RESULTS IN DEVELOPMENT CO-OPERATION

Is the Results Community ready and fit to embrace the data revolution?

Discussion paper for the OECD/DAC Results Community Workshop

10-11 April 2018, Paris

This issues paper is targeted at the OECD/DAC Results Community and is intended to provoke discussion during the workshop session on the same topic on 11 April 2018.

Building on the 2017 Development Co-operation Report, this paper explores the intersect between the results agenda and data for development, examining what role big data and new technologies might play in results-based management. The paper goes on to describe aspects of the data and IT systems of development co-operation providers as well as their digital and data strategies, and the challenges and opportunities these present for strengthening results-based management which honours country ownership. Overall, we argue that support for, use of, and alignment to country-led results data, particularly administrative data, by development co-operation providers can help bridge the data divide in support of sustainable development outcomes.

Building on this paper, three questions can be further discussed amongst the Results Community:

1. How can new data strategies and systems enable better use of data for results-based decision making by providers and partners?
2. How can providers and partners make use of big data and new technologies to enhance results-based approaches?
3. How can providers ensure that new approaches are shared with partners and support country-owned data in support of the SDGs?

1. Introduction

Agenda 2030 and the SDGs represent a global results framework that requires, more than ever, data to demonstrate progress towards these results. As proposed in the 2017 Development Co-operation Report on data for development (hereafter DCR 2017), as well as in other reports and initiatives, the DAC has a key role to play in championing data for development, scaling-up and increasing the impact of financing for data and providing statistical capacity building to support sustainable development outcomes[1] (OECD, 2017[1]).

The data revolution[2] has the potential to transform data for development, enhancing the evidence base for development policy and programming, and ultimately supporting development impact on the ground. However, the data revolution also contributes to a global data divide where, on one hand, there is continued scarcity in developing countries of basic data, and weak incentives and capacity to fill these gaps (for example, 44% of countries worldwide do not have comprehensive birth or death registration data and no data exists for two thirds of SDG indicators). On the other hand, new technologies and digitalisation bring a data deluge, with increasing sources and types of data, and increasingly sophisticated systems to analyse them (OECD, 2017[2]).

Development data that demonstrate change and impact, i.e. "results data" are being influenced by the data revolution. New technologies, increased availability of data, and accountability pressures are changing the way providers of development co-operation measure and manage for results. Data from a variety of sources are used for results-based management (RBM) including data collected in countries through national and subnational statistical and administrative data systems (country-led data); data collected and verified by multilateral institutions; and data from research and evaluation (OECD, 2017[3]). But data collected by providers at point of service delivery to monitor their specific development interventions are often given priority, which can drain resources and focus from country-led data – deepening the data divide.

New technologies offer opportunities for non-traditional data sources, such as big data, to be harnessed for monitoring results throughout the project cycle (for example, geo-coding). Several providers have published or plan to publish strategies to manage data, new technology and digitalisation. In addition, providers are increasingly investing in aid management systems which streamline analysis and use of their own data within their agencies (OECD, 2017[3]). While bringing new opportunities, providers will need to manage the risks of generating duplicative data that are not shared, and do not strengthen national systems for country-led data.

This discussion paper explores how the OECD/DAC Results Community can bridge rather than deepen the data divide. First, the paper explores the challenges and opportunities of new technology and big data for RBM by providers and also partners (section 2). Section 3 expands on how the data revolution is manifested within aid agencies, exploring how new strategies, systems, and tools are being introduced by providers. Finally section 4 argues that investing in and using country-led results data (DCR 2017's data action 5 – Figure 1) must remain a priority as providers increase and enhance their use of data. Overall, the paper highlights opportunities and challenges, suggesting a more co-ordinated approach to results data

[1] At a consultation meeting: "Data for Development and The DAC," 23 February 2018, Paris, DAC members discussed the possibility of working collectively to tackle shared data challenges (OECD, 2018[11])
[2] Defined and described in more detail in Section 2.

collection and use that benefits both partners and providers in line with data actions 4 and 5 below (Figure 1).

Figure 1. Six data actions which providers of development co-operation and their partners need to take to bridge the data divide.

Source: OECD (2017[1]) *Development Co-operation Report 2017: Data for Development*, http://dx.doi.org/10.1787/dcr-2017-en

2. Are providers and partners ready to use big data and new technologies in their results approaches?

> *Today, it is possible to monitor migration resulting from conflict, drought, or poverty in real-time through the analysis of social-media postings and phone records. It is also possible to strengthen the quality of survey research through, for example, built-in consistency checks and controls on question sequencing, or the use of GPS to ensure the right household is visited (Bamberger and Olazabal, 2017[4]).*

The data revolution is often described in terms of a vast increase in the volume of digital data that has resulted in the phenomenon known as "big data[3]", characterised by the four "V's" of volume, velocity, veracity and variety (OECD, 2017[2])[4]. Big data and data analytics offer a range of opportunities for development and are increasingly used in the humanitarian and international development sectors, for

[3] "Big data are extremely large datasets resulting from the growing digitalisation of our lives" (World Bank, 2017[9])
[4] Importantly, big data does not simply refer to private sector data; a common misconception in development circles.

example for early warning systems, emergency relief, dissemination of information to isolated communities, and geo-coding. However, while developing countries and their development co-operation partners are increasingly using big data for research, operational and planning purposes, use of big data for monitoring and evaluating the success of development interventions is a relatively new area (Bamberger, 2017[5])[5].

