

**Response to the Joint
Questionnaire for CSTD's 20-
Year Review of
WSIS Implementation (CSTD,
ITU, UNESCO & UNDP)**

Global Digital Justice Forum

April 2024



Table of Contents

Global Digital Justice Forum’s Response to the Joint Questionnaire for CSTD’s 20-Year Review of WSIS Implementation (CSTD, ITU, UNESCO & UNDP).....	1
Question 1. To what extent, in your experience, has the "people-centred, inclusive and development-oriented Information Society", envisaged in the opening paragraph of the WSIS Geneva Declaration of Principles, developed within the 20 years since WSIS?.....	1
Question 2. How has the implementation of WSIS outcomes contributed towards the development of a "people-centred, inclusive and development - oriented Information Society"?.....	3
Question 3. How much progress do you believe has been made in implementing specific WSIS outcomes?.....	4
Question 4. What are the challenges to the implementation of WSIS outcomes?.....	13
Question 5. How are these challenges being addressed? What approaches have proved to be effective in your experience?.....	15
Question 6. What do you consider the most important trends in technology and other aspects of ICTs which have affected implementation of WSIS outcomes since the Summit? What has been their impact?.....	19
Question 7. What should be the priorities for stakeholders seeking to achieve WSIS outcomes and progress towards the Information Society, taking into account ongoing and emerging trends?.....	20
Question 8. How will ongoing trends and new developments in technology, especially in the deployment, access, and use of ICTs, impact future progress toward human development, specifically in relation to the SDGs?.....	24

Global Digital Justice Forum's Response to the Joint Questionnaire for CSTD's 20-Year Review of WSIS Implementation (CSTD, ITU, UNESCO & UNDP)

Question 1. To what extent, in your experience, has the "people-centred, inclusive and development-oriented Information Society", envisaged in the opening paragraph of the WSIS Geneva Declaration of Principles, developed within the 20 years since WSIS?

The arc of technology has moved rapidly, with much promise for positive outcomes. However, the social outcomes of digital technologies tend to depend on contextual factors and conditions. A people-centered information society is still a distant dream, today, in an information society that is Big-Tech-driven (Big Tech refers to the largest technology corporations, including Big Telco/ Big Mobile and others who wield considerable market power owing to their intelligence advantage or ability to collect, hoard and deploy data (including from the societal data commons) for optimizing production and distribution), and tending towards authoritarian regimes, thanks to the perverse collusion of the state and the market to surveil and control people. The governance arrangements of the digital order have failed to truly address issues of digital justice and data equity in relation to the well being of people and planet.

The connectivity/digital divide is still wide open, even as newer infrastructural and innovation divides that exacerbate inequality in the global digital economy have emerged. With limited infrastructure capabilities to digitalize and process their data into digital intelligence, developing countries are unable to capture development value from data and reap the benefits of the structural transformation led by digitalization. A new 'data divide' is thus exacerbating the development divide.

A corporate-led digital economy has seen the vital resource of data locked up for private profit. Under the existing intellectual property (IP) regime, processed data and data-based intelligence can be enclosed in perpetuity. Open data in health and food systems will only further the interests of Big Tech and traditional Big Pharma and Big Agri corporations (<http://tinyurl.com/54xy66dm>).

The network-data complex has created a crisis of citizen rights, and a deep crisis in the form of social engineering and the exclusion and dispossession of marginalized communities. Techno-centric approaches have seen automation of various sectors, such as schools, farms, and workplaces that have disempowered and displaced teachers, peasant farmers and other small-scale food producers, Indigenous Peoples and workers — handing over control of people's destinies to profiteering corporations.

This has resulted in the further entrenchment of existing forms of discrimination and exploitation of people and communities. The top-down design and implementation of e-governance, with its attendant “datafication”, has led to burning questions about democratic accountability and panspectronic surveillance that erodes the vibrancy of civic publics. Whether it is biometric based authentication systems, online grievance mechanisms or Big Data based beneficiary rationalization, the absence of modes for a meaningful right to be heard, and the right to contest and seek accountability, has decoupled the performance of citizenship from rights and justice (<http://tinyurl.com/yhhuhp6x>).

The private and closed content streams of mainstream platform models have undermined the generative web of hyper-links that is founded on a pluralistic openness. The dominant business model of platforms built on surveillance advertising deploys algorithmic personalization, amplifying and intensifying social bias and intersectional discrimination, exacerbating the exclusion of women, gender minorities, oppressed castes, racial minorities and other marginalized groups (<http://tinyurl.com/mw27wpb9>). It incentivises the spread of disinformation and misinformation, thus jeopardizing the sanctity of information and knowledge as a public good. While recent trends in AI development — particularly the advent of generative AI technologies — have been celebrated as ushering in a new information and knowledge paradigm, there are numerous concerns that have emerged about the risks for the realization of human rights (<https://tinyurl.com/25h5k4mf>) and its epistemic injustice and colonial appropriation of traditional knowledge and indigenous cultures. (<http://tinyurl.com/mr4y8u5r>).

The unbridled power of transnational digital corporations presents the greatest threat to an open, secure, and free digital future for all. Notably, the reticence of the state to act decisively against corporate power and to enable and nurture a people-centered information society remains a serious roadblock. Developing countries also find themselves lacking the negotiating power and the resources to counter the corporate paradigm. A lack of political will has also translated in the failure of states to step in and invest in public access, skill development, deployment of the internet to reach the poor, expand access to education etc.

What provides hope is the strong and emerging people’s resistance against Big Tech to reclaim people’s sovereignty and autonomy over their data, resources, and lives (<http://tinyurl.com/4d8y3u7t>).

Movements for digital rights and justice, data feminism, platform cooperativism and community-controlled infrastructure, and the resistance by workers and communities against corporate power are also noteworthy in this regard.

Question 2. How has the implementation of WSIS outcomes contributed towards the development of a "people-centred, inclusive and development-oriented Information Society"?

The WSIS outcomes are broad-based, development-oriented, and intended to create an equal information society which is “people-centered” and “inclusive”. The key question to ask is if the trajectory of ICTs and digitalization has been in tandem with the WSIS outcomes. It cannot be denied that technology has moved forward by leaps and bounds since the WSIS Geneva Declaration and the Tunis Agenda, and we live in a world of unprecedented informational access and interconnection. The data and AI paradigm, that wasn’t even a consideration when WSIS outcomes were originally envisaged, has ushered in a wholesale shift in the way the world has organized itself. The impact of AI systems has perforce rearranged all institutions and sectors to fit the demands of the new era. The gains of digitalization are, unfortunately, uneven. In the global geopolitical context — the greatest economic gains from AI will be in China (26% boost to GDP in 2030) and North America (14.5% boost), equivalent to a total of \$10.7 trillion and accounting for almost 70% of the global economic impact. The EU has sought to strengthen its market share in the data economy through bilateral trade deals and even as it has ushered in a slew of laws for allowing the market to function with predictability (including guardrails for user privacy), the EU approach does not really account for AI related harms to society in cross-border data flows (<http://tinyurl.com/tp934ae6>). The AI economy status quo tends to disadvantage developing countries hugely, reduced as they are to data markets and data suppliers for the developed nations, unable to reap the benefits of this data in any manner. In that regard, the goals of WSIS outcomes are far from achieved. A few examples from the outcomes are given below.

