

Women Workers in Indian MSMEs: Challenges for a Just Transition

WEBINAR ON GENDERED PATHWAYS TO JUST TRANSITION FOR MSMEs IN INDIA

December 15, 2022 | Online | Ananya Chakraborty, Ashwini Hingne, Niyati Gupta, and Steffi Olickal

INTRODUCTION

WRI India hosted a webinar on December 15, 2022, on “Gendered Pathways to Just Transition for MSMEs in India” to examine the current gaps in, and the need for addressing women’s issues in the ongoing low-carbon transition to ensure a just transition in the micro, small and medium enterprises (MSME) sector. The webinar brought together policymakers, researchers and practitioners.

As India accelerates its journey to a low-carbon, environmentally sustainable economy, integrating a just transition approach is needed to maximize social and economic opportunities for climate action and to leave no one behind (ILO, 2022). However, gender-transformative measures need to be integrated within the just transition approach. Otherwise, women would not be able to benefit equally and could become more vulnerable to the negative impacts of the transition. The session explored the following themes:

- Gendered workspaces and labor market segmentation for women in MSMEs in India
- Social norms and gender barriers to women’s inclusion and entrepreneurship in the MSME sector
- Limitations in access to productive resources such as institutional credit and seed capital, ownership of assets, transfer of technical knowledge, information and skills, and
- Role of legal and policy level support for women entrepreneurs and workers in MSMEs.

CONTENTS

- 1 Introduction
- 2 Challenges of just transition in the MSME sector
- 3 Women in MSMEs and just transition in india
- 4 Emerging lessons for women in the MSME sector
- 7 Ensuring equitable and just transition for women in the MSME sector
- 8 Way forward
- 9 Participants
- 9 References
- 10 Acknowledgments
- 10 About the authors
- 11 About WRI India

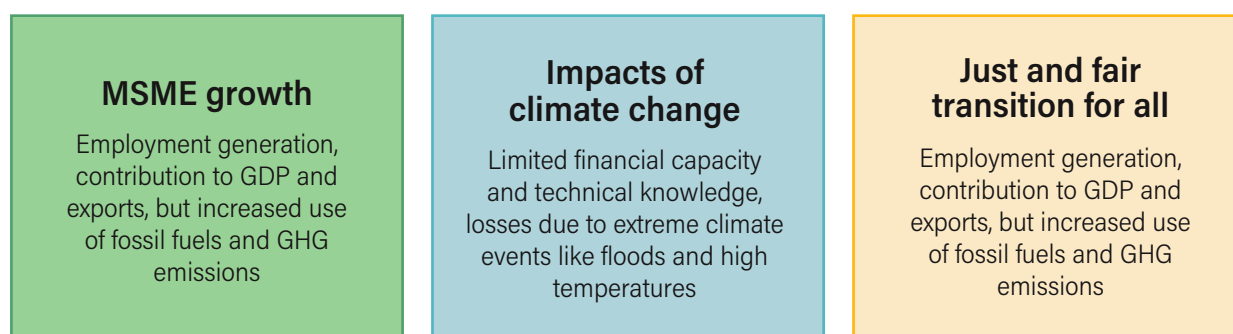
The content of these conference proceedings reflects the views of the conference participants and does not necessarily reflect the views of the World Resources Institute or other conference partners. These proceedings aim to faithfully reflect the conversations and content generated at the conference but for ease of readability some wording has been edited.

CHALLENGES OF JUST TRANSITION IN THE MSME SECTOR

The world is gearing towards a low-carbon transition to attain global climate goals and ensure sustainability of our planet. Science clearly indicates that intensive dependence on carbon-based fossil fuels for industrial growth is a key factor for anthropogenic climate change. The synthesis report of Intergovernmental Panel on Climate Change (IPCC) finds that carbon dioxide (CO₂) emissions from burning of fossil fuels contributed to 78% of the total increase in global greenhouse gas (GHG) emissions between 1970 and 2010 (IPCC, 2014). Therefore, shifting towards cleaner sources of energy, such as solar and wind can significantly contribute to GHG emissions reduction.