Big data can potentially support more adaptive approaches to results-based management

Analysis of big data potentially allows decision makers to track development progress in real time, improving their understanding of where existing policies and programmes require adjustment. This presents a tremendous opportunity to gain richer, deeper, timelier insights to complement the data that are being collected through more traditional sources (such as through field-based project monitoring). At the same time, in a context where development actors increasingly engage in complex partnerships or are part of fragmented systems, new data technology potentially allows each stakeholder to access the same information. In theory, this makes it easier to steer a programme involving many different partners, using the same results framework.

Use of big data for results-based management potentially supports a move from a more top-down descriptive, predictive and prescriptive approach to RBM, to one that supports enhanced feedback loops, real-time awareness and real-time feedback (Letouzé, 2015[6]). Development actors are starting to discuss how new technologies, and more timely and granular data from a range of sources (Box 1) can be used to enhance the RBM and monitoring and evaluation (M&E) of development programmes[6]. A 2016 UN Global Pulse Report provides a useful guide on how big data can be built into the M&E of development programmes, including a specific section on monitoring – suggesting that big data is a powerful tool for policy monitoring, and can contribute at all stages of the project cycle (UN Global Pulse, 2016[7]).

There are challenges to consider if big data is to be harnessed for results-based management

Like for development more broadly, use of big data presents both challenges and opportunities for RBM (Box 1). New technologies and big data link us more closely to beneficiaries, and in theory, enable more data on a wider range of beneficiaries. However, while this may be true in terms of bridging geographic isolation, commentators argue that this is not necessarily true in terms of disability, gender, age, political status or ethnicity, with those most vulnerable often having limited access to mobile phones, for example (Bamberger, Raftree and Olazabal, 2016[8]). Furthermore, if big data is to be used to monitor outcomes and outputs for vulnerable populations, data ethics and privacy must be safeguarded at all costs (World Bank, 2017[9]).

A further challenge lies in capacity to use big data. Many aid agencies, as well as partner country statistics offices, have limited capacity for data analysis and use, and where there is capacity, weak institutional links may exist between data specialists and RBM staff, limiting how well big data can be integrated into RBM systems (Bamberger, 2017[5]). For aid agencies, results, evaluation and data are dealt with in different ways both organisationally and strategically. For example, the Netherlands Ministry of Foreign Affairs (MFA) has plans for an information-based management initiative, including an MFA data lab which may focus on

[5] Use of ICT and new technologies in evaluation was discussed at the 19th DAC Network on Development Evaluation meeting (16-17 April 2016) http://www.oecd.org/dac/evaluation/19thnetworkmeetingdocuments.htm

[6] See for example the work of MERL tech: http://merltech.org/

working with big data, but this is organisationally separate from both results and evaluation (Netherlands MFA, 2018[10]). Results and evaluation departments could benefit from ensuring they have access to in-house data expertise, and use of big data for RBM within aid agencies ultimately requires significant re-tooling of results and evaluation departments.

Box 1. Big Data in results-based management: sources, opportunities & challenges

Sources

- Satellites and remote sensing
- Mobile call data records
- Analysis of social media data
- Commercial transactions
- Web crawling/ scraping
- Crowdsourcing
- Geospatial data - GPS

Opportunities

- Granularity: data such as call detail records (CDRs) and geospatial data, in particular – can display great temporal, spatial, thematic and unit granularity.
- Cost effectiveness: data collected for the purposes other than production of official statistics.
- Timeliness: since unprocessed mobile metadata is available quasi-instantaneously, CDRs, for example, can yield near-real-time statistics
- Data in new areas: potential of generating new indicators, previously not compiled by NSOs, such as the measurement of inequalities.

Challenges

- Access: equity – only those with access to a mobile phone and the internet will be measured.
- Privacy and ethics: less control over ensuring data is protected and anonymised.
- Capacity: technical and statistical challenges – requires retooling of M&E professionals.

Sources: Bamberger, M. (2016), *Integrating big data into the monitoring and evaluation of development programmes*, UN Global Pulse, http://unglobalpulse.org/sites/default/files/IntegratingBigData_intoMEDP_web_UNGP.pdf; Paris 21 (2018) "BIG Data, Disaggregation and policy making," Presentation at OECD workshop, February 23 2018 (unpublished)

Commentators argue that we may be moving towards a scenario where integrated programme information systems "generate, analyse and synthesize data for programme selection, design, management, monitoring and evaluation." In such a world, programme evaluation (and monitoring) may become an output of a programme database using machine learning and programme analytics (Bamberger, 2017[5]). Overall, as briefly touched upon here, big data presents a new frontier for RBM in aid agencies with great opportunity, but also risks (Box 1). Providers would benefit from considering the implications of big data and new technologies when elaborating their overarching data strategies and approaches (Section 3), particularly the potential for enabling access to real-time monitoring data, enhancing feedback loops and promoting more adaptive approaches.

