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

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Contribution by WHO

to the CSTD 2026-2027 priority theme on
"Data Governance for Development: From Asymmetry to Equitable Stewardship"

Background:

The 29th CSTD annual session selected “Data Governance for Development: From Asymmetry to Equitable Stewardship” as the priority theme for its 30th session (2026-2027). This theme addresses SDG 9 “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”, SDG 10 “Reduce inequality within and among countries”, as well as Objective 4 of the Global Digital Compact “Advance responsible, equitable and interoperable data governance approaches”.
As data becomes a strategic resource for innovation and sustainable development, unequal access to data, infrastructure and governance capacity is creating new global asymmetries. At the same time, inequalities are embedded in the processes through which data is generated and used. Harmful biases in data collection, as reflected in the gender data gap, can lead to the systematic underrepresentation of certain groups like women and girls, affecting both developing and developed countries alike.
Under this theme, the Commission will examine the structural disadvantages that are particularly faced by developing countries in building and leveraging data capacities, including challenges related to infrastructure, ownership and stewardship, free and trusted cross-border flows, and benefit-sharing. The Commission will identify good practices and policy approaches for equitable and interoperable data governance that support development goals and explore how international collaboration can advance inclusive digital cooperation, ensuring that data contributes to shared prosperity and 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 2026. 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. **What key challenges do countries face in building and leveraging data capacities, including infrastructure, ownership and stewardship, free and trusted cross-border data flows, interoperability and benefit-sharing? (Please provide examples and, where possible, quantitative evidence or indicators of these challenges and their impacts)**

Response:

- *Capacities to analyze data effectively at all levels (eg. Applying rigorous statistical methods or epidemiological techniques, modelling, estimates norms standards to raw data).*
- *International partners and funders having their own agendas and data needs that may not be aligned with National priorities.*
- *National institutional capacity building and investment.*
- *Adapting and using digital norms and standards for hand held records.*
- *Coordinating multi sectoral collaboration that align with national priorities and plans.*
- *Adaptation of legal agreements for data sharing and the necessary structures and processes to check legal frameworks for sharing agreements with private sector entities, NGOs or other Member States.*
- *Developing national strategic plan for integrated household surveys fto synergize national population based surveys.*

2. **How do inequalities affect the way data is generated, collected, governed and used for development? In particular, how do biases in data collection and use, such as gender data gap, affect policymaking, service delivery and development outcomes? (Please provide examples, evidence and any measures being taken to address these disparities)**

Response:

- *The populations with the greatest needs are often those least visible in data systems. Consequently, inequalities in data generation and governance can directly translate into inequalities in health and development outcomes.*

- *Communities left behind (eg. those living in fragile contexts – eg. Humanitarian or climate change affected, urban poor, rural remote, Indigenous populations, nomadic populations, those affected by stigma and discrimination) often live in 'quasi legal' situations or are mobile. This places them at risk and they are often not served by governmental services, but by private sector or NGOs. Data coordination and applying norms / standards in these environments is challenging and leads to greater inequities around data that could be used to track, monitor and address the needs of the most vulnerable populations. These populations also have unequal opportunities to access internet services or have devices that could support with health education or increase awareness of various health messages.*

- *Biases may happen when health workers may not be of the same background / ethnicity / language group of populations they serve – this may lead to lack of trust or even resistance to various public health interventions. Populations may 'hide' because of this.*

- *Lack of trust in institutions can also affect willingness to share sensitive personal information. For instance, some individuals may fear that data could be used for immigration enforcement, discrimination, surveillance or exclusion from services.*

- *Many marginalized populations are underrepresented or absent from official statistics because they are not captured by censuses, civil registration systems, household surveys or administrative records. As a result, the needs may be underestimated or unknown, leading to inequitable allocation of resources and services.*

- *When data used for decision-making are not disaggregated by characteristics such as sex, age, economic status, education, geographic location, ethnicity, disability status and migration status, this limits the ability to identify inequalities and target interventions to populations that are being left behind. For example, gender data gaps can result in policies and programmes that fail to address the specific needs of women and girls and may reinforce existing inequalities.*

- *Emergencies, disasters and outreach communities limit data collection on a timely and comprehensive manner. This has especially been the case in situations like Yemen, Sudan, South Sudan and Afghanistan as well as Myanmar.*

3. **Based on your organization's work, what national strategies, regulatory frameworks or policy instruments have been effective in promoting equitable and interoperable data governance? What are the lessons learned? (Please describe any specific challenges, failures or successes encountered during implementation)**

Response:

- *WHO has promoted the 'data journey' concept (in line with NSOs) and come up with a simple definition of health data governance focusing on the necessary standards and structures to coordinate and manage the data journey to produce TRUSTED, QUALITY SECURE data. Standards that WHO applies (but not limited to) include: International Classification of Diseases (ICD 11) and health interventions (ICHI), Health Equity Assessment Toolkit and other WHO health inequality monitoring tools and resources, HL7 FHIR, SMART guidelines, Enterprise architecture approach, Digital Implementation Investment Guide (DIIG – still in draft), Health Data Governance Framework (currently in draft form, due for completion by end 2026), WHO data principles, various WHO policies (personal data protection, sharing, information disclosure and research*

sharing), Geographic Information Systems (GIS) centre work, various coding standards, GATHER guidelines, FAIR principles, reference data standards.

