

Data Systems at a Crossroads: Official Statistics for a New Era

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About this paper

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Foreword

Official statistics face converging pressures that go beyond routine challenges. Donor funding cuts in 2024–25 threaten the operational viability of NSOs in low-income countries. Artificial intelligence (AI) is simultaneously disrupting and enhancing how data are produced and consumed. Mandates continue to expand towards greater inclusivity, disaggregation and citizen engagement even as resources shrink. And trust in official statistics is under strain due to political interference, competing information sources, and lingering credibility gaps exposed during the COVID-19 pandemic.

While these pressures interact and vary significantly across countries, they create both acute risks and openings for innovation. They also raise critical questions. How deep, for instance, are the funding cuts in practice, and which statistical functions are most exposed? What AI applications are realistic for resource-constrained NSOs, and what safeguards are needed? How can expanding mandates be reconciled with declining capacity? And what institutional arrangements best protect statistical independence under political pressure?

This paper assesses the current landscape, synthesises available evidence and country experiences, and proposes a framework to guide all stakeholders in official statistics in charting the future of data systems. It acknowledges significant uncertainties and invites additional input from international organisations, funders, country representatives and civil society to refine and extend the analysis.

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Table of contents

Foreword	3
Abbreviations and acronyms	5
Executive summary	6
1 Unpacking the data and trust crisis	7
Legitimacy, trust and political will	7
Financing and sustainability	9
Crucial capacity gaps	10
2 Pressures reshaping official statistics: Recognising risks and opportunities	12
Harnessing innovative technologies	12
Inclusive approaches to data	13
3 A Framework for the future: The fork in the road	15
Path One: Optimisation and smarter use of existing solutions	15
Path Two: Transformation of data systems	16
4 Conclusion and questions for further discussion	17
BOXES	
Box 1.1. Facts versus feelings	8
Box 2.1. How India's NSO is connecting official statistics to AI tools	13

Abbreviations and acronyms

AI	Artificial intelligence
API	Application programming interface
DHS	Demographic and Health Survey
IT	Information technology
MCP	Model Context Protocol
MICS	Multiple Indicator Cluster Surveys
NSDS	National strategy for the development of statistics
NSO	National statistics office
ODA	Official development assistance
ODIN	Open Data Inventory
PRESS	Partner Report on Support for Statistics
SDG	Sustainable Development Goals
UNSD	United Nations Statistics Division

Executive summary

This is a decisive moment for official statistical systems

Official statistics are foundational infrastructure for governance, development and accountability. They are used by governments to allocate resources, by international organisations to track global goals, and by citizens to hold power to account. The recent aid shocks exposed the depth of a data crisis that threatens national statistical offices (NSOs), particularly in low- and middle-income countries. At the same time, there is a rare opportunity to rethink how data systems are designed, governed and embedded in society.

Three categories sit at the heart of the data crisis diagnosis and each calls for a different response. First, legitimacy, trust and political will are under strain as official statistics compete with viral misinformation, partisan narratives and AI-generated content, while political leaders indifferent or hostile to evidence-based policymaking weaken the constituency for statistical investment. Second, the financing picture is bleak: forecasts suggest official development assistance for statistics declined significantly in 2024 and 2025, and roughly two-thirds of NSOs surveyed by the UN Statistics Division anticipated or were already facing budget cuts. Third, capacity gaps remain pervasive, from the existing inability of some statistical systems to deliver the basics, to shortages of technical, soft and leadership skills, all compounded by low data use that leaves even high-quality outputs unread.

What makes this moment distinct is the addition of two stressors that cut across all three challenges. Technological change, led by AI, threatens to widen capacity gaps between well-resourced and capacity-constrained offices unless governance and investment keep pace. Inclusive and participatory approaches, from citizen data to intersectional analysis, are reshaping expectations about who counts, who is counted and who decides how data are produced and used. Both pressures are simultaneously risks and openings: handled well, they can re-embed statistical systems in the societies they serve; handled poorly, they will deepen the very inequalities and trust deficits they were meant to address.

