INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Geneva, Switzerland
17 November 2025

Contribution by UNFPA

to the CSTD 2025-2026 priority theme on "Science, Technology and Innovation in the age of AI"

PRIORITY THEME 2: Science, Technology and Innovation in the age of AI

United Nations Commission on Science and Technology for Development (CSTD)

To whom it may concern

The 28th CSTD annual session selected "Science, Technology and Innovation in the age of AI" as one of the priority themes for its 29th session (2025-2026). This theme directly addresses SDG 9 "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation" at the 2030 Agenda.

The rapid rise of frontier technologies and the surge in data generation are transforming research and development. Artificial intelligence, as a general-purpose technology, will further accelerate this transformation. These changes in research and development practices offer significant opportunities for inclusive industrialisation and innovation, which are the core objectives of SDG 9.

Under this theme, the Commission could discuss how the use of AI and data analytics would impact research and development processes in science and industry and identify the institutional and policy conditions required to harness these technologies for inclusive and sustainable industrialization and innovation. In this context, the Commission can examine the challenges and opportunities specific to countries at different levels of development; identify good practices and policies to support domestic technological development, research and innovation; and explore ways to leverage international cooperation to bridge the uneven technological capabilities and steer technological progress toward sustainable development.

The CSTD secretariat is in the process of drafting an issue paper on the theme to be presented at the CSTD inter-sessional panel meeting to be held in November 2025. In this context, we would like to solicit inputs from international organizations, UN entities and agencies, and regional commissions on this theme. We would be grateful if you could kindly answer the following questions based on your organization's work at the global, regional, and/or national levels:

1. Can you provide some successful examples of how AI and data are being used to advance science and innovation in your country? *(Please describe how these applications* transformed research and development practices and their impacts)

UNFPA is leveraging AI as a force for positive change, focusing on its potential to accelerate development goals. However, this is done with utmost focus on understanding the potential risks and bias exacerbating factors of AI. Several applications of AI a re transforming research, development practices, and service delivery, particularly in the areas of sexual and reproductive health and rights (SRHR) and gender equality. For example:

- UNFPA is strategically integrating AI across its corporate operations to enhance efficiency and accelerate evidence-based decision-making. This includes the development of an internal, corporate AI -based Knowledge Management Search Agent and the corporate -wide integration of Google's Gemini AI into the UNFPA workspace. The organization is also piloting the automation of Country Programme Documents and an AI -enabled Evidence Assistant for Evaluation, designed to accelerate analytical synthesis and tailored evidence delivery, thereby optimizing time and resources.
- The Safety Showcase: Re-imaging Gender in Technology is a global programme managed by UNFPA in partnership with UK FCDO, Numun Fund and with the support of the eSafety Commissioner of Australia. For its inaugural event, a global open call for submissions brought in 104 applications from more than 50 countri es – a clear signal that innovation in this space is alive and growing. Hosted during the 69th session of the Commission on the Status of Women in March 2025, the event showcased seven products as leading examples of gender-centred, safety-driven tech innovation. Entrepreneurs, designers, victim -survivor advocates and policy leaders demonstrated how technology can be a force for empowerment, safe ty and joy, while protecting the well-being and human rights of users everywhere. Products that were

identified were a range of AI products designed with the needs of women and girls at the centre, including prioritisation of safety, security and privacy principles in compliance with the UNFPA Guidance on the Safe and Ethical Use of Technology to Address GBV and HPs. Products included: Zuzi AI, a multilingual chatbot dedicated to supporting survivors of GBV in South Africa; BullyID app, AI-powered tools that provide professional counseling, legal aid, and reporting systems to survivors of technology-facilitated GBV in Indonesia; and Lizzy, an AI-powered domestic abuse risk assessment tool designed to help frontline services in Germany accurately assess the risk of repeat violence and determine the need for support. Each of these products are pioneering in their processes of design which centred on gender without compromising on quality and security.

