





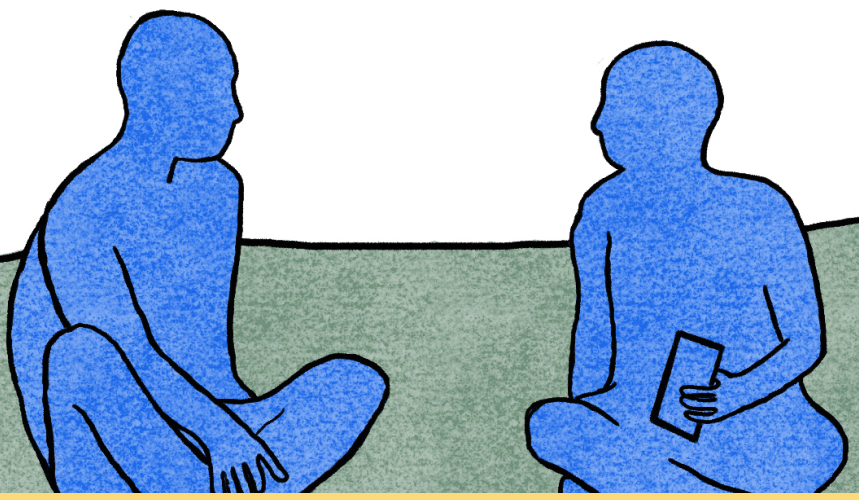
# 1

## Background and Context-Setting

Openness in the digital realm is in crisis. With the extraction of digital content, regardless of its licence or copyright status, tech companies are consolidating their power over the production and dissemination of everyday social, economic, and cultural exchanges worldwide. At a time of growing digital colonialism, corporate surveillance, and authoritarianism, it is more important than ever to democratize decisions about data. Two decades after promoting [The Open Definition](#), the Open Knowledge Foundation is proposing a shift from 'open data' to 'sustainable data commons ecosystems'. This constitutes a paradigm shift that centres data around the communities that produce, use, and share it, and protects data and knowledge in institutional, academic, and creative domains. It also offers insights into the democratic governance of data as part of a socio-technological ecosystem that contributes to the social justice principles of equity, access, participation, and the protection of community autonomy, privacy, and benefit sharing.

The sustainability of such ecosystems depends on the mutual interdependence of data, people and their related activities. These relationships and social structures, however, are grounded in physical systems that depend on embodied materials, territories, and resources. In this report, we aim to identify the main characteristics of a data commons ecosystem as a socio-technical infrastructure that protects individual and collective rights. We also provide key recommendations to ensure the sustainability of collective processes of creation, use, protection, and dissemination of digital content.

Our research has focused on the what, how, and why of data-sharing practices by open local government data as initiatives to serve the public interest and protect rights; open science projects that promote open access to knowledge as a collaborative movement; and open graphic design making use of open licenses for creative works and copyleft culture.



# 2

## Implications for Data Justice and Economic, Social, and Cultural Rights

Considering data as a commons shifts the focus from the availability and openness of the data itself to the question of who benefits from it, who governs it, and which collective social values are produced as a result. The report identifies injustices observed in the case studies that undermine economic, social, and cultural rights (ESCR), and demonstrates how a commons-based approach can strengthen ESCR by returning control, interpretation, and benefits to communities. This can be achieved by: embedding distributive and democratic justice at the core of data governance; ensuring that there are culturally grounded and adequately resourced technical and legal infrastructures; and promoting community self-governance through inclusive, collective participation.

