

# 4

## Moving from data to impact – transparency and data use



Ethiopia, 2018  
A CBNC Regional Technical Officer supports Amelework with regular visits to her health post.

Credit: © UNICEF Ethiopia/2018/  
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### Key messages

- Data and information are essential for decision-making and accountability at all stages of the development process – they underpin correct problem identification, design of policies and targeting of resources, monitoring of effectiveness and impact, and critically, learning and adjustment.
- As global levels of poverty fall in aggregate so improved targeting and a focus on the local become increasingly important to ensure the people and places hardest to reach, and at most risk of being left behind, benefit from appropriate action and investment.
- However, availability and accessibility of data and information and the ability to use evidence vary greatly – across and within countries, sectors and among types of actors.
- Despite this wide distribution, lack of transparency and statistical capacity may be particular hindrances to countries projected to be left behind, although such challenges are not limited to poor countries alone: 24 of the 30 countries at the greatest risk of being left behind either publish scant or minimal budget information or have very low statistical capacity.
- While there has been considerable progress in transparency, much remains to be done to ensure that in the increasingly complex development landscape, evidence on people is improved and resources – both volumes and impact – are traceable from mobilisation to spending.
- In particular, investments are needed in disaggregated data that respond to information needs, especially at the local level.
- Crucially, strong emphasis also needs to be placed on the uptake of data and evidence to target the right resources to reach the people furthest behind. Producing data will not be enough – capacity and an enabling environment for responsible data use are required.
- This is a challenging agenda, but by focusing on domestic data and information needs and on sustainability and inclusiveness, governments, civil society, businesses and donors can build on learning from many emerging efforts. The sustainability of investments in data production and use will depend on the extent to which they respond to domestic priorities. Investments should therefore prioritise domestic needs for disaggregated, high-frequency administrative data over surveys primarily designed to satisfy global monitoring needs.

# Transparency and data use are critical for sustainable development

## Transparency is fundamental for accountability and a first step to ensure effective targeting of resources

There is broad consensus, expressed in target 16.10 of the Sustainable Development Goals (SDGs)<sup>1</sup> that access to information is critical for sustainable development, and for people in poverty to overcome the multiple deprivations they face. Indeed, access to information is increasingly considered a basic democratic right. As global poverty falls in aggregate so improved targeting and a focus on the local become increasingly important. Access to information is thus critical for implementing policy and targeting resources. It enables planners and service providers, civil society actors and donors to design and deliver effective programmes, and to be held to account for their decisions.

Since the call for a data revolution for sustainable development – first made in the report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda,<sup>2</sup> there has been strong recognition of the importance of disaggregated data. This is data that counts everybody and enables analysis to identify how people's age, gender, location, disability and ethnicity relate to poverty.

From an economic perspective, information plays a central role in how markets function. It helps businesses, investors, regulators and civil society identify opportunities for sustainable business and stop harmful practices. Conversely, a lack of transparency contributes to creating the conditions for ineffective or damaging interventions and corrupt practices to persist.

Over the past decade, longer-standing freedom of information and transparency campaigns have increasingly been complemented by open data initiatives – bringing focus beyond general transparency to the degree of openness of data as a condition for its usefulness. From local to global levels, open data initiatives focus on demanding and delivering disclosure of data and information in machine-readable formats licenced for reuse. In the context of growing amounts of digital data collecting and processing, these initiatives have become an important means of enabling transparency.

In an increasingly complex global landscape, current social, economic and environmental challenges need to be understood and addressed. Data can help enable this and technological advances are driving fast growth in the production of data and its economic value. However, transparency and openness are essential to ensuring fair access to the opportunities this brings, and to mitigating the associated risks.

## **Use is crucial to ensure data and information can make the difference needed**

It is assumed that transparency, data and information will enable decision-makers and those holding them to account to achieve better results. However, it is increasingly evident that while these are important conditions, they do not drive transformative changes in and of themselves.

Information makes an important difference when it is acted on. For example, the participatory budgeting approach pioneered in Porto Alegre, Brazil, contributed to increased investments in services for people in poverty.<sup>3</sup> In Indonesia's rice subsidy programme, providing targeted information on recipients' rights contributed to an average increase of 25% in received subsidies.<sup>4</sup> The opening and use of public contracting information in citizen campaigns and by government agencies in Paraguay and Colombia uncovered financial mismanagement in the education sector and resulted in the resignation of the public officials mismanaging the funds. It also contributed to increased competition in the school supplies markets as well as increased participation in the governance of the education sector.<sup>5,6</sup>

Strengthening data use – which includes better understanding of barriers – will be a key priority to ensure the increased data and information being produced and made available truly feeds into planning, decision-making, monitoring and learning.

