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China Council for International Cooperation
on Environment and Development

Report on Gender Mainstreaming in SPS Research for the period 2022-2023

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Introduction

Since 2018, the CCICED Executive Committee has committed to mainstreaming gender perspectives in all aspects and processes of research. To support the integration of gender considerations as part of the Special Policy Studies (SPS) for the period 2022–2023, gender mainstreaming guidance was provided to each SPS at the beginning of the research process and continued at various touchpoints during the drafting process. This included meetings with the gender specialists and each SPS team to discuss potential approaches to integrate gender considerations into the SPS. Guidance included considerations related to equity and diversity, as well as specific entry points for integrating gender and diversity perspectives within each theme.

In addition, in 2022, CCICED updated its Toolkit on gender equality in SPSs to further strengthen the integration of gender equality considerations and the equitable participation of women and men in policy research on environment and development. The toolkit proposes practical tools for the CCICED to ensure gender equity, diversity, and inclusion are given due consideration in the course of its work to improve the effectiveness and efficiency of policies and programs, enhance and promote sustainability, and safeguard the human rights of all in the context of sustainable development.

During the 2022-2023 research year, CCICED SPS includes gender analyses as well as practical recommendations for advancing gender equality and women's rights in tandem with progressing sustainable development outcomes. This report provides a detailed overview of the integration of gender perspectives as part of CCICED SPS final research papers. The report also identifies best practices and provides recommendations for further strengthening the mainstreaming of gender perspectives in the forthcoming phase of the research.

Gender Equality and the International Framework

The integration of gender issues and the participation of women in environmental policy research and development is a critical component of environmental, sustainable development, and climate change governance. The international community cannot afford to ignore gender equality if progress on the United Nations Sustainable Development Goals (SDGs) is to take place. In doing so, gender equality awareness and action must be mainstreamed into environmental policies, strategies, and programs. Women also have an important role to play as both stakeholders and agents of change.

¹Drafted by the WPS Group, Kristine St-Pierre and Jennifer Savidge.

We know that advancements in gender equality can have profound positive impacts on social and environmental well-being. We know that working toward gender equality enhances environmental outcomes. We also know that when not managed properly, environmental measures can reinforce inequalities and lead to greater environmental degradation. However, while the rewards for addressing gender equality are high, how to do so remains a significant challenge.

Of even greater urgency is the recognition of the risks associated with treating gender equality and climate change mitigation goals and policies in isolation². The ways in which societies respond to climate change will not only have environmental consequences, but social and economic consequences as well, directly impacting people's access to opportunities, resources, and living standards. It will be important to consider the potential consequences of climate change on gender relations and other forms of social equity.

CCICED's 2022-2023 Gender-Related Work Through Special Policy Studies: Key observations

This section presents key observations on the importance of gender equality within each SPS research area and identifies opportunities to provide recommendations to further advance gender equality within environmental and climate change policy development and governance.

High-Quality Development of River Basins and Adaptation to Climate Change

The significance of gender equality and gender mainstreaming within sustainable water management is well-established globally. The integration of gender perspectives within river basin management in the context of climate change adaptation and mitigation is important, given that climate change impacts women and men differently. To achieve gender equality in river basin governance, it is important to ensure that women can participate equitably with men in leadership and decision-making roles, both as a basic right and as a means of including women's perspectives. Ideally, women and men from a range of backgrounds can participate in and lead governance processes, representing diverse perspectives, including as they relate to climate change. This is particularly important given that women and men are impacted differently by climate change and often have different capacities to adapt to and mitigate climate change risks due to underlying gender discrimination; thus the perspectives and participation of women are ever more important.

²IDRC, *Women's economic empowerment – the missing piece in low-carbon plans and actions*, 2022.

