



Advancing ocean equity at the nexus of development, climate, and conservation policy

Joachim Claudet, Jessica Blythe, David Gill, Nathan Bennett, Georgina Gurney, Louisa Evans, Shauna Mahajan, Rachel Turner, Gabby Ahmadia, Natalie Ban, et al.

► To cite this version:

Joachim Claudet, Jessica Blythe, David Gill, Nathan Bennett, Georgina Gurney, et al.. Advancing ocean equity at the nexus of development, climate, and conservation policy. Nature Ecology & Evolution, 2024, <10.1038/s41559-024-02417-5>. <hal-04579762>

HAL Id: hal-04579762

<https://hal.science/hal-04579762v1>

Submitted on 18 May 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



HAL Authorization

Title: Advancing ocean equity at the nexus of development, climate, and conservation policy.

Authors: Joachim Claudet^{1*}, Jessica Blythe², David A. Gill³, Nathan J. Bennett^{4,5}, Georgina G. Gurney⁶, Louisa Evans⁷, Shauna L. Mahajan^{8,10}, Rachel A. Turner⁹, Gabby N. Ahmadi¹⁰, Natalie C. Ban¹¹, Graham Epstein¹², Stacy D. Jupiter¹³, Jacqueline Lau¹⁴, Sangeeta Mangubhai¹⁵, Noelia Zafra-Calvo¹⁶, Natali Lazzari^{1,17,18}, Jacopo A. Baggio¹⁹, Miranda L. Bernard³, Victor Brun¹, Stephanie D'Agata²⁰, Antonio Di Franco^{21,22}, Rebecca Horan³, Josheena Naggea²³

Affiliations:

¹ National Center for Scientific Research; PSL Université Paris, CRIOBE, CNRS-EPHE-UPVD, Maison de l'Océan, 195 rue Saint-Jacques 75005 Paris, France; joachim.claudet@cnsr.fr

² Environmental Sustainability Research Centre, Brock University, St. Catharines, Ontario, Canada; jblythe2@brocku.ca

³ Duke University Marine Laboratory, Nicholas School of the Environment, Duke University, Beaufort, North Carolina, USA; david.gill@duke.edu; miranda.l.bernard@gmail.com; rebecca.horan@duke.edu

⁴ Global Science, WWF, Washington DC, USA

⁵ People and the Ocean Specialist Group, IUCN, Gland, Switzerland/Institute for the Oceans and Fisheries, University of British Columbia, Vancouver, Canada; nathan.bennett@wwf.org

⁶ College of Arts, Society and Education, James Cook University, Townsville, QLD 4811, Australia; georgina.gurney@gmail.com

⁷ Geography Department, Faculty of Environment, Science and Economy, University of Exeter, Exeter, EX4 4RJ, UK; Louisa.evans@exeter.ac.uk

⁸ Global Science, World Wildlife Fund, 1250 24th Street NW Washington DC USA
shauna.mahajan@wwf.org

⁹ Environment and Sustainability Institute, University of Exeter, Penryn Campus, Cornwall, TR10 9FE, UK; r.turner@exeter.ac.uk

¹⁰ WWF US, Oceans Conservation Team, Washington, DC, USA; Gabby.Ahmadi@wwfus.org

¹¹ University of Victoria, School of Environmental Studies, Victoria, BC, Canada; nban@uvic.ca

¹² Blue Range Labs, School of Environment, Resources and Sustainability, University of Waterloo, 200 University Ave W, Waterloo, ON Canada, N2L 3G1; graham.epstein@uwaterloo.ca

¹³ Wildlife Conservation Society, Melanesia Program; 11 Ma'afu Street, Suva, Fiji; sjupiter@wcs.org

¹⁴ College of Arts, Society and Education, James Cook University, Townsville, QLD 4811, Australia; jacqueline.lau@jcu.edu.au

¹⁵ Talanoa Consulting, 42 Knollys Street, Suva, Fiji; smangubhai@gmail.com (preferred) or sangeeta@talanoa-consulting-fiji.com

