CaribData Guide

Data Sharing for Data Producers in Small Islands

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1 How to read this guide

This document is a companion to the *CaribData How-to Handbook*. It is not an instruction manual, and it is not intended to provide step-by-step guidance on how to share data. Instead, it sets out the **current state of thinking about data sharing**, with particular attention to the realities of small island developing states (SIDS).

So in this guide we aim to provide context. We explain why data sharing has become such a prominent issue, what people usually mean when they talk about it, and why approaches that work in larger countries do not always translate

well to small places. Throughout, we focuse on concepts such as risk, trust, sovereignty, and proportional progress—these are the factors that most often shape real-world decisions about data.

Readers are not expected to agree with every perspective presented here. But we hope it will generate reflection and discussion. It can be read in full, or in sections, depending on interest and role.

Those looking for practical tools, examples, and operational steps should refer to the accompanying *Decision-Guide* and *How-to Handbook*". Read together, the three documents are intended to support thoughtful, context-appropriate data sharing—grounded in the lived realities of small places.

2 Why data matters more than ever in small island states

Across small island developing states (SIDS), data has always mattered. Governments have long relied on censuses, registries, surveys, and administrative records to plan services, respond to crises, and account for public spending. What has changed is not the importance of data, but the expectations placed upon it. Today, data is increasingly expected to travel—to be reused, combined, shared across institutions, and interpreted beyond its original purpose.

This shift reflects a broader global moment. Advances in digital infrastructure, cloud storage, and analytics have transformed data from a static record into a form of shared infrastructure. International development agendas, climate adaptation efforts, health surveillance systems, and disaster preparedness strategies now assume that data will be timely, accessible, and interoperable. In many settings, this assumption is reasonable. In others, it is aspirational.

For SIDS, this moment brings both opportunity and tension. On the one hand, small states are often rich in expertise, institutional memory, and contextual understanding. Decision-makers are closer to communities, feedback loops are shorter, and the consequences of policy choices are quickly visible. High-quality data, when it exists, can be exceptionally powerful in such settings. A single well-designed survey, registry, or monitoring system can reshape national conversations.

On the other hand, SIDS operate under structural constraints that shape how data systems evolve. Small populations limit economies of scale. Public institutions are asked to do many things with few people. Specialist data roles are often combined with operational responsibilities. Legal frameworks may be evolving faster than technical capacity. These realities do not reflect a lack of commitment to data; they reflect the conditions under which data work is done.

Importantly, the global conversation about data sharing has not always acknowledged these conditions. Much of what is presented as "best practice" assumes

large populations, stable specialist teams, and long investment horizons. When these assumptions go unexamined, they can create the impression that small states are lagging, reluctant, or risk-averse. This impression is misleading. What often appears as caution is, in fact, care—a recognition that in small places, mistakes travel fast, trust is fragile, and recovery can be slow.

At the same time, there is growing recognition that invisibility carries its own costs. When local data are scarce, fragmented, or inaccessible, external actors step in to fill the gaps. Models are built using partial information. Comparisons are drawn without context. Decisions are made at distance. In these circumstances, the absence of shared data can weaken national voice and regional influence rather than protect it.

This companion guide starts from a simple position: data sharing is not an all-or-nothing proposition, and SIDS do not need to replicate global models to benefit from it. Progress is possible without perfection. Thoughtful data sharing—grounded in local values, proportional risk assessment, and clear purpose—can strengthen trust, improve decision-making, and amplify Caribbean perspectives in regional and global conversations.

The sections that follow explore what this looks like in practice. They do not offer instructions. Instead, they describe the current state of knowledge about data sharing, paying close attention to how scale, context, and history shape what is realistic—and responsible—for small island states.

3 What "data sharing" usually means

The phrase data sharing is used frequently, but rarely precisely. It is often treated as a single action—data are either shared or they are not. In practice, data sharing refers to a range of arrangements, varying in purpose, audience, and level of control. Much confusion, and unnecessary anxiety, arises from collapsing these different models into one.

