Using Payment by Results to Improve the Sustainability of Rural Water Supply Services in Tanzania

Lessons learned from the DFID - funded programme in Tanzania (2014 - March 2019)

March 2020
## Contents

Disclaimer ........................................................................................................................................ iii
Acknowledgements ....................................................................................................................... iii
Project Information ....................................................................................................................... iii
Acronyms ...................................................................................................................................... iv
Executive Summary ...................................................................................................................... 1
  Background and introduction to the programme ........................................................................... 1
  Key learnings arising from the programme to date ...................................................................... 1
  Recommendations ...................................................................................................................... 4
1. Introduction ............................................................................................................................... 6
  1.1 The scope and purpose of this report ................................................................................... 6
  1.2 The methodology used to identify and triangulate learning points ...................................... 7
  1.3 Rural water supply sustainability in Tanzania ......................................................................... 7
  1.4 An overview of the DFID-funded PbR programme ................................................................. 8
2. Charting the evolution of the programme through time ............................................................. 10
3. Key lessons arising from the programme to date ...................................................................... 12
  3.1 Design and management of the programme ......................................................................... 12
  3.2 Using PbR to stimulate change in the system ....................................................................... 15
  3.3 Monitoring systems, and verification of results ..................................................................... 19
  3.4 Eligibility, incentives, disbursements and fund usage ............................................................ 23
  3.5 Achieving outcomes (improved functionality) ....................................................................... 23
  3.6 Equity and Value for Money (VfM) ..................................................................................... 28
4. Conclusion .................................................................................................................................. 33
5. Recommendations arising from the 2019 annual programme-wide learning cycle ............... 34
6. Next steps .................................................................................................................................. 34
Bibliography .................................................................................................................................. 36
Annex 1: Detailed Theory of Change of the PbR component of the programme ........................... 38
Annex 2: Sources of information for this report: Interviewees and workshop participants ........ 39
Annex 3: Summary of Eligibility Criteria and Payment Structure Used in different Phases of PbR 40
Disclaimer

This material has been funded by UK aid from the UK government, however, the views expressed do not necessarily reflect the UK government’s official policies.

Acknowledgements

This report has been produced by the ‘Data Verification Service Provider’ (DVSP), which is a consortium led by Ecorys in partnership with IWEL Ltd, DataVision International Ltd, WEMA Consult (T) Ltd, and Aguaconsult. It was written by Will Tillett (Aguaconsult) on behalf of the Government of Tanzania (Ministry of Water, RUWASA) and DFID, with financial support from DFID Tanzania through its support to WSDP II. Sincere thanks to Rachel Norman (Ecorys) and Harold Lockwood (Aguaconsult) for inputs into sections of this report, and to the following, who provided information, insights and peer review during the report development: Lukas Kwezi and Gertrude Kinhunrwa (DFID), Jerome Sansonetti and Aidan Covielle (DIME), Chris Brown (Wel Group), Don Brown (IWEL), and Amy Weaving and Alena Cierna (Ecorys). Many thanks also to those who also provided information through interviews, such as Machibya Magayane and Kema Koronel (WEMA), Stefanie Henke (Datavision), John Pinfold (OPM), Bahati Joram and Jackson Mutazamba (MoWI) and Herbert Kashililah (TAWASANET). Finally, thanks to all those who provided insights during the stakeholder workshop in Dar es Salaam, to RUWASA for their leadership in the workshop, and to DFID Tanzania for encouraging and supporting this programme-wide learning process.

Project Information

<table>
<thead>
<tr>
<th>Name of the Project</th>
<th>Support to Rural Water Supply, Sanitation and Hygiene in Tanzania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Value</td>
<td>£150m (of which £65.4 is under the Payment by Results Scheme)</td>
</tr>
<tr>
<td>Funder</td>
<td>DFID Tanzania</td>
</tr>
<tr>
<td>Duration</td>
<td>2014-2022</td>
</tr>
<tr>
<td>Implementer</td>
<td>Government of Tanzania through the Ministry of Water</td>
</tr>
<tr>
<td>DFID Senior Responsible Officer (SRO)</td>
<td>Lukas Kwezi</td>
</tr>
</tbody>
</table>
# Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRN</td>
<td>Big Results Now</td>
</tr>
<tr>
<td>CBSP</td>
<td>Capacity Building Service Provider</td>
</tr>
<tr>
<td>CDMT</td>
<td>Central Data Management Team</td>
</tr>
<tr>
<td>CMO</td>
<td>Community Management Organisation</td>
</tr>
<tr>
<td>COWSO</td>
<td>Community Owned Water Supply Organisations</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>DIIME</td>
<td>Development Impact Evaluation</td>
</tr>
<tr>
<td>DVSP</td>
<td>Data Verification Service Provider</td>
</tr>
<tr>
<td>DWE</td>
<td>District Water Engineer</td>
</tr>
<tr>
<td>GoT</td>
<td>Government of Tanzania</td>
</tr>
<tr>
<td>KPI(s)</td>
<td>Key Performance Indicator(s)</td>
</tr>
<tr>
<td>LGA</td>
<td>Local Government Authority</td>
</tr>
<tr>
<td>MoFP</td>
<td>Ministry of Finance and Planning</td>
</tr>
<tr>
<td>MoW</td>
<td>Ministry of Water</td>
</tr>
<tr>
<td>P4R</td>
<td>Payment for Results (refers to the World Bank-supported programme)</td>
</tr>
<tr>
<td>PbR</td>
<td>Payment by Results (refers to the DFID-supported programme)</td>
</tr>
<tr>
<td>PFM</td>
<td>Public Financial Management</td>
</tr>
<tr>
<td>PO-RALG</td>
<td>President’s Office Regional Administration &amp; Local Government</td>
</tr>
<tr>
<td>QSG</td>
<td>Qualification Support Grant</td>
</tr>
<tr>
<td>RS</td>
<td>Regional Secretariat</td>
</tr>
<tr>
<td>RUWASA</td>
<td>Rural Water Supply &amp; Sanitation Agency</td>
</tr>
<tr>
<td>TAWASANET</td>
<td>Tanzania Water &amp; Sanitation Network</td>
</tr>
<tr>
<td>ToC</td>
<td>Theory of Change</td>
</tr>
<tr>
<td>VEO</td>
<td>Village Executive Officer</td>
</tr>
<tr>
<td>WASH</td>
<td>Water, Sanitation &amp; Hygiene</td>
</tr>
<tr>
<td>WPDM</td>
<td>Water Point Data Manager</td>
</tr>
<tr>
<td>WSDP</td>
<td>Water Sector Development Plan</td>
</tr>
</tbody>
</table>
Executive Summary