¹⁶ Basque Centre for Climate Change bc3, Scientific Campus of the University of the Basque Country, Biscay, Spain; noelia.zafracalvo@bc3research.org

¹⁷ Vicerektorat de Recerca, Universitat de Barcelona, Spain, Gran Via de les Corts Catalanes, 585, 08007 Barcelona, Spain; lazzari.natali@gmail.com

¹⁸ EqualSea Lab, University of Santiago de Compostela, Santiago de Compostela, Spain

¹⁹ School of Politics, Security and International Affairs, University of Central Florida, Orlando, 32816, FL, USA and National Center for Integrated Coastal Research, University of Central Florida, Orlando 32816, FL, USA; jacopo.baggio@ucf.edu

²⁰ Centre for the Synthesis and Analysis of Biodiversity (CESAB), French Foundation for Research on Biodiversity (FRB), Montpellier, France; stephanie.dagata@gmail.com

²¹ Stazione Zoologica “Anton Dohrn”, Department of Integrative Marine Ecology (EMI), Sicily Marine Center, Lungomare Cristoforo Colombo, 90149 Palermo, Italy

²² NBFC, National Biodiversity Future Center, 90149 Palermo, Italy; antonio.difranco@szn.it

²³ Stanford Center for Ocean Solutions, Stanford University, Stanford, CA 94305, USA; Charles Telfair Centre, Charles Telfair Campus, Moka 80829, Mauritius; jnaggea@stanford.edu

* Corresponding author: Joachim.claudet@cnrs.fr

Advancing equity at the intersections of ocean development, climate, and conservation.

Achieving inclusive and sustainable ocean economies, long-term climate resilience, and effective biodiversity conservation requires urgent and strategic actions from local to global scales. We discuss fundamental changes needed to allow equitable policy across these three domains.

Main text:

Recent development, climate, and biodiversity intergovernmental agreements are increasing global attention and resources towards the ocean economy, climate adaptation, and conservation. Without focused attention to equity across these policy domains at local to global levels, there are risks for maladaptive actions and negative impacts to health and well-being, which will exacerbate the vulnerability of marginalized populations, and likely undermine joint policy goals ¹. Here, we propose to advance ‘ocean equity’, which refers to fairness and justice in the way resources and benefits from the ocean are distributed among different groups of people, regardless of their background or location, while ensuring for social, economic, and environmental sustainability ². We outline current barriers to ocean equity at the nexus of these three policy domains, and propose key leverage points with actionable options for decision-makers: addressing power asymmetries and mainstreaming multidimensional equity; integrating policy and practice across domains and scale to centre equity; and strengthening capacity and partnerships to improve understanding of equity and of how it can be fostered.

Barriers to equitable ocean policy

Embedded power asymmetries

Although grassroots resistance efforts have emerged in response to decades of social injustices for coastal communities ³, powerful economic and political actors, from industry, governments and development organisations, still dominate decision-making processes on how dwindling ocean space and resources are used ⁴. This includes determining who is included in policy-making, which knowledge is privileged in decision-making, and to whom resources flow. These power asymmetries are exacerbated by governance processes. For instance, the blue economy agenda is creating distributional inequalities through powerful corporate interests, corruption in governance systems, historical power dynamics in negotiations, and lack of representation for less powerful countries and civil society organizations. In Aboadze, for example, a small-scale fishing community in Ghana, climate change, industrial overfishing by foreign fleets, and the construction of a thermal power station on coastal land are converging and exacerbate food, water, and livelihood insecurity ⁵. Externally driven blue carbon initiatives can lead to ocean grabbing, undermining local rights and livelihoods. Marine protected areas with high levels of protection continue to be implemented preferentially in areas with low economic interests from industrial sectors, but in which coastal communities depend highly on ocean resources. Even conservation mechanisms intended to be community-led risk being co-opted by powerful actors ⁶.