## **There has been considerable progress in transparency but levels are still not satisfactory and new needs are emerging**

### **Improvements have been made particularly in the area of financing**

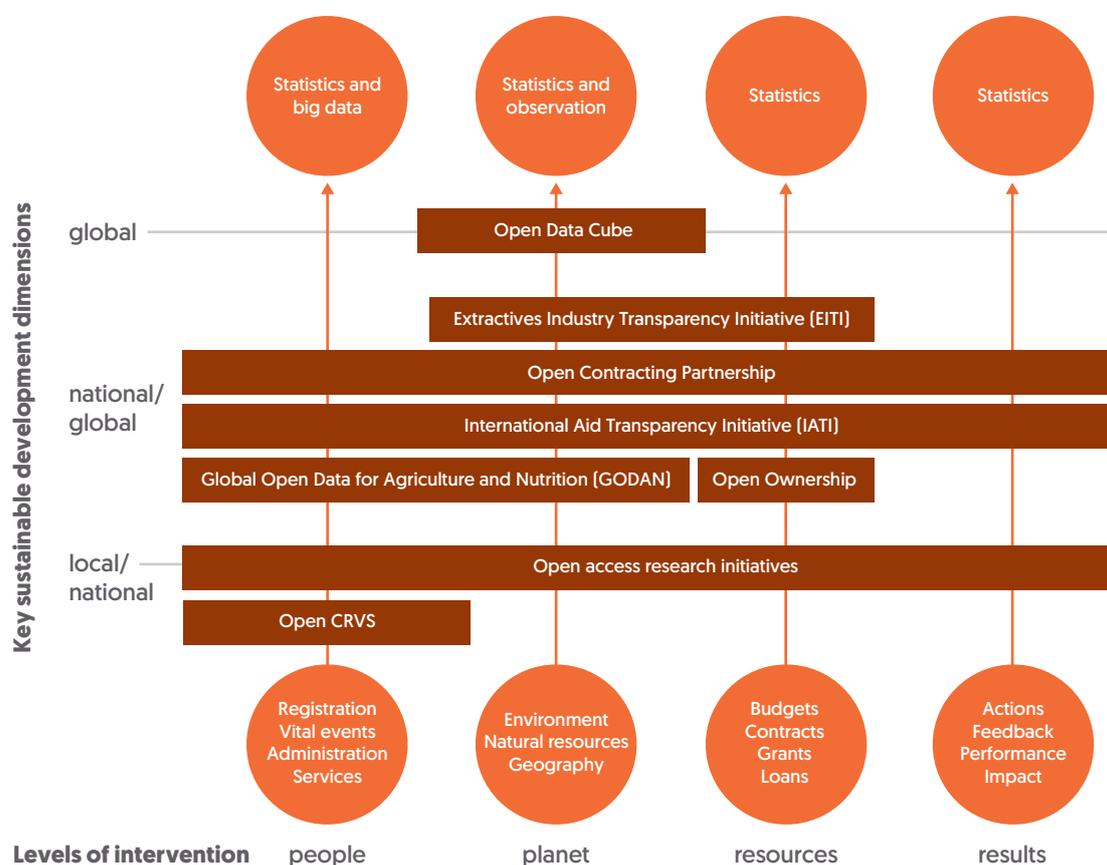
- The International Aid Transparency Initiative (IATI) has grown to include more than 800 publishers from bilateral and multilateral donors to NGOs and private sector organisations. Increasingly, major humanitarian organisations are adopting IATI's open data standard too: as of 1 May 2018, 44 of 59 Grand Bargain signatories (75%) were publishing to IATI, noting potential benefits – such as improving organisational performance, efficiency, opportunities for collaboration, evidence-based decision-making, accountability and transparency.<sup>7</sup> While not all IATI publishers provide data at the necessary level of quality yet, major aid agencies have significantly improved timeliness of their reporting over time. Around half of the organisations assessed in the latest Aid Transparency Index now publish monthly, up from about a quarter in 2016.<sup>8</sup>

- Private sector actors are increasing their corporate sustainability reporting, with the Global Reporting Initiative (GRI) emerging as the leading standard. GRI is exploring how reporting can lead to better understanding of the role of business in reducing poverty, while providing data on progress on SDG target 12.6.<sup>9</sup>
- In the area of domestic resources, between 2008 and 2015, the International Budget Project had noted steady improvements in the transparency of domestic budget information – especially in South Asia.