In producing finished goods from raw materials, manufacturing processes rely heavily on the extraction of valuable, rare and limited natural resources. To ensure long-term sustainability, profitability and productivity of the manufacturing sector, it is critical to shift from conventional production processes to green and sustainable processes that recycle, upcycle and reuse waste and resources.

FIGURE 1 | Just transition conundrum for MSMEs



Source: Authors' representation

However, such a transition to low-carbon production processes is likely to impact those at the bottom of the processes, as shifts in manufacturing and production processes impact businesses. Businesses may diversify their energy sources, adopt newer technologies and introduce newer products that are likely to impact the jobs that workers perform. Workers may be required to upskill or learn new skills to be relevant during such transitions. For a majority of the MSME entrepreneurs and workers, this transition needs to promote inclusive opportunities for men and women locked in low-income and low-skilled jobs. Therefore, it is critical that everyone is entitled to productive work in conditions of freedom, equity, security and dignity to ensure that low-carbon transitions are just for everyone.

MSMEs have a dual relationship with climate change — they contribute to it and are vulnerable to its risks. However, the impact of climate change on enterprises depends on several factors, such as the type of location, resilience of the workforce and the sector or industry in which they work. Due to its smaller sizes of operations, limited access to institutional credit, limited technological knowledge and lower capabilities to invest in resilience building activities, the MSME sector is particularly vulnerable to climate risks. A 2021 survey of MSMEs in India showed that 5% of the enterprises had faced heat waves, 8% had faced floods and 11% were affected by droughts in the five years preceding the survey (Modi, 2022). The vulnerability of MSMEs is further exacerbated by capacity and financial constraints, and they become particularly susceptible to exogenous shocks, as seen during the COVID-19 pandemic.

In the Indian context, MSMEs contribute to about 110 million jobs in the manufacturing sector (National Sample Survey 73rd Round, 2016). The contribution of MSMEs to manufacturing sector's gross value added (GVA) stood at 36% in 2021 (PIB, 2023). Given MSMEs' role in manufacturing, addressing their low-carbon transition is critical, as almost 84% of the CO₂ emissions comes from the manufacturing sector.

The shift to low-carbon production processes stands on four critical pillars:

- Ensuring resilience and reducing vulnerability to climate change
- Contributing to decarbonization
- Enabling a just transition through a mix of technology, and reskilling and upskilling of workforce
- Ensuring voices of MSMEs and their workers are heard, and their needs are met

To support MSMEs' role in just transition, it is important to build awareness and sensitize all the stakeholders about the context and impact of the transition.

WOMEN IN MSMES AND JUST TRANSITION IN INDIA

Increasing women's participation in the labor force is a primary driver and outcome of economic development of any country. However, in India, women's share in the total labor force has decreased from 26.8% in 2005 to 20.5% in 2021 (World Bank, 2023). Even when women are engaged in employment, they receive only 18% of the labor income, which is almost half of the global average (Chancel et al., 2022).

In terms of MSME units in India, women constitute only about 24% of the total workers and own approximately 20% of the total enterprises. Moreover, majority of women-owned enterprises are concentrated in rural areas (22.24%) and are likely to be micro units that are informal in nature.

Almost 70% of the 15 million women-owned MSMEs in India are engaged in manufacturing. However, women entrepreneurs and workers in MSMEs tend to be unregistered in nature and engaged in home-based activities. This increases their vulnerability to market and climate risks due to limited understanding of their roles in MSMEs, lack of accounting in national level statistics and missing out on available government support for the MSME sector (International Centre for Research on Women, 2014).

Even within the manufacturing sector, women are not equitably distributed among all forms of manufacturing activities. Women are mostly concentrated in textiles, garments, handicrafts and food processing sectors. They also have a significant presence in service-based occupations, such as care work, and in beauty parlors and hospitality sectors.