- *The main challenges have included raising awareness of the importance of investing in data standards and infrastructure, when often it is taken for granted or risks of not doing so not appreciated. This also includes raising awareness of senior management of risks and as part of risk management process and mobilizing resources required to actually implement policies (eg. Personal Data Protection Policy). Policies are often drafted but not necessarily resourced.*
- *More focused work is required to support countries to develop and enact their national data strategies, invest in underlying data and digital infrastructure. The new round of SCORE assessment of health data system profiles, could provide opportunities for developing evidence based solutions to investing in underlying infrastructure and weaker areas of health information systems (such as CRVS).*
- *WHO supports an convenes partners and Ministries of Health to help identify resources esp for low- and middle-income countries. WHO hosted partnerships such as HDC, GIDH and others are crucial for this.*

4. Can you share examples of initiatives that have helped reduce asymmetries and promote more equitable data stewardship in development sectors such as public services, education, health and agriculture? (Please provide examples, lessons learned and remaining challenges where possible)

Response:

- *Health Equity Assessment Toolkit; GIS centre*
- *Please see three pre reads for Health Data Governance summit that give specific health sector examples.*
- *Efforts to strengthen health inequality monitoring in countries have sought to reduce asymmetries in access to inequality data, increase analytical capacity and emphasize use of inequality data for decision-making. WHO have developed a series of free eLearning courses, training programs and technical guidance to build national capacities in the analysis and reporting of disaggregated health data, particularly within Ministries of Health and national statistical offices. Open-access tools such as the Health Equity Assessment Toolkit (HEAT), the Health Inequality Data Repository (HIDR), step-by-step manuals and other resources help countries independently conduct health inequality data analysis and generate evidence for decision-making.*
- *One lesson has been the value of making analytical methods, training materials and data resources openly available and user-friendly, helping to reduce reliance on external expertise and strengthening national ownership of data systems. Another is the importance of investing not only in data collection, but also in the institutional capacity to analyze, interpret and use inequality data.*
- *Remaining challenges include digital and data infrastructure, ensuring marginalized populations are adequately represented in data collection systems, barriers to accessing and linking data across sources and sectors to get a more comprehensive picture of inequalities, and political will and leadership for using inequality data for decision-making. There is also ongoing need to balance greater data availability and sharing with strong privacy protections, trusted governance mechanisms and equitable stewardship of sensitive information.*
- *WHO's GIS centre has been instrumental is supporting countries to name, map and highlight functions of health facilities in many countries. This in itself has helped increase more efficient planning for logistics and supply chains in the context of health sector planning*

- *WHO's GIS centre has been very active in emergency settings and polio eradication work – supporting inequities in different settings and support for estimates of denominators of populations and micro planning work in hard to reach areas..*

5. **What mechanisms or institutional arrangements have proven useful in fostering collaboration on data governance for development among different stakeholders (e.g., university-industry, private-public, or multi-stakeholder initiatives)?**

Response:

- *Collaborative partnerships have helped to align partner resources with country priorities, enabling the ecosystem to more effectively leverage resources to achieve articulated country priorities. WHO convenes stakeholders through different mechanisms such as Health Data Collaborative (HDC), Global Initiative on Digital Health (GIDH) and Global Initiative on AI for Health (GIAI4H). Members include governments (e.g. Ministries of Health), civil society, funders, UN agencies, private sector, academia and global and regional stakeholder specific networks.*
- *Linkages with international fora, such as Data Forum or various UN DESA meetings has helped strengthen collaboration with other sectors (eg education, nutrition and WASH) as well as national statistics offices. Various member states and civil society groups have been active in this space and continue to create political momentum for this agenda in health.*
- *The COVID pandemic raised the profile of health data sharing more and this supported an internal WHO focus on supporting countries and using our policies for sharing data. Renewed interest and need for personal data protection has played a role in better coordination internally.*
- *Internally, previous coordination mechanisms supported three level work across WHO in data. Our new department for data, digital health, analytics and AI (DDA) coordinates efforts across HQ, regional offices and country offices reducing duplications and increasing coordination..*

6. **What major bilateral, regional, or international partnership have helped advance equitable and interoperable data governance? (Please describe the benefits of participating in these partnerships, as well as any challenges related to coordination, capacity, trust, interoperability or benefit-sharing)**

Response:

- *The WHO hosted Health Data Collaborative (HDC) has been instrumental in having a multi stakeholder working group that has helped lead the drafting of a health data governance framework that could be adapted and used by countries as well as being considered a s norm / standard for WHO*
- *The WHO hosted Global Digital Health Partnership (GDHP) also has an active working group on health data governance that will highlight good practices to be shared and contribute to the ongoing process to develop a health data governance framework.*

- *Regional networks at EMRO, UN partners, leage of arab states, Academia and NGOs are collaborative for developing and improving quality data and information systems using health data systems evidence to support meaningful actions*

7. How can international cooperation strengthen equitable and interoperable data governance to ensure that data contributes to shared prosperity and sustainable development? In what ways can the UN CSTD contribute to this effort?

Response:

- *UN bodies and processes support member state driven processes, which can lead to greater ownership and transparent dialogue, with accountability mechanisms. This is especially important as health data governance can play a key role in governance for AI in health and support TRUSTED, QUALITY and SECURE data. The UN system can support this and this may increase trust in health systems more broadly.*
- *A recent inter UN review of data governance – led by the JIU – will help reveal some good practices that can be shared across UN entities – this may increase effectiveness and efficiency as we learn from each other*

- *UNDESA can play a key role here, as can the UN SG's data strategy to increase efficiency and sharing of good practices data governance. This has been useful for us with UNOCHA (humanitarian contexts) and also with personal data protection issues – with ICRC and others.*

- *Recently two WHO supported partnerships supported two health data governnance efforts – Health Data Collaborative (HDC) working group on health data governance framework (with multiple partner and country eforts) and the Global Digital Health Partnership (GDHP) working group on Health Data Governance) that has ongoing efforts to identify good practices.*

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

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