Scaling Gender and Climate Investment Opportunities

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PRWGREEN

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Executive Summary

Recognizing and promoting the role of women in climate change adaptation and mitigation, and their contributions to creating resilient food systems, is key to achieving net-zero emissions by 2050 and keeping global warming to no more than 1.5°C as called for in the Paris Agreement. This paper develops the case for investing in rural women as a means of achieving climate mitigation and adaptation goals, while simultaneously addressing gender inequality and poverty. Findings and recommendations are based on evidence from development and gender lens investing that conclude: 1 Investing in women creates a ripple effect that yields multiple benefits, not only for individuals but for their families, communities, and countries.

2 The financial value of climate and development investments can best be protected through gender-responsive interventions.

3

Climate-related projects and policies that involve women have proven to be more effective and deliver better environmental outcomes.

This discussion paper strives to address a gap in data on the impact of women on climate mitigation and adaptation, limiting further investment from the development and financial sectors. After examining existing quantitative data on the links between gender equality and climate action, we found that evidence was scarce. We therefore recommend mapping climate solutions that overlap with activities of women's existing or potential roles to inform the development of an approach for climate planners that want to adopt a gender lens. With the end goal of enhancing women's engagement in activities that are likely to have the largest impact on the climate, namely those that eliminate or mitigate emissions in agriculture and land use practices predominantly managed by women.

With the recognition that women farmers are essential players in climate mitigation and adaptation, climate finance needs to invest in efficient, effective, and equitable low-carbon development that puts women at the center. This can be done by allowing them to more effectively contribute to poverty reduction, sustainable development, and climate change while fairly compensating them for their knowledge and contributions to climate outcomes.

Supporting women entrepreneurs and women-led start-ups in green sector supply chains and carbon markets through access to finance and mentoring, and ownership of assets such as land can contribute to women's economic empowerment. All while helping diversify value chains, reduce risk, increase competitiveness and enable climate-responsive innovation.

The paper suggests new opportunities for integrating gender and climate finance in addition to funding mechanisms with the potential to scale investment toward gender equality and climate results. To achieve the most significant impact, findings point to two approaches: 1) supporting women entrepreneurs and farmers through women-focused programs in: a) green jobs and supply chains; b) climate mitigation; and c) climate-smart agriculture and natural resource management practices, and 2) financial mechanisms, including voluntary carbon markets, outcome-linked funds, and bonds (Figure 1).

Figure 1. Approaches for integrating gender and climate finance



Investing in mechanisms that enhance women's financial gain from their contributions to improving agriculture and agroforestry and protecting and restoring ecosystems have the potential to scale climate solutions by de-risking investments and enhancing gender equality in rural communities. These investments could support women-led SMEs and groups to implement activities that are likely to have the largest impact on the climate, by avoiding or mitigating emissions in these agriculture and land use practices while simultaneously advancing women's empowerment and gender equality.

This paper concludes with fourteen recommendations for action:

- Conduct gender analyses to better understand the context, intersectionality, and power dynamics at play in the design of climate change responses.
- 2 Map the existing roles of women in climate solutions as proposed by Project Drawdown.
- Collect and analyze financial data and returns of gender-responsive climate investments (to address the gaps identified in this research).
- 4 Require that all projects provide equal access to women while promoting practices and policies that reduce environmental harm and build resilience, including secure land tenure for women.
- 5 Improve internal accountability for gender commitments through gender tracking, measurement, and reporting of adaptation and mitigation investment outcomes.
- 6 Engage with and support women-led organizations and networks in all climate processes.
- Support the development of Women Climate Entrepreneurs through investments in knowledge-building and skills training.
- 8 Ensure women obtain decent jobs and have access to upskilling

- 9 Champion women innovators and entrepreneurs in the green economy and transition to net zero.
- **10** Support the development of mitigation projects that can generate both carbon and gender credits to stimulate market demand.nd transition to net zero.
- 11 Support the capacity building efforts of women's groups and enterprises to implement projects that generate carbon and gender credits by providing training on measurement, engaging with carbon markets, and business development, assisting them to become 'investable entities' of private investors.
- 12 Provide access to upfront financing on terms appropriate for women's organizations and small enterprises.
- Support governments to increase their access to and absorptive capacity for carbon market finance
 – ensuring gender equality is integrated with SDGs and other commitments.
- 14 Develop and provide thought leadership and knowledge products to share case studies and best practices.

Although many of the recommendations are already being piloted and practiced by international finance institutions and development agencies, they could be further supported by IFAD, the World Bank, the Asian and African Development Banks, and other climate and development finance institutions to raise ambition for gender equality and climate results. Three suggestions are provided for financial mechanisms, including catalytic grants, results-based payments, and bonds that could be used to support these actions.



The Link Between Climate Change and Gender

Climate change disproportionately affects poorhouseholds, while gender inequality increases climate vulnerability. Both affect women whose roles link them closely to agriculture and natural resource management for food, water, and energy supplies — the degradation of which is a time burden and affects their livelihoods, food security, health, and well-being.

The impacts of climate change on women engaged in agriculture are well-documented through numerous studies and testimonials, such as the Bill and Melinda Gates Foundation's 2020 Brief on Gender, Agriculture and Climate Change¹. Women smallholder farmers constitute the majority of rural poor, and as a result, are most exposed to the drivers of climate vulnerability and tend to be disproportionately affected by climate change. Not because they are inherently more at risk but because of structural gender inequalities relating to their role as farmers, such as limited access to resources and ownership of assets, decision-making structures, as well as patriarchal social norms that render them particularly vulnerable to the impacts of climate change. Climate-driven extreme weather events disproportionately harm women and exacerbate gender disparities in education, reproductive health, and socioeconomic status.²

The gender gap in access to financial resources, natural resources, land tenure, education, health care, and decision-making power makes women more vulnerable to climate change and prevents them from accessing vital resources and opportunities, minimizing their overall capacity to adapt and build resilience.³

* Katz, Elizabeth. 2020. "Gender, Agriculture and Climate Change Brief." Bill and Melinda Gates Foundation. https://www.gatesgenderequalitytoolbox.org/wp-content/uploads/BMGF_GACC_Final.pdf * Deng, Hong-Mei. et al. 2018. "Co-Benefits of Greenhouse Gas Mitigation: A Review and Classification by Type, Mitigation Sector, and Geography." Environmental Research Letters 12(12). * Zhenmin, Liu, & Espinosa, Patricia. 2019. "Tackling Climate Change to Accelerate Sustainable Development." Nature Climate Change 9(7): 494–496. Thus, prioritizing climate mitigation and adaptation solutions that improve gender equality, alleviate poverty, improve well-being, enhance climate resilience, and facilitate low-carbon pathways to prosperity will doubly benefit such under-resourced households. Improving gender equality generates multiplier effects for reducing climate vulnerability and achieving global development and climate goals, yielding both sustainable economic and human development benefits.

However, the benefits of addressing climate change in ways that simultaneously improve the well-being of people living in extreme poverty are commonly overlooked—despite their promise to yield substantial global socioeconomic, health, equity, ecological, and biodiversity gains. Historically, climate finance focused first on mitigation efforts and the mechanisms were not set up to enable benefits to flow to frontline communities most affected by climate change.⁴ Few studies have focused on the co-benefits of climate projects for poverty alleviation, food security, or social impacts, making quantitative evidence of the links between these co-benefits and well-being limited with the evidence that does exist often limited to anecdotes and qualitative data. The base of evidence falls even more significantly for women's empowerment and climate impacts.⁵

However, while still incomplete, there is some research to suggest that incorporating climate justice considerations into investment due diligence can have positive ramifications for investor portfolios.⁶ Climate justice provides the opportunity to address several of the world's most pressing social and environmental challenges at once, serving as a potential risk mitigant.⁷ Investors at Global Endowment Management argue that climate justice may be the most significant and overlooked way in which investors, fund managers, and asset owners can achieve net zero and the broader goals of the climate movement.

tionalendowments.org/leading_with_justice_paper_feb_2022
⁷Climate justice is defined as "a holistic approach that includes and transcends data, seeks to change existing power structures, and ensures that climate contributions and conversations are led by and centered on those most impacted".



