

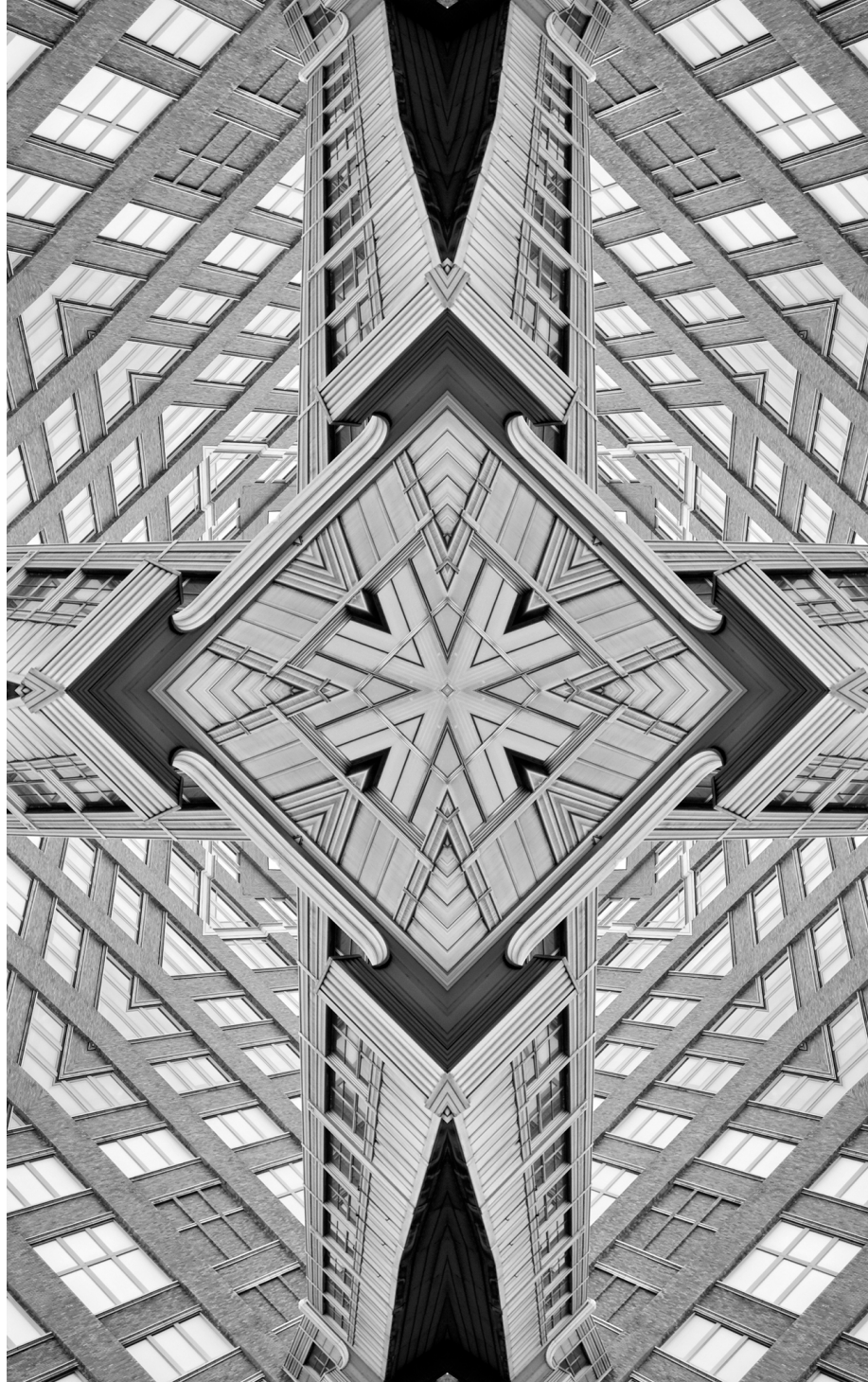
# Issue

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# Brief

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# Moving Gender Equity to the Mainstream of Climate Action

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## **Abstract**

India is among the countries in the world that are most vulnerable to the consequences of global warming. While there are notable efforts for both mitigation and adaptation, these have failed to consider issues of gender equity even as evidence shows that women and girls bear the disproportionate burden of climate change. This is a gap that needs to be bridged, given the complex interlinkages between climate and gender that encompass livelihoods, education, health, and nutrition, among many other domains. This brief examines these relationships and proposes a more comprehensive climate action plan for India that is inclusive of gender perspectives.