Background and introduction to the programme

This report highlights some of the diverse lessons learned from a highly innovative, DFID funded, Payment by Results (PbR) programme for improving rural water supply sustainability in Tanzania. The programme is innovative in that it is the first WASH PbR programme that DFID (globally) is implementing directly through a host government. It is also unique in using PbR to sustain services rather than paying for new access. The programme started in 2014, applies an adaptive programming approach and runs to 2022. This report covers the period from the start of the programme in 2014 to the end of verification of Phase 3 (March 2019). The learning presented here was captured through a qualitative process of desk review, stakeholder interviews and a one-day learning workshop in Dar Es Salaam in December 2019.

The rural water supply sub-sector in Tanzania faces a number of significant challenges. Out of the 138,333 rural water points in the country, 42,171 are in need of repair or fully non-functional (RUWASA-CDMT, 2019) limited capacity of service providers¹, limited ongoing support and oversight of these service providers by the Local Government Authorities (LGAs), and a strong focus, driven by the sector political economy, on construction of new water supply ‘projects’ rather than on maintenance and sustainability (Aquaconsult / World Bank 2017, DIME 2017g). The Government of Tanzania (GoT) launched its Water Sector Development Programme (WSDP) in 2007, and by 2015 the total funds committed to the WSDP were USD$1.6 billion (MoWI 2015b). However, despite a four-fold increase in sector investments between 2000-2015 (Carlitz 2016), access to improved rural water supplies between 1990 and 2015 has increased just one percentage point from 45% to 46% over this period (JMP 2015).

Against this background DFID launched its ‘Phase 2: Rural Water Supply & Sanitation Programme’ in 2014. It included around £75 million allocation for ongoing support of the WSDP through input financing, and allocated £65.4 million to the PbR component. This report focusses on the PbR component, which seeks to incentivise improved support to service providers to maintain and sustain services, particularly on the part of LGAs. As this approach was somewhat untested in the sector, adaptive management was a key design feature of the programme. Under the PbR scheme, DFID pays a fixed amount annually for every water point within an LGA which is functional as per the agreed definition. The calculation of the payments considers both functionality rates and accuracy of reported results, hence incentivising efforts to strengthen monitoring systems, and address sustainability issues. The programme currently includes 181 LGAs nationwide, up from 57 at the start of the programme and has disbursed a total of £14.7 million to date.

Key learnings arising from the programme to date

The PbR programme is an ambitious attempt to effect change in a complex system and has involved the mobilisation of significant resources, both financial and human, on the part of DFID and the GoT as development partners working toward a common goal of improved rural water service delivery. Whilst the programme still has some years to run, there are a number of headline insights that can be captured as follows:

- The use of PbR can be a catalytic leverage tool to help stimulate stakeholder focus and political commitment towards programme objectives (in this case, improving quality data and improving functionality). It has the potential to stimulate systems change in areas such as transparency, accountability and strengthening intra-government cooperation and support;
- Success requires investment in transparent and continuous communication to clearly set out the process and structure of the mechanism and to engender trust and credibility of the results and their application across a range of different stakeholders;

¹ Mainly Community Management Organisations (CMOs) and Community Owned Water Supply Organisations (COWSOs).
Using Payment by Results to Improve the Sustainability of Rural Water Supply Services in Tanzania

- Such a PbR programme requires robust data to prove the attainment of results, hence there has been a strong focus on strengthening government functionality monitoring systems. However, this may not lead on its own to the desired outcome of improved water point functionality without a greater connection to support provided to service providers, and to effective maintenance arrangements.

The more detailed learning points arising from this programme have been categorised into six, interconnecting themes, with the bullet points below summarising key learnings per theme.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Building adaptiveness into programme design, management and delivery: Complex and innovative programmes such as this benefit from having adaptive management as a design feature, complimented by ongoing evidence generation to justify adaptations. However, adaptations need to be clearly communicated, and should be incorporated into the ToRs and contracts of service providers.</td>
<td>Delivering PbR programme through Government: Where delivering through government, adaptive management and extended programme timeframes are required, and DFID needs to identify and effectively use levers at its disposal to influence government action.</td>
<td>Managing risk: A hybrid model of adaptive and non-adaptive components and placing more weighting of the results attributed to non-adaptive components, helps balance delivery risks and provides space for the adaptive component to innovate.</td>
<td>Engaging service providers and governance: Where Technical Assistance (TA) is required for the government to deliver the results, the procurement and contracting of such TA needs to be done in a way that does not affect the accountability for results delivery, and maximises ownership and capacity transfer to the TA recipient. Governance and coordination arrangements where key programme stakeholders periodically meet, share learning and hold each other to account are essential, particularly where there are interdependencies between parties to deliver programme activities.</td>
<td>Using PbR funding to leverage commitment to systems change and systems strengthening: Political and institutional commitment of the government is essential from the outset to support systems change. Withholding funding can provide key leverage that the payer of results (e.g DFID) has to garner commitment to systems change. However, withholding funding can pose practical challenges for a donor, hence adaptability in programme design is essential.</td>
<td>Drivers of systemic change and government commitment: PbR funds are an important intervention to support systems change. However, payments - or withholding of them - can be a catalytic tool, rather than a direct driver of change. The increased transparency and accountability that PbR and verification brings about can also be a powerful driver of change, as can the recognition and rotation of well performing stakeholders. Drivers may vary at different levels and also through time, and it is important for the payer of results to understand and track what these are, to help to impart maximum leverage.</td>
</tr>
<tr>
<td>How PbR has and can strengthen the system: Delivering PbR through governments has the potential to strengthen nationwide monitoring systems, build asset inventories, and increase commitment towards programme (e.g. sustainability) outcomes. It can strengthen internal capacities and intra-government support mechanisms, as well as leading to increased transparency and accountability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Using Payment by Results to Improve the Sustainability of Rural Water Supply Services in Tanzania

**Government reporting and monitoring processes**: The streamlining of indicators and increasing feedback loops to those reporting the data helps increase the culture of reporting and data usage.