2.0 The Evidence of Women's Impact on Climate Mitigation and Adaptation

There is a correlation between women's involvement in climate change mitigation and adaptation and the reduction of greenhouse gasses.⁸ Further evidence suggests that the inclusion of women in technical assistance improves the effectiveness and efficiency of its delivery and increases development funding sustainability, improving the overall impact of disbursed climate funds. However, as of 2021, only 64 parties out of 190 who have ratified the United Nations Framework Convention on Climate Change (UNFCCC) included a reference to women or gender as part of their Intended Nationally Determined Contributions (NDCs) under the

⁴Biegel, Suzanne et al. 2023.^{*} Inclusive Gender and Climate Finance.^{*} 2X Global. https://www.2xglobal.org/knowledge-hub-blog/inclusive-gender-and-climate-finance ^{\$}Deng, et al. 2018. *Co-Benefits of Greenhouse Gas Mitigation: A Review and Classification by Type, Mitigation Sector, and Geography, "Environmental Research Letters12(12): https://iop-

science.iop.org/article/10.1088/1748-9326/aa98d2 ⁶Henriques da Silva, Pedro. 2022. "Leading with Justice: Net Zero Investing & Conversations on Climate Justice, Global Endowment Management." Intentional Endowments Network. https://www.inten-

^e Rainard, Mathilde, Smith, Christopher J., and Shonali Pachauri. Gender equality and climate change mitigation: Are women a secret weapon? Frontiers in Climate, 2 Feb. 2023

Paris Agreement. In addition, the context in which women or gender are mentioned is most commonly in relation to adaptation (27 countries), followed by mitigation (12 countries), implementation of commitments (9 countries), and capacity-building (5 countries). Only about one third of the countries refer to women or gender in a way that is cross-cutting or mainstreamed across one or more relevant sectors (22 countries). Gender is rarely perceived as a relevant consideration in the context of mitigation strategies,⁹ likely due to the limited quantitative evidence of how women's inclusion improves responses to climate change in turn reducing emissions.

One organization that has conducted extensive scientific research and analysis on the linkages between climate action and poverty reduction, human health, gender equality, and overall well-being for rural and underserved communities is Project Drawdown.¹⁰ In 2022, Project **Drawdown released the Drawdown Framework for Climate Solutions**¹¹ based on data from peer-reviewed articles and gray literature, demonstrating the linkages among 28 Project Drawdown climate solutions and 12 dimensions of the co-benefits — both direct and indirect — and ripple effects for well-being.

The report further breaks down findings into financially viable sector-specific solutions , and estimates impacts of reducing GHGs in each of five groups: improving agriculture and agroforestry, adopting clean cooking, protecting and restoring ecosystems, providing clean electricity, and fostering equality,

Two climate solutions that can foster gender equality and contribute indirectly to reduced GHG emissions are identified: 1) rights-based, voluntary family planning, and 2) quality universal education. Slowing future population growth could translate into a 15 percent reduction in global CO2 emissions by 2050 due to reduced demand for resources. While, increasing climate literacy is a key tool for engaging in climate action and contributing to an enabling environment for mitigation, adaptation, and low-carbon pathways to development. Girls' and women's education plays an important role in building adaptive capacity, reducing vulnerability to climate-related extreme events, and enabling more effective participation in decision-making.¹² However, this focus on women's roles only in reproduction and education ignores the contributions of women to lowering GHG emissions based on their existing roles as farmers and environmental managers. Project Drawdown did not disaggregate any of these solutions by gender, nor look for specific solutions that are largely attributed to women (as they did for Indigenous Peoples). This gap in the analysis highlights an important need and opportunity to calculate GHG emission reductions that can result from women's enhanced engagement in climate solutions, within the same five sectors.

This is particularly important because the two categories of climate solutions with the highest GHG reduction potential, improving agriculture & agroforestry (278 Gt) and protecting and restoring ecosystems (182 Gt), have high levels of women's engagement in many countries. Women make up an average of 43 percent of the global agricultural labor force and are the predominant farmers in much of Sub-Saharan Africa and South Asia,¹³ where they have varying degrees of control over agricultural practices that can reduce emissions and increase productivity. In the fisheries and aquaculture sector, approximately 21 percent of the 58.5 million people employed were women, rising to about 50 percent for those employed full-time in the entire aquatic value chain, including post-harvest activities.¹⁴

Por a quick analysis on the mention of gender and women in Nationally Determined Contributions, see the Gender Climate Tracker website at: https://genderclimatetracker.org/gender-ndc/quick-analysis

¹⁰ Foley, Jonathan et al. 2020. "The Drawdown Review, 2020 – Climate Solutions for a New Decade." Project Drawdown. https://drawdown.org/drawdown-review
¹¹ Jamel, Yusuf et al. 2022. "Climate–Poverty Connections: Opportunities for Synergistic

Solutions at the Intersection of Planetary and Human Well-being," Project Drawdown.

https://doi.org/10.55789/y2c0k2p2 *2 Sims, Kate. 2021. "Education, Girls' Education and Climate Change."K4D Emerging Issues

 ³⁴ Sims, Kate. 2021. "Education, Girls' Education and Climate Change."K4D Emerging Issues Report 29.Institute of Development Studies. DOI: 10.19088/K4D.2021.045
 ³⁵ Christiaensen, Luc, Demery, Lionel. 2018. "Agriculture in Africa: Telling Myths from Facts." Directions in Development—Agriculture and Purel Development. World Bank, http://dd.bank

Directions in Development—Agriculture and Rural Development. World Bank. http://hdl.handle.net/10986/28543

¹⁴ FAO. 2020. "State of the World's Fisheries and Aquaculture 2020. Sustainability in Action." https://doi.org/10.4060/cag22gen

Studies across South Asia, Sub-Saharan Africa, and Latin America have demonstrated that women's involvement in forest governance and management resulted in higher adoption of sustainable resource management practices that led to improved ecological conditions, regeneration, and reduced illegal harvesting.¹⁵ Women's influence on improving forest ecological conditions is likely a result of women's greater dependence on and knowledge of forest resources, as the primary providers and collectors of food and fuelwood for the family. Non-timber forest products (NTFPs) are the most widespread source of income from nature, with the sale of NTFPs, such as fuel, food, and medicine making up 22–28 percent of the income of rural people experiencing poverty who live in or adjacent to forests.¹⁶

A good example is found in the Climate Smart Village of Daga-Birame in Senegal

Box 1.

Climate Smart Village of Daga-Birame in Senegal.

The following collective action interventions were implemented:

women and men participated equally on a local forest management committee, meaning women participated in village decision-making; the women's group set up a microenterprise to process and sell fruit powder made from local baobab trees;

a savings pool invested in community resilience activities.

As a result, women's control over livelihood-focused activities and revenues, as well as forest management and environmental conservation increased. Their participation in community decision-making and children's school enrollments also increased.

which takes a collective action and technology training approach, devised by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), described below:¹⁷

This evidence suggests that mapping climate solutions that overlap with women's existing or potential roles related to these climate solution areas improving agriculture & agroforestry and protecting & restoring ecosystems could inform and influence climate planners — specifically, to support actions that enhance women's engagement in the activities that are likely to have the largest impact on the climate, by avoiding or mitigating emissions reductions in these two areas. Evidence suggests that when women have secure rights and access to land, they use resources sustainably,¹⁸. Including women in climate change mitigation and adaptation efforts can help guarantee clean air, safe drinking water, sufficient food and secure shelter for future generations. For example, women are often in charge of the selection, improvement and adaptation of plant varieties, using criteria based on their genetic characteristics. Women safeguard and maintain seeds and germplasm to be used as planting material in smallholder agricultures, thus contributing to biodiversity conservation and food security enhancement.¹⁹

Overall, research indicates a correlation between women's inclusion in leadership and decision-making structures and sustainable natural resources and adaptation outcomes.²⁰

A study in India also indicated that women's full and meaningful participation in sustainable forest management leads to 28 percent greater probability of forest regeneration.²¹

It should be noted, however, that climate mitigation practices should not rely on women's unpaid labor on the belief that women are predisposed to take up an environmental care-tending role. Similar to the unpaid care work that women provide for their households and communities, unless it is compensated, environmental stewardship can increase women's workload without properly addressing their needs. For example, a comparative study of REDD+ projects across six countries conducted by Larson, et al. (2018) found that living in a REDD+ site was significantly correlated with a decline in women's subjective well-being, suggesting that more attention to gender must be made in the design and execution of REDD+ projects.²²

¹⁶ Agarwal, Bina. 2009. "Gender and Forest Conservation: The Impact of Women's Participation in Community Forest Governance." Ecological Economics 68(11): 2785–2799. Mwangi, E., Meinzen-Dick, R., & Sun, Y. (2011). Gender and Sustainable Forest Management in East Africa and Latin America. Ecology and Society, 16(1). ¹⁶ Verdeld Paul et al 2007 "Forest Environmental Incomes and the Rural Poor" Forest Policy and Foromotics (27) 860–870.