- The outcomes focus on bringing about more access to all groups and communities of people across countries. Even where access is deemed to have been achieved or market-led access is seen to be adequate, such access is built on surveillance advertising and algorithmic personalization. This amplifies and intensifies social bias and intersectional discrimination, exacerbating the exclusion of women, gender minorities, oppressed castes, racial minorities and other marginalized groups (<http://tinyurl.com/mw27wpb9>). Hence, the focus needs to be on meaningful and empowering access for all.
- Marginalized groups and their interests are specially supposed to be protected under the Tunis Agenda. And yet, with the AI paradigm, we are witnessing an appropriation of their traditions and language (<http://tinyurl.com/mr4y8u5r>). More generally, the risks arising from digital technologies for marginalized groups — such as persons belonging to national or ethnic, religious, linguistic or racial minorities, Indigenous Peoples as well as local communities, persons in rural areas, economically disadvantaged persons and persons in vulnerable or

marginalized situations — and their rights have been recognized to some extent (<https://tinyurl.com/25h5k4mf>), but not yet translated into effective protection measures.

- Improving international financial mechanisms is a key goal of the outcomes; however the manner in which international economic law is structured disadvantages developing countries. For instance, the moratorium in the WTO on imposing customs duties on electronic transmissions prevents developing countries from raising revenues for their public and social development purposes. Without public finance for national and sub-national community-led infrastructural initiatives, the dominant paradigm cannot be successfully challenged.
- The Tunis Agenda, under para 55, states “We recognize that the existing arrangements for Internet governance have worked effectively to make the Internet the highly robust, dynamic and geographically diverse medium that it is today, with the private sector taking the lead in day-to-day operations, and with innovation and value creation at the edges.” However, internet governance frameworks, in the absence of binding regulations on platforms and accountability mechanisms, have failed to create a robust internet. In fact, the private sector-led internet has led to walled gardens, a sociality of post-truth that hurts the already vulnerable and the criminal deployment of technology to fuel genocide.

As such, global digital cooperation has failed. The WSIS outcomes are held to ransom because of clear omission by the powerful economies. The importance of creating enabling infrastructure in all countries of the world — both physical and digital — has been consistently ignored by developed countries. There is no allocation of Official Development Assistance (ODA) or public financing for infrastructural development for developing countries.

It is vital that the injustices of the digital paradigm, including human rights violations, are acknowledged in the WSIS+20 review process. Additionally, recognition of the unfolding data and AI paradigm and its legal, regulatory and ethical basis is an important first step. Binding rules that place accountability at the doors of digital transnational corporations, is another. Interagency cooperation within the UN is another must, which should also consider orienting itself towards the digital transformation.

Question 3. How much progress do you believe has been made in implementing specific WSIS outcomes?

WSIS envisions a "people-centered, inclusive, and development-oriented information society" utilizing ICT for sustainable growth. The rapid technological changes have significantly altered today's information society. We stand at the frontier of next generation network-data technologies that have infinitely widened the scope of Internet-related public policy issues far beyond what was on the agenda at Tunis in 2005. Yet the WSIS vision remains relevant.

C1. The role of governments and all stakeholders in the promotion of ICTs for development and C7. ICT applications: benefits in all aspects of life

A significant measure at the international level to achieve the objective of Action Line C1 and C7 is the establishment of the UN interagency task team on Science Technology and Innovation (STI) for the SDGs (IATT) that has the mandate to “promote coordination, coherence, and cooperation within the UN System on STI related matters, enhancing synergy and efficiency, in particular to enhance capacity-building initiatives”. The IATT, being a component of the UN Technology Facilitation Mechanism, facilitates policy dialogue and advocacy among United Nations bodies, governmental and non-governmental stakeholders, and partners for the implementation of the WSIS outcomes.

Considerable progress has also been made at the national levels to integrate ICT in governance, welfare delivery and achievement of SDGs (<http://tinyurl.com/2r6bp2vf>). In recent times, there is an increasing push to platformize critical services, such as access to welfare services, healthcare, and digital payments, by leveraging massive amounts of data collected from citizens. Digital Public Infrastructures (DPI) are an example of this drive (<http://tinyurl.com/4u85su2d>). The last G20 summit held in India, made a major push for DPIs, which has been described as a set of shared digital systems that should be secure and interoperable, that can be built on open standards and promote access to services for all, with governance and community as core components (<http://tinyurl.com/4bzwsybs>, <http://tinyurl.com/2xnptxf9>, <http://tinyurl.com/3mv7fas7>).

Despite the above advancements, progress remains inadequate. Without committed international public financing for platform and data infrastructures, low and middle-income countries (LMICs) face challenges securing their digital futures amidst rising debt and fiscal constraints. The prevalent financing model, leaning heavily on private sector involvement through blended finance and multistakeholder partnerships (<http://tinyurl.com/2ts36kbk>), places the onus on vulnerable states to 'de-risk' private sector investments and protect them from internal developments. It also impedes developing countries from furthering their infrastructural capabilities to leverage their data commons for autonomously defining pathways to development, and instead become mere data extraction sites for private corporations.

Further, the absence of robust regulatory frameworks in LMICs allows infrastructure to shape the law, often resulting in limited responsibility to address exclusion-related harms (<http://tinyurl.com/34zvrxdn>).

C2. Information and communication infrastructure: An essential foundation for the Information Society

According to the latest data from ITU, the number of people worldwide not connected to the Internet decreased to an estimated 2.6 billion people in 2023. Sixty-seven per cent of the world's population, or 5.4 billion people, are now online. According to early estimates, growth in Internet connectivity remains the strongest in low-income countries (17% over the last year). However, less than one-third of individuals are connected to the Internet in these countries (<http://tinyurl.com/3w6sycp2>).

As the UN Secretary General noted, ‘Two decades after the World Summit on the Information Society, the digital divide is still a gulf’ (<http://tinyurl.com/dp4drwn2>). Only 36% of the population in LDCs used the Internet in 2022, compared with 66 per cent globally. As many as 17% of the population in LDCs did not even have access to a fixed or mobile broadband network. Only 2 LDCs have met the UN Broadband Commission’s affordability 2% target (<http://tinyurl.com/y22hd8ab>). Divides also persist across gender, income, language, and age groups (<http://tinyurl.com/y22hd8ab>). Meaningful access to connectivity and community-based multi-purpose public access points seem to have become forgotten strategies. This is despite the increasing success of community-driven connectivity solutions in areas of market failure (<https://tinyurl.com/387k64se>).