At its simplest, data sharing means allowing data to be reused beyond the purpose for which they were originally collected. This reuse might be internal, across departments within the same organisation. It might be national, across ministries or agencies. It might be regional or international, enabling comparison, pooled analysis, or collective learning. In each case, the core idea is the same: data continue to generate value after their initial use.

Crucially, data sharing does not imply that all data are made public. Open data—data that anyone can access, use, and redistribute without restriction—is only one end of a much wider spectrum. Many widely used and well-governed data systems rely on controlled access, where data are shared only with approved users, for specified purposes, under defined conditions. In research and public policy, this is often the norm rather than the exception.

Another important distinction is between data and information. Sharing data

does not always involve releasing raw datasets. In many contexts, sharing takes the form of aggregated tables, indicators, dashboards, or statistical summaries. These products are derived from underlying data but are designed to reduce disclosure risk while still informing decision-making. For small populations, this distinction is especially important, as aggregation can significantly lower the likelihood of identifying individuals.

Metadata—the descriptive information that explains what a dataset contains, how it was collected, and how it should be interpreted—is another often overlooked form of sharing. Making data findable and understandable can be as valuable as making it directly accessible. In regions where data are scattered across institutions, simply knowing that a dataset exists, and under what conditions it might be accessed, is a meaningful step forward.

Data sharing is also frequently confused with data transfer. Sharing does not necessarily mean relinquishing ownership or control. Many sharing arrangements are explicitly designed to preserve data sovereignty, ensuring that data producers retain authority over how their data are used, interpreted, and cited. In small states, where historical experiences of extractive research or externally driven analysis remain salient, this distinction matters deeply.

For SIDS, clarity about what is meant by data sharing is not a semantic exercise; it is foundational. When data sharing is understood as a flexible set of practices rather than a single obligation, it becomes easier to align sharing approaches with local capacity, legal frameworks, and social expectations. It also becomes easier to see that partial sharing, staged access, and selective openness are not failures, but sensible responses to context.

This broader understanding sets the stage for a more productive conversation about risk, trust, and responsibility. Once data sharing is recognised as something that can be shaped—rather than endured—it becomes possible to ask better questions about how it should be done in small island settings.

4 Why global models don't fit neatly

Much of what is written about data sharing is shaped by experiences in large, well-resourced countries. The models that dominate international guidance often assume sizeable populations, specialised institutions, stable funding, and clear separations between technical, legal, and policy roles. In those contexts, data sharing can be treated as a technical challenge: build the platform, set the rules, and scale.

Small island developing states operate under different conditions. Population size alone changes the nature of data work. Small numbers increase disclosure risk, reduce statistical anonymity, and limit how finely data can be disaggregated. What is routine practice in a large country—publishing detailed local indicators, for example—may be inappropriate or unsafe in a small one, even when the

underlying data are of high quality.

Institutional scale matters as well. In many SIDS, the same small teams are responsible for data collection, analysis, reporting, governance, and public communication. Expertise can be deep but thinly spread. Staff turnover can be disruptive, especially when systems are carried in people as much as in documentation. Global data-sharing models rarely account for this reality, yet it strongly shapes what is feasible and sustainable.

Legal and regulatory frameworks add another layer of complexity. Data protection laws in many SIDS are relatively new, evolving, or unevenly implemented. In some cases, legislation has moved faster than institutional capacity, creating uncertainty rather than clarity. Faced with ambiguous obligations and real penalties, organisations may default to caution. From the outside, this can look like resistance to sharing; from the inside, it is often prudent risk management.

Time horizons also differ. International initiatives frequently operate on short project cycles, while the benefits of data sharing—trust, reuse, cumulative insight—emerge slowly. In small states, where capacity building competes with day-to-day service delivery, the opportunity cost of adopting complex global frameworks can be high. A model that is technically sound but operationally heavy may simply not survive contact with reality.

None of this implies that SIDS should lower their ambitions. It does imply that ambition must be reframed. Effective data sharing in small states is less about scale and speed, and more about fit and durability. *Systems that are modest but trusted, limited but clear, and gradual but cumulative are often more valuable than comprehensive solutions that cannot be maintained.*

Recognising this mismatch is liberating. It allows small states to move away from a narrative of deficit—of always catching up—and towards one of adaptation. Global models can inform local practice, but they cannot substitute for it. Data sharing works best when it grows out of local realities rather than being imposed upon them.