Climate change is a unique threat, not only because it is omnipresent and unpredictable, but also due to the obscure ways it impacts populations and ecosystems over time. This obscurity stems from the complex links between the state of the climate and the causes of poverty, embedded as they are within various socio-cultural contexts. Thus, current action plans to combat climate change may not be capable of fully addressing its non-linear effects on those with the fewest resources, or those with unequal access to decision-making and credible information.

In both developed and developing countries, patriarchal structures and rigidly defined gender norms often leave women and girls disadvantaged. When extreme weather events or disasters occur, therefore, the question is not only how severely everyone is affected, but who is affected more, given existing power relations and structural barriers. The fourth session of the United Nations Environment Assembly in Nairobi in March 2019 acknowledged the compounded burden of climate change on women and girls, but also emphasised the “power of their knowledge and collective action.”<sup>1</sup>

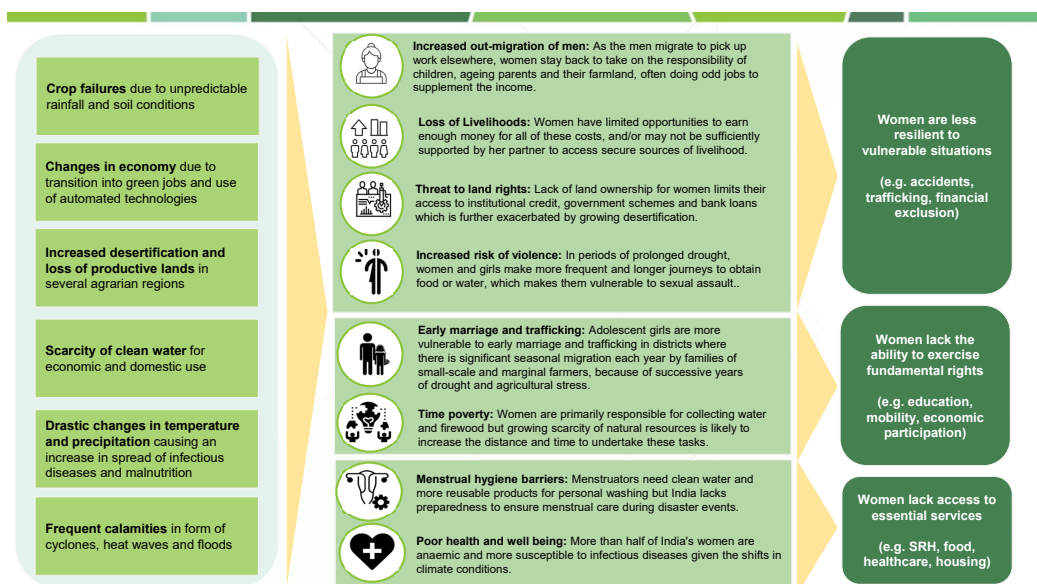
Recent discourse has increasingly highlighted the disproportionate effects of climate change on women due to their greater domestic responsibilities, lack of asset ownership, and limited access to the skills and knowledge needed to adapt to stressful events. This brief examines the deeper implications of shifting ecological conditions from a standpoint of gender, and proposes constructive ways to bring about equity in the policies that are being created under India’s climate change response plan.

A 2022 study by the United Kingdom's (UK) Foreign, Commonwealth and Development Office (FCDO) found that one of Odisha's economically stable districts, Kendrapara, is experiencing rapid migration, with 85 percent of its population migrating once or twice a year due to exacerbated vulnerabilities associated with frequent cyclones, floods, and storm surges.<sup>2</sup> The critical push factor, however, is the absence of secure and stable livelihoods for the community. With the district critically dependent on adequate rainfall and the health of local natural resources, extreme weather events such as heat waves and prolonged droughts are affecting the stability of agriculture, on which 40 percent of the population depend, and of fisheries, which provide employment to more than 28 million people.

