

Monitoring results of complex systems change

Measuring and assessing the changes fundamental to sustained WASH services¹

Key messages

- Donors are attentive to the emerging discussion of complex systems thinking and the relevance of systems thinking to sustained development impact. They consider their approaches to be consistent with and supportive of systems development.
- No donor yet has a holistic systems approach that encompasses analysis, design, implementation, monitoring, evaluation and learning.
- Each donor has entered the dialogue and applied approaches based on its own priorities, its understanding of 'systems', and the characteristics of its programming.
- Donors have been more focused on honing analysis, approaches and instruments for sustaining results than on monitoring and measuring their contribution to systems development.
- Access indicators remain important for domestic accountability, and any donor initiatives to measure and monitor contributions to country systems development will co-exist with existing quantitative results monitoring regimes.
- Proxy indicators are often used to measure the sustainability of WASH efforts.
 In some cases a functionality indicator is used as proxy, while others use indicators more indicative of demand, or the continued use of services within a target area.
- Many donors are now working to systematise and expand their thinking on monitoring system change. USAID has the most developed approach but only pilot applications in the field and none in WASH.
- Approaches to local systems and WASH service sustainability will always be context specific and each contribution to systems development is valuable.
- Evidence of the importance of country ownership and the validity of systems approaches can be better documented if there is greater harmonisation of efforts and approaches in-country. Experience with new government-togovernment instruments and budget support should be shared and linked with organisational performance monitoring.
- There is a richness of experimentation and thought on systems thinking as a
 path to sustainable development. However, there is still a wide divergence in
 how 'systems' is perceived, whether among donors, between donors and
 partners, or (likely) between countries and development partners. Going
 forwards, efforts should be made to provide a platform for collaboration and
 exchange across the sector to ensure coherence.



1 Background

The context

The Sustainable Development Goals (SDGs) agreed in September 2015 establish a new level of ambition for developing economies and their development partners. Specifically, SDG6 calls for countries to 'ensure availability and sustainable management of water and sanitation for all'. Significant sector change will be required to deliver such a comprehensive goal and its associated targets which encompass both universality and sustainability. Increasingly, there is recognition that positive change in sector performance at scale requires an approach that considers all the distinct but interrelated elements and relationships that collectively contribute to effective and efficient water and sanitation services.

Under the MDGs there was an understandable drive towards new access to water and sanitation services and donors sought to help countries achieve those results. Yet this focus on new access results created a tension with the aid effectiveness agenda which highlighted that repeated investment in infrastructure that did not yield a sustained service was inefficient and, itself, an unsustainable use of resources.

As the world transitions from the MDGs to the SDGs, there is an opportunity to reexamine the role of the donor²/development partner and to understand how they engage, or anticipate engaging, in building the strong local systems that will sustain water, sanitation and hygiene (WASH) services. This paper is built from an assumption that the development of capable local systems will be essential to sustain service delivery and achieve the acceleration in sector performance needed to realise the ambition of the SDGs. While development partners and local stakeholders must maintain a focus on developing points of access, they must also invest in developing the local systems to sustain points of access – and this in turn requires an evolution away from ways of working that have not always been aligned with systems thinking.

This paper synthesises the findings of a WaterAid study into current donor thinking on measuring sector progress towards developing sustained WASH services, and the degree to which donors are embracing aspects of systems thinking in their approaches.³ It also offers recommendations for additional exploration and collaboration.

What do we mean by systems thinking?

Systems thinking can be described as an approach to problem solving that balances holistic thinking with a tendency to reduce complex problems to their most basic parts. Systems thinking accomplishes this by encouraging an understanding of the web of dynamic factors that collectively influence the ability of people and institutions to deliver the desired development outcomes. By identifying a reasonable boundary around a 'system' and then trying to understand, work with and shape these existing relationships and actors, governments, development partners and other sector stakeholders have a better chance of achieving a sustainable outcome.