This recognition also sharpens the next question: if global templates are not enough, how should risk, harm, and responsibility be understood in small populations? This is where our discussion now turns.

5 Risk, harm, and small numbers

In small island states, concerns about data sharing are rarely abstract. They are grounded in lived experience: small populations, close social networks, and the knowledge that information travels quickly. In these settings, the consequences of a data breach—or even a misinterpretation—can feel immediate and personal. Risk, therefore, occupies a central place in conversations about data.

Risk is often spoken about as though it were synonymous with openness. This

is misleading. In data governance, risk is better understood as the *potential for harm* arising from unintended disclosure, misuse, or misunderstanding of data. That harm may be social, legal, financial, psychological, or reputational. Whether data are shared or withheld does not, on its own, determine whether harm will occur.

A useful way to think about data risk is to focus on *impact*, not intent. Some data, if disclosed, would have little consequence. Other data could expose individuals or communities to serious harm. Crucially, the same type of data can carry very different levels of risk depending on context. Health, migration, income, or behavioural data may be relatively low risk in one setting and highly sensitive in another, particularly where stigma, illegality, or political sensitivity are involved.

Small populations intensify these considerations. Even when direct identifiers are removed, individuals may still be identifiable through combinations of characteristics such as age, geography, occupation, or rare conditions. This re-identification risk is not hypothetical in SIDS; it is a structural feature of small-number data. As population size decreases, the margin for safe disaggregation narrows.

This reality does not make data sharing impossible. It makes it *context-dependent*. Rather than asking whether data should be shared at all, a more productive question is what level of harm could reasonably arise if the data were misused or misunderstood, and how likely that harm is. From this perspective, data sharing becomes a matter of proportionality rather than prohibition.

Research ethics and data protection practice offer a pragmatic principle that resonates strongly in small states: when uncertainty exists, it is safer to assume higher risk and to act accordingly[1]. Acting accordingly does not mean withholding all data. It means being deliberate about what is shared openly, what is shared under controlled conditions, and what is not shared. In practice, most well-functioning data systems operate across this spectrum.

Reputational risk deserves particular attention in SIDS. There is understandable concern that shared data may be taken out of context, misinterpreted, or used to reinforce external narratives that do not reflect local realities. Past experiences—where small datasets have been used to make sweeping claims without local involvement—have reinforced this caution.

Yet the absence of shared data carries its own risks. When local data are unavailable, external actors rely on proxies, models, or partial sources. These substitutes often appear authoritative but may poorly reflect on-the-ground realities. In such cases, withholding data can reduce local voice rather than protect it.

Seen this way, risk is not an argument against data sharing, but an argument for *thoughtful data sharing*. Sharing that is grounded in local knowledge, accom-

[1] Hambleton IR, Jeyaseelan S, Collins B, et al. *A Practical Guide to Protecting Your Research Data (with Limited Resources)*. CANREC Bulletin. Vol1, No2, Dec 2019. pp6-12. Available online.

panied by appropriate context, and aligned with realistic safeguards can reduce harm rather than increase it. It also allows data producers to retain agency over interpretation and use.

For small island states, the goal is not to eliminate risk. That is neither possible nor necessary. The goal is to balance risk against benefit in a way that reflects local values, social structures, and capacities. Doing so creates space for trust to develop—an ingredient that matters as much as any technical safeguard.

6 Trust as infrastructure

Data systems are often described in technical terms: platforms, standards, pipelines, and protocols. Yet in practice, the most important infrastructure for data sharing—especially in small island states—is *trust*. Without it, even the most sophisticated systems remain unused or underused. With it, relatively simple arrangements can function effectively.

Trust operates at multiple levels. There is institutional trust: confidence that organisations will handle data responsibly, respect agreed conditions, and act predictably. There is professional trust: confidence in the judgement and competence of the people who collect, analyse, and communicate data. And there is public trust: confidence that data will not be used to harm individuals or communities, and that sharing data serves a legitimate public purpose.

