

Session Outcome Document

Connecting the Unconnected in the Field of Education Excellence, Cyber Security & Rural Solutions and Women Empowerment in ICT along with International Conference on Digital Transformation in ICT Arena, Education Arena: Roadmap towards SDG 4

CMAI Association of India

11 am – 11.45 am CEST

<https://www.itu.int/net4/wsis/forum/2025/Agenda/Session/230>

Overview

The joint session brought together distinguished stakeholders, including policymakers, regulators, educators, cybersecurity experts, technology leaders, and grassroots organizations to deliberate on strategies to accelerate digital transformation. It explored critical themes:

- **Connecting the Unconnected:** Bridging the digital divide by extending ICT infrastructure and affordable connectivity to rural and underserved communities.
- **Education Excellence:** Leveraging digital technologies to advance inclusive and equitable quality education, aligning with **SDG 4** (Quality Education).
- **Cyber Security & Rural Solutions:** Ensuring trust and resilience in digital ecosystems, with special focus on localized rural innovations.
- **Women Empowerment in ICT:** Enabling greater participation of women in the ICT sector and ensuring gender-responsive digital policies.

This event also aligned with the broader goals of the **World Summit on the Information Society (WSIS)** and aimed to outline a roadmap for progress beyond 2025.

Key Insights

- **Digital Inclusion is foundational:** Without connectivity, communities cannot leverage e-learning, e-health, e-agriculture, or digital finance. Tailored rural models and community networks were highlighted as essential.
- **Education must be reimaged:** Technology should supplement traditional pedagogies with digital literacy, adaptive learning platforms, and teacher capacity building.
- **Cybersecurity is no longer optional:** As digital adoption grows, so do threats. There is a critical need for awareness campaigns, secure digital identities, and resilient local infrastructures.
- **Women's empowerment drives societal transformation:** Investing in women's digital skills, leadership in ICT, and safety online are pivotal to equitable progress.

- **Multi-stakeholder collaboration is key:** Public-private partnerships, academia, civil society, and international bodies must work together to pool expertise and resources.

Emerging Trends

- **AI and ML in Education:** Personalized learning pathways and predictive analytics are improving learning outcomes.
- **Community networks and micro-ISPs:** Local ownership models are proving effective for last-mile connectivity.
- **Digital credentials & micro-certifications:** Recognized globally, helping bridge education-to-employment gaps.
- **Women-led tech startups:** More women are driving ICT innovations tailored to local needs.
- **Blockchain for education records & identity:** Enhancing trust and portability across borders.
- **Cyber hygiene and zero-trust architectures:** Becoming mainstream even for small and rural enterprises.

Challenges in the Next 20 Years

- **Affordability & equitable access:** Devices, data, and electricity still remain barriers for many communities.
- **Skills gap & digital literacy:** The rapid evolution of technology risks leaving large populations behind.
- **Cyber threats & misinformation:** As digital penetration grows, so will risks to personal data, institutions, and democracies.
- **Sociocultural barriers:** Gender biases, language divides, and local customs can impede technology adoption.
- **Sustainability of rural solutions:** Many pilots struggle to scale due to lack of long-term funding or policy alignment.

Success Stories and Opportunities for WSIS Beyond 2025

- **Rural e-learning centers in India & Africa:** Community-owned centers have dramatically increased digital literacy and school enrolment.
- **Women coders networks in Asia:** Initiatives like SheCodes and WomenWhoTech have trained thousands in programming and cybersecurity.
- **Telemedicine & AgriTech platforms:** Using simple mobile apps, rural populations are accessing doctors and modern farming techniques, improving livelihoods.
- **National cybersecurity frameworks:** Several countries have adopted robust policies that protect both critical infrastructure and citizen data.

Looking ahead to **WSIS Beyond 2025**, opportunities include:

- Expanding regional digital hubs that blend connectivity, education, and healthcare.
- Developing multilingual AI tools that break language barriers.



- Formalizing international frameworks for digital trust and cross-border education recognition.
- Launching global funds specifically to empower women and rural youth in ICT.