In the context of increasing calls for data to become more open, a number of initiatives also exist across core dimensions of sustainable development (e.g. people, planet, resources and results), spanning different levels of interventions (Figure 4.1). These have strong potential to contribute to openness and interoperability of data across key domains.

**Figure 4.1**

Various initiatives are pushing for the opening of domestic and international data sources



Source: Development Initiatives, various.

## However, progress in transparency and capacity to use data and statistics varies considerably across developing countries

Roughly three quarters of the 115 countries assessed do not provide enough budget transparency according to International Budget Partnership's Open Budget Survey 2017. Meanwhile the global average transparency score fell between 2015 and 2017 for the first time following a decade of improvement.<sup>10</sup>

Of the 47 countries classed as providing scant or minimal public budget information, 30 are in Africa. A number of poor-performing countries are among those with the lowest government revenues and high populations of people in poverty. Of the 30 countries with revenues below \$400 per capita, more than half (18) publish scant or minimal budget information. Similarly, of the 31 countries with recorded poverty populations of over 5 million people, 18 publish scant or minimal budget information. These include countries with both large populations of people in poverty and high poverty rates such as Nigeria, Tanzania and Madagascar.

However, low transparency is not limited to poor countries. Nine of the eleven lowest-ranked countries for budget transparency are middle or high income countries. Among the 47 countries publishing scant or minimal budget information, 10 are upper-middle income countries, 17 are lower-middle income countries and 3 are high income countries.

Statistical capacity also differs widely across developing countries. Roughly half (14) of the 30 countries with the lowest levels of statistical capacity as measured by the World Bank are in Africa.<sup>11</sup> Half of the 20 countries with the lowest per capita government revenues sit in this group (while a further three do not have per capita government revenue data available for 2016).<sup>12</sup> But again, low capacity is not limited to poor countries: approximately a third of the 30 lowest-scoring countries are upper-middle or high income countries (with island states featuring particularly among these).

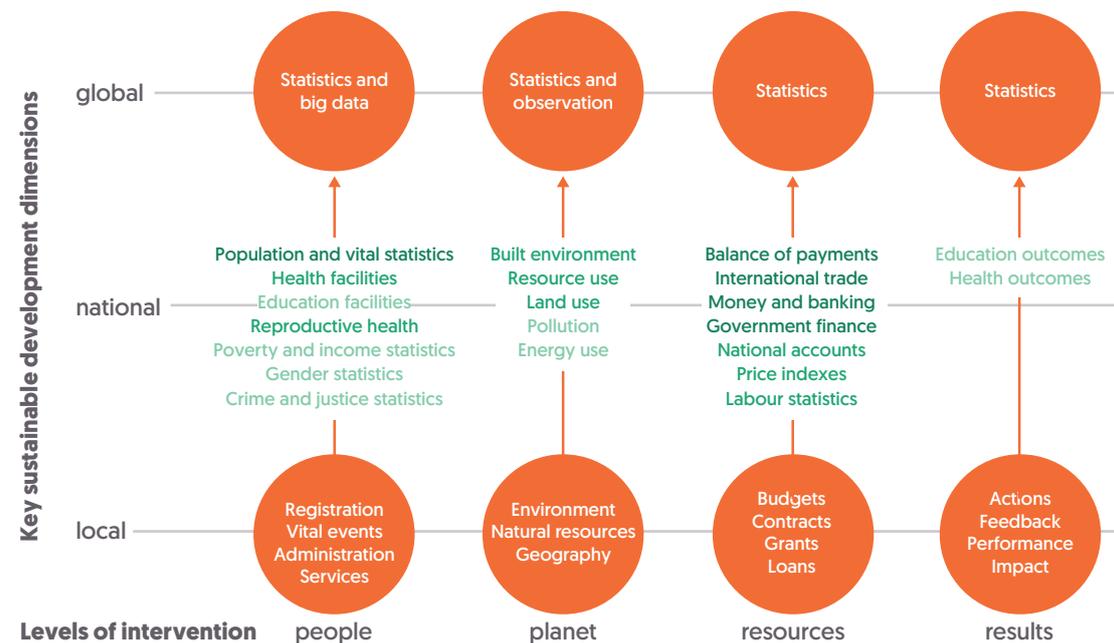
Despite this wide distribution transparency and statistical capacity may be a particular hindrance to countries at risk of being left behind. Of the 30 countries identified in this report, 24 either publish scant or minimal budget information or have very low statistical capacity.<sup>13</sup> Of the 27 countries with the lowest performance in budget transparency, 7 also have very low statistical capacity. Six of these are in Africa and four (Somalia, South Sudan, Chad and Yemen) are among those most at risk of being left behind.