TABLE 1 | Percentage distribution of enterprises across the sector and categories by gender

		MALE	FEMALE
Sector	Rural	77.76	22.24
	Urban	81.58	18.42
Size of enterprise	Micro	79.56	20.44
	Small	94.74	5.26
	Medium	97.33	2.67

Source: MSME Annual report, 2021-22

Women in MSMEs face the following broad set of challenges in just transition:

TABLE 2 | Challenges for women's inclusion in MSMEs in India

GENDER BARRIERS	LABOR MARKET	PRODUCTIVE RESOURCES	REGULATORY ACTION
<ul style="list-style-type: none"> Gender division of labor and “triple roles” for women Unequal capabilities, e.g., illiteracy (59%), anemia (66.4%) 	<ul style="list-style-type: none"> Low labor-force participation for women (20.5%) Highest gender pay gap for women in India (18%) 	<ul style="list-style-type: none"> Limited access to productive resources Lack of knowledge, skills and technical information 	<ul style="list-style-type: none"> Undercounting of women's work in national income accounting Legal barriers Limited gender-responsive policies

Source: German Agency for International Cooperation (GIZ) 2019. NFHS 5 2019. United Nations Human Development Report (UNHDR) 2022. World Inequality Report 2022.

Women in Indian MSMEs face multiple forms of gender-based discrimination. They undertake ‘triple roles’ in production related activities, reproduction such as childbearing, taking care of tasks required to support household wellbeing like cleaning, cooking, caring for the sick and the elderly, and community affairs such as providing support for community related development activities and volunteering (Moser, 1993). They face systemic and social barriers, such as higher burden of illiteracy and poor health outcomes. For instance, the National Family Health Survey 5 (NFHS 5) has indicated that the incidence of anemia among women in India increased from 46.1% in 2016 to 66.4% in 2019. Moreover, women are more likely to be responsible for social care and domestic responsibilities in addition to their economic roles, increasing their time burden. Consequently, Indian women are less likely to be engaged in the labor market, including in the MSME sector, as indicated by the data. India has the third highest entrepreneurship gender gap in the world, with only 33% of the early-stage entrepreneurs being women. They are also more likely to be left behind in access to critical productive resources, such as credit, technology, knowledge and skilling. An International Finance Corporation (IFC) report of 2021 found that women entrepreneurs received just 5.2% of the total credit outstanding for MSME sector by public sector banks, despite women-owned enterprises (31%) having higher profit margins than male-owned enterprises (19%). These challenges can inhibit women’s ability to overcome vulnerabilities and risks associated with the ongoing low-carbon transition and bring forth additional gender-specific vulnerabilities.

EMERGING LESSONS FOR WOMEN IN THE MSME SECTOR

This section explores key insights and recommendations provided by the keynote speakers and webinar panelists. The discussion highlights the importance of women in the MSME sector and deliberates on their current position and context within the sector. It identifies key gaps and challenges in ensuring gender responsiveness for a just transition, that is inclusive and equitable. The webinar was conducted as a part of an ongoing research for Climate-Resilient Employees for a Sustainable Tomorrow (CREST), a five-year initiative of the Ares Charitable Foundation. These insights combine the vision, collective purpose and guidance from academic, government, private sector and civil society actors to ensure that women in the MSME sector are supported in the low-carbon transition. The aim is to equip them with the skills for green jobs, climate finance and technologies required for disrupting traditional occupational segregation of women in the sector, so as to transition to a sustainable and just economy.

1. Women in MSMEs face multiple and interlinked risks in the current economic model

Current models of economic development have heightened income and wage inequalities and manifested a widening chasm between the rich and the poor. Vulnerable groups, including women, the elderly, children and youth have borne an unequal burden of the lopsided development trajectories in the face of limited social and economic protection.

Women in the MSME sector are often located at the bottom rung of global supply chains of multinational enterprises, with limited bargaining capacity and higher susceptibility to exploitation. Global shocks like climate change, financial crises, pandemics and restructuring of global supply chains may impact the resilience of women and youth by reducing opportunities for gainful and secure employment. In recent times, interlinked crises like the COVID-19 pandemic, food and energy inflation, geopolitical tensions and climate change have increased the risks and vulnerability for large sections of the population by reducing shared prosperity and environmental sustainability.