Big data use should be considered for provider and partner results systems

Efforts to grow big data use for development by providers must be co-ordinated, and should include consideration of building the big data capacity of national statistical organisations alongside that of provider agencies (World Bank, 2017[9]). Furthermore, investing in partner national and sub-national administrative data[7] also enhances access to real-time data which can be used by both partners and providers for RBM[8] (discussed further in section 4). There is a case for providers to understand and use new sources of data and technology-driven innovation to fill data gaps, while also helping to build up capacity for core and essential official statistics and administrative data in partner countries, ensuring country ownership and paying attention to stimulating the demand for data in developing countries (OECD, 2018[11]).

3. How can providers ensure that internal data systems and strategies support shared development outcomes?

Spurred by the data revolution, DAC member governments are increasingly pushing aid agencies to get better at using data for decision making – and to be more accountable for performance. Agencies are being mandated by their governments to increase their focus on data, results and performance[9]. This is leading to development of strategies and information technology solutions for the capture and analysis of data – including for results monitoring.

Data strategies and policies support provider internal systems, and can link them to the wider data landscape

To help build the required capacity and capability and ensure effective use of data, some providers are developing data strategies and policies (outlined in Annex A). In some cases data strategies form part of, or intersect with, a wider digitalisation strategy (where digitalisation is treated as development sector, or cross-cutting issue), while others address specifically how data is used internally by aid agencies. For example, DFID's digitalisation strategy has internal and external facing components:

1. Doing development in a digital world
2. Transforming as a digital department (DFID, 2018[12])

DFID's digitalisation strategy promises to consider how aid management systems, including for results, can be transferred to other departments which disburse ODA, and their wider data roadmap situates DFID's data as part of a wider (external) data ecosystem (Figure 2). Global Affairs Canada's data strategy (currently under development) will span not just development co-operation, but all streams of the Department's work: international assistance, trade and foreign policy. In the context of international

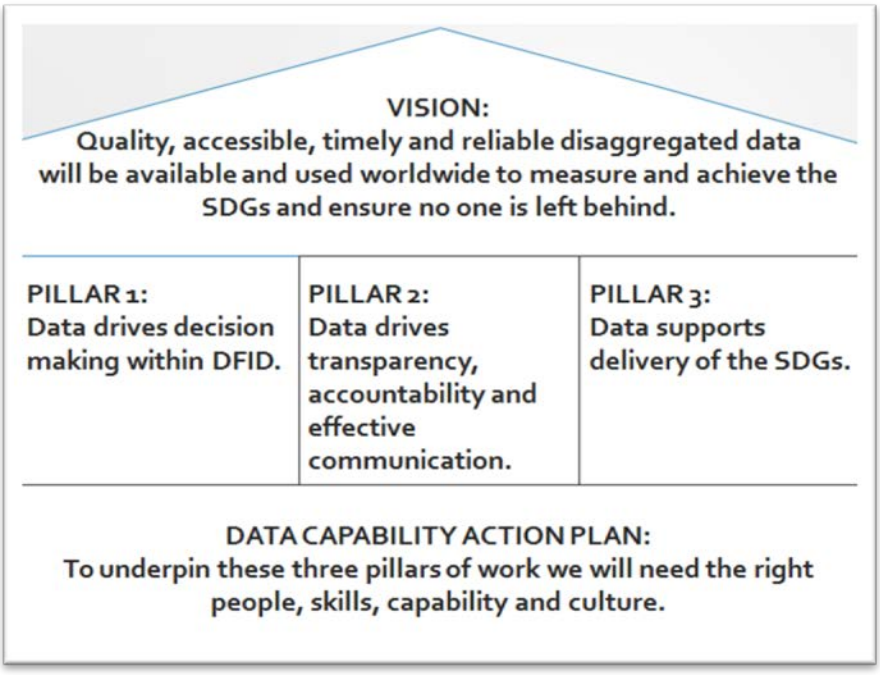
[7] Data owned by partner-country line ministries and sub-national agencies, e.g. from health and education information management systems.

[8] See for example case studies from UNICEF (2017[34]).

[9] For example in Canada, new government-wide requirements require increased use of data for systematic performance and results measurement across government (Treasury Board Secretariat of Canada, 2016[32]). The approach to data and digital across government in the UK is guided by the UK Government's Transformation Strategy (Government Digital Service, 2018[35]).

assistance, Canada's approach has a strong focus on building capacity for use of data for monitoring results and evidence-based decision making, in order to manage better for (development) results in Canada's partner countries. UNICEF's data strategy is externally facing and grounded in supporting partner governments to improve demand, supply and use of data. Belgium has elaborated a digitalisation strategy, which includes a data pillar, and is integrating SDG-linked results fields in its new database – but the two are separate.