Systems thinking is a framework that shifts decisively away from approaches that are restricted to limited project interventions. The assumption here is that project



interventions have impacts that are only questionably sustainable over the longer term.

Systems thinking is conceptually easy to understand, but it can appear challenging to translate complex and dynamic systems into practical applications to international development. On the one hand, it appears to be simply good development practice. On the other hand, to apply this approach in a methodical and consistent way requires a different set of design, implementation and monitoring tools than those traditionally employed by donors, who are bound by project constraints and an ongoing need to demonstrate tangible results. In particular, donors need to attribute publicly-funded project interventions to project results – which can seem to be at odds with a systems-based emphasis on contribution toward a development outcome that requires collaborative efforts of local stakeholders.

Applications of systems thinking to water and sanitation services are also complicated by the varied starting assumptions of the meaning of the term 'system', including:

- Natural systems (the supporting ecosystem).
- Physical systems (the physical infrastructure designed for a purpose).
- Government systems (like procurement, planning and budgeting) that support the delivery of all basic services.

Each of those is part of the context that might be considered through a systems lens, but probably not all. Instead, a systems approach would consider the independent but interrelated elements (including infrastructure, institutions, people, capabilities and resources) that collectively produce and deliver services to populations.

Applied to water and sanitation services, for instance, a systems approach would look beyond the new access generated through a specific water point or latrine and more deliberately consider the web of financial, institutional, technical, environmental and social relationships, incentives and rules that will affect the functioning of that water point or latrine over the long term.

This paper examines how donors have been able to reconcile these different pressures and perspectives, and how the benefits of systems thinking might be captured and reported in a pragmatic way.



2 Current practice in the design, measurement and monitoring of sustainable WASH interventions

The following is a summary of current donor views and approaches to 'system-building approaches'. It distils inputs from the WASH departments or lead practitioners of 13 donors (including seven bilaterals and four multilaterals), including those directly or indirectly responsible for the design and implementation of donor investments.

2.1 Design approaches

Donors report deliberate efforts to improve the sustainability of WASH services, whether through overarching sectoral engagement, through attention to factors known to be important to sustainability (financing, capacity, water resources etc.), through formal strategies and methodologies targeted to the specific intervention, or through a combination of these approaches. There is recognition that targeted approaches, informed by learning, are necessary to improve development effectiveness.

Achieving internal strategy commitments to the sustainability of development efforts requires collaborative approaches. There is recognition that any efforts by external development partners need to be complemented by an ongoing relationship with host-country governments and other development partners in-country and in the sector. This engagement builds collaboration and trust and, ideally, should inform project design, enhancing responsiveness to government priorities and local conditions. Several donors cited the value of sector working groups in-country, but there was also emphasis on the individual donor's need for a relationship with government and a strong understanding of the sector. That said, Ethiopia and Mozambique were identified as countries where the government was becoming effective in coordinating with donors and among donors. The value of participation in joint sector reviews or preparatory processes for global or regional meetings like the SANs (SACOSAN and AfricaSan) or Sanitation and Water for All (SWA) high level meetings (HLMs) was not emphasised during these discussions.

Donor approaches are increasingly targeted toward cultivating country or organisational capacity, ownership and/or responsibility. For instance, the Dutch Directorate-General for International Cooperation (DGIS)'s SDG Strategy 2015-2030 (under development) will require implementing partners to articulate their exit strategies and the transition to local responsibility, and the German corporation for international cooperation GIZ⁴ describes its organisational mandate as specifically focused on developing capacity within the countries of operation. While the French development agency (AFD) specifies the need to strengthen sectoral and governance frameworks, USAID positions its development interventions within a Local Systems Framework and recently launched a Broad Agency Announcement (BAA) calling for partners interested to co-develop with USAID a new methodology for using systems analysis, multi-stakeholder initiatives and continuous learning and information dissemination to improve the impact and sustainability of USAID WASH programming (see Box 1). As a multilateral with a strong urban water and sanitation



programme, the Asian Development Bank (ADB) develops the capacity of the public service providers as a backbone of its approach.

