

# COMMUNITY-CENTERED AI TAXONOMY FOR DATA CENTRES



*A Socio-Environmental & Community-Centric Governance Framework*

**AI systems are sustained by data centres that are resource-intensive infrastructures embedded in land, water, energy, and public systems.**

Their rapid expansion is reshaping ecological conditions, livelihoods, and governance structures, often resulting in an **uneven distribution of agency, decision-making capacities, benefits and burdens.**

AI infrastructure is increasingly shaped by state-corporate partnerships that mobilize public resources—land, water, energy, and subsidies, for private digital expansion, often without proportional public benefit.

## Core Principle

AI infrastructure must be understood as material and resource-intensive, with impacts that are unevenly distributed and often borne by communities excluded from decision-making.

## Guiding Question

How do AI and data infrastructures reshape the distribution of public resources—land, water and energy—risks, and decision-making capacities across communities?

This framework also engages with emerging global narratives of **People-Centric Digital Public Infrastructure (DPI)**.

While DPI is often framed in terms of *interoperability* and *efficiency*, it remains insufficiently attentive to **meaningful access**, as well as to the **material and ecological infrastructures** that sustain it.

A **community-centered approach** argues that DPI cannot be considered “people-centric” **unless** it accounts for the land, water, energy, and ecological systems that underpin digital infrastructures, and ensures the **meaningful participation of citizens and communities in governance.**

# SEVEN PRINCIPLES OF COMMUNITY-CENTERED AI



## **SAFETY** – *Socio-Environmental Safety*

Safety is the extent to which AI infrastructures avoid ecological degradation and livelihood disruption at design level, particularly in relation to land, water, biodiversity, and local economies.

## **SECURITY** – *Resource & Community Security*

Security is the protection of stable, sustainable and equitable access to essential resources—water, energy, land, and livelihoods—against disruption or reallocation by AI infrastructures.

## **TRUSTWORTHY** – *Public Legitimacy*

Trustworthiness is the degree to which AI infrastructure is perceived as just, meaningful, relatable and beneficial, based on whether it delivers tangible and equitable outcomes for affected communities.

## **RESPONSIBILITY** – *State-Corporate Responsibility*

Responsibility is the clear and enforceable allocation of obligations across governments and corporations for the environmental, social, and resource impacts of AI infrastructure.

## **OPENNESS** – *Infrastructural Transparency*

Openness is the public visibility and mandatory disclosures of the material, economic, and governance aspects of AI systems, including resource use, land allocation, and subsidies.

## **ACCOUNTABILITY** – *Public Accountability*

Accountability is the ability of communities to understand policy shifts, question decisions, seek redress, and hold institutions answerable through enforceable mechanisms and oversight.

## **COMMUNITY-IN-LOOP** – *Community-Centric Governance*

Community-in-loop is the meaningful participation of affected communities in decisions regarding the design, development, deployment, and governance of AI infrastructures and systems.