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**CSTD 2024-2025 priority theme on “Technology foresight and technology assessment for  
sustainable development”**

Statement submitted by

Gender Advisory Board

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remarks delivered by Caitlin Kraft-Buchman, Co-Chair Gender Advisory Board

## **Gender and Social Inclusion in Technology Foresight and Technology Assessment**

Technology foresight, Technology assessment, (or **ForSTI Strategic Foresight** as UNCTAD has just shared with us) : “*offers a critical opportunity to anticipate societal impacts, broader societal perspectives and help more inclusive evidence-based decision making*”, particularly in light of the rapid evolution of artificial intelligence, digital platforms, and automation. **However, gender considerations are too often missing in assessment and foresight exercises. This omission is not just a gap in analysis; it is a barrier to creating the truly inclusive, sustainable futures envisioned by the Pact for the Future and the Global Digital Compact.**

The urgency of integrating **gender perspective and analysis into technology foresight** and technology assessment cannot be overstated. The **digital gender gap** remains a global challenge—women are less likely to access the internet, own a mobile phone, or have the digital skills necessary to thrive in the digital economy. Moreover, as AI becomes embedded in various sectors, we see a growing reality that gender biases will be embedded and amplified by these technology systems. Data on women is less likely to be captured, and without intentional, inclusive foresight, the tools we develop today could further marginalize women and girls tomorrow.

In order to have excellence in 21st century science & technology for development, **gender analysis is not optional**; it is imperative to ensure that technological advancements benefit everyone as each of the previous panelists have so eloquently said, so that these technologies do not perpetuate existing inequalities. We wish to outline several **actionable steps** to address this pressing issue:

### **1. Institutionalize gender analysis in technology foresight and technology assessment processes**

We must make gender and social inclusion analysis a standard component of all technology foresight and technology assessment methodologies. This includes ensuring

that all data used in foresight and assessment activities is **disaggregated** by sex, age, ability and socio-economic level and that gender and social inclusion impacts of new technologies are analyzed thoroughly. It also requires that gender / social inclusion experts and knowledge be integrated into foresight and assessment processes, to ensure that gender and social inclusion dimensions of technology processes are included.

For example, a foresight analysis of the best time and mode to collect milk from women dairy producers in Ethiopia included analysis of women producers' production levels, daily time schedules, cost to deliver milk to collection centres, as well as analysis of acceptable times between milking and cooling. As foresight practitioners, we cannot assume that technologies will affect men and women equally; in fact, they rarely do. By embedding gender-responsive methodologies, we can preemptively identify and mitigate unequal impacts.

## **2. Appoint gender specialists in technology foresight and assessment teams**

**Yet,** Incorporating gender analysis requires expertise. Foresight and technology assessment teams must be multi-disciplinary and include **gender and social inclusion specialists**, domain experts and those with lived experience to ensure that gender is integrated throughout the process. These experts should also have expertise in the sector of the economy or the technology framework utilised in the foresight exercise. Beyond technical expertise, these specialists will help guide foresight activities to consider the structural and societal factors that affect how women and men engage with technology differently and how women are particularly impacted by new and emerging technologies.

## **3. Set gender-parity targets in tech leadership**

**ForSTI Strategic Foresight** Technology foresight and assessment must be accompanied by action to **increase women's leadership** in technology sectors and in decision-making processes and fora. We need **measurable targets** for gender parity in leadership positions within government bodies, government funded research institutions, and incentives from governments to the private sector to embrace parity. Women must be present and be heard at the decision-making tables where the technologies of tomorrow are being shaped and foresight is being discussed.

#### **4. Develop gender-responsive metrics for technology policy impacts**

As we move forward, we must evaluate the impacts of technological policies with **gender-responsive metrics**, and analytical frameworks. This includes developing **indicators** that measure how technological advancements affect women's access to resources, employment, and opportunities and their abilities to benefit from these resources, employment and opportunities.

**In this regard with ForSTI we can Proactively address the digital gender gap with targeted foresight programs** that ensure women have the skills and access they need to participate fully in the digital economy. This could include everything from **digital literacy training** to providing **affordable technology access**, to promoting women's participation in technical sectors where they are less represented. These initiatives should be designed to address the specific barriers that women, particularly those in marginalized communities, face in accessing and using and creating digital tools. **Regular monitoring and evaluation** will allow us to make adjustments in real time to ensure that policies promote gender equality and therefore benefit all. In order to avoid adverse impacts, new technologies need to be evaluated before they are deployed.

#### **5. Foster interdisciplinary collaboration and inclusive participation**

Technology foresight and assessment processes must actively engage diverse stakeholders.. Methods like **co-creation workshops** and participatory simulations can provide valuable insights and ensure that policies are shaped by those who will be most affected by technological changes. This collaboration fosters trust, increases the relevance of foresight outcomes, and ultimately will lead to more **innovative and equitable solutions**.

#### **6. Prioritize capacity-building and education**

To make gender analysis an enduring part of technology foresight and assessment, we need to invest in **capacity-building programs** that train practitioners on how to effectively integrate gender perspectives and gender and social inclusion experts who understand technology. Gender analysis should not be an afterthought—it must be a core competency for anyone involved in shaping our technological futures. Governments and institutions must fund and promote multidisciplinary training programs to foster a culture of gender-responsive foresight.

Finally, **we must act now**. The rapid pace of technological change means that the window of opportunity to influence these developments is narrowing. The policies and systems we design today will determine whether women and girls are empowered to contribute to and benefit from the future or whether they remain sidelined. We cannot afford to wait—integrating gender analysis into technology foresight and assessment is a **strategic imperative** for building a more just, inclusive, and sustainable world.

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