At the level of project design, all donors engaged in direct implementation undertake either sector analysis or project-specific analysis to inform the sustainability of investments. At the sector level, the Australian Department of Foreign Affairs and Trade (DFAT) reports increasing its use of political economy analysis (PEA) and had previously invested in the external development of country WASH sustainability snapshots. DGIS's work through its primary partner, UNICEF, is likewise influenced by the WASH bottleneck analysis tool WASH-BAT which assesses the enabling environment for sustainable services. AFD is often guided by an internal framework diagnostic which informs on the balance of activity to be directed toward improving the sector framework versus a loan-specific service intervention. At the project level, USAID requires a project-specific sustainability analysis (across all sectors) although there is no standardised format for this. The UK Department for International Development (DFID) cited the value of poverty reduction diagnostics to inform on sector constraints and areas of comparative advantage. DFID staff are working internally to encourage the adoption of a sustainability analysis as part of programme design, including the potential that results not backed by a strong sustainability narrative would not be counted within the overall access results reported. This approach is not yet approved and would take some time to roll out. WASH project design routinely looks at contributing factors like coverage of operations, maintenance costs and community engagement as a matter of good practice, even if this is not described as sustainability analysis.

Multilaterals – ADB, the African Development Bank (AfDB), the European Commission (EC), the Inter-American Development Bank (IDB), and the World Bank – undertake standard environmental and social analyses as part of their preparation processes which include aspects relevant to sustainability. This is supplemented by a programme-specific review of the enabling environment and/or risks to sustainability, although there is no standardised format. Under its programme-for-results (PforR) operations, the World Bank undertakes an environmental and social systems assessment (ESSA) to evaluate social and environmental risks and benefits associated with a given PforR operation. The ESSA focuses on the counterpart systems that apply to a given programme and whether they are sufficient to manage risks associated with the proposed programme. The ESSA provides an assessment of the applicable systems against a set of core principles defined in the policy. As part of its new work to develop an integrated results framework, the World Bank may develop more guidance on the initial level of systems and sustainability analysis that would be beneficial.

Finally, DFAT, DGIS and the Swedish International Development Cooperation Agency (SIDA) emphasised that they complement their in-country work with investments in specific global partnerships and programmes like the Water and Sanitation Program (WSP), SWA, the Sustainable Water Fund and the Global Innovation Lab for Climate Finance. Further, SIDA and DGIS specifically referenced the need for approaches to sustainability to engage the private sector since their resources will be critical to achieving the scale and sector change envisioned by the SDGs. DGIS has enacted a cost-share contract with Vergnet



Hydro for the installation and maintenance of 1,000 hand pumps, with Vergnet guaranteeing functionality for 50 years.

Taking the desire for greater local ownership and capacity even further, several donors use, or are developing, **financing instruments** that are argued to operationalise that goal. In particular:

- The Global Water Practice of the World Bank has a vision to focus 'less on fixing the pipes and more on the institutions that fix the pipes'. The PforR financing instrument helps accomplish this by:
 - Financing the expenditures of specific development programmes (ongoing or new; sectoral or sub-sectoral; national or sub-national).
 - Disbursing on the basis of the achievement of key results, rather than inputs, under those programmes.
 - Strengthening programme systems for adequate fund management and environmental and social safeguards.
 - Strengthening institutional capacity needed for those programmes to achieve results.

The PforR complements the World Bank's existing instruments of development policy financing (DPF) and investment project financing (IPF) and can provide an advantage over the narrower transactional focus of the other instruments.