This paper argues that the statistical community has reached a fork in the road. Incremental adjustment alone may no longer be sufficient. Countries and the international community face a strategic choice between two broad paths. The first, optimisation, focuses on operational excellence and innovation within established frameworks through stronger engagement with policymakers, better donor alignment, expanded peer learning and adaptation of mature technologies. The second, transformation, pursues a more fundamental redesign: new institutional arrangements, financing and public-private partnerships at scale, a reimagined workforce, systematic use of advanced analytics and privacy-preserving data infrastructure, and the institutionalisation of participatory and intersectional approaches.

Rather than prescribing a single solution, this paper provides a framework to facilitate informed debate and chart a course towards more sustainable and inclusive data systems. This paper is the foundation for a forthcoming series of policy briefs that will explore specific aspects of this theme in greater depth. What it does insist on is that the status quo is not a sustainable option. The forces buffeting statistical systems will not wait for consensus, and those who delay may find that circumstances, as during the COVID-19 pandemic, choose for them.

1 Unpacking the data and trust crisis

Official statistics are foundational infrastructure for governance, development and social progress. When a government allocates health resources, it relies on mortality and morbidity data. When international organisations track progress towards global goals, they depend on nationally reported indicators. When citizens hold their governments accountable, they need trustworthy information about economic performance, service delivery and social outcomes. When these systems break, all these actions suffer. Consider the example of the global health data system, where recent breakdowns in official statistics have directly undermined resource allocation, progress monitoring, and accountability in a sector where failures are measured in lives (Open Data Watch, 2025^[1]).

Understanding and responding to the current crisis for official statistics requires distinguishing between three distinct categories of challenges: the low ebb of legitimacy, trust, and political will; the difficult financing and sustainability situation for low- and middle-income countries; and the capacity gaps that threaten to deepen the inequality between country data systems still further. Each of these challenges demands different responses. But their interaction also creates the volatile conditions that statistical systems now face, particularly amid the additional stress tests from technological change, citizen data and more inclusive data.

Legitimacy, trust and political will

The relationship between official statistics and public trust has always been delicate, but it has become precarious in the current environment. Social media platforms have simultaneously democratised access to information and degraded the quality of public discourse, leading to an increasing divergence between facts and feelings (Box 1.1). In this new information ecosystem, official statistics must compete for attention with viral misinformation, partisan talking points and AI-generated content that can be produced rapidly and tailored for maximum engagement.

These conditions expose a fundamental gap that statistical systems have been slow to address. Official statistics were originally designed to serve governments, not citizens. The products, formats and communication strategies of most NSOs remain oriented towards audiences comfortable with technical documentation and statistical abstractions such as ministries, international organisations and researchers. Citizens seeking to understand their own lived experiences often find official data inaccessible, irrelevant to their concerns or even contradicted by their daily realities.

Lack of trust in governments consequently leads to low trust in national statistics. The perception exists in many countries that data are manipulated to support political agendas (UNECE, 2025^[2]) or that data that reflect poorly on the government are delayed or withheld (Bangladesh Ministry of Planning, 2025^[3]). Those living under illiberal regimes and members of marginalised groups may hesitate to participate in data collection, fearing what the government may do with their personal information.

Political will for statistical investment has always been tenuous, but several new factors are weakening it. The rise of political discourse that regularly appeals to fake news has brought to power leaders who are indifferent or actively hostile to evidence-based policymaking. Gender equality and other inclusiveness agendas that have driven significant methodological innovation in recent decades face organised backlash.

At the same time, statistical leadership in many countries remains technocratic in orientation, often uncomfortable and incapable of the political engagement necessary to build coalitions for reform.

Successful engagement in the political sphere is crucial to building the political will necessary for strong statistical systems. For example, effective engagement with parliamentarians tends to focus on linking data to outcomes that legislators care about – such as constituency services, budget oversight and electoral accountability – rather than abstract arguments about the importance of evidence (PARIS21, 2026^[4]). Success stories involve sustained relationship building, not one-off presentations. However, several barriers dampen political will, among them a lack of political incentive to prioritise data investments when returns are diffuse and long term; high political turnover that disrupts relationship building with statistical champions; and underrepresentation of data-literate voices in political processes (Data2X, 2024^[5]). These structural barriers suggest that building political will requires systemic, organic approaches, not just better communication.

