Executive Summary:

Gender inequality, biodiversity loss, and environmental degradation
By A. Emmett Boyer, Margaux Granat, Althea Skinner, Paul Demerritt, Karl Deering, Cheryl Margoluis and Taryn Skinner

In collaboration with the CARE-WWF Alliance, EnGen Collaborative conducted a literature review as a critical step in responding to the question: What is the cost of biodiversity loss and environmental degradation on gender equality? The research unearthed several findings about the relationship between gender and the environment, but what is most noteworthy are the gaps that emerged.

The identified linkages and gaps will support the development of future CARE-WWF Alliance programming, learning and advocacy. The literature review, as well as this executive summary, also offers practical recommendations to help practitioners, donors, policy-makers and academics begin to fill these gaps, i.e., advance gender equality and conservation in their program design, implementation, research and learning, including through institutional cultural change, in stakeholder and partner engagement, etc. The full literature review and list of references is forthcoming.

This research revealed compelling evidence that underscores the importance of addressing the relationship between gender inequality, biodiversity loss, and environmental degradation:

Gender and Environmental linkages
Gender inequality and environmental degradation are correlated, as are women’s empowerment and environmental wellbeing. A study analyzing environmental and social indicators for 114 countries found a statistically significant relationship between gender inequality and environmental wellbeing, where nations with higher levels of inequality tend to have lower environmental wellbeing and vice-versa. Another study of 70 countries found that a greater proportion of women in parliament and their years of educational attainment was correlated with a decrease in the expected carbon emissions per resident, particularly in countries with lower indicators of socioeconomic development.

Women’s Leadership and Participation in Conservation and Climate Decision-Making
Evidence demonstrates that participation and leadership of women in natural resource and land management leads to better governance and environmental outcomes. However, women are consistently underrepresented and face barriers to participating in conservation and climate decision-making, from global and national policy spaces to local resource management groups.

Key Gaps
Data Connecting Gender and Conservation and Its Use
The global community needs to redouble its efforts to connect gender-disaggregated environmental data, without which sustainable development analyses and progress monitoring is incomplete. Seven of the 17 SDGs do not include official indicators on gender equality, and SDG 5 (gender equality) excludes indicators on access to natural resources. As of December 2020, only 13% of UN Member States had data for at least half of the SDG gender indicators, and globally, there is still not enough available information for nearly two-thirds of SDG gender indicators.

---

1 The Carbon Intensity of Well-Being ratio is an ecological efficiency measure defined as a ratio measuring the amount of CO₂ emitted per unit of life expectancy at birth.
While there are toolkits and methodologies for identifying gender indicators, limited capacity to collect and analyze sex-disaggregated data, lack of funding, and inadequate baseline data have limited the use and usefulness of gender indicators in conservation. Limited capacity and funding to implement research methods that would expand understanding of the qualitative pathways through which socially constructed gender norms shape environmental governance and outcomes is also a barrier to implementing programming that realizes the promise of linked gender equality and conservation impacts.

Men and Masculinity
Societal expectations of men and social norms surrounding masculinity affect not only gender equality but also the effectiveness of conservation strategies. However, gender and conservation literature rarely considers how social norms affect men, how these norms are created and sustained, and their relationship to the protection or destruction of ecosystems.

Initial research has revealed linkages between patriarchal structures, societal expectations for men, and conservation attitudes. When men are unable to meet social expectations to provide for their families in the context of ecological and climatic change (e.g., natural disasters or crop failure), this can lead to self-destructive behaviors, negative coping mechanisms, and even gender-based violence. Conversely, pro-environmental behaviors and views are more associated with social constructions of femininity—such as natural resource stewardship as an extension of caretaking, a norm associated with women in many cultures. This may present opportunities that the conservation community has not fully leveraged.

Indigenous Women’s and Men’s Rights and Leadership in Conservation
Environmental degradation poses risks to the realization of the rights to territorial integrity, cultural self-determination – and even health, safety, and livelihoods – of Indigenous Peoples. Simultaneously, Indigenous-managed territories are characterized by better ecosystem health and higher levels of biodiversity. Global calls to conserve 30% of the globe’s biodiversity by 2030 – coupled with the reality that over a quarter of Earth’s land are Indigenous and 67% of that is classified as natural – means that much of the land and seas targeted for conservation reside in Indigenous territories. Conservation strategies must expand beyond traditional protected areas to include other effective conservation measures, relying in large part on the construction of mutually respectful partnerships with Indigenous People and Local Communities (IPLCs).

Indigenous women are often recognized as holders of environmental knowledge, yet governance and policy decision-making spaces at multiple levels often fail to value them as equal and autonomous actors. This contributes to strategies that misrepresent the relationship between Indigenous culture and nature, restrict traditional practices and sacred spaces, enhance bias in knowledge valuation and research, and position Indigenous women as vulnerable parties in relation to environmental degradation and climate change. Aligning conservation solutions with capitalism risks over-relying on economic interventions to empower Indigenous women without recognizing how such interventions may perpetuate inequitable colonial structures and create new (or exacerbate existing) risks for Indigenous women and their lifeways.