The SPS on *High-Quality Development of River Basins and Adaptation to Climate Change* effectively integrates gender considerations through a focused section on gender equality and social inclusion in watershed governance, as well as a gender-focused policy recommendation. The focused section uses three case areas in the upper and middle reaches of the Yangtze River to illustrate the gaps in gender equality and social inclusion, including a look at gender dimensions of watershed management-related industries. In doing so, the SPS sought to further investigate the gender-differentiated impacts of specific gender differences brought about by climate change and identify the corresponding solution strategies to address them. The research points to the direct and disproportionate impacts of climate change on Chinese women and their low levels of participation and leadership within watershed governance. The research finds that:

- Women's participation in decision making of governance in the basin is still insufficient.
- There is a relatively serious gender bias in the workplace in watershed management-related industries.
- Most watershed management policies fail to effectively integrate a gender perspective.

The SPS provides entry points for addressing these gaps by (1) promoting women's participation and leadership in watershed governance through watershed collaboration, (2) implementing gender-specific statistics in multiple statistical indicators on watersheds and climate change, and (3) enhancing women's capacity to participate in watershed environmental protection and management through training and education. In doing so, the SPS calls for the revision of watershed management regulations and institutional documents to ensure that impacts on women are considered and mitigation measures are incorporated in watershed governance practices. The SPS also points to the lack of gender-disaggregated statistics for disaster loss hazards and other climate change impacts as an important factor that contributes to the invisibility of women and their needs and priorities. It calls on government and educational institutions to work together to advocate for gender-disaggregated statistics on disaster loss hazards to provide an evidence base for informing the development of gender-responsive policies, programs, and budgets.

The SPS included one gender-focused recommendation on the importance of paying close attention to gender and social equity issues in watershed governance, including increasing the participation of women and other marginalized groups to ensure that their unique perspectives, needs, and capacities are considered and incorporated, contributing to sustainable development outcomes.

Collaborative Mechanism for Carbon Reduction, Pollution Reduction, Green Expansion and Growth

The *Collaborative Mechanism for Carbon Reduction, Pollution Reduction, Green Expansion and Growth* SPS includes a highly informative gender analysis section with a discussion of gender-related issues in the coordinated management of carbon reduction, pollution reduction, green expansion and growth, as well as key recommendations.

The issue of gender equality is often overlooked in the transition to a green economy: as such, the research presented by the SPS is key when analyzing and identifying gender-related issues to better identify the origins of inequality and address these issues by designing and implementing more equitable and effective policies, mechanisms, and services. The SPS recognizes that the impacts of climate change and air pollution are not uniformly distributed worldwide and that certain social groups, such as women and children, are commonly more severely affected. The SPS is also clear about the risks of adopting a “gender-blind” approach to economic transformation on women’s employment, participation, work environment, and opportunities for education and training. As such, the SPS sees introducing gender issues and actively practicing gender mainstreaming in the process of promoting green growth as key strategies for improving gender equality, as well as important foundations for promoting sustainable development.

The gender analysis included as part of the SPS discusses gender equality in the green and low-carbon transition in the power and the transportation sectors, providing a set of targeted recommendations for advancing gender equality in both sectors. These include the following: in the power sector, developing specific policies to protect the interests of women workers and support their transition to the new job market through skills training and education. This would involve policies that encourage more women to participate in the renewable energy industry, such as in solar and wind energy sectors. It would also require strengthening policy research and development from a gender perspective, including more gender-specific data to better understand the different impacts of the low-carbon transition on men and women and how to formulate more equitable policies. In the transportation sector, such policies would include those for enhancing women’s skills and knowledge through education and vocational training, enabling them to find work in the emerging green transportation industry; enhancing women’s representation and influence in transportation planning and decision making through public participation and social dialogue; and strengthening their leadership and influence in the green low-carbon transition by providing leadership training, promoting professional networks and mentoring systems, and increasing the proportion of women in critical decision-making positions.

The SPS makes it clear that gender mainstreaming is indispensable as China pushes forward to reduce

carbon, decrease pollution, expand green development, and stimulate growth. As such, the SPS identifies three specific recommendations to promote gender equality in the green transition. They are:

- The development of a medium- to long-term research plan to track and thoroughly investigate the development of gender mainstreaming in China’s green transition process, providing a scientific basis for policy-making and improvement.
- Address common gender issues at the same time as considering unique industry challenges.
- Learn from international practices on the integration of gender perspectives and promote international communications.