- The EC identifies its instrument of choice as budget support with results-based management. Budget support is put in place when certain preconditions are met. The support can be for state-building in a more fragile country, improved governance or sector-specific support. In the case of the latter, a limited number of sector targets, very specific to the country's goals, are set for the disbursement of each tranche of funding. A December 2014 evaluation of EU cooperation with Bolivia 2007-13 found that sector budget support actions had strengthened the national policy dialogue among stakeholders and improved policy formulation, deepened the Government's capacity to implement policies, and enhanced sector-level monitoring. While strengthening local systems, the support is often triggered by achievement of outputs and less by sector outcomes, which would require a more holistic sector collaboration.
- DFID designed the WASH Results Programme to focus on delivering outcomes (sustained use of services). The programme employs an innovative finance mechanism following principles of 'payment by results' whereby the three WASH suppliers will receive payment only upon independent verification of achieving a set of specific results packages agreed between each supplier and DFID. The three suppliers are committed to deliver WASH services before the end of December 2015, the Millennium Development Goal (MDG) deadline. From 2016 onwards, the commitments shift towards sustainability of these services, i.e. the *outcome* of continued access to water, sanitation and continued safe hygiene practices, until the end of the programme in March



2018. This is intended to provide an incentive to implementers to consider factors such as local capacity and systems to sustain results.

• Similarly, USAID has a simpler government-to-government (G2G) funding mechanism called the Fixed Amount Reimbursement Agreement (FARA). Under a FARA the host government implementing agency is reimbursed a fixed amount for the successful completion of specified activities or outputs with previously agreed upon specifications or standards. If the final cost is less than USAID and the partner had estimated, there is no reduction in the payment; likewise there is no increase if the cost exceeds the estimate. As stated, FARAs are mainly used to finance outputs like infrastructure projects that are relatively straightforward to cost, but they do make use of local systems and create an incentive for good cost estimates and improved efficiency.

Flexibility in terms of project duration and phasing is seen as a significant advantage. Short programme cycles are cited as a constraint (World Bank, USAID) to significant institutional and sector reform. However, most of the interviewees indicated that they had flexibility to design longer projects or to extend projects. Some donors like DFAT and DFID are able to design instruments with phased approaches which are able to reflect the change in the operating context or, in the case of DFID, a defined 'sustainability' phase.

2.2 Measurement approaches

The discussion on measurement approaches highlights the intersections among conversations on results, sustainability, capacity development and local systems. Of necessity, donors measure results at different levels and with different indicators, depending on their strategy and programmes. In most instances, donors are collecting and reporting on multiple types of information to capture different types of results. In broad terms, donors look for:

- Results achieved through specific project interventions. These are the
 results directly attributable to the project intervention and are typically outputs
 or outcomes.
 - In some cases, these are captured through an internal menu of standard indicators available to that donor. Standard indicators are harmonised across a donor's WASH portfolio and allow for upward aggregation and, potentially, external reporting.
 - The most collected result in WASH is new access to WASH services as a reflection of SDG 6. This is collected through an indicator of access, a basic accounting of the number of people reached through the donor programming. Whether the sustainability of this access is confirmed will be discussed later.



- Custom indicators also capture results directly attributable to the project intervention but are tailored to the project intervention and/or less often used so unlikely to be aggregated across a portfolio and reported externally.
- Sustainable results. The global goals for WASH, the aid effectiveness
 discussion, and the focus on domestic resource mobilisation all point towards
 the need for sustainable results from development interventions. For donors,
 however, approaches to measuring and reporting on sustainability of WASH
 fall into an uneasy space between project results and system strengthening.
 Donors interviewed opted for different approaches (often a combination)
 including:
 - Confirming the ongoing functioning of project-funded investments.
 - Inferring the likelihood of ongoing functioning of project-funded investments through the use of proxies (such as cost recovery) at a project level.
 - Inferring the likelihood of ongoing functioning of project-funded investments through the use of proxies (such as percentage coverage in a given geography) at a sector level.
- Capacity development. Capacity development also straddles categories of results. On one hand, few WASH projects are designed without capacity development, especially within a community or service provider. Often, the indicators are custom, reflecting the specific goals and interventions of a project. However, donors also identify a broader need for sector capacity which can take the form of improved processes and systems or the improved performance of sector institutions. Capacity development is described as completely fundamental to sustained development outcomes and often used as a donor entry point toward sustainable WASH. Here too, there are different levels of engagement and measurement:
 - Project-level outputs and outcomes as a result of project inputs toward capacity development.
 - Contribution to improvements in sector performance as a result of project or sector-level support.
- Sector change, achieved through a contribution toward sector goals as agreed with government. The form of contribution includes budget support, technical assistance, and other forms of government and sector systems strengthening. These activities are more directed toward achieving impact long-term and high-level changes to human well-being through collective actions and contributions towards systemic change from local stakeholders, governments and development partners. Indicators might be a subset of the government's own sector programme indicators, and might be measures of the change in organisational or sector performance, unattributable in sum to the actions of any one sector participant.