Indigenous Language and Knowledge in Ecology and Conservation Research
Ecology and conservation literature is dominated by authors and scholarship from the Global North. Many peer-reviewed journals limit publication to written materials in English, which excludes important ecological knowledge embedded in Indigenous languages and oral traditions. Experts noted a common misperception that research gaps exist where they do not really exist, because studies have been published in local languages; this can lead to duplication of work and dismissal of local research efforts. Indigenous communities may also experience participation fatigue if they are continually asked to share information with various research initiatives, usually without shaping the research agenda
Recommendations for Progress on Gender Equality and Conservation

Based on the findings, the CARE-WWF Alliance refined EnGen Collaborative recommendations to make them more actionable. While far from exhaustive, here are a few concrete steps key actors can take to address these gaps and advance gender equality and environmental sustainability in research, practice, grant-making and policy-making:

**Academics and practitioners** should expand opportunities for IPLCs to lead the design and application of research and practice by relying on local experts and loosening language requirements. Research institutions and NGO projects should rely, whenever possible, on local researchers and those with expertise in feminist, participatory and action research methods that are rooted in local culture and/or value traditional knowledge and practices. This includes respecting and prioritizing Indigenous research practices and ethics, which is especially critical in efforts to bridge Indigenous and scientific knowledge in ways that support and learn from Indigenous land management. To this end, IPLCs should be able to submit research and programmatic proposals in their native language. BINGOs should pay for translation of such proposals – just as digital journals should expand their ability to translate articles to democratize access to peer-reviewed research.

**Programmatic designers and implementers** should connect the best of top-down and bottom-up approaches by prioritizing co-design, co-management, and co-production principles in ways that enable programmatic accountability to the needs and priorities of communities rather than donors. At their worst, top-down approaches can exclude the voices and leadership of IPLCs including women, undermining the sustainability and local ownership of conservation programs. In contrast, creating feedback loops between different scales of programming allows for community input and priorities to guide systems changes, such as policies and regulations, data collection and dissemination priorities or budget allocation. Structures that facilitate such feedback make learning agendas and programming activities more accountable to IPLCs.

Here are some concrete ways practitioners might use co-production and co-management principles to connect the benefits of top-down and bottom-up approaches throughout and beyond the project cycle:

- Address the under-representation of IPLCs in programmatic roles by recruiting and resourcing local ‘experts’ in programming, ensuring that the people hired speak the local language, live in the region, and are responsible not only for providing local context but for leading project activities. Also, provide training and capacity strengthening so communities have the skills and information they need to meaningfully participate in all stages of the project cycle and enable project ownership.
- Ensure that an understanding of the dynamics between environmental, sociocultural and economic systems inform projects by working with donors to prioritize and resource gender analysis and the collection of data on gender and social norms and natural resources. In addition to promoting participatory design, donors and practitioners should fund staff training on gender-transformative practices and monitoring or engage local partners with expertise in these areas.
- Address the social norms that create the limitations for women to meaningfully participate in natural resource management and other activities in their communities. Strategic approaches to understanding and challenging harmful and discriminatory social norms – with attention to intersectionality – should inform every stage of the project cycle.
- Build participatory systems for monitoring and evaluation that engage communities in locally relevant research design and data collection, while also providing mechanisms to feedback to global learning and research agendas. Ensure that communities are engaged in the synthesis of findings and how data are used to improve design and implementation. Ensure that the communities also have access to use the data as they desire for their own development as well.
• Explore ways to create and sustain partnerships with local organizations that go beyond the life of projects. Support could include providing financial capital, in-kind resources, or capacity building to social movements and civil society organizations (CSOs). Improve the responsiveness of policy and planning to local needs by creating opportunities for women and IPLCs to hold positions of power and lead decision-making and by linking government agencies and policymakers with CSOs.

• Conservation and development organizations must also examine not only their recruitment practices, but also their relationships with country offices and internal accountability processes. As with donors, funding structures should be examined to explore how to shift power to IPLCs and local organizations. relationships with country offices and internal accountability processes. As with donors, funding structures should be examined to explore how to shift power to IPLCs and local organizations.

Donors should address their role in perpetuating unequal power dynamics by shifting funding priorities and modalities to resource and empower IPLCs as primary agents of change. Donor organizations can work to improve their accountability to grantees by taking steps to assess and understand their organizational biases, such as undertaking anonymous surveys regarding staff attitudes, audits of discriminatory hiring and operating practices, and examining how these biases affect their relationships with local partner organizations. Donors that primarily work with big international NGOs (BINGOs) based in the Global North should also re-examine their funding structures to prioritize less restricted funding to local organizations, particularly those led by women and/or Indigenous Peoples; this may require shifting eligibility requirements that are more readily fulfilled by BINGOs. In the process, donors can form direct relationships with local organizations and practitioners to better understand their funding needs and priorities – as well as to connect with additional local organizations based on recommendations from their peers.

Global biodiversity and climate policymakers should ensure that their agendas mainstream women and gender in their decision-making and aspirations. The 2022 UN Convention on Biological Diversity Conference of Parties 15 meeting presents a momentous opportunity to agree on the Post-2020 Gender Action Plan, in particular to:

• Ensure that the Global Biodiversity Framework contains specific commitments to gender-responsive actions and indicators;

• Adopt a new stand-alone target to “ensure equitable access and benefits from conservation and sustainable use of biodiversity for women and girls, as well as their informed and effective participation in policy and decision-making related to biodiversity”, and

• Create spaces for local women-led organizations to influence the development of the global biodiversity agenda, including accountability structures that allow for the monitoring of biodiversity goals that address the needs of women and IPLCs.

2 UN Convention on Biological Diversity, 2020