The digital infrastructural and innovation divide is even more stark. Just two countries — the United States and China — account for half of the world’s hyperscale data centers, 70% of global AI talent and almost 90% of the market capitalization of the world’s largest digital platforms (<http://tinyurl.com/3d43dpx7>). Further, as the data-driven digital economy has evolved, a data-related divide has compounded the digital divide. While monthly global data traffic is forecast to grow by more than 400 per cent by 2026, activity is concentrated among a few global players (<http://tinyurl.com/dp4drwn2>). More specifically, the control over large parts of the digital and data infrastructure by private corporations (expressed, for instance, through the concentration of power through the control of cloud services) and limited public oversight and regulation creates serious risks for the realization of human rights and a people-centered and inclusive information society. In this new configuration, developing countries find themselves in subordinate positions as mere providers of raw data to global digital platforms, while having to pay for the digital intelligence obtained from their data (<http://tinyurl.com/3d43dpx7>).

C3. Access to information and knowledge + C8. Cultural diversity and identity, linguistic diversity and local content + C9. Media

Digital communication platforms such as social networks, search engines, news aggregators, and video sharing services have enhanced people’s access to news and information. These digital platforms allow users worldwide to share stories and experiences with a larger audience, fostering dialogue and

community building. Further, recent advancements in AI can be used to document and analyze endangered languages, helping to preserve and revitalize them. For instance, Iceland has recently partnered with OpenAI to use GPT-4 to preserve the Icelandic language (<http://tinyurl.com/naahdd2m>). Similarly, AI-powered tools can assist in preserving and restoring cultural artifacts, historical sites, and artworks (<http://tinyurl.com/3wwy428b>).

Governments as well as international organizations increasingly use social media platforms to disseminate information and converse with the people in diverse local languages. Social media also acts as vital tools for the government to disseminate information to connect with the affected population and mobilize relief.

Despite the democratizing potential of the internet and digital technologies, the private and closed content streams of mainstream platform models have destroyed the generative web of hyper-links that is founded on a pluralistic openness. The dominant business model of platforms built on surveillance advertising deploys algorithmic personalization, amplifying and intensifying social bias and intersectional discrimination. It incentivises the spread of disinformation and misinformation which jeopardizes information as a public good. The disinformation problem is exacerbated by automation and machine learning (ML) technologies, particularly deepfakes.

Cyberspace mirrors and amplifies social exclusion and discrimination based on class, race, gender, caste, and other axes. The rights of women and less powerful/ oppressed groups are under threat in the digital public sphere due to algorithmic virality and the intensification of hate (<http://tinyurl.com/mw27wpb9>). Risk of online violence is intensified by immersive environments such as the Metaverse that renders any experience of cyber assault more visceral (<http://tinyurl.com/ymh3srnk>). Whereas human rights institutions have acknowledged that the right to participate in and to enjoy the benefits of scientific progress and its applications in agriculture should preserve, not violate, the right of peasants and other people working in rural areas to choose which technologies suit them best (<https://tinyurl.com/upyzacan>), such recognition has not yet translated into effective policy frameworks.

The rise of algorithmic platforms has also introduced many challenges for professional journalism. Surveys have pointed out that the majority of users today consume news through social networking sites (<http://tinyurl.com/jpk894mh>). While large media companies have been able to adapt to the new dynamics and even witness a steady increase in revenue, 'local media, which hasn't adapted nearly as well, has lost a large chunk of its revenue, despite continuing to be an important news source for local communities.'<http://tinyurl.com/37m7vx9b>, <http://tinyurl.com/ts4xfau>

While Artificial intelligence has ushered in a transformative era in the information and communication space, the epistemology driving AI often eliminates alternative knowledge frameworks of Southern and indigenous people (<http://tinyurl.com/3d5cwuf4>). There is a high risk of the inherent bias and glaring omissions in data sets becoming reified into ‘objective’ truths, denying the meaningful representation of the Majority World in the AI paradigm (<http://tinyurl.com/54jysr5b>). Paradoxically, the arc of AI innovation continues to exploit people from these countries, and the traditional knowledge of Indigenous Peoples, peasants and other people and communities, for corporatized AI systems that lock innovation, without sharing benefits. (<http://tinyurl.com/mr4y8u5r>, <http://tinyurl.com/54jysr5b>).

Today there is growing consensus that digital platforms and emerging technologies cannot be left to self-regulation. Multistakeholder frameworks such as the Christchurch Call have proven ineffectual in addressing harmful and unlawful online content (<http://tinyurl.com/yn2njtrw>). The recently released UNESCO Guidelines on Digital Platforms, while being an important guiding document for regulators and platforms, is not built on any international consensus and fails to provide a binding normative framework (<http://tinyurl.com/3t5yef34>). While national level regulatory initiatives like the Digital Services Act of the European Union (<http://tinyurl.com/yjxmbbhhu>) set forth a strong human rights centered approach to regulation and accountability of digital platforms, such initiatives in many other jurisdictions are either severely lacking or tend to give wide-ranging powers to authoritarian governments to use digital as a tool of surveillance and control.

C4. Capacity building

Digital enskillment plays a pivotal role in shaping the workforce of developing countries. Some countries are seen to be leaders in good practices — Ghana’s ICT in education policy framework and Rwanda’s national Digital Ambassadors Programme (<http://tinyurl.com/bdf8znd6>) are oft-cited examples. There are also robust local level initiatives such as in the Indian state of Kerala where the IT@School initiative integrates information technology (IT) into the state education system (<http://tinyurl.com/r8x3mhjt>).

However, according to available data, less than 40 percent of youth in high- and upper-middle-income countries have minimum digital literacy proficiency. Data is unavailable in most low- and middle-income countries, where digital skills gaps are likely the largest (<http://tinyurl.com/muaknafu>).

The digital skills gap is most likely to affect young women (<http://tinyurl.com/muaknafu>). For instance, in India, the labor force participation of women has been steadily falling, with only 27.2% of women currently participating in the workforce (<http://tinyurl.com/2ecbuve>). This is due in part to the lack of digital enskillment and the limited opportunities for upward mobility in the labor market (<http://tinyurl.com/ycxenfdt>).

Multi-country studies indicate that digital automation contributes to the polarization of labor markets and the hollowing out of middle skilled jobs (<http://tinyurl.com/35j7b6hm>), with women-dominated jobs at the greatest risk of being lost to such technology-led job displacement (<http://tinyurl.com/yptjnzmv>).