Developing countries, such as India need to make efforts towards consolidating gains from the demographic dividend. Presently, labor markets are in a condition of flux and uncertainty due to interlinked crises that impact the world of work for businesses and workers of the Global South. This is compounded by the burgeoning numbers of youth who need economic opportunities and social protection.

Specifically, women have unfairly borne the brunt of global uncertainties. These global crises have stalled or slowed the pace of progress of women living in the Global South.

2. Gender roles heighten women's social and economic vulnerabilities

In India, women are responsible for undertaking a majority of social and care responsibilities, such as unpaid domestic work, childcare and elderly care. Much of the work that women perform — within their own homes or in the labor market — is viewed as an extension of their social roles and responsibilities.

Women continue to perform income-generating work within their homes in informal and unregulated environments, with low or no wage, and with limited knowledge, skills, or training. As women continue to engage in such roles with poor access to social safety nets or social protection mechanisms, they are left behind during economic transitions.

Measures, such as formalization of care-related work performed by women, lifting the burden of unpaid care work, and providing universal social protection are some of the fastest guarantees for economic and social growth for women and society at large.

3. Structural gender biases limit women's economic resilience

Women's participation in the labor market in India is among the lowest in the world. The dismal representation of women in labor market and entrepreneurship roles in India continues to be enmeshed in the assumption of their traditional gender roles. Male owners of industries and other MSMEs remain reluctant to engage women as workers. Women are mainly employed in low-income and low-skilled roles that tend to be viewed as an extension of their traditional gender roles. For instance, much of the automobile sector is dominated by male workers and owners with the perception that women are not suited for the

BOX 1 | Building Climate-resilient MSMEs

Climate-Resilient Employees for a Sustainable Tomorrow (CREST) is a five-year, \$25 million initiative of the Ares Charitable Foundation that seeks to ensure the twin goals of equality and economic opportunities for marginalized groups like women workers in the MSME sector in the ongoing economic and energy transitions.

Reskilling workers for accessing green jobs, training, engaging with entrepreneurs, and improving access to knowledge, resources and opportunities are some of the ways in which the initiative envisages to support people for a just and equitable transition.

Source: Ares Charitable Foundation 2022.

heavy and strenuous jobs of the automobile sector. As the automobile sector undergoes a swift and deep decarbonization, women engaged in the production and manufacturing of ancillary automobile parts may be left behind in the transition.

Nearly 80% of the MSMEs in India continue to be owned and operated by men. Data from the 73rd round of the Survey on Unincorporated Non-Agricultural Enterprises (Excluding Construction) conducted by the National Sample Survey Office (NSSO) indicate that women-owned MSMEs tend to be micro in size which are mostly own account enterprises. Compared to men, women are more likely to operate from within homes, leaving them out of the purview of industrial and labor laws in several cases.

4. Policies related to climate change continue to disregard women's agency

Climate policy in India has been guided by the development trajectory and policy guidelines. Although climate policy defines gender, it continues to be addressed in a limited way (Singh et al., 2021). Women are viewed as a vulnerable group who require state protection and support, or are understood to be virtuous champions who can advocate for solutions to tackle climate change. Therefore, women's biological and social roles continue to define women's position in the climate policy. There is a tendency to play into the imagery of women as the sole providers of care in the domestic sphere and this role is extended to economic institutions, resulting in institutionalizing of gendered norms in climate policy. Women are seen as beneficiaries of mitigation actions, such as cookstove programs where energy-poor women are provided with clean cooking fuel. However, this representation can rob them of their agency, as they are not viewed as important stakeholders who are part of the supply chain. During economic transitions such as technological and low-carbon transitions, their traditional vulnerabilities are multiplied and heightened, making them more susceptible to transitional risks.

BOX 2 | Risks of Excluding Women in India's Automobile Sector Transition

The automobile sector in India provides an interesting case study on the risks of excluding women in low-carbon transitions. Traditionally, the sector has been dominated by male workforce, with women's contribution being limited to ancillary and secondary roles. As the automobile sector undergoes a rapid transition towards decarbonization and lesser dependence on fossil fuels, electric mobility is one of the primary emerging solutions in the automobile industry. However, this transition from internal combustion engine (ICE) vehicles to electric vehicles (EVs) has not accounted for women's role in the sector upfront.