 ¹⁹ Vedeld, Paul et al. 2007. "Forest Environmental Incomes and the Rural Poor." Forest Policy and Economics (7): 869–879.
 ¹⁹ Huyer, Sophia. 2021. "Building Farmers' Resilience to Climate Change means Addressing Gender Inequalities." CGIAR GENDER Platform Evidence Explainer. https://hdl.handle.net/10568/114266.
 ¹⁹ Gebremedhin Kidu et al. 2019. "Women's Land Tenure Security in Sustainable Development." Journal of Production Research & Management 9 (1): 21–30.

 ¹⁹ OECD. 2021. Gender and the Environment. Building Evidence and Policies to Achieve the SDGs. OECD Library. https://doi.org/10.1787/3d32c339-en.
 ²⁰ Deliver for Good. 2019. "Invest in Girls and Women to Tackle Climate Change and Conserve the Environment." http://deliverforgood.org/wp-content/up-

²⁰ Deliver for Good. 2019. 'Invest in Girls and Women to Tackle Climate Change and Conserve the Environment.' https://doi.org/10.1016/j.climateChange.pdf

²¹ https://www.undp.org/content/dam/undp/library/gender/Gender%20and%20Environment/UNDP%20Gender%20and%20REDD+Policy%20Brief%206-WEB.pdf ²² Larson, Anne M. et al. 2018. "Gender Lessons for Climate Initiatives: A Comparative Study of REDD+ Impacts on Subjective Wellbeing." World Development 108: 86-102 https://doi.org/10.1016/j.worlddev.2018.02.027

The Business Case for Investments in Women in Climate-Related Initiatives

There is a large body of research that supports the business case for investing in women. It can be summarized in three main arguments:

- 1 Investing in women creates a ripple effect that yields multiple benefits, not only for individuals but for their families, communities, and countries.
- 2 The financial value of climate and development investments can best be protected through gender-responsive interventions.
- 3 Climate-related projects and policies that involve women have proven to be m ore effective and deliver better environmental outcomes.

1) Research from the international development sector outlines the multiple benefits of investing in women.

Evidence shows that gender equality and women's empowerment lead to increased productivity, socio-economic development, and environmental sustainability, including better climate adaptation and mitigation outcomes.²³

Through their roles as farmers, agri-entrepreneurs, and household caretakers, particularly in the case of male out-migration, women are in a position to make effective use of finance in order to strengthen agricultural resilience to climate change and increase productivity. It is critical to ensure that climate finance is available to and shared equitably by women smallholder farmers, who are more difficult to reach, to provide them with access to information, know-how, technologies, and financial and other resources, such as land, that can be used as collateral to secure finance.

One example of an initiative that is trying to address the challenges that women-owned small agribusinesses face is the Rallying Cry — a global initiative catalyzing private sector investment in gender and climate, currently running pilots in Zambia and Kenya. It convenes a network of African Women Business



Leaders and works to shift capital toward gender and ²⁷climate smart enterprises in its network.²⁴

There is also evidence from the private-sector that demonstrates how adopting a gender lens to investing can lead to proven returns. A Calvert Impact Capital study found that companies with more gender-balanced leadership had better return on sales, assets, and equity.²⁵ Research by the International Finance Corporation (IFC) found that private equity and venture capital funds with gender-balanced senior investment teams generated 10–20 percent higher returns than funds that have a majority of male or female leaders.²⁶ The 2X Challenge, launched by development finance institutions at the 2018 G7 Summit, responded to the need to catalyze investment in women, and has since mobilized over \$4.5 billion, surpassing its initial goal by 50 percent.²⁷

²³ Cooper Hall, Laura, Granat, Margaux, Daniel, Tara. 2019. "Women's Organizations and Climate Finance: Engaging in Processes and Accessing Resources." Women's Environment and Development Organization (WEDO). https://wedo.org/wp-content/uploads/2019/06/-WomensOrgsClimateFinance_EngaginginProcesses.pdf ²⁴ The Rallying Cry. 2021. "Catalyzing Investment to Scale Gender and Climate Solutions in ²⁴ The Rallying Cry. 2021. "Catalyzing Investment to Scale Gender and Climate Solutions in ²⁴ The Rallying Cry. 2021." Catalyzing Investment to Scale Gender and Climate Solutions in ²⁴ The Rallying Cry. 2021. "Catalyzing Investment to Scale Gender and Climate Solutions in ²⁴ The Rallying Cry. 2021." Catalyzing Investment to Scale Gender and Climate Solutions in ²⁴ Comparison of Climate Solutions in Climate Soluti

²⁴ The Rallying Cry. 2021. "Catalyzing Investment to Scale Gender and Climate Solutions in Africa." https://therallyingcry.org/wp-content/uploads/2022/08/The-Rallying-Cry_Call-to-Action-report_November2021-1.pdf

⁴⁵ Value for Women. 2021. ⁴A Business-First Approach to Gender Inclusion: How to Think About Gender Inclusion in Small and Medium Enterprises.^{*} https://v4w.org/resource/a-business-first-approach-to-gender-inclusion/

Ress-first-approach-to-gender-inclusion/
 IFC. 2020. "Report: Moving Toward Gender Balance in Private Equity and Venture Capital." https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/genderatifc/resources/gender_balance_in-emerging-markets

ternal_corporate_site/gender+at+ifc/resources/gender-balance-in-emerging-markets ²⁷ For more information on the 2X Challenge, see https://www.2xchallenge.org

2) The financial value of climate and development investments can best be protected through gender-responsive adaptation interventions.

This can help reduce risks related to the impact of climate change, by supporting rural women who manage activities at the 'front lines' of climate change. Climate risks may disproportionately impact women and girls due to pre-existing gender inequalities. Both climate and gender risks are systemic risks, meaning when they coalesce, financial risks may be amplified for investees and investors alike. By integrating a climate and gender lens, investors can formulate a more comprehensive view of the systemic risks posed to their investments that may include environmental risks due to climate change or social risks caused by gender-based violence and harassment. By employing only one of the lenses, investors leave themselves exposed and miss an opportunity for greater returns and impact.²⁸

For example, Pula, an agricultural insurance provider in Africa that aims to build the resilience of farmers against the impacts of climate change. realized that by not targeting women as customers, they were missing out on a primary group of stakeholders.²⁹ To Pula, it is well-understood that not considering women farmers' specific needs may pose performance, reputational, and even legal risks to investments. Simply put, investments that exclude women and don't provide benefits to women are considered unsustainable.

3) The effect of leadership goes beyond financial returns.

When companies have more gender-balanced leadership, they also tend to have better governance and are more likely to proactively pursue sustainability. An analysis by Sasakawa Peace Foundation of more than 11,700 companies globally found that a critical mass of 30 percent of women on a company's board made a difference to climate governance and innovation, as well as a lower growth rate of emissions. 0.6 percent compared to 3.5 percent for companies with no women on their board. Research by the University of California Berkeley's Haas School of Business found the presence of more women corporate directors in a company is linked to the proactive pursuit of sustainable business practices and opportunities such as investing in renewable power generation, improving energy efficiency, and measuring and managing emissions. Women's preferences in the design of low-carbon transport, energy, and other mitigation interventions can vary from men's due to different levels of control over household assets, time use, and travel patterns stemming from the gender division of labor.30

 ²⁸ Biegel, Suzanne & Lambin, Sophie. 2021. "Gender & Climate Investment: A strategy for Unlocking a Sustainable Future. GenderSmart. https://www.wocan.org/resources/gender-climate-investment- strategy-unlocking-sustainable-future#
 ²⁹ Shell Foundation. 2020. "How Gender Impacts Agricultural Insurance Decision Making in Emerging Markets." https://shellfoundation.org/learning/how-gender-impact-agricultural-insurance-decision-making-in-emerging-markets/
 ²⁰ Biegel and Lambin, "Gender and Climate Investment."