**Definitions, and measurability**: Functionality is a difficult result to measure, due to heterogeneity in field conditions and the use of proxy indicators to define functionality status. Definitions that adequately reflect the diversity of field conditions can be complex, which may not align to more binary and simple definitions which would be needed for community-level reporting of functionality status. The measurability of functionality should be ascertained early on in a programme such as this.

**Timing of the verification and implications**: Where functionality is defined based on yields, the optimal timing for verification is in the dry season. However, multiple other factors influence the timing of the verification, such as the annual financial years of the donor and the payee. With such multiple factors, the annual verification and payment cycle faces risks if certain aspects are delayed.

**The methodology and process of verification (method, process and practicalities)**: Having a unique water point code ID can ease the verification of results. The sample size of verification needs to be adequate to accurately reflect efforts to achieve results of each LGA. However, the larger the sample size, the more expensive the verification process, with implications on post-project continuity.

**Scope of the DVSP and added value of verification**: Large scale verification surveys pose an opportunity to collect additional information to help inform policy and strategy. Independent Verification teams gain insights into opportunities for strengthening monitoring systems, and should have a requirement and effective mechanism to provide feedback and advice to government on how to strengthen them.

**Credibility and trust of verification process and results**: The credibility and trust of the verification process and the results are essential for the PbR system to effectively incentivise behaviour change. The verification methodology needs to be understood and agreed by all key stakeholders, and results fed-back to those generating the data (e.g. the LGAs), to boost understanding and ownership of the findings.

**Understanding of the incentives and payments**: For PbR to be effective, it is important that the payees understand how the payments will be calculated, and what they need to do to maximise payments. Feedback of results from verification need to be timely to allow rapid action to address barriers. There is a trade-off between complexity of the calculation of the payments – which better allows payments to reward field realities – and the simplicity of the calculation, to aid stakeholder understanding.

**Pricing structures, formula of the incentive, and what it incentivises**: The pricing structure is highly influential in what actions the payments incentivise, provided the payee fully understands how this is calculated. Pricing needs to be set in a way which reinforces commitment to the desired outcomes, whilst at the same time avoiding perverse incentives which may lead to un-helpful behaviours.

**Qualification Support Grants (QSG), eligibility criteria, minimal thresholds and pressures to disburse**: Setting minimal requirements for PbR payments to start, and for payees (e.g. LGAs) to enrol, is a strong driver to encourage action on systems strengthening. These requirements should be strategically developed, with potential support provided to achieve them and verification should robustly measure them, to avoid ‘token’ efforts being made. The payer (e.g. DFID) sticking rigidly to the pre-requisites set out for the programme helps to reinforce the leverage it has.

**The process of getting the funds from DFID to the LGAs**: Where using the Public Financial Management (PFM) systems of governments to transfer payments to payees, the protocols, risks and timeframes for such processing need to be understood in advance, and actively tracked for delays and bottlenecks. The annual timing of financial year closure, verification and disbursements, may require the donor to forecast amounts that may be appropriate to pay (forecasted against the results from the previous year), and transfer these funds, before the results of the verification can provide the precise payment amounts needed. In this case, efforts are needed to ensure that this will not influence the definition of payment amounts to match the amount initially transferred.
Usage of the funds received at the LGA level: It is important to understand the level of autonomy that the payee (e.g. District Water Engineer) has to define how the payments are spent, and to understand who else may influence these decisions. Adequate timeframes are required to utilise the funds between payment cycles, not only on ‘quick fixes’ but also to address root causes and barriers to functionality and data quality. All those stakeholders influencing how funds should be spent should be clear on the objectives of the funds. Decisions on how the funds are spent can benefit from prior diagnostic analysis of the issues and potential solutions. Sharing payment information with CSOs operating in the area may help advise and hold to account how the payees (e.g. LGAs) utilise funds. Early communication of results can help the payee to plan for the fund use, even prior to the funds being received in their accounts.

Moving beyond ‘means’ (monitoring systems) to get to ‘ends’ (functionality): PbR requires strong data and reporting systems. However, there can be a risk in overly focussing on improvements in these, and efforts are needed to ensure an ongoing focus on the ‘end goal’ of improving functionality rates. There is a need to build the linkage between improving data, and improved decision-making and planning based on this data to improve functionality outcomes.

Maintenance arrangements and models: Initiatives seeking to improve maintenance outcomes could consider a range of maintenance service delivery models, potentially testing models and how they can work with PbR. There should be a clear linkage between reporting of data, and maintenance activities.

Roles and responsibilities between LGAs and service providers (e.g. COWSOs/CMOs): Decisions on who to pay for the results should include consideration on what falls within the mandate of those receiving payment, and whether other stakeholder groups are critical to achieve the ultimate results of better performing water supply services. If there are additional groups, consideration should be made as to how they can be more directly engaged and potentially also benefit from the incentive payments.

Complementary actions in the sector needed to achieve outcomes: Where channelling payments to decentralised entities, clarity is needed about what wider sector-level conditions should be in place to improve the overall enabling environment for progress at decentralised levels, and to consider how such actions can be stimulated. This may lead to a PbR structure that incentivises action at various levels of the system simultaneously.

Achieving VfM in the programme, and in achieving outcomes: The setting of the incentive, in this case, price per functional water point, is not straightforward and needs to be sufficient to incentivise behaviour change, whilst not being excessive and therefore resulting in poor value for money. There may be a trade-off between complex payment structures, which reflect field realities and maximise VfM, and the need to have simple payment structures to boost stakeholder understanding.

Ensuring an equity-focus in programme support and gains: As PbR rewards those that can deliver results, it theoretically may not focus funds on the communities and districts that are the poorest, most challenged hydrogeologically, and most in need. This risk should be monitored, and actions taken if it were to materialise. As with VfM, there is a trade-off between having complex payment structures that fairly reflect the diversity in costs of sustaining services between districts, and the need for simplicity in the structure to aid stakeholder understanding, as well as making the whole PbR operation affordable and sustainable. All of this requires data to drive decision making, which may only be available through analysis of successive years of such a PbR programme, therefore difficult to analyse adequately, in some cases, form the outset.