The rise of Ed-Tech and the privatization of education have created new exclusions, as not all individuals have access to these digital services. Further, if institutions of public education are dependent on platform companies, such dependency can create risks, interruptions, and also entail higher cost for products until they may be subsidized. This can prove detrimental to the educational needs of students. Without adequate data governance frameworks, implementation of digital technologies in public education also risks reproducing patterns of data colonialism through the data extractive strategies adopted by ed-tech and other platform companies. Road maps for technology in education that actively promote the public value of education, unequivocally restraining its commercialisation are severely lacking (<http://tinyurl.com/y9zcbxpz>).

C5. Building confidence and security in the use of ICTs

The confidence that individuals and organizations have in the security, privacy, and ethical practices of digital technologies is crucial for shaping decisions and actions in the digital world. In light of the extensive use of ICTs in critical sectors like banking, finance, health systems management, and the recognition of need for resilient infrastructure to foster innovation under Goal 9 of the SDGs (<http://tinyurl.com/43jprewa>), a people-centric approach to digital infrastructure and public goods becomes non-negotiable.

Sadly, digital trust is currently at an all-time low due to various factors, including geopolitical polarization (<http://tinyurl.com/4ecf7a3w>), the rise of digital money (<http://tinyurl.com/zv8x8c3n>), and the ongoing challenges in cybersecurity (<http://tinyurl.com/3httn2k>). While individual countries and regional blocks are adopting regulatory policies on digital money (<http://tinyurl.com/ye2yfrny>), these must be coordinated at the global level to ensure that they meet the needs of all countries and that they are widely adopted to limit regulatory arbitrage (<http://tinyurl.com/zv8x8c3n>). An international treaty on cybercrimes is yet to be adopted and is still being negotiated (<http://tinyurl.com/52r9fcku>).

The lack of trust in government, exacerbated by events such as the COVID-19 pandemic, has further eroded digital trust, with citizens reporting lower levels of trust in government in the government's handling of their data (<http://tinyurl.com/5n7j4xp5>).

Increasingly, the right to privacy is pitted against safety and security in debates around encryption and interoperability, resulting in the unhelpful comparison and undermining of both concerns. Surveillance risks posed by technologies like facial recognition, dark patterns, etc., and security concerns raised by 5G networks, Web 3.0 etc have raised new questions about digital trust and call for security, reliability, accountability, and ethical use of emerging technologies. Ultimately, restoring and maintaining digital trust will require a concerted and multifaceted approach to address the complex and evolving landscape of digital technologies and their impact on society.

C6. Enabling environment (legal, regulatory, policy environment)

The movement towards recognizing digital human rights has gained some momentum in recent years, with the emergence of rights regimes at the national /regional levels — including the right to access the internet, right against profiling, the right to be forgotten, and right to data access. There is yet no international human right to internet access and rights at national/regional levels in relation to the internet and for the digital society are fragmented and evolving. The linkages between techno-design of the internet (net neutrality, interoperability, freedom from dataveillance) and its potential to be an enabler of rights is increasingly gaining legitimacy. There is also a growing recognition that economic rights need re-articulation in the digital context, thus giving rise to articulation of labor rights in digital workplaces and citizenship entitlements in the digital welfare state.

However, this progress is hindered by geopolitical fragmentation. Multistakeholderism has achieved little for global digital constitutionalism (<http://tinyurl.com/54xy66dm>). It has deepened corporate capture of policy decisions at the multilateral level with Big Tech playing kingpin in defining the narrative. It has fragmented and fractured the cartography of digital governance — with a multiplicity of international approaches across sectors and arenas (including trade, food, ecological systems, labor, and more) that emboldens the rich and powerful to consolidate their position through forum shopping (<http://tinyurl.com/5ejbkbfx>). The reliance on multistakeholderism is one expression of a generalized lack of effective regulation of transnational corporations and other business enterprises, which has led the UN Human Rights Council (HRC) to establish an Open-ended Working Group mandated to negotiate a legally binding instrument, which should also apply to BigTech companies (<https://tinyurl.com/zvcsxdce>).

Digital trade rules (on non-discriminatory access to national markets, equal treatment, restrictions on data localisation and source code disclosure, GATS applicability to digital services) also impede the ability of the Global South to regulate corporations in digital value chains and to enforce transparency and accountability regulation on AI services and application providers.

Further, traditional approaches to data protection that limit privacy harms to non-consensual data processing and re-identification of the data subject are not adequate to safeguard individuals and society from data harms. The human rights framework hence requires an update that is adequate to digitality through a new class of rights in relation to data and data sovereignty. In recent years, the UN Human Rights Council (HRC) and other human rights institutions have increasingly recognized the manifold implications of ICT for human rights — political and civil as well as economic, social and cultural rights. (<https://tinyurl.com/25h5k4mf>). The HRC has also recognized that digital technologies, including AI, pose marginalized groups at particular risk, including persons belonging to national or ethnic, religious and linguistic, racial minorities, Indigenous Peoples as well as local communities, persons in rural areas, economically disadvantaged persons (<https://tinyurl.com/25h5k4mf>). The Office of the High Commissioner for Human Rights (OHCHR) is currently elaborating a study to identify such risks and provide guidance on how they could be addressed by states.

UN and human rights institutions have also issued guidance for the better protection of the rights of marginalized people and communities, such as peasants, Indigenous Peoples and other rural people. In an authoritative interpretation of the right to science, the UN Committee on Economic, Social and Cultural Rights has clarified that these groups have the right to choose which technologies suit them best (<https://tinyurl.com/upyzacan>). Furthermore, the UN Committee for World Food Security (CFS) has recently approved policy recommendations on the use of data in the context of food security and nutrition, which recognize that Indigenous Peoples, peasants and other small-scale food producers have a variety of methods to generate, collect, store, and use data, and that states are required to protect these groups' human rights — including their right to food and nutrition — and protecting their traditional knowledge, innovations and practices (<https://tinyurl.com/8dhaw6uc>).

As the UNCTAD Digital Economy Report (2021) highlights, both economic and non-economic considerations, including competitive advantage in global value chains, possible impact of preferred policies on MSMEs in different sectors, human rights — including privacy and data protection, national security interests, social developmental priorities, and more, are simultaneously implicated in policy decisions on the economic governance of data and the extent of integration into the global digital economy through data flows (<http://tinyurl.com/3d83msne>). Developing countries urgently need a comprehensive, whole-of-economy roadmap for data governance.

