Submission to the UN CSTD Working Group on Data Governance

Track 3: Considerations of Sharing the Benefits of Data

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The below submission includes answers to select questions shared by the co-facilitators for this track. Question numbers are indicated as per the numbers in the online submission form. Responses are followed by a list of relevant readings and resources on considerations of sharing the benefits of data.

Q8. What dimensions of "benefits" (economic, social, and other indirect aspects of it) should the track consider and why?

(i) Seizing the development benefits of data—the case for a resource governance regime

UNCTAD's <u>Data for Development Report 2024</u> classifies the development benefits of data into two critical dimensions. Firstly, data constitutes a new fundamental economic input in the production process that creates new markets and fosters novel ways of economic value creation. Secondly, data offers societal benefits that extend beyond the exclusive gains realized by companies/private value. Data-based intelligence can support open science and innovation to address critical social and environmental challenges in the development process and further progress on the SDGs.

Any discussion on the dimensions of data benefits must start from an acknowledgement of data as a relational resource. Data is an outcome of social relations; that is, it arises in the context of the social environment in which human exchanges/interactions take place. As a dimension of the societal commons, the value of data is obtained and enhanced through aggregation and the enhancement of possibilities for heterogeneous uses (Viljoen, 2021).

The prevailing framing of individual property rights in data (through personality rights at the point of data collection and trade secrets protection for data businesses at the point of data aggregation and re-use) only aids enclosure and data lock-ins by first-mover corporations. (Coyle and Diepeveen, 2022).

The market-led trajectories of data innovation have evolved in a direction where the network effects of data aggregation are used for the capture of consumer surplus through novel strategies of rent-seeking. Investment in utilizing the generative potential of data to foster diverse cultures of innovation for non-commercial/public purposes and decentralized/local development (economic and non-economic) is, by and large, lacking in the data economy status quo driven by speculative capital.

The FAIR Guiding Principles for scientific data management and stewardship (Findable, Accessible, Interoperable, Reusable) and the CARE Principles of Indigenous data governance (Collective Benefit, Authority to Control, Responsibility, and Ethics) are often recommended as the way forward to optimize equitable development outcomes from data innovation (Vidotti et al., n.d).

Stewardship principles for specific classes of actors (owners of machine agents in the context of FAIR; Indigenous community representatives in the context of CARE) are an important dimension for benefit maximization. However, data resources need macro-level policy and legal mechanisms that provide an overarching resource governance framework for the unique resource of data.

The equitable distribution of value from the data commons for economic diversification and generation of public value requires macro-level mechanisms at the international and national levels

- a) to ensure that the data commons is managed for the common good/towards the overall public interest and
- b) to set limits on the uses of data that can potentially create significant risks and harms, or lead to benefit-erosion.

(ii) A global data constitutionalism for development

At the international level, a global data constitutionalism is vital as a meta governance framework, with data solidarity as a critical principle to ensure global data equity. El Sayed et al. (2025) propose three pillars as constituent elements of data solidarity: Pillar 1 is about the active facilitation of data uses that generate public value, Pillar 2 focuses on prohibition or strict regulation of those that generate significant risks and harms, and Pillar 3 focuses on the taxation of the data uses that generate private benefits with little or no public value so that profits generated by corporate data users are reinvested in the public domain.

Currently, trade, Intellectual Property (IP), and taxation regimes pose several impediments to equitable sharing of benefits at the global level:

- Digital trade rules restrict developing countries' right to regulate cross-border flows of their citizens' data resources. 'Data flows with trust' based on privacy safeguards are not enough. Developing countries face a situation where Big Tech is able to colonize data markets, capturing data and Al innovation dividends completely. Trade agreements carry clauses that further constrict the space for introducing market regulation, particularly in anti-trust and competition law domains, preventing the enactment of sanctions against monopolistic data business practices. The right to regulate data for "digital sovereignty and the right to development" (BRICS Declaration on Al) is sacrosanct. International data solidarity (coordinated action across local, national, and global tiers to maximize the benefits of data for and eliminate data harms to people and the planet) must coexist with the principle of subsidiarity, affirming the equality of all states in international law.
- The dominant IP regime enables first-mover platforms to aggregate and control societal data resources in perpetuity by weaponizing trade secrets protection, resulting in a 'public data deficit' that erodes benefits and causes huge losses. The Worker Info Exchange (2024) has demonstrated how regulatory failure to secure public access to gig economy data from Uber masks £2 billion per annum in wage theft, safety violations, and rampant emissions.

