

A practical guide for digital social innovations engaging in data-driven policy dialogue to influence national and regional policies in Africa

Leveraging data for policy influence

The Engine Room

DATA
GOVERNANCE
IN AFRICA

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1. Introduction

1.1 Background and purpose

Through its Innovation Hub, Enabel launched a call for proposals focused on data-driven digital social innovations (DSIs). Six projects were selected, across e-health, agriculture, climate change and digital inclusion. This guide responds to a central question: **how can DSIs effectively engage in policy dialogue to influence national and regional policies?**

While many DSIs generate valuable data, translating this into policy influence remains a persistent challenge. This guide provides practical, evidence-based insights grounded in African policy contexts to help bridge that gap.

A note on terminology. This guide treats policy dialogue, evidence uptake, and policy influence as nested concepts rather than separate ones. **Policy dialogue** is the sustained engagement process through which DSIs and policymakers exchange data and perspectives. **Evidence uptake** is the mechanism within that dialogue whether and how policymakers actually absorb and act on the data produced. **Policy influence** is the outcome, and it operates on a spectrum: from gaining access to a decision-making space, to being recognised as a legitimate stakeholder, to securing a seat at the table, to being routinely consulted, to shaping the content of a policy or its implementation.

1.2 How to use this guide

This guide is intended for DSI practitioners, civil society organizations, public institutions and development partners.

It can be read in full or used as a reference document:

- Section 2 maps the policy and data ecosystem
- Section 3 outlines key research findings, including enablers, barriers and strategies
- Section 4 provides sector-specific recommendations
- Section 5 presents illustrative case studies
- The appendix includes sources and methodological details

1.3 Methodology

The research combined three approaches:

- A desk research and literature review of over 25 academic and policy sources on data-driven policy influence in Africa
- Eight key informant interviews conducted in November 2025 with DSI practitioners and policy experts across Kenya, Uganda, Nigeria, Benin, Zimbabwe and Malawi
- A closing workshop and research shareback session with DGA grantees, which deepened insights on community-centered data practices and sustaining engagement beyond funding cycles

1.4 Key concepts

Term	Definition
Digital social innovations (DSIs)	Digital innovations that tackle societal challenges through the use and sharing of data, implemented by public institutions, academia, CSOs, NGOs and social enterprises.
Policy dialogue	Sustained engagement between evidence producers and policymakers to inform or influence policy through exchange of data, evidence and perspectives.
Data governance	Frameworks, policies, standards and practices that determine how data is collected, stored, shared, used and protected.
Knowledge translation	The process of turning research into actionable policy and practice through synthesis, communication and application.
Policy windows	Opportunities for policy change, triggered by political events, crises, institutional processes or shifts in public attention.
Advocacy coalitions	Groups coordinating around shared policy goals.
Knowledge brokers	Intermediaries (think tanks, universities, issue-based groups) that bridge research and policy.
Citizen science	Involvement of community members in data collection, monitoring and analysis using digital tools.

2. Mapping the ecosystem: data uptake in public institutions

This section maps the landscape of data-driven policy influence across Africa. It draws on the desk research, literature review and key informant interviews to describe the structural conditions, key actors and policy frameworks that shape how data and evidence move from digital social innovations into policy processes.

Understanding this ecosystem is essential for any DSI seeking to engage in policy dialogue. Knowing who the actors are, how decisions are made, and where entry points exist determines whether evidence reaches decision makers

2.1 The data-to-policy landscape in Africa

The African continent is undergoing rapid digital transformation, yet the infrastructure for translating data into policy remains uneven and fragmented. The AU Data Policy Framework, adopted in 2022, identifies five interconnected challenges:

- Fragmented data sources across countries and institutions
- Insufficient regulatory frameworks governing data collection, sharing and protection
- A widening digital divide between and within countries
- Limited cooperation on data governance across borders and sectors
- Inadequate investment in data infrastructure and the technical capacity to maintain it

These structural conditions set the stage for the data-to-policy pipeline. However, the research highlights a critical insight: even where data exists and is accessible, it does not automatically influence policy.

Across every country studied, a consistent finding emerged that policy decisions are shaped primarily by contextual realities, political dynamics, costs and the actors involved, not by the availability of evidence alone.

The desk research examined this dynamic in depth across six countries. The findings paint a nuanced picture of how evidence interacts with policymaking in practice.

Country / region	Key findings on evidence uptake in policymaking
South Africa	Research evidence is not the main driver of policy decisions. Feasibility of implementation, financial constraints and the buy-in of key managers are more decisive. Efforts by researchers to push evidence to policymakers were described as ineffective when not preceded by relationship-building. Subnational policymakers found evidence useful for understanding national-level decisions but lacked personal relationships with researchers.
Cameroon	The absence of institutional links between academic institutions and government leaves policymakers uncertain about how to engage with researchers or access evidence. Routine health information and best practices from high-performing districts are the primary sources of evidence, not synthesized research. Funding agencies and NGOs were identified as key players in policymaking at both national and subnational levels.
Uganda	Policymakers and researchers identified research partnerships, institutional capacity for knowledge translation and the characteristics of research itself as the most important facilitating factors.