- UNFPA Country Offices have developed and deployed several AI-powered chatbots to provide confidential, accessible, and personalized information to young people and communities. Just Ask! in India, for example, is an AI-driven digital platform that has processed over 2.2 million user queries and reached over 140,000 users, providing expert-validated SRHR information and dispelling misconceptions. Similarly, the Hayati Chatbot in South Sudan and SophiBot in Kenya provide confidential access to SRHR and GBV information in contexts with limited healthcare services. These initiatives transform information delivery by creating scalable, on-demand, and non-judgmental platforms that reach a significant number of people.
- AI is being used to enhance health worker capacity and improve maternal health outcomes. The NeMa Smartbot in India, developed in partnership with the Maternity Foundation, is an AI tool integrated into a mobile app to provide real-time, evidence-based answers on pregnancy and childbirth to midwives. This tool, designed for offline use on simple smartphones, transforms a traditional research paper or training manual into an interactive, on-the-spot resource. Additionally, the BabyChecker in Honduras and West Africa uses AI-powered ultrasound technology to enable non-specialists to conduct vital prenatal scans, identifying potential risks and increasing access to life-saving diagnostics in remote areas.

2. What specific challenges, bottlenecks, or failures have you encountered in implementing AI and data for science and innovation? What are the lessons learned?

While the potential of AI is immense, UNFPA has encountered several specific challenges in its implementation. For example:

- A major bottleneck is ensuring the privacy and security of sensitive user data, particularly when working with Large Language Models (LLMs) and private companies. UNFPA has addressed this by establishing formal agreements with partners to ensure all data is ring-fenced and not used for training their LLM models, thereby upholding organizational-wide privacy and security standards.
- Skills gaps caused by the extreme pace of the development of AI. In addition, the current experimental nature of AI development also clashes with the required approach in sensitive contexts and in particular in UNFPA's mandate area of population health and safety, creating a barrier for rapid prototyping and deployment.
- The drive towards efficiencies as well as increased coverage of programming, has led to a proliferation of technologies including AI products, not been accompanied with compliance with standards including the UNFPA Guidance on the Safe and Ethical Use of Technology and the accompanying assessment sheets which support design of AI based on the safety, security and privacy of users. Without a systematic approach to compliance, there is a risk that AI tools could inadvertently reinforce stereotypes or expose users to harmful content, particularly in sensitive areas like SRHR and gender-based violence. The use of chat bots, for gender-based violence and SRHR, particularly for young people, may result in information which reinforces stereotypes of the user or exposure of young people to targeted and harmful ad-tech, and requires rigorous training and restricted databases versus utilizing generative AI.

3. Can you provide examples of strategies or policy instruments to support AI and data for science and innovation? (Please describe how ethical considerations—such as fairness, transparency, privacy, and accountability—are being incorporated and provide relevant details such as links, budget, evaluation, or other information to characterize them)

UNFPA employs a mix of strategies and policy instruments to support the safe and ethical integration of AI into its work. For example:

- The UNFPA Guidance on Safe and Ethical Use of Technology to Address GBV and HPs is designed to support the design and deployment of technology that is safe, secure and private. While maintaining the highest standards for GBV programming in particular, the Guidance has applicability across all tech including AI.
- UNFPA's IT Strategy dedicates a specific section to how to integrate AI within UNFPA. UNFPA is also updating the strategy to encompass the importance of horizon-scanning and foresight thinking to make UNFPA as a whole more agile in being able to uptake and adopt these technologies safely, within an environment where the tech is constantly evolving every day.
- The Safety Showcase global program, managed by UNFPA in partnership with the UK FCDO and other organizations, is a policy instrument for promoting ethical design. It acts as a platform to highlight leading examples of gender-centered, safety-driven tech innovations, demonstrating how ethical principles can be integrated into the design and functionality of products from the outset.