Governments need to invoke public interest exemptions of the TRIPS regime to enact national legislation for mandatory data sharing obligations in the public interest on dataholders who have enclosed valuable societal datasets (such as real-time transportation or meteorological data). Additionally, as the BRICS Leaders Statement on the Global Governance of Al notes, "a balanced approach is needed to protect intellectual property and safeguard the public interest" and from this standpoint, we need to evaluate how to make traditional IP regimes fit-for-purpose in the Al age. The data age has presented international governance regimes with new challenges – new threats to the cannibalization of knowledge commons posed by unauthorized data and Al use, being a case in point.

• Tax avoidance by transnational digital corporations through base erosion and profit shifting tactics prevents governments from recovering data value that has been privatized. As the Global Digital Justice Forum (2025) has highlighted, a fairer and more inclusive global corporate tax system is urgently needed for the digital economy in order to remedy the erosion of benefits from the public domain and to build back the capability of developing countries to generate public value propositions from datasets. The UN Tax Convention, currently being negotiated, should enable developing countries to effectively address issues like the taxation of digitalized services towards redistributive justice.

(iii) A robust national public law framework for governing the data commons

At the national level, a public law framework that governs the data commons from a data justice perspective and recognizes societal rights in data is necessary. National data rights regimes must actively work towards human and planetary flourishing. It must expand the rights of data subjects beyond the right to personal data protection and rights against data harms to include the right to control the use and re-use of data in downstream uses. Working to break the stranglehold that a few data holders currently enjoy over the data resources they aggregate is essential to prevent benefit erosion. To protect and promote wider social benefits, national data regimes must adopt a data justice approach that includes:

a) An expanded rights regime for data subjects beyond privacy and anti-profiling

Adapting from the GPAI's (2022) recommendations, we advocate an integrated set of rights for data subjects in the societal data commons, from a data justice standpoint. These include the right to:

- access and port one's data, including designating data stewards to manage one's data:
- erasure and correction of data;
- an economic share in profits derived from data:
- benefit from one's data, and avoid economic harm;
- appropriate representation in data, including to opt out of data sets without denial of benefits and services;
- participate in the governance of data and relevant economic systems based on data

A data justice framework does not preclude privacy rights; in fact, it is rooted in a more nuanced approach to the loss of autonomy in an extractivist data paradigm. It advocates for a proactive, rights-based policy roadmap that recognizes a wide array of roles, responsibilities, and rights of stakeholders.

b) Conditional access rights that limit de facto IP rights of first movers

Gurumurthy and Chami (2022) have proposed a data semi-commons framework that outlines a conditional right to non-exclusive access in the base layer of data for data holders. In the data they have directly collected (in compliance with personal data protection legislation and the law of contracts/other relevant laws of the land), data-holders have a 'right to use'. This right includes the right to the processing of such data for the generation of inferred data and the right to obtain profits from inferences/intelligence, subject to legally laid out limits for market fairness. In processing the data collected and in the routes they pursue to generate value from 'inferred data', data-holders are perennially obligated to respect data subjects' right to privacy. So, in addition to safeguards in personal data protection, data-holders must ensure that even with respect to the non-personal data that they have collected, any act of processing does not lead to profiling. Data-holders have a mandatory duty to share data as required by their obligation to respect the rights of data-seekers, who may be individual data-seekers wanting to exercise their rights of data access and portability, governmental authorities seeking data in the public interest, or private entities seeking data for essential innovation.

Q10. Which governance arrangements (for example, standardization, finance, intellectual property, and data protection in a broader sense) impact benefits of data and can such arrangements help address equities related to benefit sharing?

At the national level, in order to promote an enabling environment for equitable benefit sharing, the following data governance measures are critical:

(i) Shifting the basis of privacy and data protection regulation to "data use" from "data type"

Evidence increasingly demonstrates that governing data markets and innovation from a "data type" perspective (that is, grouping data into a priori categories of personal & non-personal data and sensitive & non-sensitive personal data) may be inadequate to address privacy violations and risks of discriminatory data profiling. This is because advanced analytics can turn even "non-sensitive" data into sensitive personal inferences (Solove, 2024). Similarly, predictive behavioral modelling based on aggregate, anonymized data can generate new fields that stigmatize or exclude vulnerable groups, making protections against automated profiling critical.