	However, policy negotiation remains limited to those with technical knowledge and financial power. Non-state and local actors are insufficiently involved in agricultural and health policy processes.
Burkina Faso	National adaptation policies are only partially informed by scientific information. The production of scientific data is not prioritized in ministerial budgets. Collaboration protocols between research agencies, universities and ministries are absent; scientists are recruited as ad hoc consultants only. The dependency on international technical and financial partners for evidence production is high.
Tanzania	The agenda-setting process operates within a complex network of factors that interact until a policy window opens. Power in this process is based on three factors: financial incentives, technical expertise and influential position. Donors often hold two or all three, creating a natural power imbalance. Evidence bolsters policy ideas but cannot push them onto the agenda alone; a person must champion an idea.
Malawi	Key barriers include poor communication and collaboration between researchers and policymakers, unavailability of research in usable formats, and limited skills to appraise evidence. Policymakers rely on best practices and expert opinions. Strengthening demand for evidence from policymakers was identified as a necessary condition for improving supply.

Despite these barriers, the research also identified significant enablers that create openings for data-driven policy influence. These vary by country but share common threads: legal frameworks that mandate public participation, open data initiatives that make government information accessible, and growing recognition among some government actors that evidence-based approaches produce better outcomes.

2.2 Key actors and institutions

The ecosystem of actors involved in data-driven policy influence spans multiple levels, from community-based organizations collecting data at the grassroots, to regional bodies coordinating policy across borders. Understanding who these actors are, what roles they play, and how they interact is a necessary step for any DSI seeking to position itself within the ecosystem.

Government actors

At the national level, key government institutions include national statistical offices which serve as official sources of population, economic and social data; data protection authorities which regulate how data is collected, stored and shared; and line ministries responsible for health, agriculture, environment and technology.

In Kenya for example, the National Bureau of Statistics remains a primary source of government information, and the Office of the Data Protection Commissioner plays an active role in data literacy and governance capacity building.

In Zimbabwe, municipal councils and the Council Committee on Health and Housing serve as direct interlocutors for DSI advocacy on service delivery.

Subnational structures are equally important. County assemblies in Kenya (47 in total), local government councils in Zimbabwe and state-level bodies in Nigeria all participate in policy processes that can be influenced by data.

Interviewees noted that engaging with long-term career government actors at these levels, those who retain institutional memory across political transitions, is often more effective than targeting senior officials who may change with each electoral cycle.

Regional and continental bodies

Regional bodies play a growing role in data governance and cross-border policy coordination. The African Union, through the AU Data Policy Framework (2022), sets the continental vision for data governance. Regional economic communities translate this into sub-regional action.

International organizations

International organizations provide funding, technical assistance and convening power. The European Union, UNDP, ITU, WHO and UNICEF are active across multiple countries. The Global Partnership for Sustainable Development Data (GPSDD) and the UN Economic Commission for Africa (UNECA) have played direct roles in building data infrastructure, as demonstrated in the Nigerian COVID-19 Geospatial Data Hub. These organizations can open doors that DSIs cannot access alone, but the research also cautions that donor-driven agendas can skew which evidence gets prioritized. In Tanzania, donors who use pooled funding modalities are less likely to exploit their power, whereas those maintaining greater control over aid are more likely to prioritize their own agendas.

Civil society, academia and DSIs

Civil society organizations form a critical layer of the ecosystem, serving as data producers, advocacy actors and knowledge brokers. In Kenya, the Data Governance Society of Kenya, KICTANet and partnerships involving Amnesty International contribute to coalition building around digital rights and data governance. In Nigeria, NGO coalitions of 700 to 800 members amplify the influence of individual organizations.

Academic institutions play a dual role as knowledge producers and knowledge brokers. Strathmore University in Kenya provides data protection certification programs and serves as a bridge between research communities and policymakers. In South Africa, the Policy BUDDIES project demonstrated that structured one-to-one linkages between university-based researchers and subnational policymakers can increase trust and evidence uptake.

The literature suggests that universities are especially valuable as embedded gateways to credible research, particularly where specialized knowledge is required.

DSIs themselves operate across this ecosystem as intermediaries. They collect data at the community level, translate it into evidence and advocacy messages, build platforms that governments can adopt and form partnerships that connect grassroots knowledge with national and international policy processes. Their position gives them a unique vantage point, but also requires them to navigate relationships across multiple levels of the ecosystem.