4. Are you engaged in promoting open innovation or open data? If not, why? If yes, can you share specific projects and outcomes? (Please provide relevant details such as links, budget, evaluation, or other information to characterize them)

Yes, UNFPA is a strong advocate for open innovation and, where appropriate, open data to foster a collaborative and transparent development ecosystem. For example:

- The GenF Mentorship Programme is a regional initiative developed by UNFPA in the Arab States region and Startups Without Borders. This program involves identifying and selecting women-led initiatives and social businesses, matching them with local mentors and female role models, and organizing and delivering tailored mentorship thematic sessions. It specifically supports social businesses that address UNFPA's three Transformative Results with l skills, mentorship, and opportunities, aiming for a positive impact. 320 entrepreneurs applied to the program. 15 women-led startups were selected to be mentored. It exemplifies open innovation by sourcing external talent and ideas from women-led social businesses and integrating external expertise through diverse mentors and strategic partnerships.
- The Adolescent Girls Social Practice Lab is a collaborative and experimental space, piloted in 11 country offices including 70 participants, that brings together diverse stakeholders, including experts from government, adolescent and youth groups, civil society, academia, the private sector, artists, and influencers. Its primary purpose is to tackle the complex socio-economic and cultural barriers that adolescent girls encounter in the Arab region. This initiative is designed to foster innovation and generate practical, human-centered solutions through a structured process of collaboration and design thinking. This mechanism directly promotes open innovation by gathering diverse groups to collectively design solutions.
- In projects like TABOO in Colombia, UNFPA has made its collected data publicly available via a dashboard and a microsite. This promotes open data by allowing other researchers and organizations to access and utilize the insights gathered on SRHR myths and misconceptions, fostering broader collaboration and reducing the duplication of efforts.

5. Are you engaged in putting in place mechanisms to foster collaboration around AI and data for science and innovation among different stakeholders (e.g., university-industry, or private-public)?

UNFPA is deeply engaged in fostering collaboration around AI and data for science and innovation among different stakeholders. UNFPA actively works to create public-private collaborations. For example, The NeMa Smartbot was a partnership between UNFPA, a private foundation, and an AI startup. Similarly, projects like the BabyChecker in Honduras (with Delft Imaging) and SophiBot in Kenya (with Microsoft) demonstrate mechanisms for bringing together governments, the UN, and the private sector to scale health solutions.

In addition, UNFPA's leadership in the Equity 2030 Alliance serves as a model for multi-stakeholder collaboration, bringing together over 100 members from academia, the private sector, and civil society to create a collective force for gender equality by design in technology and finance, including AI development and data.

6. Are you engaged in any bilateral, regional, or international partnership aimed to foster AI for STI? (Please describe the benefits and challenges of participating in these partnerships)

Yes, UNFPA participates in working groups in support of implementation of the Global Digital Compact including engagement around the sub groups including under Chapter 3 of the Pact (Inter-Agency Task Team on Science, Technology, and Innovation); GDC Obj 1 (Closing Digital Divides); GDC Obj 3 (inclusive, open, safe and secure digital space); Obj 4 (Working Group on data governance); Obj 5 (Governance of AI). Across all working groups UNFPA work to support the integration of gender as well as ensuring safe and ethical design and use of technology as a primary mitigating factor for the perpetration of technology-facilitated GBV.

7. How can international cooperation enhance the use of AI and data for science and innovation to support technological capacity building in your country? In what ways can the UN CSTD contribute to this effort?

International partners can co-invest in the development and implementation of ethical frameworks and assessment tools, such as the UNFPA Guidance, to ensure AI technologies are designed with human rights at the forefront with understanding of national contexts. By joining platforms like the Equity 2030 Alliance, international partners can help normalize gender-equitable design as a business and development imperative, unlocking new markets and attracting private capital for social good, while ensuring these efforts to be more targeted in the national contexts for a more data-driven innovation ecosystem to emerge.

The UN CSTD can contribute to this effort by serving as a global platform to share these successful models and advocate for a systemic, mission-driven approach to AI policy, fostering partnerships among diverse stakeholders to accelerate progress on national development challenges.

Please indicate contact person(s) responsible for projects/policies and international collaboration in this context in case we need clarification on the inputs.

Please send your responses and any further inputs on the theme to the CSTD secretariat (cstd@un.org) by **31 August 2025** . We look forward to receiving your valuable inputs.

Sincere regards,

CSTD secretariat