Figure 2. DFID's data roadmap

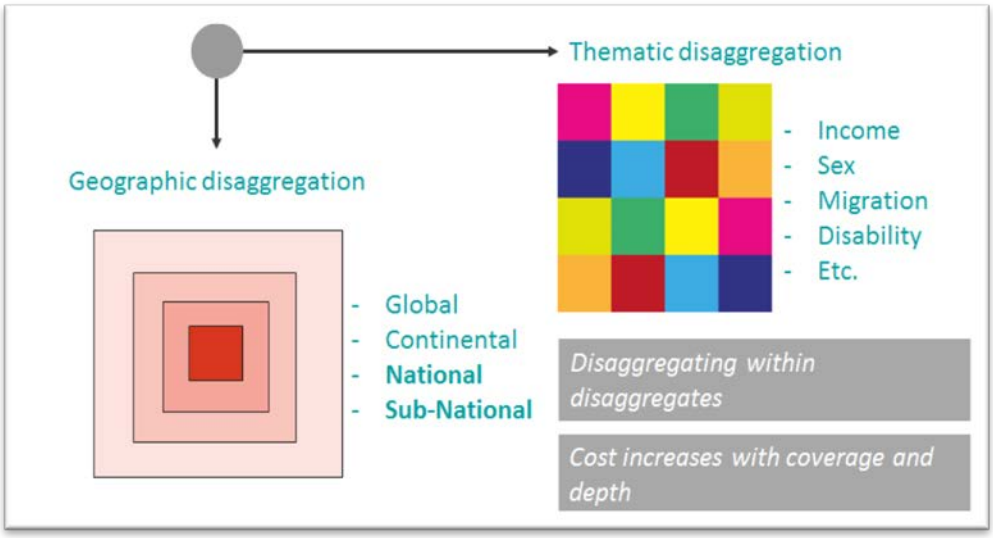


Source: DFID (2018) "DFID 2020 Data Roadmap: How DFID will harness the data revolution to deliver the SDGs" Presentation to the OECD, February 23rd 2018

Providers are considering how best to disaggregate results data

Data disaggregation, whether geographic or thematic (Figure 3) is also an important consideration. DAC members are facing increasing pressure to produce and use more disaggregated data, enabling them to target and monitor whether results have been achieved for those left furthest behind. Several DAC members have started to define their approach to and invest in disaggregated data, suggesting that there is scope for collaboration between members and with partners given the similarities in the types of data they need (OECD, 2018[11]). DFID has elaborated a data disaggregation action plan which has both an internal and external focus (DFID, 2017[13]). DFID disaggregation will focus on four key variables – sex, age, disability status and geography, while Netherlands MFA plans to disaggregate by gender, age, region (or urban/ rural) (Netherlands MFA, 2018[10]). Providers may wish to consider how they can strengthen disaggregation of their own results data, whilst also building partner capacity to disaggregate, and then use data within national and sub-national RBM systems.

Figure 3. Data Disaggregation



Source: Paris 21, (2018) "BIG Data, Disaggregation and policy making," Presentation at OECD workshop, February 23 2018 (unpublished).

New provider IT systems are systematising capture and use of results data

To collect, aggregate and analyse results data, providers are creating their own internal IT systems or databases with increasingly sophisticated "results modules" and standard measurement methods and definitions (UK, New Zealand, Canada, Belgium, Netherlands for example - Annex A). Often the goal is to establish systems that can capture and code project-level results data, which are then aggregated to the country, sector and agency-wide levels, and in some cases automatically analysed. Taking such a 'bottom up' approach is technically challenging, but promising. It can potentially produce data which enables adaptive and flexible approaches in varied contexts while also generating aggregated data for accountability purposes. However, as with wider programme management, systems which support flexibility must be accompanied by an organisational culture which incentivises adaptive approaches and is not too risk-averse. Furthermore, it will be important to ensure that internal systems designed to collect large amounts of data are accompanied by increased organisational capacity and capability to link different datasets and produce meaningful analysis which can be used for learning *and* accountability purposes.

Some systems aim to enable live collection of data at point of service delivery via the IATI standard, which includes an optional results field. Currently, just 13% of the organisations publishing to IATI include some information in the results field (O'Donnell, 2017[14]). Belgium and Netherlands are working towards increased use of IATI for publishing results (Annex A), and Sida and USAID publish some results information (O'Donnell, 2017[14]). Using IATI or a similar cloud-based system in the field for results capture means that results data is entered directly into the system (rather than being reported by partners then entered by aid agency staff). In theory, this leads to increased efficiencies, and in the case of IATI increased accessibility and comparability of data. However, this approach may lead to challenges in terms of maintaining consistency and quality of data and may limit the extent to which qualitative data can be collected. Importantly, measurements and indicators are often unique to each provider and not harmonised among providers (Zwart, 2017[15]; OECD, 2017[3]), creating considerable reporting burden for partners.

New data strategies and systems could be better linked to country-led results data

It is too early to assess the benefits and challenges of different approaches to recently-introduced IT systems and accompanying data and digital strategies. The cost of implementing such systems is undoubtedly high, and anecdotally, the time to have them up and running is lengthy and plagued by delays. In addition, the extent to which these systems and strategies promote and facilitate sharing of information with partners and others, or take into account how partners (especially partner governments) collect data and statistics and their capacity needs in this regard varies. Providers would benefit from ensuring that whatever approach they take, they make sure that data is shared and accessible to partners and other stakeholders. This is explored further in the next section.

4. How can providers support country-led data in their results approaches?

While data showing outputs and outcomes may be generated during project implementation and used in provider data systems, data on impact and change are normally obtained from a country's national statistics and administrative data systems or from multilateral institutions (for example, on infant mortality rates, employment rates, CO2 emissions). Providers and partners would benefit from ensuring collection and use of data for stand-alone project monitoring and reporting, and investment in systems which collate analyse and use these data, does not divert attention and resources away from measuring development change and outcomes at the country level as articulated in the SDGs (OECD, 2017[3]). In this context, results managers have a role to play in bridging, rather than deepening, the data divide.