Private sector

Private sector involvement in data-driven policy is less prominent in the interviews but significant in specific contexts. During the COVID-19 pandemic, technology companies including ESRI, GRID3 and FRAYM partnered with the Nigerian government and international organizations to build the National Coronavirus Geospatial Data Hub. In the Limpopo Digital Twin project, Microsoft Research co-designed the AI virtual assistant and Amazon Web Services provided infrastructure. These examples suggest that private sector partnerships can rapidly scale data infrastructure when government technical capacity is limited, though they raise questions about data ownership and sustainability that DSIs should consider.

3. Research findings

Sections 3.1 to 3.5 follow the arc of a typical engagement. Section 3.1 looks at **how DSIs show up** the modes they use to engage policymakers. Section 3.2 covers **what helps them gain traction** once they engage. Section 3.3 examines **what blocks them from getting in the door** in the first place. Section 3.4 steps back to ask **whose evidence the system is structured to hear** the political economy that underlies both enablers and barriers. And Section 3.5 identifies **the concrete moments and entry points where influence happens**. Sections 3.6 to 3.9 then move from analysis to practice, covering translation of data into evidence, community-centered data collection, coalition-building, and indicators of success.

3.1 How DSIs use data to engage policymakers

The research identified four principal engagement modes, which are often combined in practice.

Mode	Description and examples
Advocacy	Using data to promote policies, mobilize communities and hold governments accountable. In Zimbabwe, data on cancer clinic fees and drug stockouts contributed to the scrapping of user fees.
Evidence provision	Collecting data for baseline assessments, real-time monitoring and accountability. Organizations engage authorities with data-driven insights on service delivery gaps.
Technical assistance	Supporting governments with data platforms, governance structures and strategic planning. In Benin, a civic tech platform built with AU funding provides local governments with data infrastructure.
Direct partnership	Co-designing policy interventions through formal partnerships. In Nigeria, involving the government from project onset enabled officials to facilitate access to the Ministry of Health.

3.2 Enablers of policy influence

Across the interviews and the literature, four enabling conditions came up repeatedly when DSIs described moments where their data actually shifted policy. None is sufficient on its own; they tend to compound, and influence is most likely when several are present at once.

3.2.1 An enabling policy environment

Successful initiatives operate within legal frameworks that support citizen participation and data governance. National data laws such as the Kenya Data Protection Act (2019) provide predictability and safeguards throughout the data lifecycle. Constitutional provisions requiring public participation, as in Zimbabwe's Chapter 14 on devolution, create formal entry points for civil society. Positive policymaker attitudes toward evidence-based policy, as observed in Nigeria, further strengthen these opportunities. The academic literature confirms this: studies from Cabo Verde, Chad and Mali found that policy dialogues were more successful when they used inclusive, bottom-up participatory approaches with clear legal mandates for consultation.

Pre-existing institutional capacity for knowledge translation matters just as much as the law itself: where formal mechanisms for researcher-policy interaction already exist, ownership and application of evidence increase substantially.

3.2.2 Access to credible, high-quality data

Access to trusted data improves the uptake of evidence. Organizations draw from national statistics systems such as the Kenya National Bureau of Statistics, open data platforms, and rigorously collected community data. Participatory data generation increases both the relevance and credibility of evidence.

In Nigeria's 1.8 Billion campaign, youth-led data collection gathered evidence on young people's health needs, which was then presented directly to government forums.

DSIs emphasize transparent methodologies, including standardized surveys and published research protocols that make datasets auditable and replicable. Data literacy training for grassroots organizations is equally important: it reduces the risk of contaminated data and strengthens civil society's capacity to manage information in compliance with evolving data protection and AI legislation.

A further dimension highlighted in the academic literature is the political weight of domestic evidence. A study in Tanzania found that locally generated evidence levelled power dynamics in policy negotiations, strengthening governments' position against donor-driven agendas. This reframes data quality as not only a technical question but a question of sovereignty: who produces the evidence shapes whose interests it serves.

3.2.3 Relationship building with policymakers

Sustained engagement builds trust and increases collaboration. Strategies include continuous engagement with ministries, government co-signing of project letters and involvement of officials from project inception. The academic literature strongly supports this and goes further: a systematic review found sustained relationships were the most frequently reported facilitator of evidence uptake, and in Uganda, research partnerships involving stakeholders throughout the process were rated as the single most important facilitating factor across all studies reviewed. South Africa's Policy BUDDIES pilot demonstrated that structured one-to-one dialogue between researchers and policymakers increases trust and evidence use, though both sides noted it requires significant time and commitment. Timing matters too: recommendations that are economically feasible, contextualised, and aligned with decision-making timelines are far more likely to be taken up than rigorous but late evidence.