## Important data gaps remain, especially in relation to disaggregation and data on people

Notwithstanding this considerable progress, important challenges remain to ensure that essential data for development is both available and accessible to stakeholders (Figure 4.2). According to recent evidence from 180 countries, even at national level many lack data in key areas and openness of available data remains limited.<sup>14,15</sup> According to the Open Data Inventory, data availability and accessibility is lowest in areas that are especially important for local decision-making and accountability (e.g. concerning land use and ownership and domestic spending information) as well as in those concerning performance and impact data (e.g. education and health outcomes data).

**Figure 4.2**

The availability and openness of development data varies across different dimensions of sustainable development



Source: Development Initiatives based on Open Data Index [2017] <https://index.okfn.org/dataset/> and Open Data Inventory [2017] <http://www.odin.opendatawatch.com/>.

Note: Text shading on national-level dimensions represents data coverage scores: a darker shade of green represents higher average data coverage scores.<sup>16</sup>

With particular reference to areas covered in earlier chapters of this report, key gaps relate to:

- **Data on people:** significant challenges still need to be overcome in collecting comprehensive and disaggregated, locally relevant data to make all people visible. For example while 65% of births are registered globally, only 34% of births are registered for the poorest 20% of people.<sup>17</sup> [See Chapter 1.]
- **Disaggregated data on international resources:** data on what financing reaches people beyond the national level is still very limited – without this, it is impossible to establish where the largest funding needs are and to refocus resources accordingly. [See Chapter 3.]
- **Timeliness of data on international resources:** there are substantial lags in available data and a continued lack of forward-looking data by donors – for example less than half of major donors assessed for the 2018 Aid Transparency Index<sup>18</sup> provide forward-looking data on their funding.
- **Traceability of resources:** particularly in the humanitarian financing sphere, there is a lack of traceability of funding from donor to people affected by crises.
- **Interoperability:** producing relevant, high quality evidence for use in decision-making and accountability typically requires joining up data across multiple sources. With the plethora of open data initiatives and the increasing range of organisations actively contributing to development outcomes, inefficiencies created by diverse reporting standards and platforms must be addressed – including between domestic and international sources of data.

- **Domestic budget transparency:** improvements in this area have stalled and there are indications of backsliding – for example 22 sub-Saharan African countries' scores fell in the 2017 Open Budget Survey.

Overall, these challenges hinder the use of available data for planning, targeting and monitoring. They must be overcome if transparency is to fulfil its potential in supporting more effective allocation of resources, more efficient and effective delivery of development outcomes and ultimately an end to poverty everywhere.

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#### **Box 4.1**

##### **Transparency, data and privacy**

Individual privacy rights are the essential counterpart of public transparency.

This issue has moved to the centre of attention through the advent of connected data systems (including beyond national borders) and machine-driven data analysis, and increasing amounts of private data being held by businesses and public actors as well as recent privacy scandals. Particularly given the increased collection, sharing and use of disaggregated data on individuals, appropriate means of protecting privacy and preventing misuse have to be found while ensuring that data can be used for legitimate purposes in the public interest.

Challenges in this area arise in different contexts. For example, the Nepalese government recently released the personal details of beneficiaries of a housing reconstruction programme in the aftermath of the 2015 earthquake.<sup>19</sup> In the UK's National Health Service, repeated breaches of confidentiality affected hundreds of thousands of people through data loss<sup>20</sup> and malfunction of opt-out mechanisms.<sup>21</sup> So far, these do not appear to have affected the public's trust in the service's data handling but there is clear concern that they could. Trust, however, is central to the functioning and sustainability of data systems.

Updated legal frameworks – notably the entry-into-force of the EU General Data Protection Regulation (GDPR) in May 2018 – are emerging in this area. In the development and humanitarian sectors, various studies and good practice guidelines have been developed, for example by the International Committee of the Red Cross.<sup>22</sup> However, in many countries there are often no clear legal safeguards, at the same time as there are serious risks such as the potential misuse of detailed biometric data on refugees for surveillance purposes.