In the SDG era, providers of development co-operation, including DAC members, are attempting to:

- maximise their contribution to the Sustainable Development Goals and targets that developing countries have prioritised within their national systems and frameworks
- better understand the linkages between progress towards SDG targets, and the allocation and use of development co-operation resources
- use results data to inform decisions about their development co-operation interventions and make course corrections
- safeguard ODA budgets by demonstrating impact to their constituencies (OECD, 2017[3]).

At the same time, developing countries are working to ensure their national development plans reflect the SDGs, and that they have the capacity and resources to monitor progress. They want providers to align with these priorities in their strategies and commitments. Providers of development co-operation have committed to using developing countries' own results data and systems to determine whether development co-operation interventions are contributing to the impact and change for which countries are striving (OECD, 2011[16]; OECD, 2005[17]). In Nairobi in 2016, providers agreed to support countries in developing and implementing their own country-led results frameworks and associated systems, and offered to assist countries in integrating the SDGs into their national development plans, results frameworks and data collection efforts. In addition, providers agreed to minimise the use of additional or parallel frameworks, and to refrain from pressuring countries to add performance indicators that are not consistent with the country's own priorities (GPEDC, 2016[18]). Ultimately, if DAC members are working

with partners to deliver on their jointly agreed priorities, then it is critical that partners have access to good data and statistics that inform decision-making and prioritisation.

Providers face challenges investing in and using country-led data for results-based management

However, existing and emerging donor preferences for results-based mechanisms are changing the landscape of financial support for country-led data (Paris21, 2017[19]). Evidence suggests there is a vicious cycle operating in some developing countries. Low trust in country-led data combined with provider performance and accountability requirements leads to independent and often overlapping data collection efforts that are not well shared. When data are not shared, there is a lack of co-ordination, duplication and overlap; and when country data are not used, their quality does not improve, further diminishing the chances that they will be used (OECD, 2017[3]).

Investing in and using partner statistical systems are ongoing challenges for DAC members (Figure 4). While most DAC members do not invest in statistical systems at the needed scale, they recognise that they face challenges in having the right evidence from statistics and data for development co-operation decisions, programming, monitoring and reporting. 16 of the 22 respondents indicated so in a survey of DAC members conducted to prepare the DCR 2017. The survey also found that while 17 of the 22 respondents tried to use partner country data by default, their actual use varies depending on the national system they are working with (Sanna and McDonnell, 2017[20]). In 2015, the objectives of 81% of DAC members' new interventions were aligned with the development priorities set by countries. However, only 58% of these interventions drew their results indicators from those included in country results frameworks and only 50% intended to use countries' data and monitoring systems (OECD/UNDP, 2016[21]).

Figure 4. Provider support for statistics: highlights

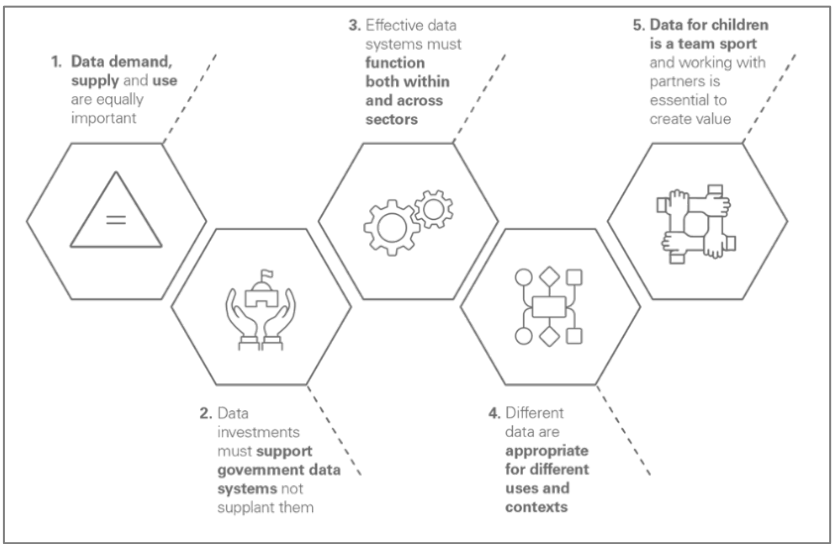
Source: Paris21 (2017), *Partner Report on Support to Statistics: PRESS 2017*, http://www.paris21.org/sites/default/files/2017-10/PRESS2017_web2.pdf

Support for and use of country-level administrative data leads to a win-win situation

Country-owned and led data and statistics should be clearly situated in provider data and digitalisation strategies and policies. In its Data for Children Strategic Framework UNICEF commits to strengthening administrative data systems which will in turn expand the commitment and capacity of partner governments to track and respond to intermediate outcomes in real-time, for example whether teachers

are in school, or whether health clinics are reaching the right populations. This means considering the role of data in each sector and across all sectors (Figure 5). Overall, UNICEF's data framework promises to deepen its support for administrative data collection and use, whilst taking a partnership approach and building its own capacity for data analysis and use (UNICEF, 2017[22]).