In small states, these forms of trust are tightly intertwined. Institutions are not abstract entities; they are known through the people who work in them. Decisions are rarely anonymous. This proximity has advantages—it allows relationships to form and problems to be resolved quickly—but it also raises the stakes. Breaches of trust are highly visible and can have long-lasting effects.

Trust is often treated as something that follows from rules: put the right policies in place, and trust will emerge. In reality, trust is built through *process*. It develops when data sharing is consistent, transparent, and reversible. Consistent sharing creates predictability. Transparency clarifies how and why data are used. Reversibility—knowing that sharing arrangements can be paused, revised, or withdrawn—reduces fear and encourages participation.

This has important implications for how data sharing initiatives are designed in SIDS. Large, one-off releases of data may generate attention, but they do little to build trust if they are not embedded in ongoing relationships. Smaller, incremental forms of sharing—pilot collaborations, time-limited access, or thematic exchanges—can be more effective. They allow institutions to learn from experience, adjust safeguards, and demonstrate reliability.

Trust is also shaped by history. In many Caribbean settings, data have been collected by external actors, analysed elsewhere, and returned—if at all—as conclusions rather than resources. These experiences matter. They influence how current offers of data sharing are interpreted. Acknowledging this history is

not about assigning blame; it is about recognising that trust cannot be assumed where past practices have limited local control or visibility.

Communication plays a central role here. Data sharing that is accompanied by clear explanation—what the data represent, what they do not, and how they should be interpreted—supports trust. Silence, by contrast, creates space for suspicion. In small populations, where data are easily personalised, proactive communication is not an optional extra; it is part of responsible stewardship.

Importantly, trust is not only about protecting against harm. It is also about *enabling benefit*. When institutions trust that data sharing will be fair, contextualised, and respectful, they are more willing to invest time and effort in preparing data for reuse. When the public trusts that data are used to improve services or inform policy, they are more likely to participate in data collection efforts in the first place.

For SIDS, recognising trust as infrastructure shifts the focus of data sharing away from compliance and towards relationship-building. Policies, platforms, and safeguards remain essential, but they work best when they reinforce trust rather than attempt to substitute for it. In small states, where social capital is both fragile and powerful, this distinction is critical.

Trust does not eliminate risk, but it makes risk manageable. It provides the social foundation on which proportional, context-sensitive data sharing can grow over time.

7 Data sovereignty without isolation

For small island states, conversations about data sharing are inseparable from questions of sovereignty. Data are not just technical assets; they are representations of people, places, and priorities. Who controls data, who interprets them, and who benefits from their use are therefore deeply political questions, even when framed in technical language.

Data sovereignty is often misunderstood as an argument for keeping data closed. In practice, it is better understood as the *right to govern data*—to decide how data are collected, stored, shared, interpreted, and preserved over time. Sovereignty is about control, not concealment. It is entirely compatible with sharing, provided that sharing occurs on terms defined by data producers and stewards.

In small states, concerns about losing control over data are heightened by past experience. Data have sometimes flowed outward with little return: analysed elsewhere, published without local involvement, and disconnected from national priorities. These patterns create understandable caution. They also explain why appeals to openness, when detached from questions of governance, can ring hollow.

Yet isolation carries costs. When data remain fragmented, invisible, or inaccessi-

ble, small states risk being spoken *about* rather than speaking for themselves. In regional and global settings, absence is often filled by estimates, proxies, or assumptions. These may be well intentioned, but they rarely capture local nuance. In such contexts, sovereignty exercised through isolation can inadvertently weaken influence.

The alternative is *sovereignty through participation*. This involves sharing data in ways that preserve local authority while enabling collective insight. Practical expressions of this approach include clear conditions of use, requirements for local collaboration or acknowledgement, and mechanisms that ensure data remain accessible to local institutions over time. These arrangements shift the balance from extraction to partnership.

Regional approaches are particularly important here. For SIDS, pooling data across countries can increase analytical power without sacrificing national control. Regional platforms can provide shared infrastructure while allowing data to remain nationally governed. When designed carefully, such arrangements enhance sovereignty by reducing dependence on external systems and by amplifying regional voice.