The experience is not unique to Odisha. Robust, micro-level vulnerability assessments have found other climate hotspots across the country.<sup>3</sup> Similar climate-induced displacement pervades in states such as Assam and Jharkhand, while coastal cities like Mumbai and Kolkata continue to face water scarcity and rising food prices along with an influx of migrant populations. The southern and western regions of India are highly prone to extreme droughts, exacerbating the risk of rapid crop failures and low food security. Meanwhile, the northern and northeastern regions have become extremely flood-prone, which too, compounds migration.<sup>4</sup>

How exactly does climate change affect women's sense of security and well-being? The framework illustrated in Figure 1 highlights data from various studies that shows how climate change impacts the domains of sustainable livelihood, safety, clean water, sanitation, healthcare, and education.<sup>5</sup>

**Figure 1:  
Climate-Gender Impact Framework**



Source: Author's own, using various open sources.

In 2018, India was ranked as the country most vulnerable to climate change,<sup>6</sup> both because of its exposure to climate-related disasters and the economic dependency of a high percentage of its population on climate-sensitive sectors like agriculture. This has severe implications for women and girls, especially those in remote regions and those who belong to tribal communities, minority groups, or are part of populations who migrate seasonally and engage in fisheries, forestry, and agriculture. The lives of the women in most of these communities are intricately connected to collecting and managing natural resources.

For example, fisherwomen account for 34.6 percent of the total fisherfolk population in India, while the agricultural sector employs 80 percent of all economically active women in the country.<sup>7</sup> Women constitute a higher proportion of casual agricultural labour as more men take up wage labour in the non-farm sectors which are often gender segregated. The *Economic Survey*

2017-18 has highlighted that with the outmigration of men, there is a growing feminisation of agriculture in India, leading to an increasing number of women in roles such as cultivators, agricultural labourers, and entrepreneurs.<sup>8</sup>

The Intergovernmental Panel on Climate Change's (IPCC) sixth assessment report on global climate change says that agricultural land in India is today severely threatened by climate change. This is especially disadvantageous for women as they constitute barely 14 percent of all landowners in India.<sup>9</sup> Lack of land ownership has multiple implications for women, including higher workload, psychological stress, and limited access to formal finance.<sup>10</sup>

Following frequent droughts and unseasonal, heavy rains, various state governments have launched compensation packages specifically for losses due to such climate shocks. However, it is largely the men who own the land and thereby receive such compensation. There is no gender disaggregated data on women farmers receiving these packages, which makes it difficult to determine the gendered impact of these initiatives.

Frequent climate calamities are also likely to create additional barriers to access of essentials like quality education, menstrual care, and appropriate nutrition. Historical experience with hydro-disasters in India shows that rising water levels and frequent flooding tend to affect women's menstrual care, given the lack of hygiene products, female helpers and gender-segregated toilets in relief camps for those who are displaced by the disaster.<sup>11</sup> Development professional Mayuri Bhattacharjee, who started the widely covered Dignity in Floods campaign, has highlighted how India lacks a strategic framework at the policy level to ensure menstrual hygiene care during disaster events. Relief camps and shelter homes also lack adequate provisions for the needs of pregnant and lactating women.<sup>12</sup>

Like floods, droughts too, can impact hygiene, making it more likely for adolescent girls to miss school when on their monthly period due to the lack of clean water for menstrual care. A 2015–16 assessment of droughts in India found that hand pumps had dried up in 60-80 percent of schools surveyed in Madhya Pradesh, restricting the number of water, sanitation and hygiene facilities available to girls.<sup>13</sup> As per the Malala Fund Girls' Education and Climate Challenges Index, India will have 141 million school-aged girls vulnerable to climate change effects by 2025.<sup>14</sup> In low-income families, frequent disasters lead to impoverishment, which increases the chances of girls dropping out of school.<sup>15</sup>

Climate change is also undermining India's efforts to end hunger and malnutrition, due to crop failures, unpredictable rainfall patterns, and increased carbon dioxide concentration.<sup>16</sup> The Consultative Group for International Agricultural Research (CGIAR) Gender Platform has built a comprehensive framework to illustrate how climate change leads to poorer nutrition and health, with a detailed literature review identifying three crucial drivers of malnutrition in women: skipping meals to feed other family members in times of hunger; having to travel longer distances for water and fuel; and lack of access to productive resources and assets.<sup>17</sup>