Figure 5. Basic principles of UNICEF's data work



Source: UNICEF (2017) *Data for Children*, *Strategic Framework*, https://data.unicef.org/wp-content/uploads/2017/04/Data-for-Children-Strategic-Framework-UNICEF.pdf

Providers should continue to invest strategically in national statistics (generation and use), but should also support strengthening of national and sub-national administrative data systems (World Bank, 2017[9]). By sustainably strengthening administrative data systems, there is benefit for all. Partners have enhanced access to real-time monitoring to improve outcomes, and providers benefit from high quality monitoring data which meets accountability requirements – without creating duplicative systems or relying on externally contracted data collection for monitoring purposes. Administrative data can be strengthened *within* broader investments, for example, interventions in teacher training, institutional support for Prison Services, or renewable energy infrastructure. Such investments should include cross-cutting consideration of results data production and management (not just as part of a provider-mandated logframe), ensuring these data are demand driven and available for results-based management and evidence-based decision making by both providers *and* partners.

In addition, providers could consider how to better link their own systems and strategies to country-led data systems[10]. Increased coherence strategically, organisationally and in aid management systems by providers could help bridge the data divide, and providers could consider enhancing linkages and synergies between how they:

[10] Regional data platforms such as the Secretariat of the Pacific Community's (SPC) 'SDG portal,' are a potential way in which partners and providers could potentially link and share both provider and partner data: http://sddinnovations.spc.int/sdg-portal/

- Generate, use and organise their own monitoring and performance data for steering and learning;
- Support partners to generate and use data (from both new and traditional sources) in support of development outcomes (i.e. support for statistical capacity building and administrative data strengthening/ quality); and
- Incorporate or link country-led data and statistics into their own systems to inform delivery of development co-operation.

5. Conclusions

To make the best out of the data revolution, stakeholders are seeking good practices which better align aid-related results monitoring, global SDG monitoring and developing country data initiatives. At the same time, there appears to be a growing appetite among DAC members to tackle data challenges through more effective investments and through better co-ordination with a view to cutting back parallel and duplicative efforts and to find win-win data solutions for donors and partner countries (OECD, 2018[11]). Big data and new technology present new opportunities for results-based management, particularly for real-time monitoring and feedback. Analysis of big data should be accessible and usable by partners and complement traditional sources, ultimately enabling new technologies to be harnessed to strengthen partner administrative systems.

Honouring commitments to invest in and use country-led results data and participating in accountability mechanisms that are relevant to developing countries and their priorities will entail a change in providers' mind-set as well as behaviour. It requires clear vision and pragmatism in dealing with the pressure to attribute results to every aid dollar. It also requires ensuring that internal systems and strategies for management and analysis of results data are designed to strengthen and support country-led data (OECD, 2017[2]). With this in mind, the Results Community has an important contribution to make to improving the value, use and relevance of data for development, and ultimately bridging the data divide. More specifically, as providers elaborate how results-based management will intersect with data and digitalisation strategies and systems they could consider:

- Exploring big data potential and challenges for RBM – and framing development co-operation agency data strategies and approaches in the context of the data revolution
- Aligning, co-ordinating and sharing to reduce burden on partners of parallel, fragmented, accountability-driven data collection, ultimately benefiting from synergies among partners and increased efficiency
- Building institutional links and coherence between data strategies and data systems, support for partner data and statistical capacity, and internal results and performance requirements
- Mainstreaming consideration of data for development across development interventions and their related results frameworks.

References

Bamberger, M., L. Raftree and V. Olazabal (2016), "The role of new information and communication technologies in equity-focused evaluation: Opportunities and challenges", *Evaluation*, Vol. 22/2, pp. 228-244, http://dx.doi.org/10.1177/1356389016638598. [8]

Bamberger, M. and V. Olazabal (2017), "Spotlight on Tech Enabled M&E", https://www.rockefellerfoundation.org/blog/spotlight-tech-enabled-evaluation/. [4]

Bamberger, M. (2017), "The future of development evaluation in the age of big data | MERL Tech", http://merltech.org/the-future-of-development-evaluation-in-the-age-of-big-data/ [5]

Belgian Development Cooperation (2016), *Strategic Policy Note 'Digital for Development' (D4D) for the Belgian development cooperation*, https://diplomatie.belgium.be/sites/default/files/downloads/strategy_policy_note_d4d.pdf [23]

Belgium MFA (2018), "OECD-DAC Mid-Term Review of Belgium - progress against recommendations." (Unpublished) [24]

DFID (2017), "DFID Data Disaggregation Action Plan: Better data for better lives", Department for International Development, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/582315/Data-disaggregation-action-plan-Jan-2017.pdf. [13]

DFID (2018), "DFID's Data Disaggregation Action Plan & the Global Inclusive Data Charter," Presentation to the OECD, 23 February 2018. [37]

DFID (2018), *DFID Digital Strategy 2018 to 2020: doing development in a digital world*, https://www.gov.uk/government/publications/dfid-digital-strategy-2018-to-2020-doing-development-in-a-digital-world/dfid-digital-strategy-2018-to-2020-doing-development-in-a-digital-world. [12]

DFID (2018), "DFID 2020 Data Roadmap: How DFID will harness the data revolution to deliver the SDGs", Presentation to the OECD, 23 February 2018. [38]

Government Digital Service (2018), *Government Transformation Strategy*, Government Digital Service, https://www.gov.uk/government/publications/government-transformation-strategy-2017-to-2020/government-transformation-strategy. [35]

GPEDC (2016), "Nairobi Outcome Document", Global Partnership for Effective Development Co-operation, Nairobi, http://effectivecooperation.org/wp-content/uploads/2016/12/OutcomeDocumentEnglish.pdf. [18]