Donors believe that access indicators are important and will remain an important metric. Access is typically one of the standard indicators against which donors could, or must, report. The results against this indicator can be readily aggregated, reported externally and understood. Where a donor's standard indicator for access included reference to 'sustainable access', it is not unusual for the access to be systematically measured and reported, but sustainability is addressed through a narrative or through periodic evaluations.

Proxy indicators are often used to measure the sustainability of WASH efforts.

Overall, interviewees are comfortable with the proxy approach to measuring the sustainability of WASH services, particularly in combination with capacity building within the sector. The main divide is whether the proxy is a functionality indicator which demonstrates an available supply at a specific point at a specific time (often with additional information collected to inform the prognosis of continued service provision) versus indicators more indicative of demand, or the continued *use* of services within a target area. The latter, which DFID endorses, reveals whether the relevant systems have been put in place to deliver a service that people want within a service area. The World Bank similarly identified percentage coverage and customer satisfaction as strong proxies. In practical terms, the functionality indicator is more often an index of factors indicating probability of sustained service. It should be noted that these indicators are quite different for urban and rural geographies.

DFID, AfDB and the World Bank raised the challenge of measuring sustainability and change in organisational performance. The comments were two-fold. The first was that an index indicator, like those typically used to measure functionality, were, by nature, complicated to aggregate since they are composed of subsets of scores against different factors. Secondly, the indices are often tailored to reflect local context. This makes sense when assessing specific project results but hinders the ability to do cross-project or cross-country learning or make assessments of service sustainability over time. The most significant user of the functionality approach, DGIS, discovered this when it conducted a 2013 review of five years of sustainability checks applied against its WASH programmes. The review found inconsistency in the definitions and applications of the functionality measure which made it difficult to draw conclusions that could be addressed in future programming in a systematic way. Despite this, some donors, like DGIS, AfDB and DFAT, are using or considering functionality indicators as complement to other measures. The Global Monitoring and Harmonisation Task Team of Sanitation and Water for All is undertaking work to develop a functionality indicator, drawing from the range of global experience. This indicator might, at least, provide a degree of comparability among those who adopt it.

In terms of organisational performance, every donor spoke of the need for capacity development, but the interventions ranged from traditional technical assistance to partnerships to direct use of country systems. There is no clear set of indicators but agreement that the result to be achieved is an improved ability to perform the specified sector role, which argues for an indicator tailored to the role. USAID has been investigating the potential to build a measurement tool adapted from the PACTOrganizational Performance Index.



2.3 Monitoring approaches

Donors acknowledged internal challenges in monitoring for sustainability but made less reference to host-country monitoring needs. A key issue was the abillity to conduct post-project evaluations at meaningful times, frequency and scale to allow for learning and adaptation. As the World Bank stated, one of the biggest challenges in measuring sustainability is that success isn't evident for many years, making the establishment of a good set of leading, or proxy, indicators of sustainability critical. Donors without a mandated programme length (DFID, GIZ, AFD) see this as a distinct benefit, allowing an ex-post evaluation to be built into design. Most donors are ramping up their internal monitoring, post-project evaluation, and learning efforts, but there was no equivalent discussion of efforts to build host-country monitoring capacity and platforms.

