowledge, what do the local stakeholders need to perform their responsibilities (e.g., project design/implementation, measuring impact, decision making, advocacy, risk management, etc.)?
- Q4) What are the barriers to getting that much-needed knowledge?
- Q5) How can the everyday work of the stakeholders be better supported by global science?

This session was held as a dialogue between the research managers and local stakeholders to co-develop and shape a focus on how to best support local science and stakeholders to be better seen, and better integrated, i.e. to make that much-needed step into being an integral part of those (national/regional/international) research projects of direct relevance to their everyday life and livelihood.

Outputs: This session's entire process and outcomes will be written up as one of the V2V Working paper series on capacity building and bridging local-global science.

1.d. Innovation Challenge 3

To advance understanding of ecological feedbacks in the Earth System

N.a.

1.e. Innovation Challenge 4

To advance and improve the use of social science data for ocean management, decision making and policy development

As part of the **NoCRISES** project, we have utilized a number of social science based methods e.g. governance mapping, process tracing, and creative arts components, to understand marine conflicts, and have applied this in 6 countries that are part of the NoCRISES project. More details can be found on the website www.nocrises.org. Four papers have been written up that will contribute to social science data for ocean management and policy, and these will form part of the MAST Special Issue: Marine conflicts and pathways to sustainability in an era of blue growth and climate change. All four are in the final review stage and the projected time period for publication is between June-Nov 2023.

The NoCRISES project papers that have been submitted are :

- Social science methods used to study coastal and marine conflicts: results from a systematic literature review (2nd stage of revisions have been submitted);
- Analysis across case studies in global sustainability projects: An emerging challenge in the Anthropocene (revisions pending);
- Mapping of natural resource use and governance can inform ocean related conflict and management – Empirical Evidence from Bangladesh and Fiji (in first stage of review);
- Understanding and analyzing the complex causality of conflicts over marine environments through process tracing (Finished 2 round of reviews, in final stage now).

The **V2V** Project is led by Prateep Nayak and also includes other HDWG members - Samiya Selim (V2V Bangladesh country coordinator), Priscila Lopez, and Yinji Li (Japan country coordinator). Its contribution to IMeER research Objective 8 is summarized below:

The V2V transboundary task force to address vulnerability in small-scale fisheries of the Sunderbans delta covering Bangladesh and India was initiated at the CSD Annual COncference in Bangladesh. We conducted two sessions contributing to Research Objective 8. Develop understanding on key ingredients for transformation towards more sustainable, equitable and inclusive governance approaches to fisheries and aquaculture. The outcomes of the session are being written up as a working paper with action points that will be addressed in October 2023 at CSD 6th Annual Conference for Sustainable Development. Details of the session given below:

Transboundary Challenges and Opportunities in Sundarbans Delta

Along the Bay of Bengal coastline, which crosses the border between Bangladesh and India, is the largest mangrove forest in the world. This region is best known worldwide as the habitat of the Royal Bengal Tiger. Around 13 million people live in the region, 8.5 million of them around the forests in Bangladesh, and 4.5 million live inside Indian forests. The Sundarbans are being significantly impacted by both anthropogenic and natural events, and this impacts the social-ecological systems in both countries to varying degrees. The majority of the issues in the Sundarbans are shared by Bangladesh and India, and the locals have attempted to adapt in a number of ways. Focusing on shared issues and solutions encourages collaboration on many levels, from governments working together to coordinate fishing ban seasons, to farmers learning about salt-resistant paddy types used across the border.

Joint disclosure on the problems that Bangladesh and India share in the mangrove ecosystem that spans their border improves mutual understanding and could lead to great collaborations. Our common goal from this round table discussion is to highlight the common issues and to link and create synergies between Bangladesh and India regarding solutions to the transboundary issues in the Sundarbans delta.