Recommendations

The learning points contained in this report were presented and discussed with key programme stakeholders in a workshop in Dar es Salaam on 6th December 2019. Based on these learnings, the participants recommended the following actions to be taken on by the programme in the coming year:

1. Ensure strong communication on the payment structure and results to LGAs, parliamentarians and wider civil society;
2. Investigate and address the causes of low data accuracy, particularly at the community level, and further consider and strengthen the linkage between community-level reporting, and maintenance (including a consideration of adapted maintenance models);

3. Further analysing how future programmes can adapt to emerging conditions, such as the progressive shift from public standpipes towards household water connections and wider service level indicators;

4. Further analyse the VfM and equity aspects of the PbR programme component;

5. Strengthen the governance and communication arrangements for programme delivery;

6. Review the timing of the verification cycle (considering the upcoming 2020 elections).
1. Introduction

1.1 The scope and purpose of this report

The UK Government’s Department for International Development (DFID) is collaborating with the Government of Tanzania (GoT) to roll-out an innovative Payment by Results (PbR) programme for the rural water supply sub-sector. The GBP £ 65.4 million PbR programme component was initiated in 2014, and by March 2019, had scaled to cover 181 Local Government Authorities (LGAs) across Tanzania.

DFID has previously used PbR as a financing mechanism in the WASH sector; however, in these instances, its application has largely focussed on incentivising ‘new access’ to WASH services and has been channelled through NGO service providers. The PbR programme in Tanzania is highly innovative, not just for DFID but also in the wider WASH sector as it is using PbR, not for new access, but achieving a greater focus on sustaining services. DFID is also delivering the programme directly in partnership with the GoT rather than through NGOs. The PbR programme has been designed to be adaptive and is part of DFID’s ‘Testing What Works’ and ‘LearnAdapt’ initiative, which seeks to generate learning on applying adaptive management in DFID programming more broadly. The programme holds significant potential to generate valuable learning, both for the GoT and DFID, and for the wider WASH and PbR communities of practice within Tanzania and globally.

Whilst there are various initiatives that seek to generate and document learning from the programme, these tend to focus on specific aspects, and there has not been a systematic process of periodically capturing and documenting programme-wide learning. In a workshop in Morogoro in May 2019, programme stakeholders agreed on the need for a more coordinated and consolidated approach to capturing and disseminating learning. A Learning and Dissemination Strategy for the programme was developed, which identified three broad objectives for the programme-wide learning activities (Error! Reference source not found.).

Figure 1: Objectives of the Programme Learning & Dissemination Strategy

| Objective 1: To strengthen the impact and effectiveness of the PbR programme in Tanzania. | Objective 2: To inform sector policy and strategy in Tanzania. | Objective 3: To improve approaches to rural water supply sustainability and PbR globally, and scale up best practices. |

It was agreed that a consolidated, programme-wide learning report would be produced annually, summarising the key learning from the programme. As the decision to initiate programme-wide learning was taken in 2019, this first annual learning cycle focussed on capturing learning that has arisen from the design phase of the programme (2013/14) up to the end of March 2019.

2019 Learning Cycle: From Programme design up to the end of Phase 3 Verification (March 2019)

This report summarises the key learning that has arisen from the programme over this period. The learning points have been compiled by the Learning Team of the Data Verification Service Provider (DVSP), written primarily by Will Tillett (Aguaconsult), on behalf of DFID, the GoT, and the programme Service Providers3.

---

2 The programme benefits from the evidence generated from the Process and Performance Evaluations of DIME. Evidence is also documented through DFID’s Annual Review process, as well as blogs and academic papers written by various programme stakeholders, particularly by DFID Tanzania and Wel Group.

3 DIME, Wel Group, and the Data Verification Service Provider Consortium led Ecorys, including WEMA Consult, IWEL, Aguaconsult and DataVision.
1.2 The methodology used to identify and triangulate learning points

The learning points and recommendations contained in this report were primarily identified through a desk review of over 30 programme-related documents, and through remote and in-country interviews of 16 key programme stakeholders. Provisional findings were shared and triangulated through a one-day stakeholder workshop in Dar es Salaam on the 6th December 2019 (24 participants). This report has received inputs and reviews from several key programme stakeholders. See the Bibliography and Annex 2 for a list of sources of information used in this 2019 learning cycle.

It should be noted that the learning points captured in this report are based largely on desk-based and remote engagement and are therefore limited in nature. They are based on a largely qualitative process of identifying and harvesting learning arising from the PbR component of the programme, rather than a quantitative study, and the body of evidence supporting each learning point is variable. Some points captured in this report are based on the opinions and perspectives of a small number of programme stakeholders, and in some cases, different stakeholders raised different perspectives and opinions, which is to be expected in such a complex and large-scale programme. To mitigate these limitations, the process of reviewing and developing the content of this report aimed to triangulate the learning points and perspectives across a wider range of stakeholders, seeking to gain broad consensus on the key learning points.

1.3 Rural water supply sustainability in Tanzania

In Tanzania 62% of the population lives in rural areas (37 million people) (World Bank 2018), and JMP (2019) estimates that just 43% of the rural population has access to at least basic water services. To address widespread gaps in access to WASH services, the GoT launched the Water Sector Development Programme (WSDP) in 2007, which aims to take a sector-wide approach to planning and encouraged the pooling of funding from GoT and development partners into a sector basket fund. By June 2015, total funds committed to WSDP1 were USD$ 1.6bn (MoWI 2015b), making it one of the largest ongoing rural water supply country programmes in Africa at that time. However, despite a fourfold increase in sector investments between 2000-2015 (Carlitz 2016), access to improved rural water supplies between 1990 and 2015 has only tracked population growth and increased just one percentage point from 45% to 46% over this period (JMP 2015).