3.2.4 Coalition building

Multi-stakeholder networks prevent siloed work and amplify influence. Participation in large coalitions, such as NGO networks of 700 to 800 members, enables organizations to champion data governance at scale. Institutional leadership roles and partnerships with bodies like the Office of Data Protection, Amnesty International and Strathmore University create pathways for capacity building across the sector.

3.3 Barriers to getting in: why DSIs struggle to reach decision-making spaces

Before evidence can be absorbed or influence exercised, DSIs first need to reach the spaces where policy is made and this is often where the work can reach challenges. The barriers in the table below are drawn from key informant interviews and the desk research, and they cluster across five recurring themes: the political conditions that organizations operate in, the institutional and community willingness to engage with change, the capacity to read and use data on both sides, the availability of usable data in the first place, and the resources required to sustain engagement over time.

Barrier	Key findings
Shrinking civic space	Costly authorization requirements (>USD 1,000 per study); government resistance to scrutiny; fear of retaliation and surveillance. Organizations working on LGBTQ+ issues report arrests and online attacks.
Institutional resistance	Government and bureaucratic reluctance toward transparency and external scrutiny; resistance to sharing authority over data and decision-making with civil society actors.
Community-level resistance	Scepticism toward policy changes; mistrust where past data collection has produced no visible benefit to the community; research fatigue from repeated extractive engagement.
Limited data literacy	Low awareness of data rights among organizations, policymakers and citizens. Difficulty translating data into compelling policy evidence. In Malawi and Burkina Faso, weak institutional capacity to appraise research.
Poor data availability	Inconsistent collection practices; lack of central repositories; evidence often only available in handwritten forms; restricted access to sensitive data.
Resource constraints	Limited capacity for evidence production and relationship maintenance; lack of dedicated data staff; networking described as a long-term operation requiring sustained investment.
Misaligned timelines	Research is often produced on academic or project cycles that do not match policymakers' decision-making windows. In several countries, formal collaboration protocols between research agencies and ministries are absent entirely.

3.3.1 When to reconsider the strategy

Data-driven policy influence is not always the right investment, and the table above is not exhaustive. Several conditions signal that DSI energy may be better spent on alternative paths

Some factors to consider:

- **Consultation is performative.** Where DSI or civil society inclusion is a procedural rather than a genuine input channel, producing additional evidence rarely changes outcomes.
- **The decision is already made.** In some contexts governments selectively commission, cite or share data to legitimise positions reached on other grounds. Engaging on the government's terms in these moments risks lending credibility to a predetermined outcome.
- **No policy champion and no policy window.** When there is neither an institutional ally inside government nor a foreseeable opening (budget cycle, election, institutional review, crisis response), the higher-value investment is usually relationship and coalition groundwork until conditions shift, rather than evidence production aimed at immediate uptake.

Reading these signals is itself part of strategic engagement. Choosing not to pursue direct policy influence in a given moment is not a failure of the data; it is a recognition that influence is exercised through many channels, and that public communication, litigation, peer learning, and regional advocacy can be more effective than direct policymaker engagement when the formal route is closed.

3.4 The political economy of evidence: whose data gets used, and why

Sections 3.2 and 3.3 set out the conditions under which DSI evidence does or does not reach policymakers. This section turns to a deeper question that runs underneath both: not whether evidence is heard, but whose evidence the system is structured to hear in the first place.

The academic literature on evidence uptake in Sub-Saharan Africa drawing on studies from South Africa, Cameroon, Uganda, Burkina Faso, Tanzania and Malawi points consistently to three structural dynamics that shape this.

Policy windows determine when evidence matters. Agenda-setting in most contexts is not a continuous process. Evidence accumulates in the background and is drawn on only when a policy window opens, typically a budget cycle, election, institutional review, or crisis response. DSIs that produce excellent evidence outside these windows often find it ignored, while less rigorous evidence produced inside a window can move policy. This is not a flaw in policymakers' reasoning so much as a feature of how political attention works.

Donor priorities exert significant pull. Several studies, most pointedly research from Tanzania, found that on a wide range of issues, power over the agenda rests with donors rather than with national governments. Evidence aligned with donor priorities is substantially more likely to be taken up than evidence that diverges from them, regardless of comparative quality. This creates an incentive structure in which domestically generated evidence on locally defined problems is structurally disadvantaged, even where it is more accurate and more relevant.

Negotiation is restricted to those with technical and financial capital. In Uganda, the literature found that policy negotiation is effectively limited to actors with both technical knowledge and financial resources. Communities and smaller civil society organizations may be consulted, but the table where positions are reconciled is much smaller than the consultation process suggests. For DSIs, this means that gaining a seat at the consultation level is necessary but not sufficient: real influence often requires translating community evidence into a form that can be defended inside the smaller negotiating space.