Box 1.1. Facts versus feelings

The disconnect between facts and feelings in many contexts is not necessarily an unbridgeable divide, although it presents a big hurdle to NSOs that are used to simply reporting the numbers. Rather, this gap reflects a divergence between the tools policymakers and economists use and the average person's lived experiences. For example, one survey found that a majority of people polled in the United Kingdom believed that net migration rose in 2025 when it actually decreased by two-thirds (O'Connor, 2026^[6]). Metrics like net change and rate of change are not necessarily intuitive to the public: people may still see an increase in the number of migrants, and unless that net change is drastic, it may not change people's underlying perception of the issue. This presents an opportunity to bring statistics to the public in a way that is easily understandable and to open a two-way conversation between data producers and data users. Publishing data with explanations that connect the data to the relevance of citizens' lives and point out why the findings may differ from perceptions can bridge this gap, increasing data literacy as well as strengthening the trust between citizens and statistical institutions.

Source: O'Connor (2026^[6]), "No, the public is not irredeemably ignorant", <https://www.ft.com/content/320cca7a-f93c-4776-b35b-1b5092d92a46>.

Transparency and trust

The open government and open data movements generated considerable momentum a decade ago but have since matured into more sustainable initiatives with less noise, even though the current moment requires ever more open data. The initial excitement about their transformative potential has given way to harder work on implementation – making data usable, building feedback loops between producers and users, and ensuring open data can meet the demands of the AI revolution.

For NSOs, the transparency agenda presents both opportunity and challenge. Greater openness about methodology, uncertainty and data limitations could rebuild trust by demonstrating intellectual honesty. However, transparency also exposes statistical work to criticism from actors who may not engage in good faith. The path forward likely involves more deliberate engagement with citizens as users and stakeholders rather than just subjects of data collection as well as the design of products and communication strategies with citizen needs explicitly in mind. Moving from an extractive to a collaborative relationship with citizens and stakeholder groups such as academia would enable NSOs to embed their data gathering and validation and use strategy as part of an ongoing relationship (UNSD, 2026^[7]).

In this process, stakeholder engagement is key to helping NSOs connect with citizens, provide better data and build trust. For example, Panama's NSO strengthened partnerships with churches to disseminate information to citizens about the census process (Arteaga, 2023^[8]). Recommendations made by the Taskforce on Strengthening the Bangladesh Bureau of Statistics include proactive use of social media and public briefings to share not just data but the relevance of the data to policy and the lives of citizens (Bangladesh Ministry of Planning, 2025^[3]).

Strategic, thoughtful responses to misinformation and misuse of official statistics can strengthen citizens' trust. While Principle 4 of the Fundamental Principles of Statistics states that "statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics", NSOs must decide what type of response is most appropriate and effective based on the context of the misuse (UNGA, 2014^[9]). Statistics Norway has found that in cases where a direct response would be unlikely to change opinions or reach new audiences – for instance to counter misinformation posted on far-right news sites – posting clarifications on the NSO site had greater impact (Hanssen, 2025^[10]). Having a strategy in place to respond to misuse of official statistics allows NSOs to be prepared and act accordingly. When carried out correctly, a considered response can increase trust in the NSO while combatting misinformation. Partnerships and established dialogues with the media can also allow for timely dissemination of data while also ensuring that accurate, easily understood interpretations of data are readily available for the public (Arteaga, 2023^[8]).

Financing and sustainability

The financing picture is bleak. While official development assistance (ODA) reached record nominal levels in 2023 according to the latest PARIS21 Partner Report on Support for Statistics (PRESS) and the Clearinghouse for Financing Development Data, forecasts suggest that volumes declined significantly in 2024 and 2025, affecting not only health and other crucial sectors but also statistical capacity building (PARIS21, 2025^[11]). These latest estimates showcase a troubling pattern: support for data and statistics is already concentrated among a small pool of funders, and now major bilateral donors are potentially withdrawing entirely from the space.