There is a wide range in terms of frequency, formality of approach, engagement of local stakeholders and systems, and the degree to which monitoring was specifically ascertaining the sustainability of service. There was an acknowledgement that monitoring and ex-post evaluations could be improved, both in methodology and in the establishment of a learning linkage to inform government sector leaders and future programming. No donor mentioned the potential risk to undertaking an evaluation and only DGIS indicated there was a plan for remediation – whether by the donor or through local action – should an evaluation reveal failure.

Several donors raised the point that the value of monitoring has to be balanced against the cost and the opportunity cost. That is, if donors are to spend more of their resources on direct monitoring or on improved country capacity for monitoring, the value of that monitoring in terms of improved sector performance has to be demonstrated. So the monitoring has to be efficient in execution and yield information that is actionable and accessible to those who can use it. DGIS is exploring remote technologies and publi-private partnerships (PPPs) for monitoring which will yield good sector information.

Some donors make a long-term investment in a country's own ability to monitor sector performance. Examples of this approach to strengthening local systems include:

- 1. The EC provides WASH sector budget support with tranches of funding released against a *country's* demonstration of sector results against agreed indicators.
- GIZ works strategically and directly to strengthen sector regulators and monitors and, wherever possible, adopts the sector indicators as its own incountry.
- 3. DFAT provides capacity development support across regions to civil society with the objective of strengthening sector accountability and is training local stakeholders to carry out functionality checks.

Where ex-post evaluations have been done, they provide valuable learning. AfDB recently conducted four evaluations of WASH programmes in Malawi, Zambia,



Ethiopia and Tanzania. Not yet public, these evaluations highlighted the functionality (sustainability) challenges, the need to engage countries more heavily in baseline data development, and the difficulty in measuring sustainability of results after project closure. IDB is undertaking a series of ex-post evaluations of the sustainability of its water and sanitation interventions in Bolivia, Haiti and Paraguay. DFAT's rural Indonesia WASH programme (which includes a World Bank loan) has been active for ten years and offers an opportunity to re-visit the work on previous years. ADB's 2015 *Annual Evaluation Report* included, as it does each year, a deeper dive on sustainability of operation results in a particular sector. The 2015 report focused on urban water and sanitation and gave a sustainability ranking to each operation.

WASH operations did quite poorly in terms of ensuring sustainability, with only 47% of the 20 operations assessed and validated as likely sustainable or most likely sustainable.

There are interesting monitoring initiatives underway which offer opportunity for further exploration and learning. Specifically:

- DGIS continues to partner with UNICEF, in particular, to embed sustainability
 thinking into its programming. This includes WASH-BAT analysis of the
 enabling environment for sustainable services, the requirement for evidence
 of functionality, and increased attention to a transition (over the life of a
 programme) of responsibilities to government.
- **DFID** commissioned operational research of the value for money (VfM) achieved under its programming. This included a deep dive on sustainability which will inform guidance on monitoring of sustainability and potential DFID-level post-programme-completion quantitative assessments of sustainability.
- The Policy Planning and Learning (PPL) Bureau of **USAID** is investing in research on the monitoring of complex systems change, including opportunities for pilot work. This approach would not replace results reporting but would complement it with more immediate and multi-level feedback on the changes in the sector.



A snapshot of USAID local systems framework and sustainability activities¹

USAID has made an agency-wide commitment to a local systems approach to development. To operationalise this commitment, two new agency practices are particularly relevant to the sustainability of WASH programming. The first is the focus on local systems through a local systems framework that defines clear and practical steps toward realising a vision of development that is locally owned, led and sustained. The second is the agency's adoption of a mandatory sustainability analysis as part of the programme design process. Increasingly the two have become integrated and complemented by fresh thinking on how to measure and monitor changes in systems and organisations.