Promoting Digitalization and Green Technologies for Sustainable Development

To achieve gender equality in digitalization and unlock its potential to enable women’s empowerment, it is important to understand the gendered dimensions and differentiated impacts of digitalization on women and men, and to identify and address gender-based barriers to ensure that women and men can equitably benefit from digitalization processes. This means ensuring women’s access to digital tools and employment opportunities in information and communications technology and in the science, technology, engineering, and mathematics (STEM) fields, considering the structural and transformational changes that are needed as part of digital governance and within the digital ecosystem to ensure they are gender responsive and reduce the gender digital divide, and ensuring that the perspectives of a diversity of women and men are considered within digitalization processes.

The *Promoting Digitalization and Green Technologies for Sustainable Development* SPS effectively integrates relevant gender considerations throughout the research. One text box on artificial intelligence and biases, for example, highlights the risk of gender biases resulting from biased inputs that are then reproduced within outputs, as well as existing gender gaps in data, which are a major impediment to the development of gender-responsive artificial intelligence. Another text box highlights, in practical terms, the gender dimensions of the avoid-shift-improve framework for gender-inclusive smart cities, and the need to consider gender and inclusion within urban design and decision making. Finally, the SPS includes a gender-focused section that explores the gender perspective within digitalization, examining the representation of women in STEM fields within China and globally, and considerations for ensuring their equitable employment, participation, and leadership within transition processes prompted by artificial intelligence and evolutions in digital infrastructure. It also incorporates an intersectional perspective in recognition that discrimination can compound based on the intersection of

different identity factors, such as gender identity, disability, and socio-economic status, increasing the marginalization of women and other demographic groups and excluding them from the benefits of digitalization. It also recognizes the harmful consequences of excluding women from participating in the design and implementation of climate change policies and interventions on digitalization processes, and the importance of increasing their representation within STEM fields so that their full talents can be harnessed to find solutions within green transitions of the digital sector.

To demonstrate the many gendered dimensions of digitalization, future research could focus on developing relevant case studies based in China, Asia, or globally. Such case studies could demonstrate how a gender analysis of the green transition of a digitalization process can be applied to identify and address gender-based barriers and opportunities in digitalization to enable equitable outcomes for women and men while simultaneously furthering sustainable development.

Climate Change

Gender equality and climate change intersect in important ways that have been recognized by the global community, within the SDGs and the UNFCCC and its associated Gender Action Plan. Traditional gender roles of women and men within society and as economic actors result in gender-differentiated impacts of climate change and a failure to include women's perspectives, participation, and leadership in efforts to address it. Entrenched gender stereotypes and discrimination often result in women having less access to and control of resources to enable them to mitigate and adapt to climate change, little input into decision making on climate action, and limited access to their rights.

International frameworks seek to promote women's participation and leadership across the spectrum of climate action and within all aspects of the transition to a green economy and clean energy investments.

The *Pathway to Carbon Neutrality and China's Role in Global Climate Governance* SPS effectively integrates gender into the research topic by including a dedicated chapter, *Analysis of Gender Mainstreaming*. This chapter is introduced with a brief examination of the reasons for climate change's disproportionate impact on women, including the reliance women have on natural resources, and the potential to maximize synergies in action on gender equality and climate change to achieve mutually reinforcing outcomes. Within the context of China's "dual-carbon" goals, the chapter then identifies entry points for reinforcing gender mainstreaming in China's climate actions in four main areas. This includes recommendations for improving the leadership and participation of women within China's climate action decision making in recognition of their current underrepresentation. In accordance with UNFCCC guidance, an excellent recommendation put forth is for China to appoint a national gender

and climate change focal point to support the incorporation of gender perspectives into discussions and decisions on carbon peaking and carbon neutrality. The second area the SPS identifies is ensuring equitable opportunities for women's employment within a just transition, as neglecting to recognize gender dimensions often results in women not benefiting from emerging opportunities and can exacerbate gender inequalities. Measures are proposed to ensure that gender considerations are incorporated into emerging employment opportunities, nationally determined contributions, and climate investments to ensure that women as well as men can equitably benefit and contribute to climate goals.