In a recent UN Statistics Division (UNSD) survey, roughly two-thirds of NSOs reported that they anticipate or currently face budget cuts in 2025 (Inter-Secretariat Working Group on Household Surveys, 2025^[12]). For NSOs already operating at minimal capacity, these reductions translate directly into postponed surveys, abandoned data series, and deferred investments in technology and human capital. Household surveys supported by external funding such as Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS), which produce many Sustainable Development Goal (SDG) indicators in lower-income countries, are particularly vulnerable, as the recent upheaval at the DHS programme demonstrates (Wahl et al., 2025^[13]).

National strategies for the development of statistics (NSDSs) remain the primary framework for co-ordinating external and domestic support for statistical development. But as is the case for all tools, these must be properly implemented to achieve their greatest potential (PARIS21, 2026^[14]). The most effective strategies link statistical investments explicitly to national development priorities, creating alignment between data production and the information needs of planning, monitoring and accountability processes. The 2025 UNSD survey results show that countries recognise this: over half of the NSOs surveyed that are experiencing budget cuts reported they have taken adaptive measures such as strengthened partnerships with national institutions and sought more national government financial support through domestic resource mobilisation (DRM).

Partnerships and co-ordination

DRM for statistics requires alignment between NSOs, ministries of finance, tax authorities and line ministries. The ongoing conversations on the Sevilla Platform for Action on the Future of Data initiative are intended to connect these actors within the government that have so much to gain from one another (Sevilla Platform for Action Initiatives, 2025^[15]). When statistics are seen as serving government priorities rather than competing with them for resources, domestic funding becomes more feasible. The challenge is repositioning statistical offices from cost centres to strategic assets.

International co-ordination frameworks like the Cape Town Global Action Plan for Sustainable Development Data and the Medellín Framework have articulated clear priorities, but implementation has been slow and uneven. Financing commitments remain largely voluntary, with limited mechanisms to track follow-through (HLG-PCCB, 2017^[16]; HLG-PCCB, 2025^[17]). As the 2030 Agenda nears conclusion, these frameworks represent unfulfilled promises but also concrete foundations on which to build. The statistical community has an opportunity to deliver on commitments already made rather than negotiating new ones.

In addition to DRM and international co-operation frameworks, there is greater potential for NSOs to partner with the private sector to access complementary datasets and gain a fuller picture of the state of a country's economy, such as through payment flows, for example. Potential collaborations with the private sector have received considerable attention for statistical modernisation, including in the context of data sharing agreements, public-private partnerships for information technology (IT) infrastructure and corporate support for statistical capacity. Yet tangible progress remains limited. Companies guard commercially valuable data, and the governance frameworks needed to manage access to private data sources – such as mobile phone records, satellite imagery and transaction data – remain underdeveloped in most countries. For example, when Statistics Norway exercised its legal authority under a new Statistics Act to access cash register records and payment card data from supermarkets, the Norwegian Data Protection Authority determined that the data request exceeded what data should be collected and shared (UNECE, 2026^[18]). Discussions between the two organisations are ongoing, and Statistics Norway is exploring possible solutions that would enable it to protect identifiable information and still collect these data. This example demonstrates that statistical system modernisation is a governance design problem, especially when NSOs seek to partner with actors outside the traditional national statistical system.

Crucial capacity gaps

The current crisis compounds existing structural weaknesses in statistical systems. Understanding these legacy issues is essential for assessing which responses will address root causes rather than merely treat symptoms.

Production weaknesses and gaps remain pervasive. Many countries still lack complete vital registration systems and updated census data. These foundational data systems underpin most other statistical operations; without them, even well-designed surveys and innovative data sources have no frame within which to operate. For example, only 30% of low-capacity countries meet the standards for vital registration coverage and just half meet the standards of good practice regarding the publication of national accounts data (Badiie, 2025^[19]). These persistent foundational gaps help explain why progress on the World Bank Group's Statistical Performance Indicators, despite gradual improvement, has stalled in several regions, with low-income countries continuing to lag due to limited resources and capacity (World Bank Group, 2026^[20]; World Bank Group, 2025^[21]).