Understanding, measuring and monitoring local system change

USAID, like other donors, typically uses a specific approach to monitoring, referred to as performance monitoring. Performance monitoring uses indicators designed to measure results that contribute to broader country strategy results frameworks or project log frames. Annual (or semi-annual) reviews of performance data are intended to inform high-level decision making. At the project and activity level, monitoring is intended to inform implementation. Performance monitoring practice involves collecting baseline data, setting targets, and comparing actual figures to targets.

However, where the cause and effect relationships are hard to predict, it can be limiting to identify solutions and plans in advance. Complex system monitoring complements performance monitoring by adding additional dimensions of understanding the development evolution. To that end, as USAID is advocating working through local systems, it has been investigating ways to monitor the system change that is achieved.

The monitoring approach that USAID is advocating is built in three layers:

- 1. **Visualisation** of the system through the '5 Rs' rules, resources, roles, relationships and results.
- Enriching understanding of systems through qualitative narratives from users and beneficiaries. If there is consistency in application, these stories add another dimension to understanding of how the change is unfolding on the ground – from a range of different perspectives
- 3. Finally, indicators are still important for the foreseeable future, USAID will still rely in part on performance indicators. But these can be supplemented with other **measures of systems change.**

Five suggested approaches to complex system change monitoring

Building from the 5 Rs, USAID has begun to identify five approaches to system change monitoring, drawn from inside and outside the realm of systems thinking, that it is testing through a series of pilot activities and learning events. To date, none of these pilot activities have been in water and sanitation, but they have been conducted in sectors including health, biodiversity and agriculture.

1. The value of qualitative narratives

Stakeholder feedback helps to capture information in the blind spots of traditional monitoring. That is, USAID's monitoring is organised around an assumed causal pathway, but this can create blind spots in relation to other intended, unintended, positive or negative outcomes or alternative causes of change from other actors and factors and non-linear pathways of contribution.



2. A basket of indicators

Different types of indicators yield different types of information at different times:

- Leading indicators provide information before the result takes place.
- Coincident indicators yield information at about the same time as the result.
- **Lagging indicators** provide data after the result takes place, often with considerable time lag due to data collection routines and long result chains.
- **Sentinel Indicators** are placed at critical points in a system map to help monitor and inform the mutually-influencing relationship between the programme and its context.

2. Process monitoring of impacts (PMI)

PMI identifies and monitors the processes that are assumed to underlie the achievement of results and tests whether these assumptions were valid or whether in fact other processes are occurring or processes are interacting to produce different results.

3. Most significant change (MSC)

In contrast to PMI, MSC is a broader monitoring and evaluation method that encompasses a range of perceptions on a range of development outcomes precipitated by a project. MSC collects and analyses qualitative data (stories and feedback) on broad 'domains of change' rather than measuring indicators.

4. Outcome harvesting

Like MSC, outcome harvesting is not bound by the pre-determined project objectives, but invites participatory monitoring of outcomes as they emerge. Changes can be reported as soon as they are recognised in the course of a project, and after collecting evidence of outcomes (positive and negative), the approach works backward to establish and document a narrative of how the intervention contributed directly or indirectly to each change.

How is USAID moving forward?

To support these pilots, USAID has different mechanisms and approaches, including the Monitoring, Evaluation, Research and Learning Innovations (MERLIN) programme, which allows users to source, co-create and co-design development solutions that innovate on traditional approaches to monitoring, evaluation, research and learning. Within MERLIN, the Strategic Program for Analyzing Complexity and Evaluating Systems (SPACES MERL) will conduct a landscape analysis of the systems and complexity tools available for international development issues. SPACES MERL will then help match available systems tools to different current international development issues and questions around the world and, based on findings from pilot studies, establish a toolkit of systems and complexity tools that can be used separately or in various combinations by decision makers. Early adopters in the agency have been Global Health, the Bureau for Food Security, the Global Development Lab, and some Missions (e.g. Uganda), but USAID remains interested in additional trials, including in WASH.