Data sovereignty also extends beyond access to interpretation. Who tells the story of the data matters. Ensuring that local experts are involved in analysis and communication is as important as controlling who can download a dataset. In small states, where context shapes meaning, interpretation without local insight risks error, even when technically correct.

Seen in this light, data sovereignty is not a barrier to data sharing; it is a *precondition for sustainable sharing*. When institutions are confident that their authority will be respected, they are more willing to engage. When sovereignty is acknowledged, openness becomes a choice rather than a threat.

For SIDS, the challenge is not to choose between sovereignty and sharing, but to design forms of sharing that strengthen sovereignty over time—by building local capacity, reinforcing regional collaboration, and ensuring that data remain a living national resource rather than a one-way export.

8 What progress looks like

In discussions about data sharing, progress is often imagined as a destination: fully open datasets, seamless interoperability, and widespread reuse. For small island states, this vision can feel distant, or even inappropriate. A more useful way to think about progress is not as a fixed end point, but as *a series of practical gains* that accumulate over time.

Progress may begin with knowing what data exist. In many settings, valuable datasets are scattered across institutions, stored in legacy systems, or known only to a small number of individuals. Making data visible—through inventories,

catalogues, or simple documentation—does not require sharing the data themselves, yet it materially improves coordination and reduces duplication. Visibility is a form of progress.

Improving data quality and stewardship is another foundational step. Data that are poorly described, inconsistently stored, or vulnerable to loss are difficult to share responsibly. Investing effort in basic curation—clear variable definitions, version control, secure storage, and long-term preservation—often delivers more value than rushing towards openness. In small systems, where data loss can erase decades of work, stewardship is not an optional extra.

Progress can also take the form of *selective sharing*. Rather than attempting to release everything at once, institutions may choose to share a small number of well-understood datasets, or to focus on specific themes of regional importance. These early sharing efforts act as learning spaces. They surface practical challenges, test governance arrangements, and build confidence among both data producers and users.

Metadata and aggregates play a central role here. Sharing summaries, indicators, or dashboards can meet many policy and planning needs without exposing sensitive microdata. Over time, as trust and experience grow, more detailed forms of access may become possible. The direction of travel matters more than the speed.

Capacity building is another marker of progress. Data sharing is sustained not by platforms alone, but by people who understand both the data and the responsibilities that come with them. Training in data literacy, ethics, and communication strengthens the entire ecosystem. In small states, where individuals often wear multiple hats, these investments have multiplier effects.

Importantly, progress should be judged against *local baselines*, not global ideals. What represents meaningful advancement in one setting may be unrealistic or unnecessary in another. Small, durable improvements—maintained over time—often matter more than ambitious reforms that cannot be sustained.

This perspective reframes success. Progress is not defined by how closely a system resembles those of larger countries, but by whether data are becoming more reliable, more visible, and more useful for local decision-making. In this sense, progress is cumulative and contextual, shaped by purpose rather than prescription.

Recognising these forms of progress creates space for realism without complacency. It allows small island states to move forward deliberately, building systems that reflect their scale, values, and priorities—while remaining connected to regional and global conversations.

9 Regional initiatives and shared approaches

For small island states, regional collaboration has long been a practical response to limited scale. This is as true for data as it is for trade, health, education, or disaster preparedness. When national systems are small, regional initiatives offer a way to pool effort, share learning, and build capacity that would be difficult to sustain independently.

Across the Caribbean, many regional data efforts have emerged in response to concrete needs rather than abstract ideals. These initiatives are often sector-specific—focused on health, climate, disaster risk, or official statistics—but they share common motivations: reducing fragmentation, improving comparability, and strengthening regional voice. Collectively, they illustrate that regional data cooperation is not new, but it remains uneven and incomplete.

A recurring theme in the Caribbean experience is what has been described as "islands of data": valuable datasets held within institutions, projects, or sectors, but weakly connected to one another and often invisible beyond their immediate use[2]. This fragmentation is not primarily technical. It reflects differences in mandates, funding streams, legal interpretations, and institutional culture. Regional initiatives frequently arise as attempts to bridge these divides.