There will continue to be new challenges as technology-driven data collection, sharing and use evolve. Private and public interests will need to be weighed up when formulating an appropriate context-specific response to these challenges.

However, development data initiatives must work to protect individual rights and public trust equally wherever they operate, particularly those of the most vulnerable people. This requires applying key principles of privacy protection such as active consent, data ownership and limitations on use according to specified purposes.

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## Improving data use is a fundamental next step to better development outcomes

Transparency is indispensable to increasing use of data. But on its own, it is not enough to deliver transformative change in accountability and results. How available data is used is critical to better understand where need is and to better target resources to improve the lives of the people most at risk of getting left behind.

### There is very limited evidence on how data is being used in development

Information is used in decision-making in different ways. This report, to give an example, focuses on advancing instrumental and conceptual use to improve development outcomes. It applies evidence to solve specific problems and to broaden understanding and knowledge about a given issue. But information can also be used to legitimise views or decisions that may not seek public interest outcomes.

There are limited systemic studies of data use in development. However, a recent report based on a multi-country survey of development leaders by AidData<sup>23</sup> indicates that research and analysis, and monitoring and evaluation are the areas that make the most use of information. Meanwhile it is used less for implementation and design purposes.<sup>24</sup> For actors at national level, domestic official data and statistics are especially critical for decision-making and accountability. Among international sources, evidence produced by multilateral actors is preferred. There is strong demand for context-specific analysis and practical recommendations.

### Barriers to data use are complex and relate to multiple factors

Available evidence – mostly qualitative – suggests that the uptake of information in decision-making depends on multiple factors. These range from the technical features of data and information to highly contextual questions of whether there is an enabling environment that motivates evidence use.

The extent and urgency of challenges vary, for example, by sector, implementation stage, organisation and location of an intervention. However, from problem identification to impact evaluation, barriers to data and information use can be assessed and relevant approaches to overcoming them devised. Figure 4.3 introduces a conceptual model framework that can be used to prioritise efforts in specific contexts. At each stage of delivery (planning, implementation and evaluation) it assesses demand for data at local, national and international levels, and an indication of where the challenges of both supply and use of the data are most urgent. Drawing on limited available case study evidence for this report, it then applies the framework to identify where key challenges lie.

**Figure 4.3**

The extent and urgency of challenges related to data use can be measured across levels of intervention and stages of delivery

		<b>local</b>		<b>national</b>		<b>international</b>	
<b>planning</b>	<b>demand</b>	Frequent, location and service-level comparable statistics. Credible, policy-relevant analysis.		At least annual, subnationally comparable statistics. Credible, policy-relevant analysis.		Annual, nationally comparable statistics. Credible, policy-relevant analysis.	
	<b>supply</b>	<b>data</b>	<b>information</b>	<b>data</b>	<b>information</b>	<b>data</b>	<b>information</b>
	<b>use</b>	<b>capacity</b>	<b>environment</b>	<b>capacity</b>	<b>environment</b>	<b>capacity</b>	<b>environment</b>
<b>implementation</b>	<b>demand</b>	Frequent and detailed, project and service-based monitoring and feedback information.		At least quarterly information by domestic/sector plan and budget, programmes and projects.		Quarterly or less frequent programme/project based information.	
	<b>supply</b>	<b>data</b>	<b>information</b>	<b>data</b>	<b>information</b>	<b>data</b>	<b>information</b>
	<b>use</b>	<b>capacity</b>	<b>environment</b>	<b>capacity</b>	<b>environment</b>	<b>capacity</b>	<b>environment</b>
<b>evaluation</b>	<b>demand</b>	Context-relevant, actionable information for learning and improvement.		Domestic plan and budget, programme and project-based information. Credible, policy-relevant analysis.		Project/programme based, and attribution-focused statistics. Credible, policy-relevant analysis.	
	<b>supply</b>	<b>data</b>	<b>information</b>	<b>data</b>	<b>information</b>	<b>data</b>	<b>information</b>
	<b>use</b>	<b>capacity</b>	<b>environment</b>	<b>capacity</b>	<b>environment</b>	<b>capacity</b>	<b>environment</b>

**cross-cutting requirements**

**Availability and accessibility of data:**

High quality, disaggregated and comparable data on all people and resources

**Availability and accessibility of information:**

Credible analysis relevant to policy and level/area of intervention

**Adequate and sustainable capacity:**

Human and technical capacity for production, sharing and use of data and analysis

**Enabling environment:**

Transparency and access to data and information, willingness and incentives for use, inclusive statistical system

Notes: This is a conceptual model for assessing demand, supply and use of data and information. A darker shade of orange indicates less data is available or open; shading is illustrative based on case study evidence.