4.0 Women's Roles from the View of Climate Investors

The relevance of gender issues is not well understood by many practitioners involved in climate change mitigation investments and financing mechanisms. Prevailing approaches to reducing emissions have prioritized scientific and technological measures, often at the expense of social and behavioral considerations.³¹ Most of the mitigation projects and funds so far have supported large-scale energy infrastructure and industrial efficiency programs, which are often viewed as mitigation projects with little connection to gender equality or other social issues.³²

³⁸ Karlsson, Gail, Eddy, Nathalie, and Harris, Rachel. 2013. "Exposing Gender Gaps in Financing Climate Change Mitigation—and Proposing Solutions." Climate and Development Knowledge Network, Global Gender and Climate Alliance, and the Women's Environment and Development Organization.



³⁴ Arora-Jonsson, Seema and Jeannette Gurung, 2023. Changing business as usual in global climate and development action: Making space for social justice in carbon markets. World Development Perspectives 29.

In this scenario, women's roles have been narrowly understood in relation to their vulnerability to climate change, and therefore limited to adaptation instead of mitigation projects. Since the vast majority of global climate finance, roughly 90 percent (or US\$571 billion) goes to mitigation, while adaptation funding (US\$46 billion) makes up only 7 percent, with dual uses accounting for the rest, this has limited investment in women's empowerment.³³ As stated by Tara Guelig, Director of Sustainability and Impact at the Lightsmith Group, which manages the Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT) of Nordic Development Fund, "Conceptually, climate adaptation continues to be difficult for investors, in terms of how you can measure it and how you can link it to beneficiaries, while still generating returns."34

Climate action that recognizes women's knowledge of resource management and their potential to effect long-term change is not only more just but also more successful. Mitigation measures that are gender blind can be less effective and less sustainable; they can also inadvertently manifest or widen inequalities and present risks to investors.35

projects and policies that involve women have proven to be more effective and deliver better environmental

Similar to the way that gender equality is now largely understood as "smart economics" that enhances efficiency and outcomes, gender mainstreaming into climate policy and financing mechanisms constitutes "smart climate finance." At the same time, climate finance creates "an opportunity to address

long-standing equity issues and can facilitate and build upon ongoing processes for promoting equality, fairness, and justice in the global economy," according to GenderSmart's 2021 Gender & Climate Investment Report.37

The recent shift in awareness of women's potential to contribute to mitigation action and interest from gender lens funders and investors provides an opportunity to harness climate finance mechanisms for gender-responsive mitigation and adaptation initiatives. The growing interest of gender lens investors in climate sectors as evidenced by the GenderSmart network has resulted in case studies and research on investing opportunities to encourage investors to drive the deployment of gender-smart capital at scale and pace, and embed gender analysis into the investment process for better business, social, environmental, and investment outcomes.

While sustainable investing is no longer novel to investors, investment strategies that take an integrated gender and climate lens to investment decisions are still relatively new. Investment in climate action exceeded \$500 billion in both 2017 and 2018, while in 2020 green bonds and green debt instruments crossed the cumulative \$1 trillion mark. By the end of 2020, there were over \$12 billion in assets managed by gender lens investment (GLI) vehicles across public and private markets.³⁸

To scale gender-smart climate investing, a clear narrative to convey the opportunity, supported by evidence, is required, similar to the evidence now available for gender-lens investing. A credible analysis helps detect and avoid so-called 'pinkwashing' and 'greenwashing', when projects are painted over with a gender or climate appearance, masking the reality mitigating risk and maximizing positive social and environmental impact.

³⁷ Biegel and Lambin, "Gender and Climate Investment." ³⁸ Biegel and Lambin, "Gender and Climate Investment."

³³ Buchner, Barbara. et al. 2021. "Global Landscape of Climate Finance 2021." 48. Climate Policy Initiative. https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2021/

³⁴ https://www.ndf.int/newsroom/new-facility-boosts-investment-into-climate-solutions.htm

³⁵ Karlsson et al, " Exposing Gender Gaps in Financing Climate Change Mitigation." ³⁶ For more information on UNFCCC and gender, see the UN website at https://unfccc.int/gender

Case Studies of Gender-Smart Climate Investing

To date, evidence on returns to gender-smart climate investing remains scarce. However, the following five case studies demonstrate examples of where investments are successfully yielding returns for gender and climate.

1. ResponsAbility

Is a leading Swiss impact asset manager that is applying a gender lens to one of its climate funds to increase women's access to clean power, primarily in Sub-Saharan Africa, and South and Southeast Asia. By doing so, it complies with the 2X Challenge criteria mandating that at least 50 percent of its portfolio companies actively improve and provide quality employment for women. ResponsAbility is an example of a private firm operating at scale in emerging markets. Since 2003, its funds have invested over \$10 billion in private debt and private equity to companies in the sectors of sustainable food systems, financial inclusion, and climate finance whose business models directly support the SDGs.³⁹

2. The InsuResilience Investment Fund

(IIF) is a fund that contributes to climate change adaptation by improving access to and increasing the use of insurance in developing countries.The objective of the fund is to reduce the vulnerability of micro, small, and medium enterprises (MSMEs) as well as low-income households to extreme weather events. The IIF Debt Sub-Fund works with microfinance institutions that combine loans to micro-entrepreneurs with insurance products against extreme weather events and natural disasters, protecting vulnerable rural farmers — rural women in particular. The European Investment Bank (EIB) has invested in the IIF Debt Sub-Fund, but only after receiving a guarantee that 40% of the investments made by the Debt Sub-Fund will be in line with the 2X Challenge Criteria, ensuring women benefit from access



to climate insurance.⁴⁰ The fund seeks to integrate gender-inclusive practices across the design, implementation, and operations of its portfolio value chains and products by encouraging the collection of sex-disaggregated data, provision of educational tools and resources, and by offering gender-responsive Climate Risk Insurance schemes which recognize women and men's differentiated vulnerability to climate risks. The IIF has made six investments across emerging markets, helping to protect more than 20 million poor and vulnerable people from the effects of climate change, 75 percent of whom are female. It has the potential to reach between 100 and 145 million beneficiaries by December 2025, as part of a wider program by the G20 InsuResilience Global Partnership, which eventually aims to protect more than 500 million vulnerable people against the impacts of climate change.41

³⁹ ResponsAbility. 2020. "responsAbility Commits to Gender Equality: Climate fund qualifies for the 2X Challenge" Press Release. November 12, 2020. https://www.responsability.com/en/press-releases/responsabili-

ty-commits-to-gender-equality-climate-fund-qualifies-for-the-2x-challenge #For an investment to be 2X eligible, they must fulfill one of the following five criteria related to women's entrepreneurship: leadership, employment, consumption, or investments. See more at: https://statici.squarespace.com/stat-

ic/5b180402c3c16a6fe0001e45/t/60bfe754201d3d2a8e51745c/1623189333660/2X+Challeng e+Criteria+(Final+June+2021).pdf

⁴¹ https://www.insuresilienceinvestment.fund

3. Pula

Is an agricultural insurance and technology company that designs and delivers innovative agricultural insurance and digital products to help smallholder farmers endure yield risks, improve their farming practices, and bolster their incomes over time. It offers both crop and livestock insurance to smallholder farmers in Africa, to boost the resilience of farmers against the impacts of climate change. The project's objective is to improve the livelihoods of farmers by enhancing their access to knowledge and education, agricultural productivity, and food security. The project implements a series of activities benefiting women, including providing training on sustainable agricultural practices to improve production and enhance food security.

In 2021, Pula measured its impact on women farmers using the W+ Standard. The audit showed that a total of 14,250 women farmers in Kitui County, Kenya benefited from Pula's educational program. The digital component involved providing agronomic advisories, while the in-person sensitization sessions focused on how insurance works, optimal crop-selection techniques, water management practices, and fertilizer application. Women farmers understood that they had several options in the event of crop failure, they can either replant seeds for a variety of crops to target a mixed harvest, or receive a claim pay-out as compensation for crop losses brought on by drought.