Regional statistical systems provide one example. Efforts led by regional bodies have sought to harmonise indicators, improve census coordination, and support national statistical offices through shared standards and training. These initiatives have helped improve comparability across countries, but they also highlight a persistent tension: regional coordination depends on national capacity, and national capacity is uneven. Progress tends to be incremental rather than transformative.

In health, regional surveillance and research networks have played a particularly important role. Shared disease surveillance platforms, regional registries, and collaborative research projects have demonstrated the value of pooled data for understanding trends that are not visible at national level. At the same time, these efforts have exposed challenges around governance, sustainability, and long-term stewardship—especially once project funding ends.

Climate and disaster risk data provide another instructive case. Regional early warning systems and hazard monitoring initiatives are widely recognised as essential for SIDS. These systems depend on cross-border data flows and shared standards, yet they must also accommodate national responsibilities for response and communication. Here, regional data sharing is not optional; it is foundational to collective resilience.

International development partners have increasingly supported regional data initiatives, recognising that small states face structural disadvantages in building

[2]Hambleton IR, Jeyaseelan S. *The silent barrier: exploring data availability in Small Island Developing States.* Rev Panam Salud Pública. 2024;48:e64. https://doi.org/10.26633/RPSP.2024.141

standalone systems. While this support has enabled important advances, it has also contributed to a landscape shaped by projects rather than platforms. Short funding cycles and externally defined priorities can limit continuity, reinforcing the very fragmentation that regional initiatives seek to overcome.

What emerges from these experiences is a clear lesson: regional data initiatives are most effective when they focus on *connection rather than centralisation*. Successful approaches tend to respect national ownership, prioritise interoperability over uniformity, and invest in relationships as much as infrastructure. They work best when they make existing data more visible and usable, rather than attempting to replace national systems.

Seen in this light, regional initiatives are not a substitute for national data systems, nor are they a guarantee of openness. They are a means of extending what small states can do together, while preserving local control. For data sharing in SIDS, the regional level offers a pragmatic middle ground—large enough to matter, small enough to remain grounded in context.

Understanding this regional landscape is essential for interpreting where new initiatives fit, how they complement existing efforts, and why coordination, rather than proliferation, is now the central challenge.

10 Looking ahead

The conversation about data sharing in small island states is often framed as a technical challenge to be solved. In reality, it is better understood as a *collective learning process*—one that unfolds over time, shaped by experience, trust, and changing needs. There is no single model to adopt, and no fixed endpoint to reach. What matters is direction, intent, and durability.

For SIDS, the future of data sharing will be defined less by scale and more by judgement. Judgement about what data matter most, where risks genuinely lie, and how benefits can be realised without eroding trust. This requires ongoing reflection rather than rigid rules. It also requires space to say no—to recognise that not all data should be shared, and not all at once.

At the same time, the costs of inaction are becoming clearer. In a world increasingly shaped by data-driven decisions, invisibility carries consequences. When data from small states are absent or fragmented, priorities may be misread, needs underestimated, and policies poorly aligned. Thoughtful data sharing offers a way to remain present in these conversations, without surrendering control.

Encouragingly, many of the building blocks are already in place. Across the Caribbean, there is deep technical expertise, strong professional commitment, and a growing recognition of data as a public good. What is often missing is not capacity, but connection—between datasets, between institutions, and between

producers and users of data. Bridging these gaps is as much a social task as a technical one.

The approach outlined in this guide is deliberately pragmatic. It does not promise quick transformation or universal openness. Instead, it emphasises proportion, context, and trust. It recognises that progress in small states is often incremental, and that those increments matter.

Ultimately, responsible data sharing in small island states is about *agency*. Agency to decide what is shared and how. Agency to shape interpretation. Agency to ensure that data serve local priorities while contributing to regional and global understanding. When data are stewarded with care, shared with intent, and communicated clearly, they can strengthen—not diminish—the autonomy of small states.

This companion guide sets the scene for that work. The practical steps, tools, and examples sit elsewhere. What remains here is the foundation: a shared understanding of why data sharing matters, why it is different in small places, and why doing it well is worth the effort.