**Supply**

Supply side barriers remain for both data and information – with information defined as the result of analysis to interrogate and interpret data, thus making it relevant to specific policies and contexts.

At present, household surveys are key sources of development data in most developing countries but are not designed to enable accurate subnational-level analysis. Less than a third of countries produce statistics that can be disaggregated by gender on informal employment, entrepreneurship, violence against women and unpaid work.<sup>25</sup> Organisations working on disability likewise have been drawing attention to the need for disaggregated data.<sup>26</sup> Similarly, survey datasets resourced by large donors and multilateral institutions remain insufficiently comparable, while global SDG monitoring platforms are proliferating with risks of duplication.<sup>27</sup> And data collection to satisfy donor demand has long dominated long-term investments into data capacities, setting misplaced incentives for national statistics officers.

Beyond data, the limited availability of evidence – that is, policy-relevant analysis in user-appropriate formats – is also a constraining factor. In an example from Nepal, despite significant aid data supply, stakeholders note the absence of actionable information that meets their needs, and primarily web-based information portals do not appear to respond to actual information preferences and behaviours, particularly of non-government actors.<sup>28</sup> And a case study from Uganda illustrates the importance of community knowledge and interpretation of development challenges – exploring the link between education sector resources and outcomes, external experts’ problem hypothesis and initial findings missed important aspects of local constraints.<sup>29,30</sup>

### **Demand and use**

On the demand and use side, barriers relate to aspects of both capacity (financial, technical and human) and the broader environment (e.g. degree of openness, institutional incentives and power asymmetries). For example, limited resources mean that addressing increasing demands for global statistics (mostly driven by the SDG agenda) can conflict with the detailed, context-specific data and analysis needs of national and local actors. The OECD *Development Co-operation Report 2017* commented that a low demand for evidence-based policymaking in many developing countries can lead to under-resourcing of data production, which in turn results in low quality data for which there is little demand.<sup>31</sup> Evidence production and use are therefore closely linked as well as connected to wider challenges of capacity and governance.

Use also increasingly involves advanced data and programming literacy, technical infrastructure and governance capabilities. While technology can be an important enabling factor, evidence clearly demonstrates the importance of user-appropriate, locally sustainable solutions (as well as the limitations of technology-led interventions in the absence of political incentives for action).<sup>32</sup>

There is also growing acknowledgement of the political economy challenges to data and information use. Power asymmetries determine public policy outcomes to a greater extent than information availability. Evidence will highlight or omit political, cultural, economic and social dimensions of any given issue, with the fragmentation of online information communities heightening contentiousness.<sup>33</sup> Without an enabling environment in which evidence can be actively and safely sought out, openly discussed, correctly appraised and acted on, data availability will not lead to positive outcomes.

### **Increasing data use is a shared responsibility of all development stakeholders**

In different scenarios, different stakeholders – government, civil society and business – can all act as data producers, users and infomediaries. From collaborating on common data collection, publishing and quality standards to increasing data accessibility to incentivise and ensure responsible data use, they all have critical roles to play. Many actors are stepping up efforts to increase data use.

Examples of government efforts include Indonesia's Unified Database for Social Protection Programmes, delivering data for a range of programmes and facilitating collaboration across central and local levels. Many other governments from Albania to Malaysia have created different types of performance and evidence units.<sup>34</sup> In South Africa, the need for more actionable information was an important factor in establishing a Department for Planning, Monitoring and Evaluation.<sup>35</sup>

Various multi-country and multi-stakeholder efforts are also emerging to support data use. UNICEF's ambitious framework for data on children, now being rolled out across country offices, aims to address multiple barriers from data redundancy and interoperability to demand and capacity for use.<sup>36</sup> Through the recently launched Africa Regional Data Cube, many partners aim to enable the use of earth observation data for environmental monitoring purposes.<sup>37</sup> Data collaboratives are being proposed to make private data sources usable for public policy purposes.<sup>38</sup> The Open Algorithms<sup>39</sup> project for example is piloting the use of large-scale, privately held datasets.