Taken together, these dynamics carry a practical implication for DSI strategy. Producing better evidence is necessary but insufficient on its own. Strengthening the mechanisms through which locally generated evidence enters the system investing in coalitions that can defend it inside negotiating spaces, in relationships with policy champions who can carry it into policy windows, and in regional and continental platforms that can counterbalance donor agendas is at least as important as the data work itself. This is the case the rest of this guide tries to make practical.

3.5 Where influence actually happens: entry points into decision-making

Effective entry points for policy influence

Entry points operate on a spectrum. The earliest stages are simply about gaining access to a decision-making space, then being recognised as a legitimate stakeholder. From there, influence deepens through securing a seat at the table, being routinely consulted on drafts and proposals, and ultimately shaping the content of policy or its implementation. Each step requires sustained relationship-building. The entry points below should be read with this in mind: they are openings to be used iteratively over time, not single moments that produce influence in isolation.

Entry point	How to use it
Sustained engagement	Build ongoing relationships with career government actors who retain institutional memory. Continuity is essential for trust.
Policy windows	Target budget planning periods, elections, institutional mergers and disaster responses. These are moments when governments are more open to input.
Credible reputation	Invest in online presence, advisory boards of academic experts and high-quality outputs that demonstrate credibility.
Early stakeholder engagement	Involve government and communities from project inception so national-level engagement becomes a continuation, not a cold introduction.
Civic tech tools	Provide governments with useful platforms for data collection and citizen engagement. Technology becomes a vehicle for relationship building.
Policy alignment	Frame data in terms of government priorities and constraints. Understand policymaker incentives and timelines.

3.6 Translating data into evidence for policy influence

DSIs act as intermediaries that translate community-generated data into stories, evidence cases and advocacy messages for policy audiences. Their core contribution lies in synthesizing local data, grounding it in lived experience and communicating it through accessible formats.

Effective communication of evidence requires moving beyond raw data. DSIs report ongoing efforts to establish local, regional and national platforms that aggregate community data for policy use. Translating data into formats policymakers respond to is critical: geographic data, percentages, financial projections and cybersecurity metrics resonate most. Visual presentation through maps and dashboards increases traction. Localization of digital and data resources into local languages and contexts is also an important component of long-term advocacy.

Storytelling is a powerful strategy. DSIs combine datasets with personal stories from community members, based on the understanding that policymakers respond strongly to lived experience. As one practitioner in Malawi described, the most effective evidence is allowing people to tell the story themselves. Outreach strategies include youth-led social media advocacy, mapping and targeting policymakers online, and synthesizing community data for government portals.

3.7 Community-centered data collection and policy influence

The closing workshop surfaced practical concerns from DGA grantees:

- how to deal with data collection fatigue
- build trust in sensitive contexts
- design co-design processes
- involve civil society at various stages

3.7.1 Defining shared goals and roles

Community-centered projects require shared definitions and joint goals as a foundation. This means defining who the community is, auditing historical relationships with data collection, identifying representatives, planning for power differentials and clarifying which stages communities participate in. Civil society organizations can play roles as technical support, results validators, governance experts and advocacy champions.

3.7.2 Widening participation and building trust

Communities are more likely to participate when they see clear benefit and have a role in shaping how data is used. Data literacy initiatives for citizen scientists, youth and grassroots organizations broaden the range of actors who can generate and collect data. Peer learning and community-based training build inclusive digital ecosystems. Data transparency, including sharing data back with communities in accessible formats, strengthens mutual trust.

3.7.3 Transparency and avenues for input

Clear communication channels are essential. Kenya's NEMA hosted 30-day consultation windows for the Draft Regulation on Forests Rules 2020, welcoming contestation through forums, online platforms and meetings. Mozambique's VaMoz Digital workshops used stakeholder mapping, problem trees and visioning exercises. Structured co-design methodologies with documented outputs foster collective action and co-ownership of policy ideas.

3.7.4 The value of community involvement

In the Limpopo Digital Twin project, nearly 1,000 citizen scientists collected water quality data via the MiniSASS app. Youth training through YOMA-UNICEF builds the next generation of data contributors. Documenting contributions, conducting impact assessments and closing feedback loops makes community value visible to government actors who may otherwise undervalue citizen-generated evidence.

3.8 Building relationships and coalitions for sustained influence

Influence accumulates through relationships maintained over years and through coalitions that share both the problem and the work. This section looks at three layers of that infrastructure: relationships with individual policymakers, coalitions, and the funding and governance arrangements that keep both alive over time.

3.8.1 Relationships with policymakers

Effective policy influence requires relationships that facilitate knowledge sharing over time. Power and stakeholder mapping exercises can be used to identify allies, opponents and persuadable actors. The Advocacy Coalition Framework provides a useful lens for understanding policymaker belief systems and for calibrating engagement strategies. Systematic reviews confirm that sustained relationships are the most important facilitator of evidence uptake.