The objective of the Session were:

1. Discussion on past experiences of attempts to transboundary cooperation / collaboration around the Sundarbans and why those were not sustainable or failed;
2. Discussion on the area of governance and cooperation between the countries to come up with new solutions;
3. Publication of the knowledge output resulting from the session's in-depth discussion in a peer-reviewed journal as an op-ed or informative article to facilitate future research.

Participants: Invited to the session were individual researchers/experts/officials from India and Bangladesh, who are part of the V2V project, academics from different universities and disciplines, diverse government ministries and agencies, NGOs as well as interested private sector actors.

1.f. Innovation Challenge 5

Interventions to change the course of climate impacts

N.a.

1.g. Innovation Challenge 6

Sustainable management of Blue Carbon ecosystems

N.a.

2. Selected highlights

2.a. Selected scientific highlights since last report (1-5)

Last report was submitted to SSC meeting, August 2022

Workshop reports - Cf. information in the IC4 section above.

2.b. Publications since last report

Please add all publications since last report to the table below (see notes for details on "Class" and "Activity" fields).

Publication with DOI	Class 1, 2, 3	Activity*
<i>Bennett, N. J., Villasante, S., Romero, M. J. E., Lopes, P. F.M., Selim, S. A., Allison, E. H. (2022). Social sustainability and</i>	3	

<i>equity in the blue economy, One Earth, VOLUME 5, ISSUE 9, DOI: 10.1016/j.oneear.2022.08.004</i>		
<i>R J Shellock, C Cvitanovic, M C McKinnon, M Mackay, I E van Putten, J Blythe, R Kelly, P Tuohy, K M Maltby, S Mynott, N Simmonds, M Bailey, A Begossi, B Crona, K A Fakoya, B P Ferreira, A J G Ferrer, K Frangoudes, J Gobin, H C Goh, P Haapasaari, B D Hardesty, V Häussermann, K Hoareau, A-K Hornidge, M Isaacs, M Kraan, Y Li, M Liu, P F M Lopes, M Mlakar, T H Morrison, H A Oxenford, G Pecl, J Penca, C Robinson, S A Selim, M Skern-Mauritzen, K Soejima, D Soto, A K Spalding, A Vadrot, N Vaidianu, M Webber, M S Wisz (2023). Building leaders for the UN Ocean Science Decade: a guide to supporting early career women researchers within academic marine research institutions, ICES Journal of Marine Science, Volume 80, Issue 1, January 2023, Pages 56–75, DOI:10.1093/icesjms/fsac214</i>	3	
<i>Bleischwitz, R., Schlüter, A., Fujitani, M., Breckwoldt, A., et al. (2022). Marine Social Sciences For The Ocean We Want. In: Nature Sustainability Community (https://go.nature.com/3Eunwj3)</i>	3	
<i>Fache, E., Kon Kam King, J., Riera, L., and A. Breckwoldt (2022). A sea of connections: Reflections on connectivity from/in Oceania. Ambio (Intro: Special Section ‘Oceania: A Sea of Connections’), DOI: 10.1007/s13280-022-01789-x</i>	3	
<i>Ganachaud, A., von Schuckmann, K., Whiteside, A., Dupouy, C., Le Meur, P.-Y., Monier, M., Van Wynsberge, S., de Ramon N’Yeurt, A., Mañéz Costa, M., Aucan, J., Breckwoldt, A., Cellier, L., Douillet, P., Ferse, S., Holland, E., Kelsey, H., Kumar, V., Nicol, S., Riechers, M., Singh, A., and Varillon, D. (2022). Copernicus Marine Sea Surface Temperature and chlorophyll-a indicators for two Pacific Islands: a co-construction monitoring framework for an integrated, transdisciplinary, multi-scale approach. Section 3.3, Chapter 3: Ocean case studies with socio-economic relevance. In: von Schuckmann, K., P.-Y. Le Traon, N. Smith, A. Pascual, S. Djavidnia, P. Brasseur, M. Grégoire (Eds.) (2022) Copernicus Ocean State Report, Issue 6, Journal of Operational Oceanography, 15:sup1, s100–s110; DOI: 10.1080/1755876X.2022.2095169</i>	3	
<i>Fache, E., Sabinot, C., Pauwels, S., Riera, L., Breckwoldt, A., David, G., Matairakula, U. and Carrière, S. M. (2022). Encouraging Drawing in Research with Children on Marine Environments: Methodological and Epistemological Considerations. Human Ecology, DOI: 10.1007/s10745-022-00332-6</i>	3	
<i>Oloko, A., Fakoya, K., Ferse, S., Breckwoldt, A. and S. Harper (2022). The Challenges and Prospects of Women Fisherfolk in Makoko, Lagos State, Nigeria. Coastal Management: 1-18, DOI: 10.1080/08920753.2022.2022969</i>	3	
<i>[Add more rows if needed]</i>		