The W+ Standard audit found that Pula's training sessions — both in-person and digital — had led to a 65 percent change in knowledge and education for each woman farmer over the two-year period. This means that compared to a control group of female farmers, the audited farmers were 65 percent more likely to be able to explain the difference between traditional agriculture and the techniques learnt from Pula's training sessions⁴².

4. Root Capital

Is a non-profit impact fund investing in the growth of small and medium sized agricultural enterprises that support the sustainable livelihoods of smallholder farmers. Since 2012, Root Capital has actively sought to increase gender equity in the sector through its Women in Agriculture Initiative, and recently gualified as a 2X investee of the U.S. International Development Finance Cooperation (DFC). Root Capital invests in agricultural enterprises with a gender lens to drive climate resilience. It is now partnering with Value for Women in pilot programs to enhance climate resilience of women in agroforestry cooperatives in Central America. These interventions map climate vulnerability and resilience alongside gender-based vulnerabilities. Loans are provided to grow businesses and cooperatives that create jobs and opportunities for women, while Gender Equity Grants help businesses identify and implement policies and practices that enhance women's inclusion. Root Capital supplements these with crucial non-financial services, including training for women leaders, managers, employees and farmers in key financial and climate-smart agricultural skills to boost gender-inclusive economic growth alongside climate adaptation and resilience.43

5. The LadyAgri Impact Investment Hub

Brings together women agri-entrepreneurs and innovators with business angel investors, philanthropists, and public donors to support women-owned and -led agribusinesses in 17 African and small-island states. In addition to connecting over 600 women agri-entrepreneurs with finance and technologies for business growth, LadyAgri provides coaching and mentoring to advance social impact, sustainable resource use, and climate resilience. They provide technical assistance to structure value chains, build capacities to enable women access to agri-fiance, and enable access to markets, equipment, and technology. Their mission is to support more women with climate-smart solutions, and ensure access to appropriate finance to strengthen their capacity to diversify, stabilize revenue streams, and grow as active stakeholders in local and regional supply chains and markets.44

⁴² Raithatha, Rishi. 2022. "Empowering Women One Credit at a Time with the W+ Standard." Pula Advisors (blog). July 8, 2022. https://medium.com/Pula-advisors/empowering-women-one-credit-at-a-time-with-the-w-standard-e14528eff4e4 4ªFor an overview of Root Capital's gender equity impact area, see https://rootcapital.org/im-

pact_areas/women/ 44To learn more about LadyAgri, see https://www.lady-agri.org/

6.0 New Opportunities for Integrating Gender and Climate Finance

New financial mechanisms, markets, and innovative funds have promising potential to shift climate action and bring about a global transformation that enables countries to address the needs of their people, reduce risk, preserve natural resources, boost economic growth, and advance climate goals.

New opportunities arise for supporting women entrepreneurs and farmers in **1**) green jobs and supply chains, **2**) climate mitigation, and **3**) utilizing climate smart agriculture and natural resource management practices and the voluntary carbon markets, and for investors through new types of financial mechanisms, including voluntary carbon markets, outcome-linked funds, and bonds.

6.1 Opportunities for Supporting Women Entrepreneurs and Farmers

Green jobs and supply chains

Reducing GHG emissions benefits both the environment and people, especially in least developed countries (LDCs). One example is through job creation that drives new opportunities for sustainable economic growth. Overall, it is estimated that more than 14 million new green jobs will be created in the renewable energy sector by 2030. At the same time, investments in the food and agriculture sector are expected to create more than 200 million full-time jobs by 2050.⁴⁵ The FAO estimates that improvements in agriculture are 11 times more effective at reducing extreme poverty in Sub-Saharan Africa than investments in other sectors. A study estimated that the country-level rate of return for agricultural investments across Sub-Saharan Africa ranged from 17–43 percent. In areas of the sub-continent where about 200 million people live, and where the temperature has increased more than 2 degrees centigrade, over US \$23 billion of investments in agriculture, forestry and landuse sectors will be at risk.⁴⁶

Due to women's strong presence in the agriculture sector, climate-smart agricultural supply chains is an area where women can make a large difference. Besides for their roles as small-scale farmers who sell and provide agricultural inputs to supply chains, they act as agro-input retailers and agro-dealers, and they are hired as extension workers and rural agro-agents. Women's skills and experiences are well-suited to assist companies supplying inputs to value chains and enable a wide reach of companies to bring products to large consumer markets. Women's inclusion offers significant potential to upgrade value chain performance and build input markets, simultaneously benefiting women and input supply companies.⁴⁷

**IFC. 2019. Investing in Women along Agribusiness Supply Chains. https://www.irc.org/wps/wcm/connect/02c5b53e-420f-4bf4-82bb-6f488ff75810/Women+in+Agri+VC_Report_FINAL.pdf?MOD=AJPERES&CVID=m0JfSbv

⁴⁵ For an overview on decent rural employment, see the FAO website at https://www.fao.org/rural-employment/work-areas/green-jobs/en/

⁴⁶ mith, Pete. et al.2014. "Agriculture, Forestry and Other Land Use (AFOLU)." In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change IEdenhofer, O., et al. (Eds.). Cambridge University Press. https://doi.org/10.1017/CBO9781107415416 ⁴⁸ IFC. 2019. "Investing in Women along Agribusiness Supply Chains." https://www.ifc.org/wps/wcm/con-

However, women's agency and authority in such value chains are limited. Women hold 23 percent of agribusiness management positions and makeup only 5.4 percent of entrepreneurs in the sector globally. A clear avenue for investors to rebalance this representation is to encourage portfolio companies to support women in their workforce and supply chains or direct new investments to agribusinesses with clear commitments to both climate and gender. In private markets, one key opportunity to integrate a gender and climate lens in agribusiness investments is to invest directly in women agri-entrepreneurs bringing green-tech innovation to inputs, processing, or distribution. Alternatively, it might involve developing programs or platforms to support and incubate women-led start-ups or SMEs offering climate solutions.

Renewable energy investments have the potential to create an ecosystem of economic opportunity for women as employees and entrepreneurs throughout the supply chain. Technological innovation such as off- and mini-grid renewable energy solutions like solar street lighting, solar-powered water pumps, water treatment, and electrification of female-headed households are key areas to focus on women's empowerment. Clean cooking technologies, such as clean cookstoves, provide multiple benefits for women as consumers by reducing health risks from indoor pollution and time poverty from a reliance on biomass, as well as economic opportunities for women as employees and entrepreneurs.

BOX 2. Women at the center of mitigation projects

In the Polochic Valley, northern Guatemala, to cope with a lack of electricity, the predominantly Indigenous population of the Alta Verapaz Department uses fire for heat and light. But this can be harmful to their health and to the environment. The Joint Programme on Accelerating Progress Towards the Economic Empowerment of Rural Women (JP RWEE), a program to sustainably develop the livelihoods and rights of rural women, was established in 2014 to put women at the center of rural development processes. As part of the program activities in the area and in partnership with the Government of India and Barefoot College International, two women from the region's Tucurú municipality were selected for a six-month solar engineering course in India.

The women learned how to assemble, repair, and maintain solar panels, as well as manage the costs involved. On their return, they installed solar panels in three villages, powering a hundred homes. These families can now charge their mobile phones at home, avoiding costly trips to the city. Without the need for kerosene, firewood, or candles, they have more money to spend on other things, like food. They also learned how to train other women in their community, ensuring the sustainability and growth of the project. The JP RWEE is a global initiative to secure rural women's livelihoods and rights in the context of sustainable development. To date, it has assisted 80,000 participants in Ethiopia, Guatemala, Kyrgyzstan, Liberia, Nepal, Niger, and Rwanda. A new phase of the program commenced in May 2022, and will involve Nepal, Niger, the Pacific Islands, Tanzania, and Tunisia. The program is jointly implemented by the International Fund for Agricultural Development (IFAD), the Food and Agriculture Organization (FAO), UN Women, and the World Food Programme (WFP).