Civil society practitioners in particular are placing emphasis on locally led problem-driven and iterative approaches to increasing data and evidence use. Efforts such as Open Institute [Kenya]'s work on collecting and using community-level data,<sup>40</sup> Global Integrity's Treasure Hunts tool,<sup>41</sup> and Development Initiatives [DI]'s own work with partners in Nepal<sup>42</sup> focus on the role of information in responding to local development challenges and learning with communities.

Open data initiatives have begun to explicitly ground their work in evidence on user needs<sup>43</sup> and increased support for data uptake, for instance through programmes to support use of open contracting data<sup>44</sup> and IATI's Data Use Strategy and Fund.

Among donors, the UK's Department for International Development has been a longstanding supporter of evidence production and uptake,<sup>45</sup> as have philanthropic funders such as the Ford Foundation, the Bill & Melinda Gates Foundation, the Hewlett Foundation, the Open Society Foundations and Omidyar Network. Major donors to transparency and accountability efforts are increasing their focus on strengthening data use, as demonstrated by recent efforts by the Bill & Melinda Gates<sup>46</sup> and Hewlett Foundations.<sup>47</sup>

Actors from all sectors will continue to play critical roles in advancing data use, each according to their particular strengths and responsibilities.

Governments must prioritise transparency and openness as enabling conditions for evidence-based policy and accountability, and to ensure that official data and statistics can be accessed and used. They can also ensure that adequate privacy frameworks and inclusive national statistics systems are developed. It is also primarily governments' role to prioritise investments into long-term domestic statistical capacity and evidence use, including through aligning bureaucratic incentives.

Civil society actors and the media play an indispensable role in producing independent evidence, for example through community-led data collection approaches, and in empowering citizens to access and use information for accountability. At the same time, it is critical that non-state actors work – in respect of privacy – make the data they produce accessible and usable, including through a greater focus on data standards that enable comparability across official and non-official data sources.

Businesses have significant amounts of data, expertise and resources to contribute to the data revolution. At the same time, many data-driven business models rely on proprietary data and/or information systems, which can conflict with public interests.<sup>48</sup> Effective regulatory frameworks for the modern data economy are only emerging now. Concepts such as ‘data philanthropy’<sup>49</sup> therefore require re-evaluation in light of the latest understanding of corporate social responsibility extending to the overall impact of businesses on society.

Donors have an important catalytical role to play but must take care that they do not distort domestic priorities, and appropriately balance short-term priorities [e.g. for SDG monitoring data] with long-term needs. Donor support – in terms of funding, policy support and technical expertise – is, however, critical, especially in areas such as statistical development and capacity for data use in government and among civil society organisations. This requires patient funding and a willingness to iterate. Within this, donors can set clear incentives for inclusive, multi-stakeholder approaches and for balanced support to the production, sharing and use of data.

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**Box 4.2****Funding for data use**

Over the last few years, there has been significant discussion on the need for investments in better data to meet and monitor the SDGs.

A Global Partnership for Sustainable Development Data report,<sup>50</sup> building on an earlier study by the Sustainable Development Solutions Network<sup>51</sup> estimated the investment needed for data on the tier I and II SDG indicators at about US\$2.8–3.0 billion per year up to 2030 for 144 low and middle income countries.<sup>52</sup> Additional aid funding required to support censuses, survey production and improvements to administrative data systems would be about US\$350–400 million.<sup>53</sup> Aid to statistics is estimated at US\$541 million for 2015 (the most recent year for which data is available), although not all of this goes directly to individual countries. Assuming that countries eligible for international development assistance can meet half of the cost required to monitor the SDGs, donor investments in individual countries of US\$635–685 million are required annually through to 2030. This reflects a near doubling of current aid that goes directly to country governments.<sup>54</sup>

An earlier critique of the data revolution focused on a supposedly unfavourable cost–benefit ratio of such investments. This argument rested on much higher cost estimates,<sup>55</sup> non-consideration of the benefits to be derived from the data, and a critique of the fact that SDG monitoring data would not meet domestic needs.<sup>56</sup>

While current cost estimates are likely more realistic, financing for data discussions focused on the SDGs still risk underestimating the effort needed in two important areas.

Firstly, the sustainability of investments in data production will depend on the extent to which they respond to domestic priorities, for example national and local development plans that may include but also extend beyond SDG targets. Investments should therefore prioritise domestic needs for disaggregated, high-frequency, administrative data over surveys primarily designed to satisfy global monitoring needs.