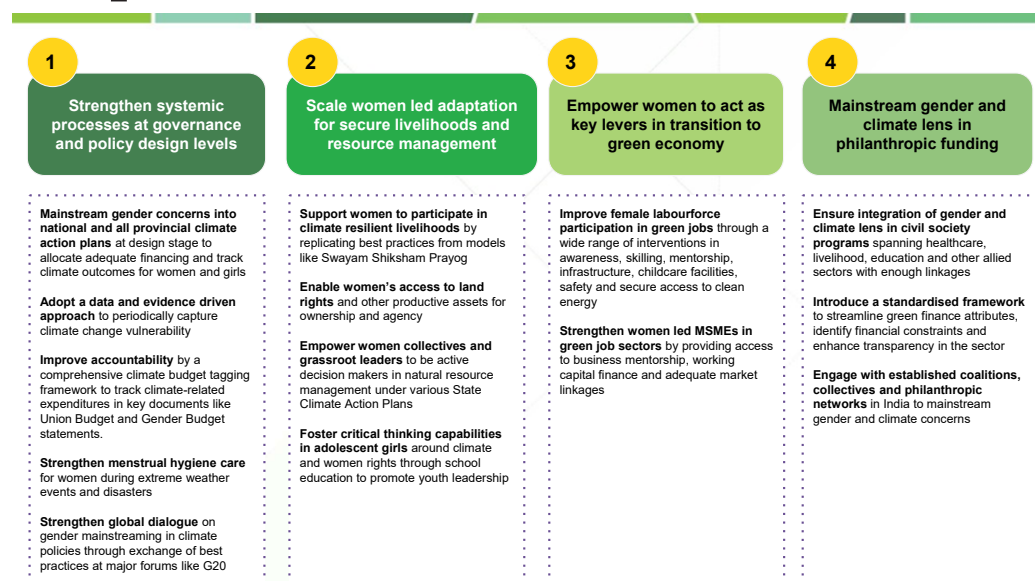
In the Indian context, this absence of equity could be catastrophic, since 51 percent of Indian women of reproductive age (15 to 49 years) are already anaemic.<sup>18</sup> India, home to 1.4 billion people, is ranked 101 out of 116 countries in the Global Hunger Index, with declining yields of food and cash crops posing enduring challenges.

“Women whose lives are intricately connected to collecting and managing natural resources are especially threatened by the impacts of climate change.”

# Proposed Pathways to Gender-Inclusive Climate Action

Considering the multidimensional nature of the nexus between climate change and gender inequity, India needs to proactively integrate the research across different thematic areas and affirm gender intentionality into climate action.

**Figure 2:  
Pathways for Inclusive Climate Change Response**



Source: Author's own, using various open sources.



# Proposed Pathways to Gender-Inclusive Climate Action

The following points outline the imperatives for India:

## **1. Strengthen systemic processes at the policy design and governance levels.**

Making sufficient impact demands radical transparency, robust frameworks to guide collaborative efforts, and comprehensive tracking of progress across sectors spanning health, education, water, sanitation and hygiene (WASH) and livelihoods. Although national climate goals have been set, and regulatory mandates are guided by Nationally Determined Contributions (NDCs) and the UN Framework Convention on Climate Change's (UNFCCC) Race to Zero targets, the implementation of policies and schemes happens at the state level. State-level agencies need to focus a gender transformative lens on India's mitigation and adaptation plans.

Studies by the Climate and Development Knowledge Network (CDKN) have identified opportunities for mainstreaming gender into the State Action Plans for Climate Change (SAPCCs). A few states have done so, but a significant gap still exists between policy and practice.<sup>19</sup> At the policy level, Odisha, Kerala, and Gujarat figure prominently among states that have recognised the importance of gender mainstreaming in their climate policies for agriculture and allied sectors. For instance, Odisha's fisheries policy emphasises education, vocational training, diversification of employment opportunities through capacity-building, market tie-ups, and social benefits, while its agricultural policies keep women's participation central to programmes on watershed development and its System of Rice Intensification (SRI).

Furthermore, NITI Aayog has developed a State Energy and Climate Index and is also working on a National Gender Index to identify remaining gaps and track progress towards gender equality. The two need to be integrated, while accountability can be driven by strengthening monitoring and evaluation mechanisms across all climate action plans where gendered impact is tracked.

SAPCCs lack regular assessments of climate impact and vulnerability to ensure that adaptation strategies are locally contextualised and responsive to the primary needs of the target communities.<sup>20</sup> Indeed, more than 80

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percent of Indians live in districts vulnerable to climate risks. Assam, Andhra Pradesh, Maharashtra, Karnataka, and Bihar are states most vulnerable to extreme climate events. Vulnerability assessments can be strengthened by collecting gender-disaggregated data.<sup>21</sup> The Centre can play an important role in institutionalising periodic data collection on climate vulnerability, and in tracking climate expenditure under the Union and Gender Budgets.