Figure 2: Spending on water compared to access in Tanzania, 1999-2011 (Source: Carlitz 2016)

Phase 1 of WSDP (2007-2015) was strongly focussed on the construction of new infrastructure, with 91% of funds allocated to this (DIME 2017b) and around 43,000 water points had been brought online during that period (World Bank / Aguaconsult 2017). DIME (2017g) found correlations between surges

---

4 Including DFID Tanzania, DIME, Wel Group, Ecorys, Aguaconsult, IWEL, DataVision and WEMA Consult.
5 Whilst the 2019 learning cycle involved limited time for in-country information collection, subsequent learning cycles will ensure more time is spent interviewing stakeholders who were not interviewed in the 2019 cycle.
6 For example, through presenting and discussing the learning points in the stakeholder workshop, and through a multi-stakeholder review process of drafts of this report.
in the number of new water points built and the timings of election cycles, highlighting the underlying political economy of the ‘access paradigm’ (Kwezi, 2019) prevailing in the sector.

The October 2019 data inventory of the Ministry of Water shows that Tanzania has around 138,333 water points, of which 85,140 are functional, 11,065 are functional need repair, 31,106 are not functional, and 11,022 are abandoned water points7. Most alarmingly, among the water points that fail, around 20% do so within the first year of construction (World Bank, 2017). Reflections and reviews of WSDP1 found that the technologies that were installed were sometimes more complex (DIME 2017c) or costly than local communities can sustain. Additionally, training for the community management groups has often been inadequate, and there are limitations on post-construction support and monitoring by the LGAs (World Bank / Aguaconsult 2017).

Tanzania’s rural water sub-sector has undergone various institutional reforms in recent years. The prevailing management model for rural water supplies in Tanzania is community management, either through Community Management Organisations (CMOs), and often somewhat larger and more formalised Community-Owned Water Supply Organisations (COWSOs) (World Bank / Aguaconsult; 2017). During the time of programme design, and up to 2019, the 181 LGAs across the country8 were responsible for ensuring water supply services in their Districts and as part of this were expected to provide support to the community service providers. The District Water Engineers (DWEs) based in the LGAs were to be supported by Regional Secretariats and the central Ministry of Water (MoW). The LGAs themselves were reporting to, and supported by, the President’s Office Regional Administration & Local Government (PO-RLAG). In July 2019, the Rural Water Supply & Sanitation Agency (RUWASA) was formed as an autonomous body, which is taking over these responsibilities for rural water supplies from the LGAs and absorbing many of the DWE’s to become RUWASA District Managers. This means that the responsibilities and mandates for rural water service delivery now rest entirely within MoW. The timeframe of this learning report covers the period before RUWASA was established.

1.4 An overview of the DFID-funded PbR programme

Against this background of major donor investments and concerns over the sustainability of rural water services, in 2013-14, DFID designed it’s ‘Phase 2: Rural Water Supply & Sanitation Programme’. Around £75 million of the programme budget was allocated to the ongoing support to the WSDP through input financing9, with a further £65.4 million allocated to an innovate PbR scheme. This latter element sought to incentivise a focus in the sector – particularly among LGAs – on supporting service providers to maintain and sustain rural water supply services. This learning report focusses only on the PbR component of the programme.

At the time of programme design, GoT had embarked on the ‘Big Results Now’ (BRN) initiative, which introduced targets and results-based reporting to several priority sectors. Water was one of these key sectors, with results largely defined as expanding access. The BRN initiative helped to lay the foundations for results-based financing to be introduced to the water sector. DFID contribution and commitment to the rural water sub-sector in WSDP Phase 1 was significant, even when some Basket Fund contributors scaled-down commitments, and helped to provide a favourable foundation in terms of relationships and potential leverage with the MoW.

The Phase 2: Rural Water Supply & Sanitation Programme adopted two Theories of Change (ToC). The first focusses mainly on the WSDP’s input financing activities, which is a relatively conventional WASH programme ToC10. The PbR component is presented as an additional catalyst to convert inputs into outcomes. The second ToC is specific to this PbR component and is based on payments to LGAs for specific results (e.g. the functionality of water points in their district), which incentivises them to

---

7 CDMT Reference Inventory Data October 2019.
8 The total number of LGAs in Tanzania has varied through time, as administrative boundaries have evolved.
9 These funds were channelled to the Basket Fund, to finance actions such as the construction and rehabilitation of water supply infrastructure, the registration of COWSOs, WASH infrastructure in schools, and supporting sanitation and hygiene behaviour change initiatives.
10 Based on inputs such as funds, expertise and behaviour change leading to improved access to WASH facilities and practicing improved hygiene behaviours, in turn leading to positive health and socio-economic impacts.
increase their efforts towards supporting community service providers in maintaining their water supply services. The logic is that the PbR funding will help provide resources for sustainability efforts, and that improved data arising from the verification of results would be valuable for LGA’s efforts and investment decisions on how to improve functionality rates. See Annex 1 for the PbR ToC. Results-based financing is based on the underlying assumption that payments will incentivise implementing agencies to exert more effort on achieving the programme’s agreed objectives (DIME 2019a).

The PbR component’s ToC has several further assumptions, as detailed in DFID (2019):
- That money would incentivise LGAs to focus on repairs and maintenance, and that the amount of money is sufficient to change behaviour towards maintenance activities;
- That the causes of the breakdowns of the water points can be influenced by the LGAs through maintenance and repairs (e.g. rather than being fundamental design flaws);
- That there is a robust data and monitoring system in GoT for the verification of results;
- That functionality can be accurately measured;
- That the mechanism to transfer the financial incentive is credible and trusted;
- That the PbR mechanism and incentive is understood by LGAs; and
- That there is adequate capacity within GoT and the LGAs to act and benefit from the scheme (or such capacity can be sourced through technical assistance (TA) 11

The PbR programme was designed to operate as follows: following an initial baseline assessment of water points across the country, the LGAs that are enrolled in the PbR scheme report monthly to MoW on the number of functional water points in their district. A DFID-procured Data Verification Service Provider (the DVSP) then verifies the accuracy of the MoW reported dataset annually, taking a specific month dataset to compare against a field survey. This independent verification then provides DFID with confidence in the results achieved by the LGAs. DFID then makes an annual payment of a fixed amount per functional water point to the LGAs, with the total payment to the LGAs calculated not only based on the number of functional water points but also weighted by the accuracy of the LGA reported data. DFID channels the incentive payments through the central government (Bank of Tanzania) to the LGAs. LGAs then theoretically have the flexibility on how to use these funds to maximise results (e.g. improving data quality and functionality rates), ready for the subsequent annual verification and payment cycle.