The shift to a green economy can generate new jobs and opportunities for women. If the millions of new low-carbon jobs expected to be created globally by 2030 include women, it could yield a direct economic gain of US\$26 trillion compared with a business-as-usual scenario. ⁴⁸⁻⁴⁹ Most job losses will likely be in mining, construction, manufacturing, and transport, with new jobs emerging in green sectors such as construction, energy, the circular economy, transport, and conservation agriculture.⁵⁰ However, the equitable inclusion of women in the green economy cannot be assumed; transitioning to green sector jobs will require significant upskilling for women in low-paid, low-skilled jobs so they can enter male-dominated sectors.

⁴⁸ To learn more on the Joint Programme on Accelerating Progress towards Rural Women's Economic Empowerment (JP RWEE), see https://www.ifad.org/en/jprwee

⁴⁹ The New Climate Economy. 2018. "The 2018 report of the Global Commission on the Economy and Climate." https://newclimateeconomy.report/2018/executive-summary/ ⁵⁰ ILO (International Labour Office). 2019. "Skills for a Greener Future: A Global View Based on 32 Country Studies." https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_732214.pdf

Climate Mitigation

Women have a critical role to play in achieving mitigation goals. However, persistent gender inequalities restrict equitable access to climate mitigation strategies and investments. In addition, efforts to promote gender equality in climate finance are underinvested with only a fraction of bilateral aid targeting gender equality. Specifically, only 11 percent of bilateral climate-related aid to energy and 12 percent to transport address gender inequalities.⁵¹ Moreover, mitigation investments are often in sectors that are male-dominated and inherently technical in nature, where opportunities for women to benefit as employees, entrepreneurs, or consumers have been traditionally limited, often through the biases of decision-makers.

Climate-smart agriculture and natural resource management practices

Some examples of gender and climate smart practices in a smallholder context include time, energy and water conserving practices (that also may generate food and income) such as biogas, agroforestry (for fodder, fruit, nuts, wood), briquettes (charcoal and wood-replacing), more equitable collective water, forest, rangeland management approaches), to name a few.

Almost all tracked adaptation finance comes from the public sector and is mainly focused on water, wastewater, and cross-sectoral projects, including support for capacity building, biodiversity, land and marine conservation, and disaster risk management. However, in Africa in 2017 and 2018, 62 percent of adaptation finance (US\$6 billion) was committed to agriculture, forestry, land use and natural resource management, and water and wastewater management⁵².

Climate and gender-smart investments in agriculture, forest management, energy provision and use, natural resource management, and conservation can drive multiple benefits for women. Efforts to promote women's empowerment and gender equality can be catalyzed through gender and climate-smart investments in climate-smart practices for agriculture, forest management, and cooking: 'Efforts to promote women's empowerment and gender equality can be catalyzed through investments in targeted gender and climate-smart practices for agriculture, forest management, and food preparation.

Sustainable forest efforts (e.g. REDD+) provide opportunities for women's improved tenure security and livelihoods impacts, enhanced participation in local resource governance (forest committees), and new income-generating activities⁵³.

There are new opportunities for **companies that deliver** agricultural products or services with a gender lens to deliver value to women farmers, enabling them to better plan for and achieve climate and productivity goals. This can include the provision of digital technology. There are many examples of such companies, including DigiFarm, a Safaricom-backed digital platform in Kenya offering a broad range of both financial (credit, insurance) and nonfinancial services (access to inputs, markets, training) that can help build the resilience of farmers in the face of a changing climate. Taking note of the relatively low uptake among women farmers (only about 10 percent), the company aimed to understand women's specific needs and tailor products to meet those needs.⁵⁴ Most importantly, the project team had set a target of 50 percent female clients, to align with M-PESA's (a phone-based money transfer service) 51 percent female customer base.55

⁵⁴ OECD DAC Network on Gender Equality. 2015. "Making Climate Finance Work for Women: Overview of the Integration of Gender Equality in Aid to Climate Change." https://www.oecd.org/dac/gender-development/Making-Climate-Finance-Work-for-Women.pdf ⁵⁴ Buchner, Barbara. et al. "Global Landscape of Climate Finance 2021," 48.

sa Climate Investment Funds. 2020. "CIF Gender Action Plan – Phase 3," Paper prepared following The Joint Meeting of the Clean Technology Fund (CTF) and Strategic Climate Fund (SCF) Trust Fund Committees of the Climate Investment Funds (CIF). June 5, 2020. https://www.climateinvestmentfunds.org/sites/cif_enc/files/-

 ⁵⁴ Varangis, Panos. et al. 2021. "Women in Agriculture Using Digital Financial Services: Lessons Learned from Technical Assistance Support to DigiFarm, Fenix, and myAgro." Equitable Growth, Finance and Institutions Insight.

https://openknowledge.worldbank.org/handle/10986/35471

⁵⁵Plan Canada & Intellecap. 2022. " Disruptive Roles in Gender Lens Investing in Kenya." https://plan-international.org/uploads/2022/03/plan_international_disruptive_roles_in_gender_lens_investing_in_kenya_march_2022_vf.pdf

6.2 Opportunities for Investors through Financial Mechanisms

Advancing the use of financial mechanisms that enhance women's financial gain from their contributions to **improving agriculture and agroforestry** and **protecting and restoring ecosystems** have the potential to scale climate solutions by de-risking investments. These investments could support women-led SMEs and groups to implement activities that are likely to have the largest impact on the climate by avoiding or mitigating emissions in agriculture and land use practices while simultaneously advancing women's empowerment and gender equality in rural communities. Three mechanisms to do so are described here: voluntary carbon markets, outcome-linked funds, and bonds.

Voluntary carbon markets (VCM)

New opportunities for women to engage in the voluntary carbon market (VCM) are emerging through market demand for carbon credits with gender co-benefits, called 'high quality' carbon credits. Although carbon markets have grown five-fold in two years, buyers still face difficulties in finding high-guality carbon credits at transparent prices. Co-benefits are additional benefits that go beyond carbon removal and avoidance, such as positively impacting communities, biodiversity, and women.⁵⁶ Monetizing the value of reduced, removed or avoided emissions - and allowing the trading of these offsets - can attract private investment and diversify the funding basis for environment and development projects. The VCM is growing rapidly, from a \$100 billion market in 2021 to a projected 50-fold increase by 2050,57 driven in large part by net zero commitments to offset carbon emissions by 2050. To achieve these net zero goals, there is currently strong interest in Nature-based solutions (NbS), which encompass projects that remove carbon from the atmosphere through the protection, sustainable management, and restoration of natural or modified ecosystems, while providing human well-being and biodiversity benefits⁵⁸ Examples include forest, mangrove, and soil restoration. NbS can address socio-economic issues, are site-specific, generate benefits in an equitable way, employ a landscape approach, recognize the trade-offs between immediate economic benefits and long-term benefits for future generations, and support ecosystems to evolve. The pre-financing of such projects, based on the anticipated value of the sale of carbon credits, can provide funding for project activities and measurement. Some investors

are directing investment to women-led companies that generate carbon credits, while many others are seeking a pipeline of similar projects led by women-owned companies that could provide critical financing for women to become engaged in this fast-growing sector. An increasing number of carbon standards (i.e. Gold Standard, Plan Vivo) are incorporating gender indicators and responding to buyers' interest in 'high-quality' carbon credits that include community and social benefits. For example, the Verra carbon registry partnered with the W+ Standard to develop a joint certification process whereby project developers measuring carbon can also measure benefits to women through the issue of W+-certified Voluntary Carbon Units (VCUs), to meet increasing market demand. There are actions currently underway to mainstream gender into the VCM. In particular, the Integrity Council of the VCM (IC-VCM)⁵⁹ and Voluntary Markets Integrity Initiative (VCMI)60 are establishing new threshold standards for 'high-quality' carbon credits. There is a growing demand for 'high guality' carbon credits that include a women's empowerment component; standards that measure and quantify outcomes for gender equality and women's empowerment are a prerequisite for the VCM to move in this direction. There exist standards and certification frameworks (i.e. Verra's Climate, Community, and Biodiversity (CCB) and Sustainable Development Verified Impact Standard (SDVISta), Gold Standard for the Global Goals, Plan Vivo, Social Carbon, etc.) that require reporting on activities for gender and women's empowerment, but currently, the W+ Standard is the only one that quantifies gender outcomes.