Traditionally, women were not preferred as workforce for the automobile sector because of the assumptions that they were not suitable for strenuous jobs, such as operating heavy machinery and lifting heavy objects. The COVID-19 pandemic also reiterated women's roles as providers of care work, as many women in the automobile sector quit their jobs to caregiving and social responsibilities. However, there is a need to understand the kinds of roles and jobs which are available for women in the ongoing low-carbon transition in the sector. About 80% of the newer jobs being created in the manufacturing of EVs will require high-level knowledge and skills, such as operating computers, internet of things (IoT), coding, data analysis, and industrial and automobile designing. This requires specialized training and knowledge in science, technology, engineering and mathematics (STEM) related fields where women traditionally have limited representation. Consequently, women in the automobile sector may not have access to these newer high paid and specialized roles. Instead, women workers may get relegated to more feminized roles, such as customer relations personnel, charging station employees and drivers with fleet aggregators, which may not provide adequate opportunities for their upward mobility in the long run.

Presently, there is a strong environmental, social and governance (ESG) related motivation among some companies, such as *Ola* and *Ather* who have showcased their commitment to engaging women in the sector. However, successful integration of women will happen if their needs are taken into consideration and labor market policies respond to their strategic and social goals.

Source: WRI Authors based on webinar discussions.

ENSURING EQUITABLE AND JUST TRANSITION FOR WOMEN IN THE MSME SECTOR

Address causes rather than manifestations of women's vulnerabilities in low-carbon transitions in MSMEs

The low representation of women in the MSME sector and in the overall labor force in India has led to several proposed solutions, such as increasing women's access to finance, improving skill training, providing safe transportation and ensuring physical safety of women workers. While these are critical to ensure that more women work and become entrepreneurs in India, there is a need to simultaneously address the causes that limit women's participation in the economy. Root causes such as gender-biased socioeconomic norms are more difficult to change in the short term, and most funders and donors tend to be reluctant to address these gender biases and progressively break gender barriers for women's inclusion.

Deploy systems level interventions to address women's vulnerabilities in the MSME sector during low-carbon transitions

In order to address women's specific and systemic vulnerabilities, there is a need for collective efforts that support women in the sector. There is a need for national and state level governments to ensure effective skill training in addition to training provided by the employer. Governments will need to regulate social safety nets which are more universal in nature, and introduce an enabling fiscal architecture to ensure a fair and just transition for all. While the current narrative of just transition has mainly focused on the transition away from fossil fuels like coal and petroleum, sectors like MSMEs and agriculture, which are also likely to get caught up in the ongoing decarbonization process, must not be overlooked.

For a majority of low- and middle-income countries, the current mechanisms for accessing climate funds offer ad hoc solutions. There is a need to move towards systems approaches that provide financial assistance, and offer support to workers and entrepreneurs in sectors undergoing multiple transitions, such as low-carbon and technological transitions. It is crucial to consider systemic benefits and institutional mechanisms for a just transition.

Learn from historical transitions and global experience

The manufacturing sector has undergone several transitions in the past. For instance, the movement towards a more capitalist model of production that is organized by workers across the global value and supply chains, and political and financial transitions hold significant lessons for navigating women's context in the ongoing low-carbon transitional pathway.

There is a need to learn about best practices and models that have supported inclusion and fairness during transition. The cooperative movement that builds ownership among the workforce, and supports them in getting proportionate gains from profits is one of the models that bears closer evidence. There are several ways to build cooperation among the workforce, including collectivization of workers, engaging with private employers, and encouraging inclusion and justice through a business case for collective growth. It can also be done by leveraging government policy and legal support for mitigating risks, and by enhancing shared prosperity during such transitions.

Develop inclusive and context-specific solutions

The climate crisis is seen as an opportunity for climate justice that needs to include social justice and human rights. In India, there is a need to ensure social transitions at the local level. The learnings and institutions built under the District Mineral Fund (DMF) on phasing out mining operations in the coal producing regions hold lessons for ensuring a just transition across other sectors. There is a requirement for a deeper understanding of the implications and pathways for low-carbon transitions on women and other vulnerable social groups.