The DFID programme Business Case suggests that using PbR as a disbursement mechanism would allow more flexibility and space to innovate in addressing barriers to improving functionality. However, it also acknowledges that the use of PbR in the rural water sector in Tanzania, and specifically its use to incentivise maintenance efforts, is relatively untested. As such, the programme design included the potential for DFID to adaptively manage the programme and incorporated a continuous research and evaluation component to help provide the evidence basis to inform such adaptations, which is being undertaken by the World Bank’s Development Impact Evaluation team (DIME).

11 Many of these assumptions are captured within the evaluation framework, and are being tested within the ongoing Performance Evaluation being undertaken on the PbR component of the programme, led by DIME.
2. Charting the evolution of the programme through time

The programme was designed in 2013-14 and launched officially in 2014. By March 2019, the PbR programme component had scaled-up to cover 181 LGAs across Tanzania and had disbursed a total of £14.7 million over the three cycles of verified results, which represents just 23% of the PbR component budget.

This section of the report provides a brief overview of how the PbR component has progressed and evolved since programme design up to March 2019 (the period covered by this report). The subsequent section of this report summarises key learning that has emerged from the programme over this period. Annex 4 presents a timeline of key events in the PbR programme component. This timeline was developed based on document review and further elaborated through a participatory co-design process in the 2019 Learning Workshop in December 2019, which was facilitated by Lukas Kwezi (DFID) and Will Tillett (Aguaconsult).

Since programme design, there have been several significant process events and evolutions which are important to flag; the most significant of these are as follows:

- **The initial postponement of payment cycles due to weak GoT datasets and monitoring systems.** Key performance indicators (KPIs) were established, together with LGA enrolment criteria. An independent review of the GoT Water Point Mapping system and monitoring system in 2014 found major weaknesses in the reliability of GoT data, which was not adequate to allow the PbR scheme to commence. The review highlighted the lack of a monitoring or reporting culture, as well as a lack of a credible process for updating the national Water Point Inventory. The PbR payments process was suspended until GoT was able to achieve minimal thresholds in terms of LGA reporting rates, with KPIs established relating to GoT reporting and data. Criteria for LGA enrolment onto the scheme in future included both achieving reporting targets and improving the quality of data reported. Eligibility also included having in place a Council Water & Sanitation Team and a Council Water & Sanitation Plan. The initial plan to focus on the lowest coverage LGAs was at this stage modified to become a nationwide programme, aiming to more systematically address

---

12 The suspension lasted for two years, and later contributed to the justification of a no-cost extension to the timeframes programme, which was approved in 2017, extending the programme timeframe up to 2022.
13 This included reported rates from LGAs, and completeness, correctness, and accuracy of data.
and improve monitoring and reporting systems at scale (see Section 3.6 for more details). Qualification Support Grants were provided to help the lower-performing LGAs to participate in the scheme.

- **The progressive improvement of monitoring and reporting processes.** The MoW established the Central Data Management Team (CDMT), which was responsible for liaising with MoW and LGAs to strengthen reporting systems and improve the reliability of the GoT rural water datasets. DFID procured a Capacity Building Service Provider (CBSP) (WEL Group) to provide ongoing TA to the CDMT, and the wider MoW. Between Verification Phase 2 and Phase 3, LGAs reporting data monthly increased from 93.2% to 99.9%, with correctness increasing from 67.8% to 78.9%.

- **Verification and payment cycles commencing in 2016, with LGA enrolment and disbursements increasing annually.** The first verification cycle was undertaken in 2016, with 57 LGAs meeting the minimum reporting and data KPI thresholds to be enrolled/receive payments. Some LGAs which did not meet the eligibility requirements and thresholds were each provided with a Qualification Support Grant to assist in their efforts to qualify for the next year’s verification and payment cycle. Table 1 below outlines the evolution of eligibility, payments and performance through time.

Table 1: A summary of LGA enrolment and disbursements through the first three verification cycles
(Source: DFID 2019)

<table>
<thead>
<tr>
<th>Disbursements</th>
<th>Phase 1 (FY 2016)</th>
<th>Phase 2 (FY 2017)</th>
<th>Phase 3 (FY 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participating LGAs</td>
<td>57</td>
<td>129</td>
<td>181</td>
</tr>
<tr>
<td>Total Disbursement to LGAs</td>
<td>£722,900</td>
<td>£2,849,927.98</td>
<td>£8,861,695</td>
</tr>
<tr>
<td>Total Disbursement to RAS (10% of LGA funds)</td>
<td>£57,100</td>
<td>£284,992.80</td>
<td>£886,169</td>
</tr>
<tr>
<td>Total Disbursement to Central Ministries (MoW &amp; PORALG)</td>
<td>£70,000</td>
<td>£643,000</td>
<td>£371,000</td>
</tr>
<tr>
<td>Total PbR disbursements</td>
<td>£850,000</td>
<td>£3,777,920.78</td>
<td>10,118,864</td>
</tr>
<tr>
<td>PbR funding utilization against total allocation of £65.4m (%)</td>
<td>1.3%</td>
<td>7%</td>
<td>23%</td>
</tr>
</tbody>
</table>

- **Modifications to verification teams, methodologies and definitions.** There have been two different Data Verification Service Providers engaged in this role since the commencement of the programme. A consortium led by IMC covered the first two verification cycles, replaced by a second consortium led by ECORYS covering the third and subsequent phases. There have been modifications between verification cycles, largely relating to definitions of functionality and means of measurement used by the DVSP to verify the data.