C10. Ethical dimensions of the Information Society

The importance of ethics in the use of ICTs is well recognised in the discourse across various sectors and regions. This has led to many collaborative efforts between multiple stakeholders, including governments, civil society, private sector entities, and academic institutions (<http://tinyurl.com/3xmx33w>). The UNESCO Recommendation on the Ethics of Artificial Intelligence

(AI) is an example of this (<http://tinyurl.com/n635m7yv>). There is also increased regulatory attention around the world to address issues such as confidentiality, security, privacy, and personal data protection. Human rights and UN institutions, such as the HRC, the CESCR and the CFS have also put forward guidance on how states should implement their human rights obligations in the context of economic, social and cultural rights (see previous section). This points to the need to translate ethical principles and considerations into policy and legal frameworks that allow people to claim the respect of their rights.

Yet, many significant risks to the fundamental values of freedom, equality, solidarity, tolerance, shared responsibility, and respect for nature continue to remain unaddressed. The abusive deployment of digital technologies has been linked to perpetuation of hate, violence, discrimination, entrenchment of discrimination and historical prejudices, undermining of labor rights, and threats to peace and security. The environmental impact of digital technologies is also substantial, contributing to ecological harm through greenhouse gas emissions, overuse of water resources, contamination of natural environments, and the generation of electronic waste (<http://tinyurl.com/wzmztcc2>, <http://tinyurl.com/2s36psjk>). Furthermore, the proliferation of disinformation, misinformation, and hate speech negatively impacts information integrity, consequently undermining democratic processes and the achievement of SDGs.

To address these challenges, there is a growing need to strengthen the relationship between ethics and rights in the development and deployment of digital technologies. This includes moving beyond the current liberal human rights view to ensure that AI systems and digital technologies are equitable. For instance, the proliferation of a discourse of 'ethical AI', which, even if useful, is unable to address the here-and-now damage caused by the concentration of economic and political power, and entrenchment of social inequities in the design and deployment of AI systems. Industry-led self-regulation has not yielded dividends in protecting human rights in AI systems. AI ethical principles should be validated through legitimate democratic processes. A human rights-centered approach to ethical frameworks is crucial as it can bring accountability in its fullest sense, including remedy. The development of such binding principles should embrace a consultative approach and include the participation of civil society and marginal actors. The private sector cannot also be viewed in a monolithic way. There are smaller players in the economy lacking the market and lobbying power of Big Tech, and the former's participation in policy processes is vital. The state has a duty and responsibility to steer and shape the future of digital governance and ensure the realization of human rights, equity and justice through its allocative, distributive and redistributive roles. Global digital governance needs to be based on human rights-based policy frameworks, which operationalize an

ethics of care, trust and guardianship to ensure that the potential harms of digital technologies are mitigated, and their benefits are equitably distributed.

C11. International and regional cooperation

One of the primary agendas of the WSIS outcomes was to enable developing countries to participate fully in the information society. However, in a highly unequal global digital economy, this has not happened. Of the 2.9 billion people, which is 37% of the world population that have never used the internet, 96% live in developing countries (<http://tinyurl.com/2d77d4h7>).

Improving financial mechanisms is a key goal of the outcomes; however the manner in which international economic law is structured disadvantages developing countries. For instance, the moratorium in the WTO on imposing customs duties on electronic transmissions prevents developing countries from raising revenues for their public and social development purposes. Additionally, given the current debt crisis where developing countries have acquired massive debt obligations, and the increasingly unjust debt structuring policies, there is little scope for these states to participate at an equal footing (<https://tinyurl.com/davdpt46>).

As such, global digital cooperation has failed. The WSIS outcomes are held to ransom because of clear omission by the powerful economies. The importance of creating enabling infrastructure in all countries of the world — both physical and digital — has been consistently ignored by developed countries. There is no allocation of Official Development Assistance or public financing for infrastructural development for developing countries.

(Also refer to the answer to Q.2).

Question 4. What are the challenges to the implementation of WSIS outcomes?

The WSIS outcomes envisaged an Information Society that enabled all participants to “create, access, utilize and share information and knowledge” in order to promote sustainable development and improve quality of life. The world, twenty years on, looks different.

(i) Monopolisation of the internet and digital marketplaces by a few Big Tech platforms and powerful countries:

The internet, once promised to be a commons that is independent of geopolitical rivalry (<http://tinyurl.com/fyeupmr8>), has become a centralized marketplace run by large and powerful US and Chinese platform companies (<http://tinyurl.com/54aahjar>). Infrastructure supporting the platformized internet is also run by Big Tech companies who have broken with impunity every norm in the marketplace rulebook for fairness and transparency, negatively impacting workers, consumers and smaller players in the digital economy (<http://tinyurl.com/2x7n4uey>). Big Tech companies follow a

winner-take-all route. For instance, Google and Meta, having captured all the data in the world, are also investing heavily in undersea cables to connect countries in Africa, to prepare for future data markets (<http://tinyurl.com/yf569b2v>).

(ii) Inadequate and inequitable data governance frameworks:

Data, the lifeblood of the digital economy and the source of Big Tech's digital intelligence, is not governed in a manner that is just, equitable, human rights-based and considerate of the rights of data holders. Driven by digital intelligence collected from their global user bases, Big Tech companies have captured the conversation on data governance and have invested in lobbying for regulation as convenient to them (<http://tinyurl.com/ymhvu3x9>, <http://tinyurl.com/u977zwnd>). What this means is that the ostensible convenience of platform marketplaces is only a smokescreen that drives user behavior towards options determined by these corporations (<http://tinyurl.com/3cjnarjh>).

(iii) New challenges raised by emerging technology:

WSIS outcomes are rooted in an understanding of the internet that has not accounted for the technological developments of the day. The AI paradigm is slowly but surely cementing its presence in what may be seen as mundane economic activities like hiring, work allocation, wage payment (<http://tinyurl.com/yv9ryfcc>, <http://tinyurl.com/p8fbmkpr>), customer service, etc., and permeating the space of personal choices like recommendations for content (<http://tinyurl.com/mr3pbkwc>). While research shows that people in developed countries, or those with regular engagement online are more aware of their engagement with AI (<http://tinyurl.com/mr3pbkwc>), the majority that lacks the same level of digital literacy or "standard skills" is left behind (<http://tinyurl.com/4m88dr5z>). In a world where 2.9 billion people are still offline (<http://tinyurl.com/378jrbaa>), the harms of AI — e.g. the Robodebt case in Australia (<http://tinyurl.com/566tsk7n>), discrimination and bias, fraud and scams (<http://tinyurl.com/4b5ybm54>) — cannot be adequately debated representational equity.

(iv) Skewed international economic law regime:

International economic law regimes are skewed against developing countries and their needs, and push a neoliberal agenda oriented towards the already developed and economically powerful countries (<http://tinyurl.com/mwkf54nu>).