Dedicated coordination roles make collaboration more resilient. Governments sometimes use knowledge brokers, such as think tanks and universities, to bridge research and policy. Universities are especially valuable as embedded gateways to credible research. Policy champions, well-connected actors positioned to maintain priority topics on the agenda, play a complementary role in seizing windows of opportunity.

3.8.2 Coalitions and multi-stakeholder partnerships

Sustained policy influence often requires coalitions: groups of actors who share a diagnosis of a problem and coordinate action. Building coalitions effectively means being deliberate about who is brought in, what resources they contribute and how they work together. Identifying shared evidence needs and exploring how data sharing addresses gaps helps create the foundation for collective action. Coalitions must also overcome barriers to data sharing, including legal constraints, technical limitations and institutional resistance. Developing a data strategy oriented around policy windows enables coalitions to time their evidence for maximum impact.

3.8.3 Sustaining relationships beyond funding cycles

The mismatch between long-term policy change and short-term funding is a persistent challenge. Practical mechanisms for sustaining coalitions include governance structures, memoranda of understanding, shared data protocols and regular convenings. Formalized coordination with clear decision-making processes prevents the gradual drift that affects time-limited coalitions. Diversified funding from government grants, corporate partnerships and individual contributions is a strong predictor of sustainability. Strong leadership capable of managing transitions to self-sustaining mode is essential.

3.9 Indicators of success

Across the interviews, DSIs described it in terms that ranged from formal policy change to a single conversation with a policymaker. The indicators below capture that range, from the most concrete to the most relational.

Indicator	Example
Actual policy changes	In Nigeria, sustained advocacy on FGM contributed to the adoption of the Violence Against Persons Prohibition Act. In Zimbabwe, user fees for maternal health were scrapped.
Policymaker feedback	A decision-maker in Cote d'Ivoire told a DSI practitioner: "Since the day I knew you guys, I have seen the world differently."
Invitations to co-create policy	In Zimbabwe, the organization is formally invited to contribute to strategic plans and budget review meetings.
Community endorsement	Over 1,000 religious and traditional leaders in Nigeria supported the FGM advocacy initiative.

4. Sector-specific recommendations

The following recommendations draw on the cross-cutting findings in Section 3, and are tailored to the contexts of four key sectors where data-driven DSIs are active across Africa.

4.1 E-health

The health sector benefits from established information systems such as DHIS2 and a relatively strong evidence-to-policy tradition. Yet the research is clear that evidence alone does not drive health policy. In South Africa and Cameroon, feasibility and buy-in of key managers were more decisive. In Malawi, policymakers reported research was often unavailable in usable formats. The key gap lies in knowledge translation: ensuring that the right evidence reaches the right people in the right format at the right time.

Guidelines

- **Invest in knowledge translation.** Produce concise, actionable summaries with economically feasible recommendations. Policymakers often face decision windows of only a few days, so evidence must be ready when needed.
- **Align with existing health information systems.** Match data outputs to government reporting requirements and indicators. This creates natural entry points and demonstrates how DSI data fills gaps rather than duplicating existing systems.
- **Build structured relationships with health officials.** South Africa's Policy BUDDIES model showed that structured one-to-one dialogue increases trust and evidence use. Identify specific counterparts in health ministries and move beyond ad hoc consultations.
- **Engage frontline health workers as advocates.** Healthcare workers who use data tools daily can communicate findings upward, creating bottom-up pressure for evidence-informed decisions from trusted sources within the system.

4.2 Agriculture

Agricultural policy processes insufficiently involve non-state and local actors. Research from Uganda shows that policy negotiation is limited to those with technical knowledge, financial resources and political power. Farmer groups are often brought in only to validate decisions already made. Farm-level data, while rich in detail, is typically too granular and localized to influence national discussions without aggregation and strategic framing.

Guidelines

- **Strengthen farmer group participation in policy.** This goes beyond data collection training. Strengthen technical knowledge of policy processes, financial capacity to participate at local and national levels, ability to negotiate among like-minded actors and access to alternative channels such as digital platforms and community forums.

- **Translate farm-level data into policy-relevant evidence.** Aggregate local data into financial projections, yield comparisons, food security metrics and geographic maps that connect to government priorities. Raw data on individual farms is rarely persuasive; synthesized data that aligns with national targets is.
- **Target agricultural planning cycles.** Map budget windows, policy review processes and donor coordination cycles. Present evidence during moments when the government is actively seeking input on spending priorities.
- **Build coalitions with farmer organizations and universities.** Participatory research partnerships create co-owned, credible evidence. A coalition presenting a unified front carries more weight than any single organization. Domestically generated evidence can also level power imbalances in sectors where donor agendas dominate.