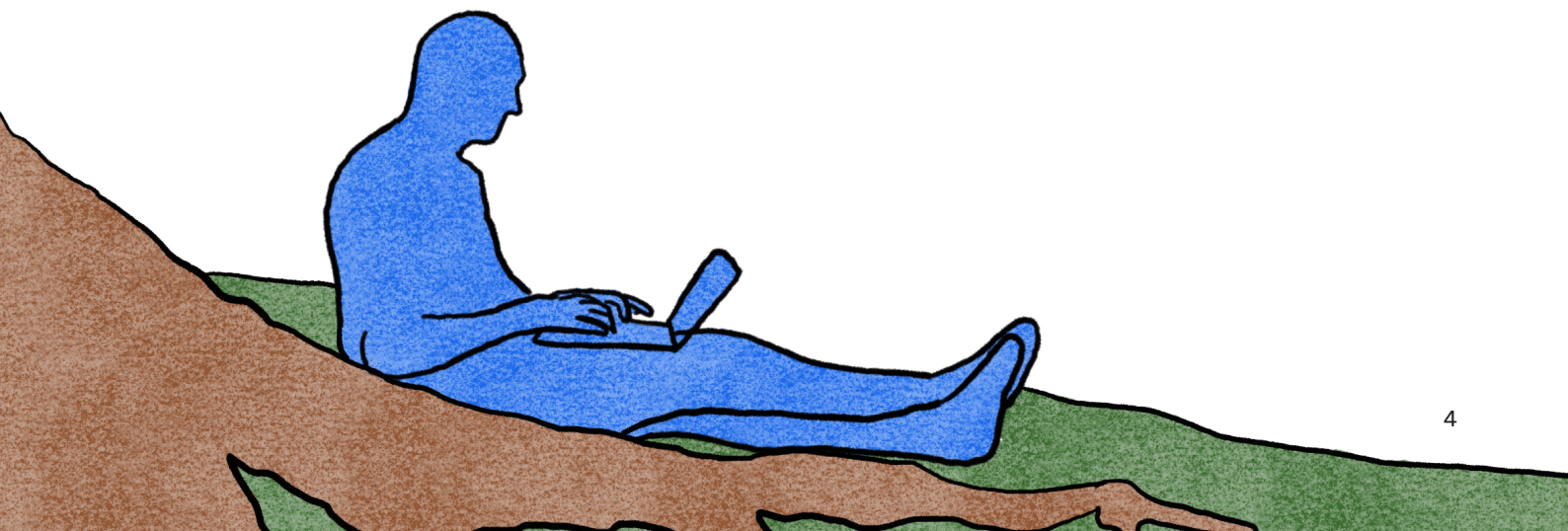
### 2.1 Main elements of data injustice identified

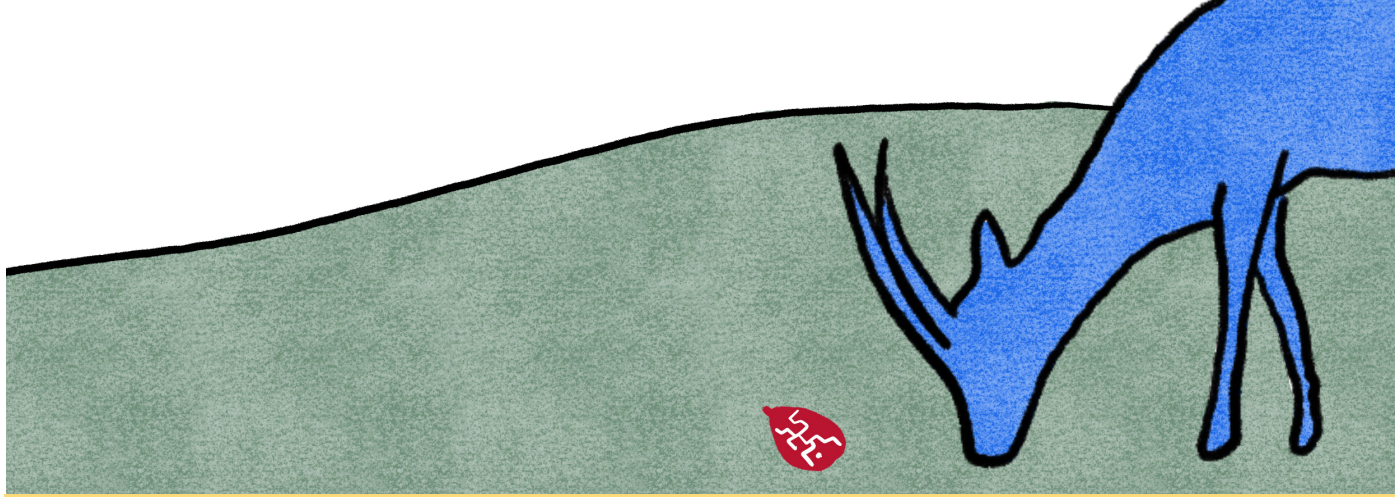
- **Data scarcity and fragmentation:** Local governments and grassroots projects often lack the data required for social programmes. They also find that datasets are fragmented, low-quality or suddenly removed, which undermines accountability and services.
- **Extraction and corporate capture:** Public and creative data are vulnerable to extraction by Big Tech and AI model builders, who harvest training datasets without consent or fair compensation. This results in wealth and control flowing away from communities.
- **Epistemic injustice and misrecognition:** Knowledge produced by the Global Majority or in Indigenous and community contexts is undervalued, miscredited, or distorted by dominant epistemologies and standards, marginalizing alternative knowledge and voices.
- **Unequal interpretation capacity (interpretive asymmetry):** Raw open datasets without accessible analytical tools or locally appropriate formats mean that interpretation is the preserve of better-resourced actors, thereby excluding communities from the processes of meaning- and decision-making that follow.
- **Unequal infrastructure and dependency:** Heavy reliance on Global North funders, proprietary tools, and unstable technology stacks creates asymmetries in capacity, sustainability, voice, and influence.