BOX 3 | Barefoot College in Zanzibar

The Barefoot College in Zanzibar is a good example to indicate how women from disadvantaged backgrounds can be included and can become agents for a low-carbon transition even in a society of entrenched patriarchy. The concept of Barefoot College was started in India and has since expanded to several countries globally. It provides training, knowledge and education to women living in conditions of poverty, by providing skill training in sectors like solar engineering.

In Zanzibar, women over the age of 35, living on less than USD 1.20 and without any formal education were trained by Barefoot College as solar engineers. Women were trained to provide decentralized power solutions at the local level. Along with skill training in the solar sector, the Enriche program trains women as master trainers, and equips them with digital literacy, financial education, self-awareness and health knowledge. This has enabled women to be leaders within their communities, break down social barriers and has empowered them to fulfill their aspirations towards themselves and their communities.

Women in Zanzibar were able to change social norms and power dynamics at the local level by providing electricity to members of their community which was hitherto considered to be a masculine role. Therefore, such transitions provide an opportunity for transformation by integrating gender justice within the issues of climate justice.

Source: WRI Authors based on webinar discussion.

Additionally, such transitions have undefined pathways and may hold lessons from failures. Legal provisions need to ensure that vulnerable people are not left behind in the process of transition. Solutions like cooperative movements can be scaled to redefine ownership for women engaged in manufacturing processes in the MSME sector.

Women are important agents for just transition solutions

The ongoing low-carbon transition in the MSME sector needs to be inclusive, and ensure fairness and equity for all. To reap the benefits of equity and justice of the ongoing transition, women need to be included as important stakeholders in the discussions, and solutions should be designed in ways that reflect and address women's strategic and practical needs. Emerging policy level solutions need to be reflective of women's comparative disadvantages, such as lower levels of literacy, lack of equal access to productive resources like technology and finance, and greater social and domestic responsibilities along with demand side constraints that limit their participation in the MSME sector. A just transition is possible only when women are seen as valuable agents and are not treated as mere beneficiaries in the ongoing low-carbon transition.

WAY FORWARD

- Current solutions have focused on addressing symptoms of low economic engagement of women in the MSMEs. It is important to shift from knee-jerk responses and focus on addressing the structural barriers hindering women's labor force participation in India.
- There is a need to break down silos in education and training, and provide holistic solutions at the local level for engaging women in the MSME sector.
- Global mechanisms and institutions are required to support a just transition and ensure that emerging inequities are reduced through funding, equitable distribution of wages, social security and safety nets for all workers, reskilling and engaging local stakeholders in a participatory manner.

PARTICIPANTS

Michelle Armstrong, Head of Philanthropy at Ares Management Corporation and Executive Director of the Ares Charitable Foundation

Sharan Burrow, Former General Secretary of the International Trade Union Confederation (ITUC)

Sabina Dewan, Founder and Executive Director, Just Jobs Network

Kavya Michael, Post-Doctoral Researcher, Chalmers University

Tarun Shukla, Senior Lead, PanIIT Alumni Reach for India Foundation

Ashim Roy, Member of the AFWA International Secretariat

Sucharita Bhattacharjee, Policy Analyst and Deputy Head, Calcutta Resource Centre, CUTS International

Ulka Kelkar, Director, Climate Program, WRI India

Ashwini Hingne, Associate Program Director, Climate Program, WRI India

Ananya Chakraborty, Senior Research Analyst, Climate Resilience Practice, WRI India

REFERENCES

Ares Charitable Foundation (2022). 'Climate Resilient Employees for a Sustainable Tomorrow' in Transformative Philanthropy in Action 2022 Impact Report. Washington D.C. Ares Charitable Fund.

Chancel, L., Piketty, T., Saez, E., and Zucman, G. (Eds.). (2022). *World Inequality Report 2022*. Paris: Harvard University Press.