To guard against downstream harms, regulation should institute clear protections that are proportionate to the harm and risk involved with data collection, use, and transfer, straddling primary (where data processing directly enables the creation of services for data subjects/originators) and secondary uses (aggregate reuse for innovation or research) of all classes of data. Crucially, individuals and communities must have a right to be consulted and determine the extent of data sharing in both cases (Gurumurthy et al., 2025). Independent oversight authorities should mandate risk assessments, disclosure of dataset linkages, and limits on processing that risks re-identification or discriminatory impacts.

(ii) Enabling regulation for alternative institutional models and mandatory data sharing

a) Policymakers should create enabling regulation and incentive structures for alternative institutional models of data governance to take shape in the local economy, such as:

- Data collaboratives that pool public and private datasets under independent oversight to enable socially valuable uses; for instance, in urban planning or public health (<u>GovLab</u> <u>2024</u>).
- Cooperative models that treat data as a collectively-owned asset where contributors are
 also members, with formal rights in governance and revenue-sharing (Micheli et al., 2020).

b) In today's data economy, where valuable datasets are concentrated in private firms (thus restricting their use for public benefits), the promotion of voluntary data sharing initiatives may be insufficient to overcome entrenched monopolies (<u>Gurumurthy & Chami, 2022</u>). Mandatory data sharing obligations may, therefore, need to be imposed on private sector data holders to provide policymakers with access to both raw and enriched datasets in instances where the wider public interest is implicated (<u>Gurumurthy et al., 2025</u>).

A system of data permits, overseen by an independent authority, can evaluate access requests against a public value threshold, weighing purposes, proportionality, and risks of proposed data uses (Gurumurthy et al., 2025) India's proposed community stewardship model offers another pathway, empowering an independent authority to compel sharing of designated "high-value" non-personal datasets for public-interest purposes, while safeguarding limited trade secret protections (Committee of Experts on NPD, 2020).

(iii) Social licensing initiatives

Social licensing regimes can challenge the in-perpetuity control of data owners. Social licensing may be understood as "the process of building trust and legitimacy from ongoing (i.e., constantly renewed) community or stakeholder engagement and acceptance of how data is being accessed and reused" (Verhulst et al., 2023). The outcomes of such a process of engagement and negotiation could include "a data sharing agreement, a set of conditions for access [...] or a design framework for access" that provides a foundation for operationalizing collective data self-determination (Ibid). Data sharing agreements in social/collective licenses can embed reciprocity obligations, mandate contributions back to shared data pools, or establish differentiated data access and use rights for different classes of data actors (Chandrasekhar, 2025).

Take the case of the Nwulite Obodo Open Data License created for those who want to share African datasets and use/reuse African datasets equitably, especially those from/in/of Africa, in the context of building Natural Language Processing innovations. Unlike traditional open licenses that apply uniform terms to all users, the Nwulite Obodo License introduces a tripartite framework that differentiates between users from Africa and developing nations and those from outside these regions. Users from Africa and developing countries must share any modified datasets under the same license and can only distribute them within Africa or to other developing nations.

Commercial use is restricted to markets outside Africa and developing regions. Also, users from outside Africa and developing countries must comply with the same sharing conditions, but are also required to provide royalty payments or other benefits to the African dataset owners. (Koros & Ogonjo, 2025).

Q11. How can investments in digital public goods and infrastructure expand the circle of actors able to derive value from data and participate in data-driven innovation?

In order to participate in data-driven innovation that advances digital sovereignty and the right to development (BRICS' Leaders Statement, 2025), investment in digital public infrastructure (DPI)—at cloud and data infrastructure layers in particular—is critical. DPIs are broadly understood to mean "interoperable, open, and inclusive systems supported by technology to provide essential, society—wide public and private services." But publicness in underlying techno—architectures does not automatically lead to socialization of data dividends of innovation ecosystems that take shape around them. This is possible only by investing in a robust public governance framework undergirding these ecosystems so as to ensure purpose and directionality of infrastructure development towards the common good. This would include: transparency and accountability guardrails, and incentives for co-creation and democratic participation.