Funding mechanisms for sustainable ocean policies are also controlled by powerful actors, and are highly politicized and mission-driven. Lack of engagement with local actors and local needs can exacerbate procedural and distributional inequities and misalignment ⁷. Spending does not currently tackle inequalities ¹. In Papua New Guinea and Solomon Islands, for example, funding for fisheries development initiatives saw limited benefits because it did not align with local socio-cultural values, economic constraints, biodiversity conservation, or climate adaptation needs ⁸.

Governance fragmentation

Ocean governance is often piecemeal, with sectors such as conservation, energy, tourism, or shipping governed by different and non-coordinated institutions, policies, or activities. This fragmented governance manifests at multiple scales and can reinforce inequitable outcomes. Growing demand for renewable energy in Taiwan, for instance, resulted in the siting of a major wind farm on important fishing areas for adjacent coastal villages and key habitat for an endangered species, resulting in disproportionate impacts on the livelihoods of local fishers ⁹.

Globally, the legally binding instrument under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction focuses extensively on the equitable sharing of benefits of marine genetic resources. However, the treaty cannot undermine the legal frameworks of pre-existing regulatory bodies. Thus, activities that impact marine biodiversity and the equitable sharing of its benefits, such as subsidized overfishing or deep seabed mining, cannot be addressed. Powerful corporate industries ensured this language was included in the treaty so that they could proceed with their activities, despite associated social and environmental impacts ¹⁰.

Capacity shortfalls

Limited capacity to address equity at the development-climate-conservation policy nexus persists for two reasons. First, the multidimensional nature of equity is often overlooked or misunderstood. For example, the Sustainable Development Goals for the ocean focus exclusively on distributional equity. When procedural equity – the fairness in the process or the way decisions are made – is pursued, it tends to be defined as participation in decision-making, which neglects the need for access to information and agency to shape decisions, which are preconditions of recognitional equity – the recognition and respect of everyone's unique identities and backgrounds, ensuring fair treatment and representation. In Fiji, for instance, government aid during the COVID-19 pandemic worsened inequities in coastal communities because policies failed to account for pre-existing inequalities related to gender, socio-economic status, and ethnicity ⁷.

Second, equity is often treated as homogenous and static in development, climate and conservation policies, and rarely accounts for the fact that equity manifests in different ways in different places for different people. Oversimplified and inappropriate notions of equity can be particularly pronounced when policies and tools are developed in the Global North and transferred to the Global South ¹¹. For instance, Payments for Ecosystem Services initiatives are underpinned by an understanding of distributional equity based on an economic proportionality principle. In the ocean, this often takes the form of payments being related to the economic opportunity costs of forgone resource

extraction, such as fishing. But research has shown that this equity conceptualisation is not always aligned with the pluralism of what is held fair by local actors (for example, those receiving more benefits could be those involved in the intervention implementation, those with customary rights, or those most negatively impacted) ¹¹ and thus potentially undermines local support and reduces economic efficiency.

LEVERAGE POINTS TO ADVANCE EQUITY

We propose three key leverage points for decision-makers and practitioners (Figure 1). For each leverage point we provide examples to illustrate practical actions that can be taken.