4.3 Climate change

Climate initiatives demonstrate some of the strongest examples of citizen science informing policy processes. The Limpopo Digital Twin integrated satellite, ground sensor and citizen scientist data into a tool handed over to a regional governance body. The challenge is not a lack of data but ensuring community-generated data meets quality standards, enters official systems and reaches decision-makers. In Burkina Faso, national adaptation policies were found to be only marginally informed by scientific information due to limited capacity and weak institutional links.

Guidelines

- **Formalize citizen science as a data pathway.** Establish quality assurance protocols, training programs and standardized collection methods so community data can be integrated into official systems. Document methodologies transparently to make datasets auditable and replicable.
- **Engage regional governance structures from inception.** Climate issues transcend borders. Work with regional commissions and transboundary bodies from the start. The Limpopo model of co-designing with the governance body and formally handing over the tool is transferable.
- **Plan for sustainability through phased handover.** Design projects with a clear handover pathway. Co-design with the entity that will eventually operate the tool, build capacity during implementation and formalize the transfer through institutional agreements.
- **Bridge the science-policy gap on both sides.** Build the capacity of data producers to present evidence in policy-relevant formats, and the capacity of policymakers to understand and appraise climate data. Make the case for domestic investment in evidence generation to reduce dependency on international partners.

4.4 Digital inclusion

Digital inclusion projects working with vulnerable populations face the most complex data governance challenges. Questions of sovereignty, privacy, consent and cross-border flows are daily operational realities. The populations served may have experienced surveillance or data misuse, making trust-building essential.

At the same time, these DSIs often operate in constrained civic environments where engagement itself can put staff and partners at risk.

Guidelines

- **Develop data governance policies before collection begins.** Establish clear protocols for consent, storage, access control and sharing in consultation with the communities whose data is involved. Governance decisions made after the fact are harder to enforce and less credible.
- **Build trust through transparency.** Explain clearly how data is used, stored and shared. Give communities meaningful control, not just informed consent but genuine participation in governance decisions. Open-source technologies and FAIR data principles support this.
- **Prepare for shrinking civic space.** Develop risk mitigation strategies before they are needed: secure communication channels, legal preparedness, staff safety plans and broad coalitions with international organizations that can provide visibility and protection.
- **Facilitate cross-border data collaboration.** Position your DSI as an intermediary for responsible data sharing between humanitarian organizations, government agencies and regional bodies. Demonstrating how data sharing improves service delivery across borders makes a practical case that governments respond to.

4.5 Cross-cutting principles

The four sectors above face different policy environments, but the same patterns emerged across all of them. The six principles below distill what the research, the interviews and the closing workshop pointed to as the differences between DSIs that move policy and those that produce excellent reports no one reads. They are intended to be read as a single set of practices that reinforce each other, not as a menu

Principle	Practical action
Relationships before evidence	Invest in sustained engagement with policymakers before presenting evidence. Build relationships with career civil servants who retain institutional memory.
Co-design from inception	Involve government actors and communities in project design from the start so findings are not surprising or misaligned.
Translate, don't just publish	Produce visual summaries, financial projections and geographic maps. Avoid lengthy academic reports. Use direct language and highlight actionable recommendations.
Work in coalitions	Partner with organizations doing similar work, academic institutions and government allies. Data-driven advocacy gains weight when multiple actors present a unified front.

Time evidence to policy windows	Map budget cycles, elections and policy review processes. Present evidence when the government is actively seeking input.
Build local capacity	Invest in data literacy for communities, organizations and policymakers. Domestically generated evidence levels power dynamics.

5. Case studies

The following case studies illustrate successful strategies DSIs are using to influence policy change. They are drawn from desk research and key informant interviews conducted for this guide.

5.1 Government-led initiatives to incorporate citizen data for environmental protection

Efforts by the Kenyan government under the National Environmental Management Authority (NEMA) to incorporate citizen and stakeholder data into climate legislation. When drafting the Draft Regulation on Forests Rules 2020, the government invited input from the public and stakeholders over a period of 30 days. They used methods such as forums, online platforms, meetings with stakeholders and expert input to gather insights. Since public feedback is integral to the design of the policy, individuals also have the opportunity to contest environmental policies in court.

Sector	Climate change
Country	Kenya
Key actors	National Environmental Management Authority of Kenya, Kenya Forest Service, Ministry of Environment and Forestry, UNDP Kenya, FCPF, Kenyan Youth Biodiversity Network, County Assemblies, Senate, National Assembly
Entry points	30-day consultation windows, NEMA stakeholder data collection, County Assemblies (47), public forums, online platforms, stakeholder meetings
Success factors	Legal requirement for consultation, multi-level engagement, documented processes, community ownership from involvement, multiple entry points (public forums, online, meetings, research, expert input)
Source	Open Environmental Data Project, "Environmental Data-Driven Decision-Making Process, a Review of Kenya's Systems"

5.2 Government partnerships with DSIs and NGOs to create emergency response data infrastructure

During the COVID-19 pandemic, the Nigerian government understood the need for reliable up-to-date data to inform responses. They wanted to create a platform that could mitigate misinformation and lack of public trust in healthcare institutions. They partnered with DSIs and NGOs (GPSDD and UNECA in partnership with ESRI, GRID3 and FRAYM) to create the National Coronavirus Geospatial Data Hub. The hub drew data from national sources, Google mobility data and community vulnerability risk assessments, and served as a publicly available resource for public health information.