- **Modifications to the incentive pricing structure and adding payments to MoW, PORALG and Regional Secretariats.** Initially, DFID provided two different payments to LGAs, for ‘additional functional’ (£1,500) and ‘functional’ (£50) water points respectively. This dual payment was revised in 2018 to a single payment of £300 for each functional water point. The incentive pricing structure (formula) has also evolved through time, with modifications to the relative weighting for completeness and accuracy of the data versus functionality of water points. See Annex 3 for more details on how the payments changed through time. In Phases 2 and 3, the payment based on functionality attainments was reweighted by data reporting components such as completeness, correctness and accuracy, thereby giving those a significant impact on the final incentive payment received by LGAs. In Phase 4, the total payment was split into two additive components: the functionality one, and the accuracy one, thereby safeguarding the rewards of LGAs that did well in terms of functionality but struggled in terms of accuracy. Whilst the initial programme design envisaged incentive payments only to LGAs, in 2017 incentive payments were added for Regional Secretariats (an additional 10% of the sum of the LGA’s in their region are paid), and for PO-RALG and MoW (based on the achievement of specific, defined KPIs, which were related to their central-level actions that supported sector progress at LGA level).

- **Challenges in the channelling of funds and feedback of verification results to the LGAs.** In the first two phases of payments, there was a time lapse of approximately 3.5 months between DFID dispersing the funds to the Bank of Tanzania and LGAs receiving the payments into their accounts (DIME 2019). There has also been challenges in the initial verification phases in the timeliness of communication to LGAs of the verification results.
3. Key lessons arising from the programme to date

The desk review and stakeholder interviews undertaken during the annual learning cycle in 2019 identified a rich and diverse range of learning points; these have been categorised into themes and sub-themes, as presented below. In reality, many of the sub-themes relate to, and interface with, multiple other themes, so this categorisation is helpful to structure the many and diverse learning points.

1. Design and management of the programme
2. Using PbR to stimulate change in the system
3. Monitoring systems, and verification of results
4. Eligibility, incentives, disbursements and fund usage
5. Achieving outcomes (improved functionality)
6. Equity and Value for Money (VfM)

The following sub-sections of this report summarise the learning points per theme and sub-theme. These were presented and discussed during the annual programme-wide learning workshop on 6th December in Dar es Salaam, and the feedback from the workshop is incorporated in this report.

3.1 Design and management of the programme

This theme presents learning around how the programme was designed, how it was managed in an adaptive manner, the management of risk and how service providers were procured and managed.

Building adaptiveness into programme design, management and delivery:

The means of increasing rural water supply functionality rates via PbR were somewhat unknown at the programme design stage, therefore it was intentionally designed to be adaptive. This design feature has proven to have been highly useful in helping the programme to evolve within a dynamic context. It has also helped to create the space to modify timeframes and disbursement amounts, which have been particularly useful in leveraging change within the rural water supply system (see section 3.2). The DFID annual review processes, the products produced by CBSP and the robust evaluation and research activities of DIME, have helped to create the evidence base for modifications to the programme through time.

However, in such a dynamic programme, with a multitude of stakeholders, at times the adaptations were not always clearly communicated and understood by all (see below in this section). With the concepts of adaptive management being somewhat new to many programme stakeholders, it is important that such adaptations be used to address changes in the context and emerging evidence, while still conducting prior preparations and managing risks to avoid the need for adaptations, as mentioned by various stakeholders interviewed during the 2019 annual learning cycle.

Some of the DFID-procured PbR service providers mentioned that adaptive programming increased the management burden on their assignments, and the contractual conditions may not be conducive for such adaptations for some (e.g. fixed cost contracts). The adaptations reportedly also posed somewhat of a challenge to the typical methods that would be applied for longitudinal programme evaluations and research normally implemented by DIME. The adaptive approach meant that more regular feedback mechanisms and a clearer distinction between long-term and short-term research findings was needed to ensure the evaluation support was both flexible enough to address the changing nature of the program, while still maintaining rigor.

---

14 The learning themes and sub-themes were developed from the themes that were identified in the Lessons Learning & Dissemination Strategy 2019. They also relate to, but are distinct from, DIME’s performance evaluation framework.
and a focus on important long-term, abstractable evidence. Since this was a new approach to both DFID and DIME, it took time to identify an appropriate arrangement and structure for this.

**Summary of key learning points (A):**

Complex programmes such as this benefit from having adaptive management built into the design and should include activities that can generate longitudinal evidence to inform and justify adaptations. However, adaptive management must be well defined and communicated to all stakeholders from the outset, should be incorporated into the ToRs and contracts of service providers, adaptations need to be clearly documented, and key stakeholders kept regularly updated on changes.

**Delivering PbR programme through Government versus NGO service provider channels:**

This is understood to be the first PbR programme in the WASH sector globally that DFID has delivered through a host government, rather than through contracted service providers such as NGOs. Undertaking the programme through GoT has provided the opportunity to influence the system ‘from the inside’, in contrast to external actors trying to strengthen government systems and directly use the system which it is trying to strengthen. This seems to have been catalytic to influence the political and institutional commitment towards the programme objectives. Running the PbR scheme through GoT structures has allowed the programme to be rapidly upscaled to operate country-wide and has allowed improvements to be made at scale, such as the strengthening of monitoring capacity. Other capacities are being developed within GoT which should help to sustain programme momentum after the programme has finished, as well as building capacities that can be used for other sector efforts.

However, experience has shown that delivery through GoT has led to some delays and somewhat lengthy timeframes for certain activities or for systemic shifts and requires additional technical capacities to be made available. The process of transferring funds through Public Financial Management (PFM) systems has proven to be lengthy, which has posed progrmmatic risks. In contrast to NGO funding channels, this choice of delivery also results in DFID having less influence and leverage on the actions of the main implementer in the programme.

**Summary of key learning points (B):**

There are pros and cons of programme delivery directly through the host government. When delivering through government, adaptive management and extended programme timeframes are required and DFID needs to identify and effectively use levers to influence government action.

**Managing risk:**

This programme was designed as a ‘hybrid’ model, including allocating around half of the budget to non-adaptive ‘input financing’ to support targets in the WSDP (see Section 1.4), together with the more adaptive, results-based component. Most of the programmatic results were based on input-financed activities, such as construction or rehabilitation of water points, hygiene promotion sessions etc. Having fewer results, against which programme progress is reviewed annually relying on the adaptive PbR component, allowed more ‘space’ for the PbR component to test, innovate, and modify timeframes. For example, the input-finance related components allowed significant funds to be disbursed against the programme overall and allowed results to be demonstrated, which enabled DFID to move more slowly with the PbR component in the

---

15 For example, for the recently commenced World Bank-supported ‘Payment for Results’ (P4R) programme for the rural water sub-sector in Tanzania.