Apart from earmarking funds for women under various agricultural, health and allied sector schemes, states also need to design policies that enable women to actively participate in climate mitigation efforts. The approach must be localised, given how climate effects vary considerably even across districts. SAPCCs must be downscaled to the district level and should develop comprehensive plans with a clear gender focus. The Centre should guide states in bringing together SAPCCs and other relevant schemes under healthcare, nutrition, livelihood, education, and WASH to better serve the targeted communities.

Attention should be paid to the needs of adolescent girls—their education and reproductive care, and protection from harm that may be caused by certain social norms. Poverty stressors, when aggravated by changing climate, pose a challenge to keeping girls in schools, as families tend to either bind them to housework or get them married early. It is necessary to make mental health counselling, legal support and provision of services such as menstrual care available at all educational institutions. There should be robust tracking mechanisms for vulnerable and out-of-school girls, especially in regions prone to frequent droughts, crop failures, and other climate impacts. Global evidence shows that increasing gender equality through investment in education leads to stronger and more equitable climate adaptation, improved mitigation of greenhouse gas emissions, and greater climate resilience.<sup>22</sup>

India also needs a guiding policy framework for menstrual hygiene during disaster events. It should mobilise both health departments and disaster management authorities at the state level to do so. WaterAid and the UN Population Fund (UNFPA) have developed a framework<sup>23</sup> but it has yet to be adopted by state governments. The government's WASH policies tend to focus on producing sanitary pads and not on any other reusable and eco-friendly alternatives. This, coupled with lack of proper disposal systems for pads and insufficient community awareness of more sustainable products, can result in environmental damage and limit girls' options.

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In 2018, the government launched Anaemia Mukta Bharat (AMB) to augment efforts for combating nationwide anaemia prevalence, along with introducing critical monitoring mechanisms such as district-level dashboards to fill implementation gaps. To combat the high incidence of anaemia among women and children across states, the programme should prioritise addressing the root cause of the issue which lies at the nexus of gender norms within households. As men are primary decision-makers in majority of households, targeted awareness and sensitisation campaigns for them can become a component of the AMB strategy. Moreover, the policy can leverage male multipurpose health workers as female last-mile workers often face societal barriers to effectively interacting with men. The government can also build partnerships with relevant civil society organisations working on health and gender issues to train male health workers and support them in effective service delivery. Moreover, the programme can begin prioritising hotspot districts where climate vulnerability and gender inequality are significantly high. As additional efforts, government can also consider collaborating with technical experts on climate-nutrition linkages to strengthen other large-scale programmes such as Saksham Anganwadi and Poshan Abhiyan 2.0.

As India takes over the G20 presidency beginning in December 2022, it will hold a significant opportunity to contribute to global climate mitigation as G20 members are some of the world's largest countries, responsible for over 80 percent of total GHG emissions.<sup>24</sup> India can emphasise the exchange of knowledge and collaboration around making women pivotal to creating more circular (or green) jobs. It will also give India an opportunity to influence adaptation strategies of G20 members where it can promote mobilising women as decision-makers and leaders in resource management, disaster preparedness, and sustainable livelihood adoption.

## **2. Scale women-led adaptation for livelihood security and resource management.**

Alongside the SAPCCs, India also has an overarching National Action Plan for Climate Change (NAPCC). The National Mission for Sustainable Agriculture (NMSA) is one of the eight missions under the NAPCC with a budget of INR 1.08 lakh crore in the 12th five-year-plan. However, no funds have been dedicated to adaptation and coping mechanisms, and only the Rain-fed Area

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Development (RAD) component of the scheme has properly utilised its funds since the mission was started.<sup>25</sup>

Effective climate response needs to include both mitigation and adaptation, but the latter has often received limited policy focus and funding. Moreover, the current pressures faced by low-income communities demand urgent planning and significant empowerment of women. There is enough evidence to validate the transformative potential of women-led natural resource management interventions, such as the Women, Work and Water campaign of the Ahmedabad-based non-government organisation, Self Employed Women's Association (SEWA).<sup>26</sup> The most important impact of SEWA's intervention was the strengthening of women's collective agency to independently negotiate in the public domain on water management, a sector earlier dominated by men.<sup>27</sup>

As of 2021, through its National Rural Livelihoods Mission (NRLM), India has established about 6.9 million Self-Help Groups (SHGs) with 75 million women members across the country. These SHGs can act as change agents to link climate with livelihoods, promoting conservation initiatives,<sup>28</sup> including the adoption of climate-resilient practices under SAPCC, at the village level—these include agro-ecological practices, micro-irrigation, and managing commons.<sup>29</sup> Grassroots NGOs have worked extensively with SHGs and other women collectives to help increase women's digital and financial literacy and market access, their opportunities for drawing microfinance and loans without collateral, and knowledge-sharing of best agricultural practices.