**If appropriate, please list the IMBeR activity through / by / from / during which the publication arose*

- What themes would you propose for new publications or syntheses which would progress the IMBeR Science Plan?

Innovative, ‘next generation’ marine sciences, that will be intrinsically interdisciplinary.

Meaningful funding schemes allowing to engage over long periods with colleagues and other local stakeholders, focusing on equity and ‘empowered’ agency.

Co-Autorship with Indigenous and local stakeholders.

- What are your proposals for other types of products connecting IMBeR to society?

Representations on public science fairs, in Universities, possibly a school leaflet

**** **Notes on publications******

Publications are logged in the IMBeR Zotero library which is publicly accessible online –

[Publications since 2019](#) | [Publications prior to 2019](#)

Publications are categorised by “Class” and linked to “Activities”:

Class 1 publications are specifically generated through/by/from/during **IMBeR activities** - for example, arising from IMBIZOs and IMBeR conferences such as the IMBeR open science meeting and the IMBeR West Pacific Symposium and from the activities of the working groups, regional programmes or other IMBeR entity.

Class 2 publications are on topics relevant to the IMBeR Science Plan that benefitted from some interaction with IMBeR or **IMBeR activities**, for example by IMBeR symposium attendees, past and present SSC members, working group, regional programme and endorsed project members, or national contacts.

Class 3 publications are on topics relevant to the IMBeR Science Plan but for which there is no direct link to or benefit from an IMBeR activity. These might include publications by SSC members, working group, regional programme or endorsed project members or members of the IMBeR international community that were written as part of the normal scientific activity of the authors and would have occurred irrespective of IMBeR’s existence. You can report Class 3 publications, but they will no longer be logged in the IMBeR database.

[See “[What is an IMBeR publication?](#)” for further information]

Why list ‘Class’ and ‘Activity’? This helps us to declare authentically which publications IMBeR has helped to generate, and it makes it easier for us to demonstrate the value of the Regional Programmes, the Working Groups, and IMBeR in general, and it helps us to justify support for IMBeR activities when we can list tangible outputs.

2.c. Events, Meetings, and Workshops

List all international and national events, meetings and workshops. Describe the level of participation: e.g. chairing session/workshop, organising meeting. Include Regional Programme / Working Group committee meetings and workshops.

Format: Title of event. Date. Location. Description of participation. Any other pertinent details.

CSD 5th Annual Conference on Sustainable Development: October 13-16 2023, Dhaka, Bangladesh.
Attended by 100+ people

- HDWG workshop
- V2V sessions
- IMECAN online workshop on fostering DEI in marine interdisciplinary ECRs

IGU Congress in Paris, France: 18-22 July 2022 - With a session co-organized by Annette Breckwoldt, UNESCO, and members of the Island Commission of the IGU: Time for Global Island Research(ers), focusing on environmental action by youth groups.

ICES ASC in Dublin, Ireland: 19-23 September 2022 - With a session co-organized by Annette Breckwoldt and Sophia Koschalski: The role of small-scale fisheries and communities in ocean governance, with a focus on equity and agency.

Synthesis and Collaboration with other RPs, WG and IMECaN

- How can your Regional Programme/Working Group/IMECaN build better collaboration with the other Regional Programmes, Working Groups, and early career network (IMECaN)?