(v) Environmental consequences of digitalization:

The huge environmental consequences of digitalization, through the consumption of natural resources, energy usage, and the challenge of e-waste disposal, as well as its disproportionate impact on poor and marginalized communities also pose a great challenge to the implementation of WSIS outcomes.

In light of these challenges WSIS outcomes must ensure that the vision for a people-centered internet includes structural justice considerations for workers, indigenous peoples, farmers, and others on the margins — all impacted in various ways by the onslaught of the dominant paradigm of a Big-Tech-led digital economy, and respect for planetary boundaries.

Question 5. How are these challenges being addressed? What approaches have proved to be effective in your experience?

“Future generations will judge whether the present generation seized the opportunities presented by the age of digital interdependence. The time to act is now” (<http://tinyurl.com/2s3udm5u>). This observation by the UN Secretary General highlights the need for action in the digital age. To create an open, free and secure digital future for all, the following approaches are needed:

(i) Public financing for public digital infrastructures in developing countries:

Building foundational platforms, data and AI infrastructural capability is crucial to secure the digital future of developing countries (<http://tinyurl.com/54xy66dm>). This is non-negotiable in order to put countries in the Global South on the path to data-supported development. For example, a public standard such as the UPI of the National Payments Corporation of India can be leveraged to set up a context-appropriate financial inclusion solution by a cooperative bank (<http://tinyurl.com/4axen56x>). Or, an interoperable platform marketplace protocol, like Beckn, can be used to evolve alternative e-commerce solutions for marginal farmers and MSMEs by a social enterprise (<http://tinyurl.com/2s8vabjz>). Another example is the creation of common European data spaces in a number of strategic fields: health, agriculture, manufacturing, public administration, etc., to harness the value of data for the benefit of the European economy and society (<http://tinyurl.com/56exsjaf>).

The creation and sustainability of digital innovation ecosystems such as the above hinges on adequate investment in local digital infrastructure and human capabilities. This needs public financing, public-community partnerships and a well-governed private sector. Creating a policy framework for this is an important first step (<http://tinyurl.com/3zh9kva7>).

(ii) Platform models based on collective ownership:

Workers in the informal economy need support to reclaim their civil-political and economic rights in the platform economy. Support for alternative business models that challenge the winner-take-all Big Tech platforms is an urgent need (<http://tinyurl.com/2z4tbw2w>). Platform cooperativism is emerging as an alternative to the dominant platform model. Based on the principles of cooperative ownership, democratic governance, and solidarity, platform coops may be collectively owned and governed by workers, consumers, or both. They need public support to sustain and thrive.

The future impact of this model depends on sustained investment in the establishment of an institutional ecosystem to provide financial, legal and technological support to nascent platform cooperatives (<http://tinyurl.com/365cjzyv>).

Further, data collectivism can provide the golden mean between the solidarity economy ethos of the cooperativist movement and the techno-design possibilities of platforms. Data collectivism enables worker organizations to be more efficient, decentralize value and reengineer production and consumption in ecologically sensitive ways. As a viable real economy alternative to platform corporations, data collectivist approaches could also create linkages between worker/producer and consumer cooperatives (<http://tinyurl.com/2z4tbw2w>). Some examples of such alternatives are Equal Care Co-op, a care and support platform cooperative owned by the people who receive support and those who give it (<http://tinyurl.com/669rct7w>), and Drivers Cooperative, driver-owned ride hailing cooperative in New York City (<http://tinyurl.com/2p893vk3>). More such examples can be found here: <http://tinyurl.com/4fkeud9j>.

(iii) A new class of worker rights in the platform economy and accountability frameworks for platform labor companies:

Updating legal regimes and creating a new class of worker rights is a vital need. This would include rights such as the right to disconnect (<http://tinyurl.com/hp5yn2k2>), right to social security (<http://tinyurl.com/e95wnkbp>), right to information and data access (<http://tinyurl.com/47kkdn45>) etc.

Finally, the exploitation of workers in the much-vaunted gig economy can end only if the digital economy is well regulated. This can be done by ensuring that any unfair or predatory practice by dominant players is aptly acted upon. Market needs to remain competitive to ensure that the introduction of the new platform is not derailed by anti-competitive activities of the incumbent players.

It is also important to ensure disclosure responsibilities for platform labor companies through supply chain due diligence frameworks. While the 2023 targeted updates (<http://tinyurl.com/3v86ae2x>) to the OECD's Guidelines for Multinational Enterprises (MNEs) on Responsible Business Conduct (Guidelines) is significant in this regard, it fails to outline the specific impacts resulting from the technology sector on labor and worker rights (<http://tinyurl.com/mr267h6k>).

(iv) Leveraging digital technologies for enhancing democratic participation:

Digital networks can be steered to deliver on the ideals of participatory democracy provided principles for their governance are developed. So-called 'smart governance' trends (characterized by networks and rapid datafication) pose critical concerns for citizenship and people's democratic rights.

There is, hence, a need to develop: standards and benchmarks and the legal limits to manage and steer the data economy; guarantees for representation of the plurality of experience and diversity of standpoints — especially of the marginalized — in democratic governance; and public interest data and algorithms to empower local communities for participatory democracy and collective action (<http://tinyurl.com/4xt99yte>). Barcelona’s experiment with digital technologies to improve democracy and communication with residents is an example of what digital democracy can entail (<http://tinyurl.com/3txar6ve>). Further, Montenegro is a prominent example, where the digital social registry has proven to improve the interoperability and delivery of public services. UNDP support to the development of the country’s Single Information System for Electronic Data Exchange (SISEDE) helped to ensure the interoperability between key electronic State registers, the domestic violence database and the court IT system, to improve the efficiency of the justice and social welfare system. (<http://tinyurl.com/59daaz5x>).

(v) Decentralised, diverse and plural social media spaces:

Alternatives to the centralized and attention-economy driven model of digital platforms need to be urgently explored to tackle harms perpetuated by algorithmic virality and poor content moderation decisions. It is about time that the Big Tech social media model built on mindless algorithmic virality that renders the social fabric of democracy vulnerable to deep erosion and polarization is banned. Decentralized social media platforms based on free software or blockchain solutions are being explored, today. They present immense potential for democratization and creation of open digital spaces, user empowerment and protection of digital rights (<http://tinyurl.com/3e9mxxft>). Scholars and researchers have also recommended separating the content hosting function from the content curation function of social media platforms, in order to enable the development of alternative recommender systems, including algorithms that cater to citizens and break the monopoly power of Big Tech and its negative externalities on the information ecosystem and public sphere (<http://tinyurl.com/4jz4n7ay>, <http://tinyurl.com/yswca8cx>). Such alternatives need to be explored through appropriate regulatory and policy support and funding by the governments.