¹ Content is drawn from an unpublished Triple-S Legacy Case Study developed by USAID and Aguaconsult in 2013 and from available USAID sources including the USAID Learning Lab website: http://usaidlearninglab.org.



3 Reflections for strengthening systems thinking in current and future practice

There is wide awareness of the need to develop the local capacity and processes required to provide a sustainable service, ultimately without donor support. In response, donors are employing approaches they believe will improve the sustainability of WASH, including sector analysis, engaging in sector discussions, and structuring activities to include local capacity development with associated indicators.

However, many do not term any of this work as 'systems-thinking'. Instead, donors use the terms 'enabling environment', 'capacity-building' and 'operating context'. Likewise, it is clear that donors are approaching sustainability and systems thinking from different vantage points. In addition to varied approaches, the focus varies among donors from programme design, to implementation mechanisms, to evaluation. Regardless of the terminology used, there are examples of positive experience and a deepening of commitment to strengthening and monitoring local systems and capacity, whether from DGIS – which expects partners to be less ambitious in terms of access results because of the need to put effort and resources toward the sustained result, and is shifting its costing assumptions accordingly – or from DFAT, whose WASH Performance Assessment Note (PAN) specifically states that 'DFAT will strengthen partner governments at national and subnational levels to efficiently and effectively invest in services and to lead in hygiene behaviour change... This includes monitoring capacity to plan, implement, regulate, maintain and finance the relevant infrastructure and services.'

However, donors are still unlikely to have an approach that is coherent and consistently applied from design to ex-post evaluation which is targeted to improved sector performance. The value of a methodology that used local systems as a consistent reference for the entire project cycle (analysis, design, implementation, monitoring, evaluation, learning) in improving the potential for sustained services by strengthening and then shifting responsibility to those local systems, is not widely dicussed. Likewise, a sense of the dynamism and linkages among the elements of a development change is still not prominent in sector thinking.

While the SDGs (which cannot be achieved without systems thinking and investments) are identified as being important to a focus on sustainability, and to highlighting the linkages within the WASH sector and between WASH and other sectors, the stance of individual governments and roles of individual agencies appear to have greater influence. When governments approached development from a longer-term, diplomatic or state-building perspective, it enabled more ambitious development work and more focus on institutional development. Likewise the mandate and policy direction of the agency has a more direct impact on programme direction than engagement in external dialogue and partnerships. Bilaterals appear more innovative and aware than the multilaterals, with a longer programme cycle and more flexibility on project design and indicators providing significant advantages.

As a next step, many donors are actively seeking opportunities to learn from the work of others, to collaborate, and to pool knowledge. There is an interesting range



of approaches and experience which could be shared by strengthening dialogue and learning around current efforts to monitor contribution to sustained sector performance. In particular, there is acknowledged room for improvement in the design and execution of post-project evaluations – and in the sharing and use of evaluation findings internally, with country partners, and with other donors. Exchange of experiences around goal setting, measuring and evaluating organisational improvement – including development of common indicators – could also strengthen current approaches to monitoring complex systems change.



Endnotes

¹ Research commissioned by WaterAid and conducted by Heather Skilling. This discussion note was written by Clare Battle based on a report by Heather Skilling.
² In this paper, the term 'donor' is used to describe the full range of bilateral and multilateral

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³ In January 2016, interviews were conducted with the WASH departments or lead practitioners of 13 donors including seven bilaterals and four multilaterals: African Development Bank (AfDB); Asian Development Bank (ADB); European Commission (EC); Inter-American Development Bank (IDB); The World Bank; Agence Française de Développement (AFD); Department of Foreign Affairs and Trade, Australia (DFAT); Department for International Development, UK (DFID); Directorate-General for International Cooperation, the Netherlands (DGIS); Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ); Swedish International Cooperation Agency (SIDA); United States Agency for International Development (USAID). Two bilaterals, SDC and JICA, were not able to participate, and another, USAID, responded from its policy bureau rather than its technical bureau.

⁴ GIZ, which is not strictly a donor but a quasi-governmental implementer.