At the moment, there seems to be little collaboration (apart from IMECaN), partly due to the effects of the pandemic on our life. We plan a short survey with the other IMBeR WG to look for potential common interests, meaningful exchange platforms and synthesis.

- Are there synthesis activities that you think could be conducted with the other regional programmes (both regional and thematic syntheses, connecting different challenges, ECRs etc.)?

For the next IMBIZO, we would like to prepare an event together with IMECaN to make ECRs more visible and integrated.

3. International collaboration and links

Session @COP27: Samiya Selim spoke at the ocean pavilion at Cop27 at the Just Seas Session on DEI and linking up local data to global models:

<https://twitter.com/samiyaselim/status/1592744727753154560?s=20>

Pathways postdoctoral grant (March 2023): Annette Breckwoldt is scientific co-lead for this postdoc (to be selected) within the [PACPATH project](#) (a Belmont Forum Collaborative Research Action), on 'Identifying leverage points to foster pathways towards sustainable coasts'

4. Input to management, policy and SOCIETY* over the last year

Add anything that is not covered under "1.c. Grand Challenge III"

**As previous reporting forms requested 'input to management and policy' only, please add any 'input to society' not captured in previous reports*

Report co-authored by Annette Breckwoldt on 'Small-scale fisheries and MPAs - a joint pathway towards 30x30?' (in German, for the Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Federal Ministry for Economic Collaboration and Development (BMZ)).

5. Education, Outreach and Capacity Development

General support to PhD and Masters students from Africa and the South Pacific in efforts to publish in international peer-reviewed journals.

6. Planned activities

6.a. Activities and Outreach and how they link to the Challenges (including, but not limited to convening sessions, meetings, summer schools, workshops, etc)

We are planning the next in-person HDWG meeting in Rabat (Marocco), so that it coincides with IMBIZO 7. Other teams from NoCRISES, V2V, and also members of IMECaN will also be there, and we will explore themes around: ocean governance, capacity building, human dimensions, social science methods used to understand marine conflicts due to existing and emerging stressors to coastal ecosystems, e.g. climate change, blue growth. We will have a series of workshops which will include a writing workshop as well as meeting with other non-academic stakeholders to understand how our science can be relevant for local stakeholders working on similar objectives as those of the IMBeR Grand Challenges. The tentative background and objectives to the conference are outlined below:

HDWG Capacity Building Workshop on 'Conducting research underpinned by robust science'

Background:

- NGO's have been collecting long-term data but struggle to ground the data and its analysis in good science/social science methods/framework; their data collection mostly led to established outputs, outcomes, milestones needed by 3 year donor funded projects.
- There's a necessity to look at the historical aspects of lacking capacity, and the other dimensions of 'capacity building', 'capacity development', 'empowerment';
- Within 'capacity building', there are different components – action, policy, history, etc.
- We have been talking about key components of HD, action in the field and capacity are key ingredients, but largely neglected so far;
- The capacity-building process needs to be assessed as parallel exercise to support the action that is going on in our projects;
- Where is the gender issue, where is the policy support, distribution and equity; where can we see this process, when thinking of all these projects we are doing, e.g.V2V?;

Key attributes of a HDWG capacity-building event should:

- Build capacity that is locally relevant, not only to the beneficiaries (e.g. fishers), but also to those working to support them (e.g. NGOs and women's groups, fisher groups, local junior government officers), who are critical multipliers and in a position to say what capacity building will help them better to support these communities;
- Have a long term impact;

- Document the process into a package that can be applied in different locations (longevity); look at a continuing process; and V2V can help and contribute here, as it is designed for this purpose (e.g. with a TD capacity development working group); V2V Japan group and TBTI will also develop towards capacity building;
- Host such an event in Bangladesh. This would also allow two projects led by HDWG members to support this initiative (i.e. V2V and NoCRISES).