⁵⁶ Sylvera. 2022. "Co-Benefits of Carbon Offsets." Sylvera (blog), June 25, 2022. https://www.sylvera.com/blog/carbon-offsets-co-benefits
⁵⁷ Bloomberg NEF. 2022. "Carbon Offset Prices Could Increase Fifty-Fold by 2050" BloombergNEF (blog), January 10, 2022. https://about.bnef.com/blog/carbon-offset-prices-could-in-

^{*/} Bloomberg NEF. 2022. "Carbon Offset Prices Could Increase Fifty-Fold by 2050" BloombergNEF (blog), January 10, 2022. https://about.bnef.com/blog/carbon-offset-prices-could-increase-fifty-fold-by-2050/

For an overview of NbS, see the IUCN website https://www.iucn.org/commissions/commission-ecosystem-management/our-work/nature-based-solutions

⁵⁹ For more on the Integrity Council of the VCM, see https://icvcm.org

⁶⁰ To learn more about the Voluntary Markets Integrity Initiative, see https://vcmintegrity.org

W+ Standard

The W+ Standard ^{™61} is a certification framework that provides metrics and guidelines to quantify, verify, and monetize women's empowerment results within projects and supply chains. It provides a framework for designing as well as monitoring results within projects and generates W+ units - quantified and verified units of improvement in women's conditions from a baseline in six domains.⁶² A requirement of the W+ Standard is that the proceeds from their sale must be shared with women's groups.

The W+ Standard was inspired by new market-based opportunities to recognize and reward the contributions of women and to generate benefits for women and communities where climate change mitigation projects are implemented. There are two ways the W+ Standard may be applied to a project that is measuring carbon. One, a project where activities issuing carbon credits are concurrently producing results for women's empowerment. An example is the ERA Brazil project, an agro-forestry project that generates carbon units and separate W+ Income & Assets units because of new economic opportunities for women created through project activities⁶³ Two, a climate change mitigation project that recognizes the co-benefits for women of their carbon mitigation measures Here, an example is the Domestic Biogas Program in Nepal that results in time savings of 2.5 hours/day for women.⁶⁴ In each case, the project developer can choose to designate the resulting carbon credits as a credit with a W+ label. This can provide an easy pathway for companies, including those engaged in the new scaling of the VCM, to achieve and report on ESG and SDG impacts, and generate revenue that can be used to pay for both implementation and measurement.

Like carbon units, W+ units can be sold to corporations, investors, public institutions, or individuals. Given the credibility and rigor of the W+ Standard process, companies also reduce their headline risks for actions that may otherwise be accused of 'pinkwashing' in addition to 'greenwashing.'

At least 20 percent of the revenue from W+ unit sales is provided to women's groups engaged in the project, and can be used as they see best fit to address community and climate adaptation needs. This enables the use of climate mitigation finance to provide grant funding for adaptation, in ways that are determined by women at the community level. The W+ Standard was recognized by the UNFCCC Women for Results Award in 2016 for its proof of concept in a biogas project in Nepal.65

To date, the W+ Standard has been applied to 20 projects, most of which are renewable energy, forestry/agroforestry, and agriculture climate projects. The establishment of an exclusive W+ brokerage agency, EmpowerCo ,66 has set the price of W+ units at a fairly high level to ensure that the new market is able to incentivize project developers, pay for the costs of women's empowerment activities, and provide a significant amount of revenue flow to women-led organizations to support their adaptive capacities for climate adaptation.

⁶¹For more on the W+ Standard, see http://wplus.org

⁶² The six domains are: Time, Health, Income & Assets, Knowledge & Education, Food Security, and Leadership

 ⁶⁴ To learn more about ERA Brazil's Pollen Program, see https://www.wplus.org/project/era-brazil/
 ⁶⁴ To learn more on the Biogas Stoves Project, see https://www.wplus.org/project/biogas-stoves-project-in-nepal-2/

⁶⁵ For more on the W+ Standard in Nepal, see the UNFCCC website at https://unfccc.int/climate-action/momentum-for-change/women-for-results/the-w-standard

⁶⁶ https://www.empowerco.com/EmpowerCo

Outcome-linked funds

The integration of environmental, social, and governance (ESG) factors into investment funds has accelerated in recent years. In Europe in particular, assets surged by about 200 percent in 2021 as funds adopted the ESG label, investing 350 billion euros (\$369 billion) in ESG-focused money funds.⁶⁷ Given the rapid adoption, private investors and Development Finance Institutions (DFIs) have sought ways to measure and quantify ESG impacts in meaningful ways to comply with reporting requirements and avoid reputational risks.

One mechanism growing in popularity is an 'outcomes' or 'impact-linked fund',68 that commits to pay for social outcomes, rather than inputs or activities. In addition, outcomes fund advocates aim to accelerate the growth of the outcomes contracting market by using outcomes-based approaches at scale, and building capabilities among involved stakeholders. They have been widely touted as the solution to taking outcomes-based contracts, like impact bonds, to scale. As is the case with individual outcomes-based contracts, like impact bonds and other payment-for-results mechanisms, a common goal espoused by those developing outcomes funds is to improve services that tackle complex social issues. Outcome-linked funds are now being piloted by leading DFIs; a few of which plan to develop a system that will produce 'results-based payments' for disbursements tied to gender outcomes to incentivize the companies they invest in, using the W+ Standard. Because the W+

Standard is a market-based approach that generates tradable assets (W+ units or W+ certified carbon credits), it presents opportunities for investors seeking climate and gender impacts to support projects and companies that deliver real benefits to women while also generating both social and financial returns on their investments.

An example of such a pioneering impact fund is the family of the Livelihood Funds⁶⁹, which are providing upfront finance to NGOs wishing to implement and monitor projects that empower farmers with efficient, affordable, and replicable agricultural practices on a 10 to 20 year scale.. Results-based returns on investment guarantee tangible impacts for rural communities (improved livelihoods), public goods (water and nature conservation, CO₂ sequestration), and improve business sustainability (better sourcing, carbon credits with high social value).

Bonds

In 2020, green bonds and debt instruments, including bonds for green, social, and sustainability goals, cumulatively crossed the \$1 trillion mark. While most bonds specifically targeting gender equality are classified as social or sustainability bonds, data published by BloombergNEF in 2021 shows that both the social bond and sustainability bond market have grown substantially since 2018, with social bond issuances increasing sevenfold in 2020 alone.

⁶⁷ Biegel and Lambin, "Gender and Climate Investment." ⁶⁸ Savell, Louise. et al. 2021. "Understanding Outcomes Funds: A guide for Practitioners, Governments and Donors." Government Outcomes Lab, Blavatnik School of Government, University of Dxford. https://golab.bsg.ox.ac.uk/knowledge-bank/ resources/understanding-outcomes-funds-a-guide-for-practitioners-governments- and-donors/ ⁶⁹For more on the Livelihoods Funds, see https://livelihoods.eu/

Gender bonds are relatively rare, only used by a few large institutional investors, such as the World Bank, Asian Development Bank, and IFC.⁷⁰ The Women's Livelihood Bond (WLB) series raised by the Impact Investment Exchange (IIX) has led the way by providing examples of both gender and climate bonds. The WLB series isa \$20 million debt security that aims to raise capital for a pool of high-impact social enterprises and micro-finance institutions (MFIs) with a mission to empower and support over half a million women across Asia transition from subsistence to sustainable livelihoods. The WLB series helps women access affordable credit, micro-savings and insurance, agricultural inputs, and clean and affordable energy. Capital is provided up-front, allowing women to fund income-generating assets and skills.

The second bond of IIX, the WLB2, includes environmentally focused enterprises in the clean energy and sustainable agriculture sectors. The bond's capacity to scale up sustainable, climate-smart agriculture has been shown to increase employment opportunities, grow incomes, improve resource efficiency, and elevate productivity to allow for less time spent on subsistence activities. In the long term, this allows for reforestation and the cultivation of resilient and sustainable communities. WLB2 focuses exclusively on women, as IIX believes that women are the key to unlocking more resilient communities.