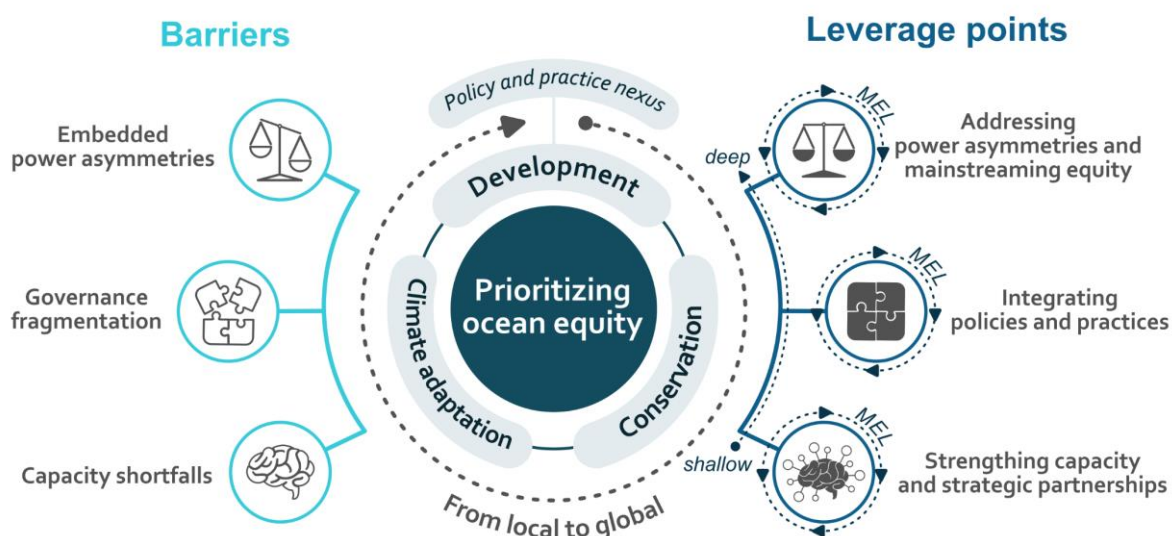


Figure 1: Barriers and leverage points to advance ocean equity. Policy and practice from local to global scales around development, climate adaptation and conservation all intersect to affect ocean equity. Proposed actions consist of deep to shallow leverage points that need to be implemented across scales (central dotted arrow) and strategically tailored to each social-ecological context through monitoring, evaluation, and learning frameworks (dotted arrows around each action, MEL). Shallow leverage points occur where interventions are relatively easy to implement but that are likely to bring about smaller change to the overall functioning of the system, compared to deep leverage points that might be more difficult to alter but have potentially larger potential for transformational change ¹².

Addressing power asymmetries and mainstreaming multidimensional equity

A foundational step in addressing power asymmetries is recognizing them. For example, leaders within implementing agencies (such as national governments, multilateral agencies and international organizations) can invest in organizational practices that trigger dialogue on power, including by inviting independent entities to review their practices. Such a culture shift could pave the way for effective stakeholder engagement and learning processes that allow for the meaningful participation of more actors in ocean governance. For example, moving beyond merely inviting representatives of

Indigenous Peoples and small-scale fisher organizations to national and international meetings, and towards co-designing safeguards and plans that ensure their concerns are meaningfully addressed.

To secure effective long-term commitments, such mechanisms should ensure that interactions focus on learning and collaboration, that parties are mutually accountable, and that conflict-resolution procedures exist. Ocean actors should ensure their internal governance processes incorporate principles of equity by asking where they work, with whom, and how activities are designed and implemented, and lobbying for change in broader governance arenas where they hold sway. This could be achieved by mainstreaming multidimensional equity considerations into government policies and organizational practices. The Indigenous Peoples of the Arctic Council's success in protecting their cultural identities and the customary practice of marine mammal hunting illustrates that international organizations can successfully support local rights-based groups and thereby center recognition in development-climate-conservation policy and practice. Reparation and restorative justice mechanisms have shown potential to redress recognition and distributional inequities. Recent examples include the State of California returning coastal property to a dispossessed black family after 90 years, and the restoration of fishing rights to Indigenous Peoples in New Zealand. Sustainable ocean finance principles can also provide a guiding framework for equity in ocean investment ¹³.