Intended audience:

NGOs, Grassroots Organizations/Civil Society Org (CSOs), and local and union fisheries officers have been identified as needing to build capacity around how to undertake gender-sensitive research and implement social science surveys that are informed by strong methodology /address inclusive participation/resolves (unconscious) bias;

- NGOs who are established in coastal Bangladesh over the past 20 years and work across similar domains in poverty, disaster risk reduction, livelihoods, climate adaptation and resilience (economic, social and env), and they have offices in the areas they work;
- Graduates from all over the country work for these grassroot NGOs, as well as local volunteers, which makes them very connected locally.

Role of HDWG: Provide capacity building expertise in terms of **designing the event and where appropriate moderating the session**

For IMBIZO7 - Future Activities – linking to IC4:

As outlined above, we plan to organise a session at IMBIZO7 (in Morocco from 20-24 November 2023) and/or one of the partner meetings (e.g., ICES/PICES).

IMECaN (IMBeR’s Interdisciplinary Marine Early Career Network) has new chairs: Shenghui Li, Laura Kaikkonen, and Rebecca Shellock. One of the things that was discussed was how IMECaN can integrate better with other IMBeR entities (Regional Programmes, Working Groups, GCs, ICs, etc.), and they were keen to understand the ‘best practices’ of conducting interdisciplinary research and integrating social and natural sciences – i.e. matching well with IC4’s work. Is there a way to link IMECaN with IC4 at this stage (e.g. as collaborators) or in the future as a capacity development exercise?

6.b. Upcoming papers (Community-Position-Review-etc)

Add text...

7. Funding

7.a. Funding from external sources

Add text...

7.b. Funding proposals in progress or planned

Add text...

7.c. Funding requested from IMBeR for 2023-2024

Include a brief budget and justify requests

We would like to request \$7000 to cover an in-person HDWG Meeting in November 2023 as a side-event of the IMBIZO7 in Rabat. Details of this have been provided above.

8. Changes to Organisational Structure (e.g. SSC) of RP / WG / IMECaN

Annette Breckwoldt and Samiya Selim still act as Co-Chairs for the HDWG from December 2021. Paul Onyango deceased in 2022. Yinji Li and Hendrik Osterblom stepped down as members in January 2023. At present, new members are scanned, names have been suggested and we follow these options up.

9. Images / Figures

****It is always good to have some recent photos / figures / infographics to create more exposure for the Regional Programmes, Working Groups, etc. These can range from those suitable for a very scientific audience, to those that would engage the general public. IMBeR would use these, on the website (e.g. <http://www.imber.info/> and <http://www.imber.info/en/news>), in tweets (@imber_ipo), in presentations, etc. In addition, Future Earth (one of our sponsors) regularly asks us to provide high quality images for their glossy reports. These can highlight the activities of IMBeR and their other Global Research Projects (see pdfs of past Future Earth reports here <https://futureearth.org/publications/annual-reports/>)*

*So, please provide any images that you might think are useful. These can be pasted in this document or emailed as an attachment to imber@dal.ca.****







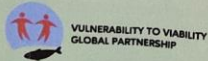
5th CSD Annual conference on
**SUSTAINABLE
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Unpacking Sustainability, Resilience and Equity

5th CSD Annual Conference on Sustainable Development 2022

13 - 15 October 2022
ULAB Research Building

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<https://youtu.be/hf3cMutfN4Y>

[ocean pavilion cop27](#)

10. Update on Action Items from 2022 SSC meeting

Please update the [table of Action Items](#)

Add text...

11. Anything not covered above

Post-2025 (i.e. 'IMBeR 3.0') - Strategy and ideas for IMBeR post-2025 and where your Regional Programme/Working Group/IMECaN fits into this:

We still need to discuss this point with the full HDWG, including newly selected members.

12. How to improve this form

Please give suggestions on how to improve this form and make it better next time.

Add text...

13. Appendices

Add appropriate meeting / workshop reports and include URLs (this helps to track where online content is missing)

Add text...