The WLB4Climate is the second investment vehicle of IIX's Women's Catalyst Fund, a next-generation gender-lens instrument that has gained new partners, including a US\$10 million investment from the US International Development Finance Corporation (DFC), a \$1 million grant from the Korean International Cooperation Agency (KOICA), and a significant grant from the Australian Department of Foreign Affairs and Trade (DFAT). The WLB4Climate is supporting women-focused enterprises in India, Indonesia, Cambodia, and the Philippines that are directly enabling women to create self-sustaining livelihoods for themselves, their communities, and the planet, fostering an ecosystem of climate-friendly small and medium-sized enterprises. From preparing women farmers to better respond to environmental shocks and maintain their yields through stresses caused by climate change-related extreme weather events to financing cleaner electronic transport and solar rooftop panels, WLB4Climate is expected to impact an estimated 500,000 underserved women and girls across Asia.

According to predictions by the IISD,⁷¹ the gender bond market is poised to expand despite its modest size in the ASEAN region, and globally, given the trajectory of the green bond market. As investors have become more sensitive to sustainability issues, the demand for green bonds has grown, now outstripping supply, bringing about higher issuer premiums and lower costs of capital.Gender bonds will likely follow a similar path as investors diversify and induce demand for more bonds and more capital.

A foreseeable catalyst to this expansion will be a deeper understanding of the impact that gender bonds can deliver alongside the financial returns they generate. Gender bonds, by investing in the full and effective participation of women in economic life, also have the potential to support efforts on poverty eradication (SDG 1), full and productive employment and decent work (SDG 8 and 9), peaceful and inclusive societies (SDG 16), and the promotion of sustainable industrial development (SDG 9). Although still nascent, the gender bond market offers public and private investors an efficient means of improving the lives of women while earning financial returns.

However, as noted by the IISD, the greatest potential to increase flows to gender equality via bonds is by creating gender bonds that have green mandates. By going beyond mere risk mitigation, bringing climate-lens investing and gender-lens investing together offers multiple opportunities for societal impact and can future-proof investments and decrease downside risk for investors. Gender bonds that stress having a climate lens can enact this integration and attract investors that want to go beyond the traditional green bond market.

⁷º Gouett, Matthew. 2021. "Furthering Gender Equality through Gender Bonds." International Institute for Sustainable Development. https://www.iisd.org/system/files/2021-03/equality-gender-bonds.pdf



6.3 Opportunities for Development Agencies and Multilateral Finance Institutions (MFIs)

As two multilateral development organizations that focus on rural economies, food security, and climate change, IFAD and the World Bank are well-suited to lead the charge in scaling up financially sustainable initiatives that catalyze gender equality and women's empowerment in climate change mitigation and adaptation. Both organizations have supported projects that build the capacities of local organizations, gender equality, and inclusiveness, and access to markets, technology, and finance to improve agriculture and agroforestry, and protect and restore ecosystems. These projects demonstrate how communities can strengthen their resilience to climate change.

Recognizing that women farmers are key to solutions for both climate mitigation and adaptation, development agencies and MFIs can invest in efficient, effective, and equitable low-carbon development that puts women in the center, as essential stakeholders, by enabling them to more effectively contribute to poverty reduction, sustainable development, and climate change responses, and compensate them for their knowledge and contributions to climate outcomes. For instance, emissions from household energy use and smallholder agriculture could be significantly reduced if women who are managing household energy use and food resources are provided with more efficient household technologies, are trained in sustainable farming, rewarded for conserving forests, and empowered to lead their communities toward sustainable development.

⁷⁰ Gouett, Matthew. 2021. "Furthering Gender Equality through Gender Bonds." International Institute for Sustainable Development. https://www.iisd.org/system/files/2021-03/equality-gender-bonds.pdf

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Conclusions and Recommendations

Recognizing and promoting the role of women in climate change adaptation and mitigation, and their contributions to creating resilient food systems, is key to achieving net-zero emissions by 2050 and keeping global warming to no more than 1.5°C as called for in the Paris Agreement.



Funders and investors need to mobilize climate finance that both mitigates GHG emissions and helps communities adapt to a changing climate, while addressing gender gaps and enabling women to access much needed-finance to build their resilience and help reduce climate impacts. Through the study of largely qualitative data from development and gender lens investing, this paper develops the case for investing in rural women as a means to achieve climate mitigation and adaptation goals, while simultaneously addressing gender inequality and poverty. Findings have identified new opportunities to do so through two overarching approaches: women-focused programs and financial mechanisms (see Figure 1). Women-focused programs that invest in creating green jobs and strengthening supply chains, pursuing climate mitigation options, and utilizing climate smart agriculture and natural resource management practices offer great opportunities. These can also make use of financial mechanisms and instruments, including voluntary carbon markets, outcome-linked funds, and bonds.

Financial investments in mechanisms that enhance women's financial gain from their contributions to improving agriculture and agroforestry, and/or protecting and restoring ecosystems have strong potential to scale climate solutions by de-risking investments and enhancing gender equality in rural communities. These investments can support women-led SMEs and groups to implement activities that are likely to have the largest impact on the climate, by avoiding or mitigating emissions in these agriculture and land use practices while simultaneously advancing women's empowerment and gender equality.

Recommendations

The following actions — many of which some international finance institutions and development agencies are already engaging in — could be further supported by IFAD, the World Bank, the African Development Bank⁷² and other climate and development finance institutions to raise ambition for gender equality and climate action:

- Conduct gender analyses to better understand the context, intersectionality, and power dynamics at play in the design of climate change responses.
- 2 Map the existing roles of women in climate solutions as proposed by Project Drawdown.
- 3 Collect and analyze financial data and returns of gender-responsive climate investments (to address the gaps identified in this research).
- 4 Require that all projects provide equal access to women while promoting practices and policies that reduce environmental harm and build resilience, including secure land tenure for women.
- 5 Improve internal accountability for gender commitments through gender tracking, measurement, and reporting of adaptation and mitigation investment outcomes.
- 6 Engage with and support women-led organizations and networks in all climate processes.
- Support the development of Women Climate Entrepreneurs through investments in knowledge-building and skills training.
- 8 Ensure women obtain decent jobs and have access to upskilling

- 9 Champion women innovators and entrepreneurs in the green economy and transition to net zero.
- **10** Support the development of mitigation projects that can generate both carbon and gender credits to stimulate market demand.nd transition to net zero.
- **11** Support the capacity building efforts of women's groups and enterprises to implement projects that generate carbon and gender credits by providing training on measurement, engaging with carbon markets, and business development, assisting them to become 'investable entities' of private investors.
- **12** Provide access to upfront financing on terms appropriate for women's organizations and small enterprises.
- Support governments to increase their access to and absorptive capacity for carbon market finance
 ensuring gender equality is integrated with SDGs and other commitments.
- 14 Develop and provide thought leadership and knowledge products to share case studies and best practices.

Supporting women entrepreneurs and women-led start-ups in green sector supply chains and carbon markets can enhance climate innovation and women's economic empowerment. Providing women with access to finance and mentoring, pathways to ownership of assets such as land, and access to markets and supply chains will help diversify value chains, reduce risk, increase competitiveness, and enable climate-responsive innovation.

⁷² Sue Phillips, presented during the AfDB's Gender and Carbon Markets Information Sessions webinar, April 19 and 20, 2023.

The financial mechanisms that could be used are as follows:



Use catalytic grants to demonstrate what success looks like at the nexus of gender and climate by funding a set of diverse pilot projects that are developed specifically to meet the needs of various types of funders and investors.

This includes pilots for:

- Buyers of 'high-quality' carbon credits;
- ESG investors seeking social and environmental returns on their investments;
- Private companies that aim to de-risk their supply chains and support their CSR objectives;
- Philanthropists who are interested in funding women's groups to build adaptive capacities.
- 2 Use catalytic grants toward technical assistance for designing climate projects and measuring impacts that can apply carbon and gender standards, such as the W+ Standard.
- 3 Use a results-based payment system through bond instruments and impact investments to encourage private investors seeking ESG results and to ensure women are compensated for their roles in delivering climate solutions.
- Use financial instruments including bonds to provide prefinancing to projects especially those implemented by women's organizations and enterprises that can generate carbon and gender credits.

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⁷² Sue Phillips, presented during the AfDB's Gender and Carbon Markets Information Sessions webinar, April 19 and 20, 2023.

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