The Swayam Shiksham Prayog, for instance, runs a women-led climate-resilient model in Maharashtra's drought-stricken Marathwada region to support grassroots women's networks in adopting sustainable farming practices, and acting as decision-makers in their communities. Similarly, the Mann Deshi Foundation is developing localised livelihood solutions by nurturing rural women micro-entrepreneurs through a range of affordable and accessible financial services.

However, a vital missing link for furthering women's role in climate adaptation is their limited ownership of land and limited property rights. Further, climate change threatens women's land rights through desertification, soil degradation, and increased contestation of arable land. This is a barrier to long-term change;

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to build climate resilience among rural communities, it is crucial that women farmers own the land they work on. Collective action by local women's groups requires strong institutional arrangements, clear incentives (short- and long-term), social capital, access to property rights, leadership training, and a transparent mechanism for the sharing of benefits.<sup>30</sup>

Moreover, the underlying strategy needs to integrate environmental protection with livelihoods and productive assets, linking them to schemes like the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) to create additional carbon sinks and build the resilience of vulnerable communities against extreme weather events. A recent example is that of cyclone-prone Rushikudda village of Srikakulam district in Andhra Pradesh, where MGNREGA labour was used to deepen and widen a local river and drainage channel to push out the water from storms back to the ocean. Around 65 percent of surveyed households in the village reported higher incomes and greater availability of farm work following the creation of irrigation and agricultural assets, which also helped them cope during disaster events.<sup>31</sup>

As the public health system struggled during the COVID-19 lockdown in 2020, the SHGs proved reliable first-level support systems. They manufactured millions of masks and personal protective equipment (PPE) kits, ran community kitchens, performed health checks, and helped spread awareness about the virus in the vernacular, especially in the remote districts. The experience validated the potential for women collectives and government to collaborate at scale and execute mutually beneficial strategies. Even at the state level, schemes like 'Didi Ki Rasoi' in Bihar—where women run canteens supplying freshly cooked meals to patients in government hospitals—support the notion that women collectives have an enormous capacity to lead last-mile initiatives. These models can act as demonstrated pathways of change.

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## 3. Empower women to act as key levers in the transition to a green economy.

Given India's ambitious commitment to transition to a low-carbon economy, made at the Conference of Parties (COP) 26 in Glasgow in 2021<sup>a</sup> and earlier at the COP-21 in Paris in 2015, it needs to create close to 50 million 'green jobs' by 2070. Fortuitously, the COVID-19 pandemic has increased consumer demand for products from healthy and sustainable sources whose use and disposal is not harmful to the environment. However, there remain significant supply-demand gaps in the labour market to meet the evolving needs of the green economy. Climate-resilient agriculture and sustainable public procurement, as well as circularity across sectors and supply chains is expected to increase in the post-pandemic period. Women workers and women-led micro, small and medium enterprises (MSMEs) can contribute vitally to this transition if supported through appropriate skilling, awareness, mobilisation, safety and mentorship. Ventures such as Carmesi, Clan Earth, The Woman's Company and Ruby Organics, which make organic and eco-friendly products, are all run by women.<sup>32</sup>

Despite the green economy gaining prominence, women entrepreneurs face multiple barriers.<sup>33</sup> Accelerators need to focus on women-led mid-stage businesses and early-stage start-ups across the green economy value chain, providing them access to finance, skilling and mentorship, market linkages, regulatory support on environmental and social goals (ESG), and sustainability and social capital. Women-owned enterprises in green textiles, waste management, and agriculture and food processing can be prioritised based on their market attractiveness, growth potential, and evidence of female participation. Promoting women in sectors such as construction, electric mobility, tourism, fisheries, and renewable energy can also be considered given their importance in the green economy.