Secondly, it is through the use of data for accountability and decision-making that impact and social benefit will be achieved. The extent to which this happens will be conditioned by capacity and contextual factors such as access to information and transparency, participatory governance, willingness and incentives for evidence use. It is critical that future analysis of investment needs for development data include more thorough consideration of these issues.

These are, of course, not only data-specific and funding-related concerns. At present, without clear markers in multi-sector projects, it remains challenging to accurately estimate aid for statistics. It is even harder to assess funding needs and results of all interventions that could potentially impact on data use, such as through wider public administration and governance reforms.

Nonetheless, as stakeholders continue to advocate options for increased investments in development – for example through a global data fund as discussed during the 2018 Data for Development Festival<sup>57</sup> – it is critical that a sharp focus is kept on the need to strengthen long-term domestic data production and capacity, systems and incentives for data use.

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# Notes

- 1 SDG target 16.10: Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements.
- 2 UN High-Level Panel of Eminent Persons on the Post-2015 Development Agenda, 2013. A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development. Available at: <https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=893&menu=1561>
- 3 World Bank, 2017. World Development Report 2017: Governance and the Law.
- 4 MIT [Banerjee A., Hanna R., Kyle J., Olken B.A. and Sumarto S.], 2014. Information is Power: Identification Cards and Food Subsidy Programs in Indonesia. Available at: <https://economics.mit.edu/files/9931>
- 5 Brown S. and Neumann G., 2017. Paraguay's transparency alchemists. How citizens are using open contracting to improve public spending, Open Contracting Partnership. Available at: <https://medium.com/open-contracting-stories/paraguays-transparency-alchemists-623c8e3c538f>
- 6 In the Paraguay example, the education minister had to resign over a spending scandal concerning mismanagement of public resource in schools. This was triggered by a media and civil society campaign that uncovered inflated spending for a catering contract. The example demonstrates a confluence of factors in addition to high levels of availability of public information and open data in Paraguay, such as existing concerns over low levels of public education spending and education outcomes, a collapsing school structure, and strong pre-existing levels of youth mobilisation and other civil society actors (available at: <https://medium.com/open-contracting-stories/paraguays-transparency-alchemists-623c8e3c538f>). In Bogota, Colombia, the national procurement agency and the local education secretariat were able to bring significantly greater transparency and openness to the market for school supplies and services. This was driven by concerns over anti-competitive practices and inflated prices for key supplies. Reforms focused on moving to the use of structured market data and public information campaigns. They resulted in much expanded market participation by new suppliers. Key challenges to overcome in the process included strong resistance such as threats of legal challenges from established suppliers. Local stakeholders emphasise the critical role of political will in overcoming these barriers. Available at: <https://medium.com/open-contracting-stories/the-deals-behind-the-meals-c4592e9466a2>
- 7 DI, 2018. Supporting Grand Bargain signatories in meeting commitments to greater transparency. Progress Report 1. Available at: [www.devinit.org/post/grand-bargain-progress-report-1](http://www.devinit.org/post/grand-bargain-progress-report-1)
- 8 Publish What You Fund, 2018. Aid Transparency Index 2018. Available at: [www.publishwhatyoufund.org/the-index/2018](http://www.publishwhatyoufund.org/the-index/2018) [accessed 18 August 2018].
- 9 SDG target 12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle, see: <https://sustainabledevelopment.un.org/sdg12>
- 10 International Budget Partnership, Open Budget Survey, 2017. Available at: [www.internationalbudget.org/open-budget-survey/open-budget-index-rankings/](http://www.internationalbudget.org/open-budget-survey/open-budget-index-rankings/). Analysis includes countries shown on survey results.
- 11 World Bank. Statistical Capacity Indicator Dashboard. <http://datatopics.worldbank.org/statisticalcapacity/SCIdashboard.aspx> [accessed 18 August 2018].
- 12 Libya, Syria and Somalia
- 13 Considered here as having a score of 50 or lower in the World Bank's Statistical Capacity Indicator. This accounts for roughly 18% of countries assessed.
- 14 Open Data Watch, 2018. The Open Data Inventory 2017 Annual Report. A Progress Report on Open Data. Available at: <http://odin.opendatawatch.com/report/pressReport>
- 15 Energy use statistics were the least reported data in the ODIN 2017 Annual Report: 120 out of 180 countries reported none of the indicators in this data category.

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