The chapter also looks at how women can be better supported to adapt to climate change, given that adaptation measures currently tend not to incorporate gender considerations. It proposes measures to include women's perspectives and leadership in policy-making, to support their ability to benefit equitably from adaptation measures, such as investments in infrastructure, and to provide finance mechanisms for women to enable them to adapt to climate change. Importantly, the SPS also considers how China can strengthen social accountability alongside environmental accountability—and promote gender equality specifically—with its overseas investments. It urges the consideration of vulnerabilities within diverse groups of women, to ensure gender inequality is not exacerbated, and to promote an equitable sharing of benefits between women and men by incorporating gender considerations in standards and guidelines and information disclosure requirements, including gender assessments, and providing training and technical support for women to enable them to benefit from local industries. Finally, the paper recommends that China strengthen international cooperation and promote knowledge sharing on gender equality amongst stakeholders at all levels.

Future research could focus on how gender considerations can be integrated into low-carbon development policies and could include case studies and practical examples from other countries to demonstrate good gender practices that have resulted in effective and equitable outcomes, with related recommendations for China.

Global Ocean Governance

As acknowledged within the SDGs, promoting gender equality is imperative to effectively protect and manage ocean and marine resources. Given the different gender roles of women and men, which tend to disadvantage women and restrict access to their rights, women and men are impacted differently by environmental issues, such as marine plastic pollution and climate change and have different needs to consider and capacities to contribute to solutions. Women are marginalized from fisheries governance despite their high concentration in onshore fish harvesting and processing activities, which results in their unique perspectives not being considered in decision making. To enable sustainable marine ecosystem management and governance that both women and men can equitably benefit from and con-

tribute to (and which further sustainability goals), women’s participation and leadership in these and associated initiatives must be supported.

The *Sustainable Blue Economy Towards Carbon Neutrality* SPS effectively explores the role of women in small-scale fisheries in a gender-focused section. The research brings to light the disproportionate impact of climate change on women, specifically from climate disasters on women engaged in small-scale fisheries, and the need to implement targeted support measures tailored to the needs of different demographic groups and a gender-inclusive approach to climate change research and governance to increase the resilience of small-scale fishers. This section provides a gender analysis of the different roles of women and men within small-scale fisheries, where men are concentrated in fishing activities and women within pre-harvest and post-harvest activities. This includes a description of the conditions under which women in the sector work, including low-paying, low-skilled, and unstable jobs, as well as unpaid fishing labour, leading to women’s contributions within the sector being disregarded. It also emphasizes the lack of female voices in decision making within small-scale fisheries—traditionally considered a male-dominated sector despite the concentration of women working within it—and the impact of this on the allocation of resources. To promote women’s meaningful participation, voice, and leadership in small-scale fisheries, the SPS recommends an increase in sex-disaggregated data collection to better understand the gender-specific contributions of fishers for targeted policy development; conducting gender-specific training to upgrade the productive skills and knowledge of female fishery workers and their resilience to natural disasters; carrying out gender-inclusive fisheries governance reforms, increasing women’s perspectives and participation in decision making, promoting equitable allocation of resources, and protecting women’s rights including equal pay; and raising awareness of women’s lack of agency in resource management and implementing measures to address it.

Opportunities for future research include exploring the importance of incorporating a gender perspective into the marine plastics life cycle. Highlighting the greater vulnerability of women and other marginalized groups to the negative impacts of marine plastic pollution, while also emphasizing the potential for engaging women and other vulnerable groups as agents of change in implementing solutions to address the issue. This approach can better facilitate the resolution of marine plastic pollution issues and contribute to the advancement of the blue economy.

Green Finance

There is growing global recognition of the intersections between green finance and gender equality, with many sources establishing the mutually beneficial outcomes can be achieved from integrating gender equality within green finance. Lessons and models of how gender considerations can be integrated within green finance can be drawn from innovative finance instruments, such as gender-lens

investing and blended finance instruments that integrate the gender–climate nexus, requiring accountability on both fronts. Gender-responsive approaches to green finance can be undertaken by public, private, and not-for-profit financial institutions in different types of financial vehicles. A range of strategies have been employed by financial institutions to integrate gender considerations into green finance decision making, accounting for gender differences in the needs of customers in green economy sectors, for different constraints faced by women and men in accessing or using green finance, and within social impact assessments as an accountability tool.