Amid enthusiasm for innovative data sources and AI applications, the importance of foundational data systems such as civil registration and vital statistics, census operations, and administrative data infrastructure deserves renewed emphasis. The 2020 census round, disrupted by COVID-19, highlighted both the fragility and indispensability of these foundational systems. Countries that had invested in

alternative approaches like register-based censuses, continuous measurement systems and digital collection methods proved more resilient. For others, significant data gaps emerged that will take years to fill.

Capacity constraints are particularly acute in low-income countries. NSOs often cannot independently design and implement survey instruments as they lack both the technical expertise and the equipment necessary for modern data collection. Reliance on external technical assistance creates dependency but does little to build sustainable local capacity.

The skills gaps facing statistical systems extend across three domains. Technical skills in data science, programming and modern statistical methods remain scarce, particularly in lower-income countries where education systems have not kept pace with technological change (Inter-American Development Bank, 2023^[22]). As the digital landscape rapidly changes, new technological skills are needed to modernise statistics and statistical communication. Soft skills in communication, user engagement and cross-functional collaboration are often undervalued in statistical organisations but are essential for building relevance and trust. Finally, leadership skills for navigating political environments, managing organisational change and building strategic partnerships may be scarcest.

Addressing these gaps requires approaches that go beyond traditional training programmes. Retention is often as much of a challenge as recruitment, since staff who develop valuable skills frequently leave for better-compensated positions in the private sector or international organisations. Building sustainable capacity may require rethinking compensation structures, career pathways and organisational cultures.

Data use and uptake remain a neglected part of statistical development, although new insights are being generated (Kenneally, 2025^[23]). Decades of investment in data production have not been matched by comparable attention to ensuring that data inform decisions. The global average openness score of just 59 out of 100, as measured by the Open Data Inventory (ODIN), shows this disconnect. Even when countries produce quality statistics, persistent gaps in data licensing, metadata and accessibility limit their utility (Open Data Watch, 2025^[24]). The disconnect between statistical outputs and policy processes means that even high-quality data often remain unused, undermining the case for continued investment in their production. The Data Value Chain is valuable precisely because it holds both production and use in view simultaneously, resisting the tendency to treat production as an end in itself and keeping data use as a constant measure of success (Open Data Watch, 2018^[25]).

But closing this production-use gap is not only a technical challenge. Following through on the entire data value chain requires strengthening engagement between NSOs and diverse users. Recent analysis emphasises that trust building requires not just technical safeguards but also sustained engagement with stakeholders, particularly as NSOs expand their roles as data intermediaries (OECD, 2025^[26]). This includes understanding user needs, communicating in the language of policymakers and improving public data literacy to help citizens identify misinformation in an increasingly complex information environment (Rahman, 2025^[27]). Systematic user-producer dialogue helps statistical offices prioritise production based on actual needs, ensures statistics are produced in accessible formats and builds collective ownership (UNECA, 2020^[28]). However, establishing these feedback mechanisms and engagement capacities requires dedicated resources and institutional commitment that remain underdeveloped in many statistical systems. It also requires a more fundamental rethinking of the NSO's role, moving from a predominantly production-oriented institution towards one that actively mediates between data and their many uses.

2 Pressures reshaping official statistics: Recognising risks and opportunities

Official statistical systems have faced challenges akin to the current data crisis before, however, pressures from two main sources – technological innovation and inclusive and participatory approaches – are aggravating the current weaknesses in the system. These additional stressors make this current moment unique as they require a significant reorientation of official statistical systems around data users and sources of data. Yet these new pressures are also opportunities for the data systems for official statistics to become fully integrated into the societies they serve and to be increasingly prioritised by politics and civil society.

Harnessing innovative technologies

Digital transformation

Digital transformation for statistical systems connects to broader agendas around digital public infrastructure and legal identity that have gained prominence in development discourse (Arai, Bertelsen and Setel, 2024^[29]). The case for statistical modernisation becomes stronger when it is linked to these broader initiatives, which often command greater political attention and resources.