Integrating policy and practice

Mechanisms to integrate policies and practices across the development-climate-conservation nexus and across scales can help center equity in ocean governance. At the global scale, a new holistic ocean intergovernmental body or network of existing organizations could support evidence- and value-based, cross-sectoral coordination. This body must, however, avoid repeating mistakes of the past by acknowledging, recognizing, respecting and opening space to the diversity of actors in each policy domain, and to their respective knowledge systems. Regionally, integrated and inclusive marine spatial planning can recognize and include all relevant actors through a process that empowers their voices in decision-making, incorporates social data, and ensures more equitable distribution of benefits. Similar coordinating bodies and policies for ocean governance at national scales could seek to simultaneously advance environmental sustainability and social equity considerations across various ocean policy domains. An emerging example of institutional and policy integration is the establishment of a Department of Blue Economy in the Seychelles and its Blue Economy Strategy that integrates blue bonds, debt for nature, conservation and heritage into the country's revised climate commitments ¹⁴. Locally, development climate and conservation organizations may, for instance, incorporate social safeguards across all areas of ocean action and monitor the cumulative impacts on equity of climate, development, and conservation initiatives.

Strengthening capacity and strategic partnerships

Mainstreaming equity requires strengthening capacity and developing partnerships among government agencies, the private sector, NGOs, funders and communities. There is a need for better understanding of the concept of equity and how it can be fostered, including by taking into account its plural and situated nature through identifying local actors' concepts of equity ¹¹. This can be

actioned by providing resources directly to local, in-country researchers to lead this work within their socio-cultural contexts. Recruiting staff with expertise in equity and other human dimensions will also help integrate learning into existing ocean programs. The success of these efforts will be limited if these experts are not resourced, tasked, and empowered to shift organizational norms and culture to center equity. Strategic partnerships that facilitate capacity-sharing on equity-centered approaches to create social change have been tested and refined for decades in other domains such as global health and aid. In Fiji, Solomon Islands and Vanuatu, a key leverage point to improve gender equity in coastal management was to build strategic partnerships among conservation and development practitioners working on gender and human rights. Development, climate, and conservation organizations could draw lessons from these experiences. For example, WWF and CARE have partnered for over a decade to connect gender equity, poverty alleviation, climate adaptation and biodiversity conservation. The partnership has advanced conservation and development goals ¹, and facilitated knowledge and capacity sharing between the two organizations. Yet dedicated investment in learning how to structure, support, and sustain these kinds of partnerships is needed.

LOOKING AHEAD

Radical transformations are needed to the structures and norms that have long influenced how development, climate, and conservation work. Realizing these changes will take time, dedicated effort, and true commitments to new operating models across these domains, as well as the social, political, and economic systems within which they operate.

Multipronged shallow and deep approach

We propose both shallow and deep leverage points to advance ocean equity (Figure 1). Shallow leverage points, such as taxes and incentives, are more easily achievable and more often targeted by organizations and policymakers, but their ability to create change is limited compared to deep leverage points, which address the deeply rooted norms, values, and structures that underpin structural and historical injustices ¹². Addressing deep leverage points requires rebalancing existing power asymmetries and risks resistance from those with vested interests in the status quo. We argue that addressing shallow and deep leverage points together could catalyze more lasting change. For instance, developing new capacities and fostering culture change within existing organizational structures may help unlock deeper reflections on the norms that influence how equity is considered.

Monitoring, evaluating and learning

Effectively mainstreaming equity will require investments in systems and processes for monitoring, evaluation and learning that enable actors working across, within, and affected by the three policy domains to learn collaboratively and in a transparent and accountable manner (Figure 1). Such efforts are emerging and include, notably, the monitoring framework adopted under the UNCBD Global Biodiversity Framework that contains an explicit site-level assessment of governance and equity process (SAGE) ¹⁵. Independent, third-party proposal reviews that focus explicitly on equity could identify problem areas prior to implementation and enable application of locally-appropriate safeguards. Similarly, financing (such as, through punitive bonds) and empowering independent

tribunals, which can enable communities to seek redress for injustices, could address equity issues as they arise in project implementation.

Here, we have provided transformative recommendations to rally ocean actors towards more inclusive and equitable forms of sustainable development, climate change adaptation, and conservation to support the sustainable enjoyment of the ocean's benefits by all.

ACKNOWLEDGEMENTS

This work is a product of the Blue Justice Working Group funded by the synthesis center CESAB of the Foundation for Research on Biodiversity.

Competing interests statement: The authors declare no competing interests.