The SPS on *Innovation Mechanisms for Sustainable Investments in Climate and Environment* incorporates gender considerations at key points throughout the research. Within the sustainable investing discussion, gender equality is reflected in the priorities of institutional investors (within diversity and inclusion) and is recognized as a critical social issue as part of the social component of responsible investing. It also acknowledges the concerns of NZAOA members around the social ramifications of organizational transitions, such as gender-differentiated impacts, and the importance of ensuring a fair transition. The research also referenced the importance to those exercising active ownership of ensuring that women are represented in sustainable investing and that the differentiated impacts on women are considered. This highlighted consideration of gender equality within investment decision making by using the example of the CPPIB’s intent to vote against boards that do not consider gender diversity sufficiently, and the CPPIB’s explicit commitment to gender-balanced senior management and diverse boards. Notably, within the recommendations, it is asserted that regulators should promote inclusive social development, with gender equality as a key component, alongside climate and environmental issues.

Future research might examine how the integration of gender equality considerations can support the scale-up of green finance, if effectively integrated, or hinder its scale-up if it is absent, and further explore the climate/environment-gender equality nexus within finance. Case studies of existing innovative finance instruments that simultaneously incorporate these priorities could be carried out, contributing to the evidence base for the efficacy of such instruments.

Green and Low-Carbon BRI

The numerous intersections between gender equality, renewable energy, and sustainable development are well-recognized globally and reflected within the SDGs and the UNFCCC. Entrenched gender roles within society, reinforced by stereotypes and discrimination, result in women’s and men’s differential energy access and gendered energy-related environmental and climate change impacts—differences often overlooked due to women’s underrepresentation within the energy sector. As a result, women’s unique needs and perspectives are often not considered within energy policy and financing,

and risk being neglected in transitions to green and low-carbon energy, which can exacerbate gender inequalities and waste opportunities for women to act as agents of environmental change. By identifying gender-based barriers within energy transitions, promoting women’s meaningful participation and the consideration of their perspectives within decision making around green and low-carbon energy, and integrating gender considerations within renewable energy financing mechanisms, a transition to green and low-carbon BRI can be more effective, sustainable, and equitable.

While the *Innovation Mechanism of BRI to Promote the Process of Sustainable Development* SPS references the social dimensions of green and low-carbon BRI, of which gender equality can play a part, it does not specifically integrate gender considerations. However, there are numerous opportunities for integrating gender into future iterations of the research on green and low-carbon BRI such as:

- Exploring practical measures to promote energy equity between women and men and among other marginalized groups within transitions to green and low-carbon energy.
- Examining how renewable energy financing can incorporate gender considerations to ensure that gender equality outcomes are promoted alongside climate change and environmental outcomes, in alignment with the Climate Change and Gender Outcomes resulting from COP 26.
- Including recommendations for key gender considerations within policy toolkits as gender good practices within the design and implementation phase of green BRI mechanisms and investments.

Future research could provide practical case studies and examples of how gender good practices institutionalized within development finance institutions, such as gender analysis, collection and analysis of sex-disaggregated data, inclusive stakeholder consultations, and gender-responsive performance indicators, have supported a transition to green and low-carbon energy.

Secure and Green Trade

At the time of writing the report on *Trade and Sustainable Supply Chains SPS*, the draft report did not include gender perspectives. However, gender has an enormous influence on sustainable consumption, largely due to the differing consumption patterns of women and men. While the green economy or low-carbon economy can bring new development opportunities to women, such as more access to energy, fewer time burdens, or new job opportunities in local energy production, the potentially negative impacts of a quick shift to a low-carbon economy may be most keenly felt among women, who start at an economic disadvantage due to gender discrimination. Their overall income level is lower

than that of men, leaving them with comparatively less flexibility in adapting to either economic shifts or climate change. Because of China’s global role in industrial production, as well as (increasingly) in consumption, and the disproportionate role of women as both producers and consumers, it is vital for policy-making to integrate the gender dimensions of sustainable production and consumption. Environmental concerns vary according to different manufacturing sectors, as do the roles women and men play in this area.