The practical challenges of digitisation vary enormously across contexts. Some NSOs are ready to implement advanced analytics and cloud-based data management, while others lack reliable internet connectivity and staff comfortable with software. One-size-fits-all technology solutions have repeatedly failed; sustainable transformation requires assessment of local conditions and staged implementation that builds capacity incrementally.

Artificial intelligence: A two-way street

The AI revolution has arrived in statistics, whether statistical offices are ready or not. International investments in ensuring data are AI-ready reflect growing recognition that official statistics must adapt to serve as training data, validation sources and complements to AI-generated analyses. Yet for most NSOs, particularly in lower-income countries, digital transformation remains aspirational rather than operational (World Bank Group, 2025^[21]).

The relationship between AI and official statistics runs in two directions, each with distinct implications. AI for data encompasses applications of machine learning and related technologies to improve statistical processes, among them automated coding and classification, computer vision for satellite imagery analysis, natural language processing for text data, and predictive models for nowcasting and small area estimation. These applications promise efficiency gains and capability extensions but require careful validation to ensure that they meet quality standards Box 2.1 (UNECE, 2025^[30]).

Data for AI recognises that official statistics have a crucial role in training, validating and benchmarking AI systems. High-quality, nationally representative data with known properties provide essential ground truth against which AI outputs can be evaluated (Fu et al., 2025^[31]). Without such benchmarks, there is no way to assess whether AI-generated information is accurate, systematically biased or entirely fabricated.

Box 2.1. How India's NSO is connecting official statistics to AI tools

In February 2026, India's NSO launched a beta Model Context Protocol (MCP) server, becoming one of the first NSOs to create a standardised interface between official statistics and AI applications (India Ministry of Statistics and Programme Implementation, 2026^[32]). The open-source server, integrated with India's eSankhyiki data portal, allows users to query datasets such as the Consumer Price Index, labour force surveys and national accounts directly through AI tools like Claude or ChatGPT without downloading files or navigating complex application programming interfaces.

The initiative reflects a strategic choice: rather than building bespoke AI dashboards, the NSO adopted an open protocol now supported by major AI providers, making official data accessible wherever users already work. The source code was published on GitHub, offering a replicable model for other countries.

The approach also raises new questions. Data served via the MCP arrive stripped of the methodological notes, revision histories and caveats that accompany published releases – context that is essential to correct interpretation. And because the data flow through an official NSO server, AI-generated analysis layered on top may carry unwarranted perceived authority. India's experience shows that making statistics AI-ready is technically feasible, but NSOs will need to consider how to preserve metadata integrity and manage the infrastructure demands that follow.

Source: (India Ministry of Statistics and Programme Implementation (2026^[32]), "NSO Launches MCP Server to Make Government Data AI Ready", <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2224472®=3&lang=2>).

Capacities are needed in both sides of the AI-official statistics relationship. But these are currently very unevenly distributed. Well-resourced statistical offices experiment with machine learning for classification, natural language processing for administrative data and predictive analytics for nowcasting. Under-resourced offices struggle with basic IT infrastructure, outdated software, and staff who have never worked with data beyond spreadsheets or still use physical forms to collect and store data. Without deliberate intervention, AI risks widening rather than narrowing capacity gaps by allowing well-resourced and well-governed NSOs to advance quickly while capacity-constrained NSOs become dependent on opaque tools that may undermine the very trust, reproducibility and public accountability that give official statistics their authority (PARIS21, 2025^[33]). As AI increasingly mediates how users access and interpret official data, new governance approaches and judiciously adapted technical fixes are needed to ensure that the integrity of official statistics is preserved through the dissemination chain (Solatorio, 2025^[34]).

Inclusive approaches to data

Citizen data

Citizens increasingly want to see themselves in data and participate in their creation – a fundamental shift in expectations, particularly by communities that have historically been miscounted or counted in ways that perpetuate marginalisation. The Collaborative on Citizen Data, convened by the UNSD, has made progress developing frameworks for how citizen-generated information can complement official statistics, and successful pilots have demonstrated that community-collected data can fill gaps for mobile

populations, informal settlements and marginalised groups that traditional surveys undercount (UNSD, 2025^[35]).