ICAI (2017), *ICAI follow-up review of Year 5 reports*, http://icai.independent.gov.uk/wp-content/uploads/EMBARGOED-ICAI-follow-up-review-of-Year-5-reports.pdf. [28]

Letouzé, E. (2015), "Big Data and Development: an overview", *Data-Pop Alliance White Paper Series.* Data-Pop Alliance, World Bank Group, Harvard Humanitarian Initiative, http://datapopalliance.org/wp-content/uploads/2015/12/Big-Data-Dev-Overview.pdf. [6]

Netherlands MFA (2018), "Response to OECD informal survey to selcted members on data and results." (unpublished) [10]

New Zealand Ministry of Foreign Affairs and Trade (2018), "Response to OECD informal survey [27]

to selcted members on data and results."(unpublished)

O'Donnell, M. (2017), "Publishing results to IATI: Will it improve learning and accountability?", Bond, https://www.bond.org.uk/sites/default/files/resource-documents/publishing-results-to-iati-0316.pdf. [14]

OECD/UNDP (2016), *Making Development Co-operation More Effective: 2016 Progress Report*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264266261-en. [21]

OECD (2005), *Paris declaration on aid effectiveness*, OECD, http://www.oecd.org/dac/effectiveness/34428351.pdf. [17]

OECD (2011), *Busan partnership for effective development co-operation*, http://www.oecd.org/dac/effectiveness/49650173.pdf. [16]

OECD (2017), "Provider Case Studies: United Kingdom Department for International Development," http://www.oecd.org/dac/results-development/docs/results-case-study-UK.pdf. [29]

OECD (2017), "Making better use of results data in development co-operation", in *Development Cooperation Report 2017: Data for Development*, OECD Publishing, Paris, http://dx.doi.org/10.1787/dcr-2017-10-en. [3]

OECD (2017), "Overview: What will it take for data to enable development?", in *Development Co-operation Report 2017: Data for Development*, OECD Publishing, Paris, http://dx.doi.org/10.1787/dcr-2017-6-en. [2]

OECD (2017), "Provider Case Studies: Netherlands Ministry of Foreign Affairs", http://www.oecd.org/dac/results-development/docs/results-case-study-netherlands.pdf. [26]

OECD (2017), *Development Co-operation Report 2017: Data for Development*, OECD Publishing, Paris, http://dx.doi.org/10.1787/dcr-2017-en. [1]

OECD (2017), "Provider Case Studies: Canada", http://www.oecd.org/dac/results-development/docs/results-case-study-canada.pdf. [25]

OECD (2017), "Provider Case Studies: New Zealand Ministry of Foreign Affairs and Trade", http://www.oecd.org/dac/results-development/docs/results-case-study-new-zealand.pdf. [36]

OECD (2018), "Draft meeting summary: Data for Development and the DAC: Strategies, good practices and next steps to bridge the data divide for development." (unpublished) [11]

Paris21 (2017), *Partner Report on Support to Statistics: PRESS 2017*, http://www.paris21.org/sites/default/files/2017-10/PRESS2017_web2.pdf. [19]

Paris21 (2018), "BIG Data, Disaggregation and policy making," Presentation to the OECD, 23 February 2018. [30]

Sanna, V. and I. McDonnell (2017), "Data for Development: DAC member priorities and challenges", *OECD Development Co-operation Working Papers*, No. 35, OECD Publishing, Paris, http://dx.doi.org/10.1787/6e342488-en. [20]

Treasury Board Secretariat of Canada (2016), "Policy on Results", Treasury Board Secretariat of Canada, https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=31300. [31]

Treasury Board Secretariat of Canada (2016), "Directive on Results," Treasury Board Secretariat of Canada, https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=31306. [32]

UN Global Pulse (2016), *Integrating big data into the monitoring and evaluation of development programmes*, UN Global Pulse, [7]

http://unglobalpulse.org/sites/default/files/IntegratingBigData_intoMEDP_web_UNGP.pdf.

UNICEF (2017), *Data for Children Strategic Framework*, UNICEF, https://data.unicef.org/wp-content/uploads/2017/04/Data-for-Children-Strategic-Framework-UNICEF.pdf. [22]

UNICEF (2017), *Data for Children, From Insight to Action: Using data to drive results*, UNICEF https://data.unicef.org/wp-content/uploads/2018/01/From-Insight-to-Action-November-2017.pdf. [34]

World Bank (2017), *Data for Development An Evaluation of World Bank Support for Data and Statistical Capacity*, Independent Evaluation Group, Washington DC, http://ieg.worldbankgroup.org/sites/default/files/Data/Evaluation/files/datafordevelopment.pdf. [9]

Zwart, R. (2017), "Strengthening the results chain: Synthesis of case studies of results-based management by providers", *OECD Development Policy Papers*, No. 7, OECD Publishing, Paris, http://dx.doi.org/10.1787/544032a1-en. [15]

Annex A: Profile of provider data strategies, systems and tools

Annex A presents a brief overview of recent developments among a selection of providers in terms of data strategies and systems. This is not an exhaustive list, rather a selection of a broad cross-section of approaches.