- **Loss of cultural control and licensing gaps:** Creative works, Indigenous knowledge, and community data may be subject to inappropriate licensing regimes or a lack of enforcement, which exposes communities to expropriation.
- **Precarious labor and cultural production:** Community researchers, designers, and volunteers carry out unpaid care and data work. When their artefacts are commercially reused without fair attribution or benefit sharing, their economic and cultural rights are undermined.

## 2.2 ESCR implications identified

- **Redistribution of agency and interpretation:** The commons approach foregrounds meaningful reuse and interpretation of data, providing access to the necessary tools and community capacity to ensure that data actually supports social policy and civic participation, rather than remaining opaque. Examples such as Maritaca AI demonstrate how local models can support participation.
- **Protection of community integrity and cultural rights:** Mechanisms such as the 'Local Contexts' metadata and 'fuzziness/obfuscation' label choices give communities agency over representation and reuse, thereby protecting cultural transmission and preventing misappropriation.
- **Enabling material and social sustainability:** Low-tech methods, experimentation spaces, and locally adapted sharing help communities to participate without becoming dependent on external resources, thereby supporting long-term access to education, research, and design work.
- **Creation of collective value governance instruments:** Data trusts, cooperatives, and collective licences can mediate reuse, enforce benefit-sharing, and provide communities with negotiation capacity, thereby addressing the economic inequality produced by data extraction.
- **Steering of AI to serve individual and collective rights:** 'Logarithmic justice' reframes AI as a tool to assist civic deliberation and local decision-making (e.g., local models and federated data structures) rather than replacing people with opaque algorithms that remove control. This safeguards participation, cultural self-determination, and equitable access to the economic and social benefits of AI while preventing new forms of dependency or exclusion.





# 3

## Sector-Specific Pathways for Data and Development Justice

The shared characteristics identified in sharing practices of structured and unstructured data and knowledge understood as a commons include the emergence of new practices of openness, the creation of new types of licenses, the emergence of new governance frameworks, and the potential of working across the North/South divide. These aspects provide a fertile ground to identify specific strategies of protection against individual and collective rights erosion by technocratic forms of openness, and promotion of the positive ESRC implications, and form the base of our recommendations to address principles of social justice around four key fields of action.

**1. Civic technological sovereignty** assumes the inter-dependency between socio-material aspects of how data is produced, maintained, used, and distributed, and by whom, under which kind of agreements. It entails:

- **Right to data interpretation**—to access open analytic tools so public data can actually be understood by civil society and inform social policy and institutions.
- **Right to community data integrity** is the right of communities to determine their representation in data systems.
- **Right to fuzziness and obfuscation** is the right to decide who has access to what level of detail. It entails the existence of different kinds of communities, with different levels of access.

**2. Conditions for sustainability** that take into consideration the role of collective production but also of reproduction, and the value of community in the process. It entails:

- **Right to low-tech** is the capacity to downscale and experiment with low-tech datasets and methods that are more accessible and inclusive.
- **Right to spaces for experimentation** in the margins of technological hegemony.
- **Right to transform shared needs into collective possibilities**, by developing economic instruments of community economies, either formal or informal.



**3. Supporting structures of data commons** that consider data as a non-state public infrastructure under collective stewardships to guarantee a shared responsibility and accountability. These structures are material—servers, buildings that host them, and connecting networks—but mostly social, cultural, and economic structures. It includes:

- **Right to civic data governance** through institutional and legal tools able to negotiate and enforce licences, monitor compliance, and enable commons-based reuse.
- **Right to develop open principles adapted to local contexts**, instead of expecting a ready-made template to work worldwide by incorporating local knowledge and perspectives.
- **Right to build communities** to engage stakeholders in the governance of the data, infrastructure, and tools to organize constituencies—such as civic organizations, researchers, journalists, investors, etc—around the public data they need.

**4. Logarithmic justice** builds AI tools as enablers and not as a human replacement or technocratic solution. It entails:

- **Right to civic agency in AI** retains capacity for decision-making. AI should not be used to make decisions or set conditions on behalf of people, but can assist in processes.
- **Right to a situated local-AI** creates situated outputs for a territory or field of action, and to have access to the data needed to develop such models.
- **Right to collective data structures** federates relevant public data between institutions and communities to triangulate and acquire enough data to train models.



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**Read the full report here**

This report is part of a research collaboration between IT for Change and the Open Knowledge Foundation (OKFN) under the [Centering Equity and Justice in Global Data Governance](#) project, a collaborative initiative anchored by IT for Change, with support from the Fair Green and Global Alliance (FGG) and the Centre for Global Digital Justice (CGDJ). The project aims to advance sector-specific, contextually grounded data justice principles rooted in Global South perspectives, developed in collaboration with progressive civil society organizations and people’s movements. Through this engagement, the project examines the impacts of digitalization and datafication in critical domains—including public health, biodiversity, food sovereignty, and climate change mitigation and adaptation—to articulate justice-oriented approaches to data governance.