(vi) Human-rights-based governance frameworks for ICT, including AI and emerging technologies:

The regulatory approach to ICT and AI should deal with the structural imbalances that shape highly unequal paradigms, and rein in Big Tech companies that currently control the playing field. The European Union’s recent legislative initiative to regulate AI is significant, but it is also vital to note the concerns of the critics of the legislation.

Governance measures need to shift from risk reduction to advancing strong institutional frameworks for audit and enforcement; provide for a multi-scalar governance model with justiciable rights at the multilateral level and room for contextual local implementation; ensure the protection and promotion of human rights — civil and political as well as economic, social and cultural rights — putting a special emphasis on marginalized groups and people; recognize different forms of knowledges and knowledge systems and affirm their equivalence; legitimize a role for public authorities and democratic governance mechanisms; and programme sustainability considerations in AI development to tackle extractivism, hyper-consumptive models and other downstream effects of AI (<http://tinyurl.com/54jysr5b>).

Additionally, from the perspective of the Global South, the opacity of algorithms baked into trade deals presents a *fait accompli* for developing countries. Multilateral rules are urgently needed to ensure accountability in AI value chains to protect the right of all peoples to freedom from harm.

(vii) A global digital constitutionalism:

A future society that is inevitably digital must be based on a constitutionalism — a set of norms, principles and rights — that addresses the ethics of liberty, co-dependence and mutuality, the right of nature and more, proactively, iteratively, and democratically. Governments should clearly articulate digital rights of citizens rooted in a civil rights framework as was done by Brazil through its Marco Civil da Internet (Brazilian Civil Rights Framework for the Internet).

(viii) Innovative measures to mitigate the environmental impact of digitalization:

Respect for planetary boundaries should be an abiding principle in development and deployment of digital technologies. Initiatives on digital sobriety (<http://tinyurl.com/y6uxzdpd>), low-tech (<http://tinyurl.com/bddmzmyv>), and circular economy (<http://tinyurl.com/d8nxvwa>) should be explored for implementation at the government, industry, community, and individual levels. At the same time, we must ensure that these initiatives do not reverse the gains of digitalization especially for less developed countries and vulnerable and marginalized communities. We must also be conscious that too often these initiatives are presented as a green solution that is still part of a predatory expansionist process of development, with a capitalist logic of profit generation which must be questioned.

Question 6. What do you consider the most important trends in technology and other aspects of ICTs which have affected implementation of WSIS outcomes since the Summit? What has been their impact?

(i) Rise of digital infrastructural monopolies:

The consolidation of digital infrastructural monopolies is exacerbating socio-economic and political divides, leading to a democratic crisis for both the economy and the polity. The emergence of the US and China as major digital power centers, and resultant neo-colonial dependencies — both infrastructural and economic — for the Majority World represents a geo-political logjam (<http://tinyurl.com/8hxb7fjt>, <http://tinyurl.com/2wtcu8mh>). Meanwhile, ideologies of techno-solutionism in international cooperation have contributed to de-democratization, a slide-back on democratic principles of governance.

(ii) Precarious work in the platform economy:

The challenges facing working people — the majority at the margins — have been compounded in the digital economy. Promises of economic mobility, access, and flexibility that underpinned digital imaginaries of future work and security ring hollow. Disruptions in the world of work based on algorithmic optimisation, have instead delivered economic precarity, employer overreach, reversal of labor rights won generations ago; with companies amassing inordinate fortunes and ever greater power while workers are left dispossessed, disenfranchised and atomized (<http://tinyurl.com/5byhdjk5>).

(iii) Digital infrastructural divide between countries:

Further, there is a growing gap in technological capabilities between countries that are AI leaders and those lagging behind in technological advancement, which is exacerbated by current IP regimes that impede AI development for public and social ends. While open-source models can play a pivotal role in democratizing access to AI technologies, within the current landscape, resources and investments available to open-source efforts are overwhelmingly controlled by Big Tech. These issues extend to public goods/national AI initiatives as well, creating a situation where innovation ecosystems are under siege and not able to evolve independently and for applications in public AI ecosystems (<http://tinyurl.com/5byhdjk5>).

(iv) Online violence and undermining of civic space:

The challenges of online violence, abuse, and hate speech (especially against women), exclusion of minorities and loss of privacy are likely to be exacerbated with the advent of Web 3.0, all of which impact on digital rights, social justice, and equity.

The future promise of AI, ironically, seems frightening not because of the uncertainty around technological possibilities, but because dominant nations and super-rich corporations in their insatiable greed for power and control are deploying digital innovation to unleash war, oppression and destruction of people and planet alike. The undermining of civic space and rise of authoritarianism, today, corresponds in large part to the co-option by states of the centralizing prowess of digital technologies.

(iv) Growing unsustainability of the digital economy:

The process of digitization has come with unsustainable environmental costs — from strip mining of rare earth minerals in conflict zones for development of hardware to huge resource requirements and GHG emissions footprint generated by the global data centers of Internet corporations. These environmental consequences further aggravate societal divisions and inequalities as regions and populations that benefit the least from digital technologies are also the ones that bear the heaviest environmental costs for their production and use (<http://tinyurl.com/d8nxvwa>).

The set of concerns that accompany emerging trends are therefore profoundly worrisome and foundational.

Question 7. What should be the priorities for stakeholders seeking to achieve WSIS outcomes and progress towards the Information Society, taking into account ongoing and emerging trends?

The WSIS+20 review must recognize and call out unequivocally the injustice and extractivism of the mainstream digital economy and recognize the need for an inclusive, equitable and just global governance regime for data and AI. Alternative pathways for platformization that account for a just digital transformation are the need for the hour. The project of effective democratization and internationalization of technical policy issues in Internet governance (pertaining to Critical Internet Resources and affirmed by the WSIS agenda) is still work in progress, while the task of ‘enhanced cooperation’, as distinct from the policy dialogue process of the Internet Governance Forum (Para 69 of the Tunis Agenda), an unfinished agenda.

The following aspects should be priorities for WSIS outcomes. Governments need to build consensus for:

1. A just and equitable data governance regime that is based on and promotes human rights
2. Refining the human rights framework to account for data rights
3. Improved taxation structures to meet the challenges of the digital economy
4. Digital public infrastructures created by and for the Global South

5. A responsible and responsive AI paradigm, which is translated into effective regulatory frameworks
6. An International economic regime that serves all
7. Digitalization pathways that respect planetary boundaries

The above priorities are elaborated below.