Sector	Health
Country	Nigeria
Key actors	Nigerian government, GPSDD, UNECA, ESRI, GRID3, FRAYM
Entry points	Emergency response needs due to the pandemic, reliance on GPSDD and their ability to bring in additional partners
Success factors	Using established relationships to bring in new partners, collaborating with private sector when government lacked the technical capacity to build the platform independently
Source	Cambridge University Press, "Increasing data sharing and use for social good: Lessons from Africa's data-sharing practices during the COVID-19 response"

5.3 Using data-driven initiatives to impact health policy changes

The Gweru Residents Forum identified the exorbitant fees female cancer patients were facing at clinics and initiated an advocacy campaign to reduce them. They created an engagement portfolio with the Council Committee on Health and Housing, impacted communities and patients, and partnered with women's organizations. The campaign was supported by a data-driven initiative where researchers collected data on the number of women receiving services, the fees they paid, availability of medication and drug supply issues. They relied on this data to demonstrate how existing policies were negatively impacting cancer patients, in violation of the mandate to provide primary healthcare services. The result was the scrapping of fees and a resolution to improve drug supply.

Sector	Health
Country	Zimbabwe
Key actors	Gweru Residents Forum, Council Committee on Health and Housing, women's organizations, community members
Entry points	Data-driven evidence, working in coalition with women's organizations, stakeholder mapping to identify relevant actors, sustaining relationships with policymakers
Success factors	Talking to impacted people to collect necessary data, involving peer organizations, supplying policymakers with actionable data to inform decisions
Barriers	Prejudice of policymakers, resistance to change
Source	Key informant interview, Gweru Residents Forum

5.4 Co-created solutions between DSIs and government for digital transformation

Fifty participants were brought together across DSIs, CSOs and government ministries for a two-day co-creation workshop on Mozambique's digital transformation. The workshop was part of the VaMoz Digital project, a joint ITU-EU Delegation initiative. The outputs included contributions to the Mozambique Digital Transformation Landscape Report and increased interest in strengthening the country's regulatory and policy environment. Sessions used tools like stakeholder mapping, problem trees, visioning workshops, policy analysis and identifying key bottlenecks to discuss areas of opportunity and assess institutional needs. A key goal was to remove silos and increase joint approaches to policy change.

Sector	Digital inclusion
Country	Mozambique
Key actors	Ministry of Communications & Digital Transformation, INCM (regulator), INTIC (e-gov), INAGE, EU Delegation, ITU, Prime Minister's Office, 50+ participants across sectors
Entry points	Organized under the joint ITU-EU project with the goal of bringing together stakeholders in the digital transformation ecosystem

Success factors	Co-creation methodology (active engagement, innovative thinking, consensus-building), ecosystem approach, evidence-based discussions (Landscape Report), expert facilitation, clear documented outputs, broad stakeholder participation
Source	ITU, "National Digital Readiness Assessment Technical Workshop: Co-creating Mozambique's accelerated digital transformation"

Appendix

A. Research framework

Objective	Research question
1. Assess DSI capacity for policy influence	How are DSIs using data to engage policymakers? What barriers and enablers shape their capacity?
2. Identify successful initiatives	What defines successful data-driven policy influence and what strategies can DSIs adapt?
3. Identify strategic entry points	What are the most effective entry points in different governmental and regional contexts?
4. Generate actionable guidance	How can DSIs translate data assets into credible evidence to influence policy?
5. Produce practical outputs	What tools and support mechanisms would most enhance DSI capacity?

B. Literature review sources

Key sources (full annotated bibliography in accompanying spreadsheet):

C. Key informant interviews

Interview	Country	Focus
1	Kenya	Data governance and digital rights
2	Zimbabwe	Governance and service delivery
3	Nigeria	Youth-led health advocacy
4	Malawi	Energy sector, data-driven policy
5	Benin	Civic technology and government partnerships
6	Uganda	Technology and policy engagement
7	Nigeria	Women's rights and health policy
8	Kenya	Data advocacy

D. Additional research questions for future work

The closing workshop identified three areas beyond the scope of this study that warrant further investigation: how DSIs can synthesize large volumes of data into assets that support policy change (knowledge translation); strategies for navigating political tensions when government actors disagree with findings or refuse to share data (power dynamics); and practical approaches for tracking and evaluating contributions to policy change (impact monitoring).

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