But significant governance questions remain. Who owns citizen data? How do communities retain agency over information they provide? How is quality maintained without imposing standardisation that strips away the local knowledge that makes citizen data valuable? These are not merely technical questions but inherent to determining what kind of statistical systems should be built.

Intersectional data

The SDG framework's promise of disaggregation to leave no one behind remains largely unfulfilled. The gap is particularly acute for intersectional analysis – that is, understanding how multiple dimensions of identity and circumstance combine to shape outcomes. Work by ODW has helped shift discourse from simple disaggregation towards revealing compounding effects. But mainstreaming these approaches requires investment in larger samples, linked administrative data and analytical capacities that remain scarce (Badiee and Buvinic, 2024^[36]).

The practical barriers are formidable. Standard sample sizes often cannot support reliable estimates across multiple cross-cutting dimensions. Administrative data linkage offers one path forward but requires governance frameworks, technical infrastructure and legal authorities that many countries lack as well as careful attention to the privacy of marginalised groups that may not have control over their personal information, such as sex workers or undocumented migrants (UNECE, 2026^[18]).

Participatory approaches offer a way to navigate these tensions. Stats NZ, the New Zealand NSO, partnered with Māori communities using the Māori Data Governance Model to publish population data through the Māori-designed platform Te Whata (UNECE, 2026^[18]). Similarly, Colombia's Wayúu Multidimensional Register was designed with and involves the Wayúu community throughout the statistical process (Perucci and Fontes, 2025^[37]). Scaling intersectional analysis will require sustained investment in methodology and data collection but equally in the participatory processes that ensure such work is done ethically and inclusively.

3 A Framework for the future: The fork in the road

The analysis in the previous chapters points to a fundamental choice facing statistical systems between two different approaches to navigating the challenges of current moment, each with distinct implications for strategy, investment and risk.

To simplify a complex reality, this paper frames this choice as a fork in the road where one path leads to optimisation and the other to transformation of data systems. This choice is binary but implementation will look different depending on the context. Some countries may need to strengthen foundations before transformation becomes feasible. Others have the capacity to pursue transformative approaches immediately.

Several factors can guide this choice. Countries with more advanced systems and enabling environments may be better positioned for transformation. Those that are less advanced may need to focus on protecting core functions while selectively pursuing innovations. External pressures from the broader economy may create pressure for statistical systems to transform. Regardless of the path, success requires a results-based approach with clear outcome targets and robust monitoring systems to track progress and enable course correction. Countries could learn from one another, and regional organisations and international bodies could support such learning by facilitating peer exchange and supporting rigorous evaluation.

No matter the choice, the status quo is not a sustainable option. The forces buffeting statistical systems, including funding cuts, AI disruption, eroding trust and expanding demands, will not wait for the statistical community to reach consensus. Those who delay their choice may find circumstances choosing for them, as during the COVID-19 pandemic. The following subsections outline the features of each possible path.

Path One: Optimisation and smarter use of existing solutions

This path prioritises optimisation, focusing on extracting value from existing approaches while making improvements. This is not to be confused with complacency but represents a direction that entails operational excellence and innovation within established frameworks.

On political will and legitimacy, the optimisation path emphasises expanding engagement with policymakers, taking advantage of existing co-ordination mechanisms and scaling approaches that connect statistical insights to relevant policy discussions. The theory of this path posits that well-targeted engagement can build political support without requiring fundamental shifts in prioritising data systems.

On sustaining production and funding, the optimisation path aligns with established strategic frameworks and planning tools and uses co-ordination mechanisms to improve donor alignment. The focus is on making existing funding go further and building the case for investment.

On capacity, the optimisation path entails strengthening existing training infrastructure, expanding peer learning through South-South co-operation, and improving staff retention through better compensation and career pathways to close technical gaps while building sustainable local expertise.

On innovative technologies, the optimisation path focuses on expanding metadata standards to improve interoperability and AI-readiness, modernising statistical operations, and leveraging peer learning. The emphasis is on adapting mature technologies to local contexts.

On inclusive approaches, the optimisation path builds on existing groups of users and producers and intersectional frameworks with the aim to improve accessibility and use of current data products rather than fundamentally reconceptualising the relationship between producers and users.