Belgium – Belgium MFA

Belgium's Digital for development strategy focuses on data, inclusive societies and how new technology contributes to economic growth and job creation (Belgian Development Cooperation, 2016[23]). The data pillar of the strategy aims to improve data availability for policy and programming and increase use of and access to big data. Belgium is in early stages of implementation, mainly awareness raising as well as some big data projects. The strategy does not deal with internal systems for measuring and monitoring results. However, Belgium is in the process of rolling out a data management tool "Prisma" which has been created and fine-tuned to deliver quality data management. It has the potential to deliver the needed information, including alignment to SDGs and SDG targets (Belgium MFA, 2018, (Unpublished)[24]).

Canada – Global Affairs Canada

Most results information is entered into the Global Affairs Canada data information management system. (OECD, 2017[25]). One of Global Affairs Canada's goals is to take a "bottom-up" approach to refreshing the system by tagging and rolling up project results to meet information needs at different levels. The aim is that eventually staff will be able to access *thematic indicator menus* for use at different levels, and that data collected on these indicators, along with their narrative assessments, would then be flagged for roll-up. However, to reach an endpoint where project managers can easily choose from a menu of indicators during design is both complex and technically challenging (OECD, 2017[25]).

A new Global Affairs Canada data strategy will support data management, use and dissemination. The Strategy covers the whole of Global Affairs Canada (trade, foreign policy, international assistance), and aims to ensure that appropriate systems and tools are in place and also equip staff with the capacity to analyse and use data in policy and programming. Performance and results-based management is central to the strategy. In the case of international assistance, Canada's approach has a strong focus on building capacity for use of indicator data for monitoring results and evidence-based decision making, in order to manage better for (development) results in Canada's partner countries. Canada is also one of the top five donors for statistical support and capacity building in partner countries (Paris21, 2017[16])

Netherlands – Netherlands MFA

Netherlands MFA has implemented an IT application which combines results data with standard activity data on budgets and partners for aggregation and reporting. Within this system, the Netherlands hopes to disaggregate results data by gender, age, region (or urban/ rural). At point of service delivery partners enter results directly into the system via IATI. In place since January 2016, this gradually introduced process will apply to all projects over EUR 250 000. The goal is to have 50% of all results reporting available on IATI by 2018, while continuing to increase this proportion over time (OECD, 2017[26]). A data strategy is under development, but there is still a fragmented approach to working with (open) data. An example is an information based management initiative, which focusses on working with (big) data in general (not results specific) this entails for example, an MFA data lab, but is still quite preliminary (Netherlands MFA, 2018[10]).

New Zealand – New Zealand Ministry of Foreign Affairs and Trade

New Zealand is in the process of implementing a new aid-management system, which will replace a number of separate legacy systems and processes into a single, integrated system for contract, financial, project and programme management. Results data is one component of this. The new system will record a full results framework at project level, including output/outcome statements, indicators, targets and results reporting. There will, therefore, be a link to other project data in the system including statistical markers (CRS sector codes etc.,) financial and contract data, and other monitoring information. Project results are linked to the 'Strategic Results Framework' (the system New Zealand uses to track and report progress against priorities and results at the whole of aid programme level) allowing aggregation and analysis of results data against strategic goals. The new system should enable New Zealand to report publicly in more detail and more frequently. In particular, New Zealand will be looking at providing results data as part of their IATI data publication. While there is no specific data strategy, work is under way to improve managers' use of data for decision making, focusing on timely and useful data to inform both strategic and day-to-day management (New Zealand Ministry of Foreign Affairs and Trade, 2018[27]).

The United Kingdom – Department for International Development

DFID released its digitalisation strategy in January 2018. The strategy speaks to the wider UK government transformation strategy for digital, data and technology. In the strategy DFID promises to explore the possibility of extending its Aid Management Platform and tools to other departments which deliver ODA. The strategy also briefly mentions strengthening country systems – though is very much focused on internal data that is used to design, monitor and evaluate its own programmes. Overall, DFID promises that "more efficient capturing of results data will free time for analysis and use." The strategy also includes a capacity building element, including a "digital trailblazers" initiative. (DFID, 2018[12]).

DFID is also developing a 2020 Data Roadmap and a data disaggregation plan. The starting point for DFID's data roadmap is the importance of more and better data as an evidence-base for policy making; to monitor results, to ensure transparency and accountability and, ultimately, to have a more coherent way of managing data for development across the department. In theory the results system will enable storing of output and outcome data from programme logframes, giving DFID the ability to aggregate results data at various levels (for example by country, sector or delivery partner) (ICAI, 2017[28]). DFID has a team dedicated to data for development, which collaborate with DFID's results team, while policy teams also work with their partners to improve data in their respective sectors (OECD, 2018[11]).

UNICEF

UNICEF has elaborated a Data for Children Strategic Framework. The overall approach is based on a commitment to strengthening government systems, and growing data, demand, supply and use to achieve results for children. The strategy defines principles and actions, and is part of a broader effort to improve the use of evidence across the organisation. The strategy clearly distinguishes between its own management data (collected for performance purposes) and external data used to achieve development outcomes. The framework includes a commitment to working with countries to strengthen SDG monitoring for the indicators UNICEF has responsibility for, and to building capacity for use of data both within UNICEF and with their partners. Importantly, action starts at country level. UNICEF offices are being tasked with mapping the data landscape and determining where they can best invest and develop data (UNICEF, 2017[22]).