The literature on green industry likewise argues that promoting gender equality and integrating gender equality and women’s empowerment principles in policy-making promotes more efficient and more profitable green industrial development. As a 2015 UNIDO report points out, “women play a key role in both consumption and production, and utilizing their distinct knowledge and skills can help a great deal in moving towards more resource efficient and cleaner production.”

Important research has been done to highlight the many gender dimensions of trade and global supply chains. As such, there remain important opportunities as part of this SPS to pay attention to gender equality and women’s empowerment, to ensure that we dismantle gender stereotypes and other barriers so that women benefit equally from the opportunities offered by sustainable trade systems. It will also be important to ensure opportunities for the increased participation of women and gender experts in the development of policies and in decision-making processes. Conducting this research and looking at the gendered dimensions of supply chains will, in turn, enable us to build a more gender-responsive sustainable trade system that empowers women and men equally.

Gender Mainstreaming in SPS Research for the period 2022–2023: Good Practices in the Integration of Gender Perspectives

The following good practices should continue to be incorporated into future SPS research and development:

1) Conducting gender analysis designed to support the development of the research. If carried out prior to the development of a detailed research outline, a preliminary gender analysis can inform how the integration of gender is best approached within the SPS and allow it to be integrated into the research plan. A more detailed gender analysis can then be carried out to inform the research and drafting process. See, for example, the *Pathway to Carbon Neutrality and China's Role in Global Climate Governance* SPS.

2) Including gender in different areas of the SPS. This can include a stand-alone text box or dedicated section near the beginning of the SPS to showcase the nexus between gender equality and the specific SPS topic. It can then be integrated at relevant points throughout the paper, drawing on the gender intersections acknowledged in the focused section. Additionally, within the section on policy recommendations, including a minimum of one gender-focused recommendation, given that this is the section most likely to be transmitted to the highest levels to influence policy. This approach was highly effective in the few cases where it was carried out. See, for example, the *Promoting Digitalization and Green Technologies for Sustainable Development* SPS.

3) Including case studies integrating gender considerations. Gender-focused or gender-integrated case studies are remarkably effective in displaying the importance of identifying and integrating gender perspectives in the SPS area, particularly for initiatives that can identify equitable outcomes. Given that gender is an emerging focus of some of the SPS research areas, and in keeping with requests for case studies within gender action plans for international environment and climate change conventions, these are particularly helpful in demonstrating the importance of gender equality to sustainable development. See, for example, the *High-Quality Development of River Basins and Adaptation to Climate Change* SPS.

Recommendations to CCICED for the Forthcoming Research Phase

CCICED will continue to strengthen capacity for integrating gender perspectives within the framework of gender mainstreaming. The following recommendations are made to further strengthen the integration of gender within CCICED SPS:

- The requirement to include gender from the beginning of the research cycle should be considered. To ensure that gender-based analysis and gender equality goals are integrated into the planning and execution of policy research, gender perspectives are most effectively integrated if considered early in the planning phase. The integration of gender could be mandated at the proposal and research planning stages, which could then be further discussed by CCICED gender experts.
- The inclusion of research and analysis on the impacts of environmental degradation and climate change on different social groups. International commitments seek to “leave no one behind,” but not all voices are heard or accounted for. This is especially true of marginalized and stigmatized communities; these communities are disproportionately affected by environmental degradation and face unique challenges in dealing with climate change, which are exacerbated by experiences of discrimination and human rights violations in their everyday lives. Research to understand the experiences, perspectives, and needs of these communities, based on intersectional identity factors such as gender, ethnicity, indigeneity, and disability, would enable CCICED SPS to develop a more nuanced approach to gender equality and social inclusion aligned with global good practices.
- The development of a gender-specific annotated bibliography to support and guide SPS teams in their research and analysis. It is recommended that during the establishment of CCICED SPS research topics, undertake an exercise of collating recent research and entry-points related to gender equality and the different subjects explored by the different SPS teams. Utilizing the literature review that was conducted and published in March 2019, further updates are required to provide better guidance to the teams in conducting gender research work.