Gol (Government of India). (2022). Annual Report 2021-22, Ministry of Micro, Small and Medium Enterprises. New Delhi: Gol.

IFC (International Finance Corporation). (2022). *Opportunities and Constraints of Women Owned Very Small Enterprises in India*. Washington D.C.: World Bank.

ILO (International Labour Organization). (2022). *Just transition: An essential pathway to achieving gender equality and social justice*. Geneva: ILO.

International Center for Research on Women. (2014). *Gender Issues in the Micro, Small, and Medium Enterprise Sector in India*. Washington D.C.: World Bank.

IPCC (Intergovernmental Panel on Climate Change). (2014). *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the IPCC*.

Modi, S. (2022). *Climate Change Adds to Challenges for MSMEs Recovering from COVID: Three Takeaways from CFI Surveys*. Centre for Financial Inclusion. Blog. May 19. <https://www.centerforfinancialinclusion.org/climate-change-adds-to-challenges-for-msmes-recovering-from-covid-three-takeaways-from-cfi-surveys>

Moser, C. 1993. *Gender Planning and Development: Theory, Practice and Training*. London: Routledge.

National Family Health Survey 5 (NFHS 5). (2020). *National Family Health Survey (NFHS-5) 2019-21*. Mumbai: International Institute for Population Sciences (IIPS)

National Sample Survey. (2016). *Key Indicators of Unincorporated Non-Agricultural Enterprises (excluding Construction) in India. NSSO 73rd Round*. New Delhi: Ministry of Statistics and Programme Implementation.

Press Information Bureau. (2023). Industrial Sector Gross Value Added (GVA) Rose by 3.7 Per Cent in First Half of FY23. Ministry of Finance. <https://pib.gov.in/PressReleasePage.aspx?PRID=1894918>

Singh, C., Solomon, D., and Rao, N., 2021. 'How does climate change adaptation policy in India consider gender? An analysis of 28 state action plans'. *Climate Policy*, 21(7), pp.958–975.

World Bank. (2023). *World Development Indicators Database: Labor force, female (% of total labor force) – India*. World Bank. <https://data.worldbank.org/indicator/SL.TLFTOTL.FE.ZS?locations=IN>

ACKNOWLEDGMENTS

This webinar was made possible with the support of the Ares Charitable Foundation. We are thankful to all the speakers for their contribution towards making the webinar an enriching discussion. We are grateful to Ulka Kelkar and Nambi Appadurai for their guidance and suggestions in conceptualizing the event. Steffi Olickal provided much needed logistical and communication support for the event. Finally, this webinar would not have been possible without the collective support of Vishwajeet Poojary, Bhawna Ahuja, Priyal J. Shah and Vivek Venkataramani.

ABOUT THE AUTHORS

Ananya Chakraborty is a Senior Research Analyst with the Climate Resilient Practice Program at WRI India.
Contact: ananya.chakraborty@wri.org

Ashwini Hingne is an Associate Program Director with the Climate Program at WRI India.
Contact: ashwini.hingne@wri.org

Niyati Gupta is a Senior Program Associate with the Climate Program at WRI India.
Contact: niyati.gupta@wri.org

Steffi Olickal is a Senior Program Associate with the Climate Program at WRI India.
Contact: steffi.lickal@wri.org

ABOUT WRI INDIA

WRI India is a research organization that turns big ideas into action at the nexus of environment, economic opportunity, and human well-being.

OUR CHALLENGE

Natural resources are at the foundation of economic opportunity and human well-being. But today, we are depleting Earth's resources at rates that are not sustainable, endangering economies and people's lives. People depend on clean water, fertile land, healthy forests, and a stable climate. Livable cities and clean energy are essential for a sustainable planet. We must address these urgent, global challenges this decade.

OUR VISION

We envision an equitable and prosperous planet driven by the wise management of natural resources. We aspire to create a world where the actions of government, business, and communities combine to eliminate poverty and sustain the natural environment for all people.



WRI INDIA

LGF, AADI, 2 BALBIR SAXENA
MARG, HAUZ KHAS,
NEW DELHI 110016, INDIA
WWW.WRI-INDIA.ORG