1. A just and equitable data governance regime that is based on and promotes human rights

The WSIS review process must:

- Enable participation of all governments to determine the global digital and data governance roadmap in a democratic manner. A multilateral, people-centered, public policy mechanism is necessary to keep the Internet, and platform, data and AI technologies free from corporate capture.
- Make space for meaningful participation of civil society at the table for negotiating a new social contract for our digital future, taking into account the huge power asymmetries between civil society and technology corporations. Governments have a legitimate public policy role in the digital domain, but this legitimacy must be earned through transparent, wide-spread, public consultations that engage civil society and social movements.
- Renew the mandate of the Internet Governance Forum (IGF) as a platform for inclusive knowledge sharing, dialogue and debate on digital governance for people and institutions from different disciplines, stakeholder groups and regions.
- Ensure that laws and policies for digital governance protect and promote human rights, maximize social benefit and curtail market tendencies for concentration and exploitation.
- Recommend setting up of a high level Working Group that reports to the General Assembly with the mandate for developing a binding international governance regime for data. This should straddle both economic and non-economic issues, and operate from the principles of data flows with human rights and equity, and recognizes development as incontrovertibly linked to people's data sovereignty.
- Declare data resources to be a common heritage of humanity given that data is continually co-generated through socio-environmental interactions. A fair and just international regime for the social resource of data includes recognition of community sovereignty over data, indigenous data sovereignty and protection of traditional knowledge from appropriation by Big Tech.

2. Refining the human rights framework to account for data rights

The WSIS review process must:

- Acknowledge the economic, social and cultural rights implicated in datafied life — from the right to a decent living, the right to health, the right to food, the right to education, the right to enjoy the benefits of scientific progress, the right to innovate, the right to access knowledge — including data-enabled intelligence, and so on.
- Help identify specific risks arising from the use of data for marginalized groups and people as well as measures to address them and ensure accountability.
- Recognise that a new class or typology of rights at the intersection of digitalization and traditional human rights discourse is vital to protect political, social and economic freedoms in the current conjuncture. These include, but are not restricted to, the right to privacy and decisional autonomy, the right to data access, the right to explanation, the right to be forgotten, the right to be represented (or not) in digital systems, the right to participate in decisions about data innovations, protection against all forms of data discrimination including unfair denial of citizen entitlements, and workers' data rights in algorithmic workplaces.
- Ensure both state and non-state actors are accountable for upholding these rights through appropriate formal legal-institutional mechanisms that place citizen voice and the right to be heard at the center.

3. Improved taxation structures to meet the challenges of the digital economy

The WSIS review process should:

- Aim to redefine the mandate of international financial institutions to meet the challenges of a new era of digitalization, and provide assistance to build platform and data infrastructure to support digital industrialization in the Global South.
- Create fairer digital societies by eradicating tax havens. Reform of the international taxation regime is urgently needed to put a stop to base erosion and profit shifting practices of transnational digital corporations, and enable Global South nations to generate adequate fiscal revenues to develop social care infrastructure.

4. Digital public infrastructures created by and for the Global South

The WSIS review process must:

- Ensure that the creation of digital public goods/infrastructures at the global and national levels is backed by robust safeguards to protect privacy and personal data, enhance autonomy, and promote equitable benefit sharing.

- Establish public financing and ODA for the development of digital infrastructural capabilities in the Global South.

5. A responsible and responsive AI paradigm, which is translated into effective regulatory frameworks

The WSIS review process must:

- Establish mandatory ex-ante and ex-post assessments of risks to human rights and threats to peace and security in relation to specific uses of AI at every stage in their development.
- Call for policies to decentralize AI innovation by breaking AI monopolies.
- Support the development of human rights-based policy frameworks to regulate AI and ensure accountability.
- Create public financing mechanisms to boost technological capabilities of developing countries for democratizing AI's economic and social value.

6. An International economic regime that serves all

The WSIS review process must:

- Oppose digital trade rules that prevent nation-states from enforcing and implementing transparency and accountability regulation on AI services and application providers (such as the prohibition on source code transfer).
- Enable reforms to Intellectual Property regimes, including through the introduction of new licensing systems similar to the creative commons regime so that community contributions are recognized in the development of generative AI.

7. Digitalization pathways that respect planetary boundaries

The WSIS review process must:

- Underscore the need to respect planetary boundaries and ecological well-being as a central principle in digital innovation systems and infrastructure development.
- Design a new socio-institutional architecture of digitality that respects the human rights, dignity, and agency of all people as well as the rights of nature inherently associated with natural ecosystems and species.
- Call for developing policies and standards, including due diligence guidance for digital services corporations, to eliminate algorithmic and ecological harms in digital value chains, and encourage environmentally-friendly digital services and innovation.

Question 8. How will ongoing trends and new developments in technology, especially in the deployment, access, and use of ICTs, impact future progress toward human development, specifically in relation to the SDGs?

The current trends of development in the technology sector are heavily driven by investments backed by corporate interests. The impact of such digitalization is visible across aspects of health (<http://tinyurl.com/3bfryb6c>), agriculture (<http://tinyurl.com/296evspk>), labor (<http://tinyurl.com/3dnajmza>), knowledge capture (<http://tinyurl.com/5e23evj7>), to name a few. Datafication in all of these sectors means that deployment, access and use of ICTs is happening in a particular manner that hollows out the public value of the digital. Corporations that use open data for innovation — say, public data on food systems — use IP to enclose data for their own profit purposes. This not only reduces its accessibility and downstream use, but also makes food systems reliant on the proprietary knowledge and information that these corporations provide (<http://tinyurl.com/5n989fwf>). In the platform economy, the considerations of decent work — fair income, secure employment and safe working conditions, social protection, ability to organize (<http://tinyurl.com/4udzde46>) — have been found to be patchy at best, with a race to the bottom system of work that exploits workers and externalizes both risk and cost to them (<http://tinyurl.com/wympdb7p>). Regulatory frameworks for AI, especially ones that governments are considering (as in the EU AI Act) seek to navigate important, and often negative, implications of AI technology, in creative work (<http://tinyurl.com/y2hyej4>), knowledge systems (<http://tinyurl.com/3b76e9hc>), health (<http://tinyurl.com/ycxzjhi>) as well as the environment (<http://tinyurl.com/3xfbhw57>).

As such, these developments span a host of SDGs, and largely don't bode well for human development and safeguarding current and future socio-political rights of people. Techno-solutionism is not going to solve the polycrisis of today's world. In order to ensure that current technological developments support and improve human development indicators and meet the goals of SDGs, such development must account for sovereignty and autonomy of developing nations and peoples, enable their participation in a meaningful way that is not subverted by overarching corporate agenda of profit-making and extractivism. In order to be able to do that, it is important to hold corporations accountable, and ensure that their deep pockets and lobbying tactics do not result in anti-democratic and unjust international policies. A truly democratic multilateral process that includes the standpoints of the most marginalized in governance mechanisms will ensure that SDGs can be achieved in their letter and spirit within the technological paradigm.