1. REFERENCES

- 1 Gill, D. A. *et al.* Triple exposure: Reducing negative impacts of climate change, blue growth, and conservation on coastal communities. *One Earth* **6**, 118-130 (2023). <https://doi.org:10.1016/j.oneear.2023.01.010>
- 2 Österblom, H. *et al.* Towards ocean equity., (Washington, DC, 2020).
- 3 Blythe, J. L. *et al.* Blue justice: A review of emerging scholarship and resistance movements. *Cambridge Prisms: Coastal Futures* **1** (2023). <https://doi.org:10.1017/cft.2023.4>
- 4 Jouffray, J.-B., Blasiak, R., Norström, A. V., Österblom, H. & Nyström, M. The Blue Acceleration: The Trajectory of Human Expansion into the Ocean. *One Earth* **2**, 43-54 (2020). <https://doi.org:10.1016/j.oneear.2019.12.016>
- 5 Nolan, C., Delabre, I., Menga, F. & Goodman, M. K. Double exposure to capitalist expansion and climatic change: a study of vulnerability on the Ghanaian coastal commodity frontier. *Ecology and Society* **27** (2022). <https://doi.org:10.5751/es-12815-270101>
- 6 Claudet, J. *et al.* Avoiding the misuse of other effective area-based conservation measures in the wake of the blue economy. *One Earth* **5**, 969-974 (2022). <https://doi.org:10.1016/j.oneear.2022.08.010>
- 7 Mangubhai, S., Nand, Y., Reddy, C. & Jagadish, A. Politics of vulnerability: Impacts of COVID-19 and Cyclone Harold on Indo-Fijians engaged in small-scale fisheries. *Environmental Science and Policy* **120**, 195-203 (2021). <https://doi.org:10.1016/j.envsci.2021.03.003>
- 8 Barclay, K. & Kinch, J. in *Engaging with Capitalism: Cases from Oceania* Vol. 33 *Research in Economic Anthropology* (eds Fiona McCormack & Kate Barclay) 107-138 (Emerald Group Publishing Limited, 2013).
- 9 Chen, J.-L., Liu, H.-H. & Chuang, C.-T. Strategic planning to reduce conflicts for offshore wind development in Taiwan: A social marketing perspective. *Marine Pollution Bulletin* **99**, 195-206 (2015). <https://doi.org:https://doi.org/10.1016/j.marpolbul.2015.07.025>
- 10 Childs, J. Greening the blue? Corporate strategies for legitimising deep sea mining. *Political Geography* **74**, 102060 (2019). <https://doi.org:https://doi.org/10.1016/j.polgeo.2019.102060>
- 11 Gurney, G. G., Mangubhai, S., Fox, M., Kiatkoski Kim, M. & Agrawal, A. Equity in environmental governance: perceived fairness of distributional justice principles in marine

- co-management. *Environmental Science & Policy* **124**, 23-32 (2021).
<https://doi.org:10.1016/j.envsci.2021.05.022>
- 12 Abson, D. J. *et al.* Leverage points for sustainability transformation. *Ambio* **46**, 30-39 (2017).
<https://doi.org:10.1007/s13280-016-0800-y>
- 13 Sumaila, U. R. *et al.* Financing a sustainable ocean economy. *Nature Communications* **12**
(2021). <https://doi.org:10.1038/s41467-021-23168-y>
- 14 Benzaken, D., Voyer, M., Pouponneau, A. & Hanich, Q. Good governance for sustainable blue
economy in small islands: Lessons learned from the Seychelles experience. *Frontiers in
Political Science* **4** (2022). <https://doi.org:10.3389/fpos.2022.1040318>
- 15 Echeverri, J. *et al.* Application of site-level assessment of governance and equity (SAGE)
methodology to a candidate OECM: Andakí Municipal Natural Park, Caquetá, Colombia.
Parks, 85-90 (2021). <https://doi.org:10.2305/IUCN.CH.2021.PARKS-27-1JE.en>