The government, philanthropic organisations, the private sector and civil society should work together to encourage women, given the dual challenges of a nascent green economy and low female labour force participation. More than 80 percent of India's labour force works in the informal sector, with women employed mostly in low-paying jobs.<sup>34</sup> Challenges persist in the green economy,

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a India has committed to drastically cutting emissions by 2030, and achieving zero net emissions by 2070.

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especially in sectors with many unskilled roles such as green construction or e-waste disposal. Apart from the government and NGOs mobilising women for green jobs, private industry should engage with social enterprises working on aggregating informal workers, so that they too, can receive benefits such as minimum wages, and safety and security, along with enabling cultural shifts to ensure dignity at work.

In the case of women, skilling candidates in their home state and placing them close to their homes can attract and retain talent in underserved geographies. It is equally important to strengthen women-led MSMEs through access to finance, market linkages and distributed renewable energy, especially the microenterprises in rural areas.

#### **4. Mainstream gender and climate lens in philanthropic funding.**

India has witnessed considerable growth in domestic philanthropy in the recent years. Yet, a study on climate finance by the India Climate Collaborative (ICC) found that philanthropic contributions to address climate change remain meagre: in 2019, for instance, less than 2 percent of philanthropy focused on climate mitigation and even less on climate adaptation and resilience.<sup>35</sup> To achieve its net-zero carbon emission targets, India will need close to US\$10 trillion (₹800 lakh crore). Existing climate finance in India remains inadequate, and will need to be supplemented with international finance, private investment, and philanthropy.<sup>36</sup>

Philanthropy is critical to augment state capacity in climate action, strengthen grassroots organisations, and bring an interdisciplinary focus to climate programmes. This includes funding by corporate houses through their corporate social responsibility (CSR) projects, private funding by domestic and international foundations, as well as pledges by high net worth (HNI) individuals. In India, gender-related giving, be it from foundations or companies' CSR funds, has primarily targeted family planning, support to women's rights organisations, and ending violence against women.<sup>37</sup>

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Funding towards women's empowerment is not well distributed, being more concentrated in Maharashtra and Andhra Pradesh, and low in states with the lowest female labour participation and high climate vulnerability. Moreover, organisations working at the intersection of climate and gender equality often require reliable, long-term and consistent financial support. Philanthropic donors tend to provide primarily short-term funding. Philanthropists should consider improving the financial sustainability of grassroots organisations as well as amplifying their impact by collaborating with other international and domestic donors that are invested in gender and climate issues.


The philanthropic ecosystem can be supported through standardised frameworks, evidence building and ecosystem goods to integrate gender and climate into their funding decisions. For instance, the Climate and Development Knowledge Network (CDKN), the South North (SSN) and the Women's Environment and Development Organisation (WEDO) have produced a guide for climate finance project planners to strengthen gender integration by leveraging local women's groups and national gender institutions. Collecting the right data and pursuing team-wide capacity building will also help accomplish this.

All interventions, including mitigation projects, can incorporate activities that improve the experiences of women beneficiaries, while also considering gender dynamics within power structures.<sup>38</sup> Similarly, guiding frameworks to standardise green financing in India, and those which provide step-by-step guidance on how to incorporate a gender lens into programmes, would be highly beneficial.



Women and girls can be important levers of change in stimulating the economy and developing climate resilience, and the imperative is to create a supportive ecosystem for them. With growing domestic philanthropy and national-level commitments, there are today greater tailwinds to leverage to make gender intentionality non-negotiable. This brief has attempted to re-examine how inclusivity and resilience can be articulated, measured, and acted upon.

Agency development for women and girls means that they need to own more productive assets and participate more actively in India's community adaptation efforts and transition to a greener economy. The uncertainty and the numerous challenges caused by climate change need an informed response, with robust processes that can continuously capture threats at the regional level to support policymaking. District-level planning and assessments are crucial to ensure granularity of data so as to create localised action plans, more so because the reasons for women's participation (or lack of it) and climate variability vary across regions. Philanthropic investments need to augment resources where required, by adopting impact frameworks that integrate gender and climate lenses and provide long-term support to civil society organisations working at the intersection of climate change and gender equity.

The next five to 10 years will be crucial to implementing climate mitigation and adaptation responses, calling for massive cooperation at the national and global levels. A gender-intentional approach is essential, which also needs to be carefully streamlined to ensure that the concerns of women and girls are fully incorporated. Immediate action on the climate front is indispensable to India's efforts at reducing poverty and inequality, but equally important is the notion of equity in these efforts. 

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