In sum, the optimisation path offers feasibility and near-term results as it involves building on existing capacities to reduce implementation risk. But it may yield only marginal improvements. Success requires clear performance benchmarks such as stabilising response rates or increasing policy citations to ensure optimisation yields purposeful improvement rather than incremental drift.

Path Two: Transformation of data systems

This path pursues transformation, fundamentally rethinking how data are produced, governed and used to restore trust and unlock new value. This is a more ambitious and riskier agenda, but one that may be necessary to position statistical systems for a different future.

On political will and legitimacy, the transformation path creates new institutional arrangements such as multi-stakeholder data stewardship councils, new transparency paradigms, participatory priority setting and a revived social contract for development data.

On sustaining production and funding, the transformation path builds data ecosystems and leverages data collaboratives and public-private partnerships at scale and establishes DRM partnerships that reduce dependence on external funding.

On capacity, the transformation path reimagines the statistical workforce – blending statistical expertise with data science, communication and outside engagement, using partnerships with universities and the private sector for talent pipelines, and investing in leadership development.

On innovative technologies, the transformation pathway is centred on the systematic use of advanced analytics, the integration of novel data sources, alignment with digital infrastructure and the development of privacy-preserving distributed data.

On inclusive approaches, the transformation path advances the institutionalisation of participatory data practices, embeds intersectional analytical approaches and integrates community-generated evidence within formal statistical systems.

In sum, the transformation path offers potential for significant improvements in relevance, trust and capability but requires substantial investment and carries higher implementation risks. Success demands rigorous evidence: are partnerships improving coverage? Are participatory data building trust? The higher risks and costs require the demonstration of new value, not just activity completion.

4 Conclusion and questions for further discussion

Official statistical systems find themselves in a moment of genuine crisis that threatens the foundations of evidence-based policymaking. On top of the existing chronic challenges that have long characterised the field, from low trust to low financing and capacity, there is an acute convergence of pressures from innovative technologies and approaches to data that demand a response. This moment can best be described as a fork in the road. Both paths involve trade-offs, but countries must make a fundamental choice: either optimise existing systems or pursue transformation.

The stakes are too high for diplomatic platitudes or incremental tinkering dressed up as strategic vision. Official statistics matter enough to warrant serious investment and reform. Yet simply asserting this is not sufficient. That case must be made and acted upon.

The following questions can guide stakeholders of official statistics to move beyond diagnosis and towards action to build more sustainable and inclusive data systems:

- Which path, optimisation or transformation, is currently more appropriate for national statistical systems and what are the signals that shape this choice?
- Where optimisation or reforms of national statistical systems was successful, what worked and why and how?
- How can the international statistical community collectively support a transformation process particularly in low- and middle-income countries?

These questions do not have easy answers. The analysis in this paper offers a starting point by clearly framing the choices at hand and outlining the stakes involved. The work of rebuilding statistical systems for a changed world will extend far beyond any single framework. But that work must begin somewhere, and the critical moment to start is now.

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Data Systems at a Crossroads: Official Statistics for a New Era

This is a decisive moment for official statistical systems.

Deep cuts in development financing for statistics, legitimacy issues, artificial intelligence and other rapid technological changes, and rising expectations for more inclusive and participatory data are colliding with long-standing weaknesses in trust, capacity and data use. For many national statistical offices (NSOs), particularly in low- and middle-income countries, this convergence amounts to a systemic data crisis that threatens their relevance, credibility and sustainability. At the same time, these pressures create a rare opportunity to rethink how data systems are designed, governed and embedded in society.

This paper argues that the statistical community has reached a fork in the road. Incremental adjustment alone may no longer be sufficient. Countries and the international community face a strategic choice between two broad paths, each with distinct implications for legitimacy, financing, risk and equity. Rather than prescribing a single solution, the paper provides a framework to facilitate informed debate among all stakeholders of official statistics as they chart a course towards more sustainable and inclusive data systems. It is also the foundation for a forthcoming series of policy briefs that will explore specific aspects of this theme in greater depth and help sharpen policy attention to key areas.

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