At the national level, governments must invest in creating an innovative public good paradigm, as the <u>Thiruvananthapuram Declaration on a New Innovation Ecosystem for our Collective Digital Futures</u> (2023) observes.¹

- Digital public goods that are publicly financed and democratically governed are vital to galvanize people's stewardship of the digital commons, achieve fair distribution of value, and stimulate an entrepreneurial culture.
- Policies must (therefore) promote public provisioning of connectivity, cloud services, common data spaces, digital intelligence, licensing standards, and other digital infrastructure
- The collective right of communities to the knowledge generated from their data and a say in the governance of their data must be protected at all times.

(i) At the national level, investments in common/shared data spaces and public data trusts are important

a) Common/shared data spaces that promote public value data innovation:

In the creation of common/shared data spaces, the realization of public value depends on ensuring that the data sharing environment does not end up as a one-way street where Open Government Data in the domain ends up subsidizing business models, with little or no utility to communities at the last mile/the public at large.

The emerging regulatory framework in the EU for its common health data space is notable for the following features that attempt to preserve the public value potential of downstream innovation (excerpted from <u>Gurumurthy et al., 2025</u>):

A system of 'data permits'. This system ensures that requests for data access from the
exchange meet a particular threshold of public value generation, and only those requests
that pass the test for socially beneficial innovation are permitted.

¹ This Declaration was adopted by the global community of cooperative movement organizations, digital rights groups, development practitioners, and policymakers who were part of the Roots of Resilience Conference, a joint initiative of the Kerala Development and Innovation Strategic Council (KDISC), IT for Change (ITfC), and the Platform Cooperativism Consortium (PCC) that was held in December 2023.

Recognition of the distinctions in data processing between primary and secondary uses, when deciding permissibility thresholds. Primary use refers to data processing for the provision of a personalized service to the data originator, while secondary use refers to data processing of aggregated datasets for research, future innovation, and public decision-making (uses where the data processing may not directly lead to benefits for the data originator). Fairness of consent procedures and safeguards may be a sufficient threshold in processing data for primary uses, but this cannot be the case for secondary uses (where data subject X may also be affected by downstream profiling even if the said service or innovation is not built on datasets that include X's data).

• The baseline of a reciprocity principle is to ensure that those who take data also give back to the pool. The proposed regulatory frame for the EU's common data space in health specifies that "Where a data holder has received enriched datasets following a processing based on a data permit, it shall make available the new dataset back into the data pool" to enable a multiplier effect. Such mandatory data sharing obligations-particularly of NPD-have been found valuable for public decision-making in different sectors, including health and transportation. A reciprocity obligation on the private sector to contribute enriched datasets back to the pool is critical to build both data volume and veracity and ensure innovation multiplier effects.

b) Public data trusts

As <u>Taylor et al</u> (2025) observe: "The public data trust is an alternative data governance model in which a public institution is in charge of managing data. In this model, the public actor accesses, aggregates, and uses the data collected from different sources. The main agreement between data subjects and public actors is a trust relationship that depends on public engagement using consultations, strong accountability mechanisms, and collective benefits. The main value of this model is the public interest that could translate into the use of public data for policy making, social innovation, and to address social challenges".

A well-known example is the DECODE initiative—a joint initiative of the governments of Amsterdam and Barcelona that developed open standards for public data and privacy-preserving apps for digital democracy tools (Bass and Old 2020).

(ii) At the international level, shared cloud and data infrastructure for AI innovation

UNCTAD's <u>Technology and Innovation Report</u> (2025) envisions a new mode of digital public infrastructure that provides greater flexibility, scalability, and global accessibility, which is essential for powering data and Al innovation in the digital economy. This new public cloud and data infrastructure has two components:

- a) Infrastructure as a service, which provides virtualized computing resources on the cloud on an as-needed basis, including servers, storage, and networking.
- b) Data as a service, which provides data on demand through application programming interfaces or cloud-based platforms, enabling users to access, manage, and analyze data sets without owning the underlying infrastructure.

This new mode of a distributed digital public infrastructure operational across institutions and countries using high-speed networks, with system interoperability and security protocols, will need a global institution financed and governed internationally, akin to CERN.

Q7. Please provide details of any: Studies; Reports; Multilateral outcomes; International standards. Other relevant process outcomes. Where relevant, please include a short summary of these documents. Documents may be sent by email to cstd-datagov@unctad.org

The complete list of readings/references for Track 3 is detailed below:

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