16 Which is likely to be required where the payments are ultimately to be received by Government at the local level, in contrast to paying NGOs for results achieved, which is the norm for most other DFID-funded WASH PbR programmes elsewhere.
early years, as the government monitoring systems were being developed. However now that the input-based funded targets have largely been met and respective budget utilised, the PbR programme component may face more pressure to disburse funds, with possible implications for DFID’s overall leverage (see further discussion in section 3.2). Within DFID, the PbR component of the programme has at times been challenging to defend during the initial period, given successive years of very minimal disbursements. This has been mitigated, to an extent, by strong commitment to the programme from senior management within DFID Tanzania, and communication well in advance to them by Programme Officers in DFID, of potential issues that may affect (low) disbursements.

The risk register of the programme identifies factors such as the ‘gaming’ of the PbR programme\(^{17}\), and also the fungibility potential of PbR payments\(^{18}\). However, it is hard to determine the magnitude of these risks in practice, with interviewees mentioning that the anticipated risks of gaming had not as yet widely materialised. Regarding gaming, this is potentially due in part to the limited understanding at the LGA level on how the PbR incentives are calculated (see section 3.4). Additionally, the disbursements have not as yet been at a level whereby substitution seems to be occurring and GoT funding is primarily earmarked\(^{19}\) for new construction rather than maintenance and sustainability.

**Summary of key learning points (C):**

A hybrid model of adaptive and non-adaptive components and placing more weighting of the results attributed to non-adaptive components, helps balance delivery risks and provides space for the adaptive component to innovate. This approach helps to resist initial donor pressures to disburse funds. Such an innovative and adaptive programme needs strong DFID senior management backing.

**Engaging service providers and governance:**

DFID has procured three Service Providers for the delivery of the PbR programme component: i) the Data Verification Service Provider (DVSP), to verify government-reported results and also document programme learning; ii) the Capacity Building Service Provider (CBSP), to support GoT to strengthen monitoring and reporting systems, and; iii) DIME, to generate evidence to inform programme evolution and to evaluate programme performance.

Following the independent review of GoT monitoring systems in 2014-15, it was agreed that a CBSP would be beneficial. This was then procured and contracted by DFID. The DFID procurement allowed the CBSP to be procured in shorter timeframes than through GoT procurement and also meant that DFID could benefit from insights ‘from within’ the system as the CBSP was an embedded form of TA support. However, as the concept of PbR is that the responsibility for achieving results lies with the fund recipient, hypothetically by DFID providing the fund recipient (GoT) with TA support, this could theoretically blur lines of accountability for achievement of results\(^{20}\).

---

\(^{17}\) This concern was primarily related to the time when PbR’s payment included a £1,500 payment for ‘additional functional WPs’. In that framework, LGAs could theoretically break functional WPs in Year N for the purpose of rehabilitating them in Year N+1, thereby securing the higher £1,500 reward. Now that the higher reward was removed, the risk of gaming was largely reduced. One theoretical potential remains around “Locked verified”, in the sense that LGAs could arrange for not functional WPs to be locked to appear as “Locked verified” and therefore receive £50.

\(^{18}\) Whereby the PbR payments displace, rather than are additional to the funds that would have been anyway allocated to the LGA for water sector activities.

\(^{19}\) Theoretically the PbR payments are not tied, however guidance from MoW encourages LGAs to channel the finances towards maintenance and sustainability efforts. This is further elaborated on later in this report.

\(^{20}\) In the case of this programme, the programme design envisaged that GoT would engage its own service providers, and funds were allocated for this. However, during implementation, the GoT requested that DFID procure and directly finance the CBSP, on their behalf.
The arrangements for coordination and communication between the service providers have reportedly not been optimal, which at times may have led to misunderstandings and may have resulted in missed opportunities for knowledge-sharing and mutually adding value to each other’s workstreams. There are interdependencies between the service providers to achieve their respective assignments and also some reliance on actions by DFID and GoT to support progress on specific service providers’ assignments. However, the programme has reportedly lacked regular exchanges whereby these stakeholders systematically coordinate, identify areas of interdependencies and can hold each other mutually to account for process on agreed actions. This issue however is reported to be improving through the course of 2019 and onwards.

Regarding the Data Verification Service Provider, whilst the programme required a DVSP across numerous verification cycles, the procurement and contracting of the DVSP function was separated into two, with the first covering verification cycles 1 and 2, and second covering verification cycles 3 onwards to allow for a faster procurement process. Whilst this allowed a diversity of ideas to be brought to the assignment, it also led to some inefficiencies due to the loss of institutional memory between verification phases. Some interviewees engaged during this learning cycle also mentioned the need to have a statistician as a core team member of the DVSP team, and that the scope of the DVSP’s ToR could potentially include guidance and advising to GoT on the monitoring and data systems, whilst mindful that this would not undermine their independence in the results verification process, nor overlap with the CBSP activities. Other interviewees however remarked that with CBSP influencing monitoring systems ‘from the inside’ in this programme, such a role for the DVSP may not have been required, rather that there should have been greater linkages between the work of DVSP and CBSP.

**Summary of key learning points (D):**

Programmes such as these may require Technical Assistance to support the organisation delivering the results (in this case the Government), however the procurement and contracting of such TA needs to be done in a way that does not affect the accountability for results delivery and maximises ownership and capacity transfer to the TA recipient. Governance and coordination arrangements where key programme stakeholders periodically meet, share learning and hold each other to account are essential, particularly where there are interdependencies between parties to deliver programme activities.

### 3.2 Using PbR to stimulate change in the system

This theme presents learning around how PbR has stimulated change in the overall rural water supply sub-sector ‘system’ over the years, and how PbR has been used as a lever to catalyse action and commitment to such changes.

It should be noted that the programme includes objectives that include improving monitoring systems, as well as objectives to improve functionality. The drivers behind these two aspects are likely to be different (albeit closely linked). This distinction between the two aspects is further discussed in section 3.5. In this section, the ‘change’ refers mainly to the institutional focus on sustainability issues, and particularly around changes in the GoT monitoring and reporting system.

**Using PbR funding to leverage commitment to systems change and systems strengthening:**

At the time of the programme design, there was a strong focus in the sector on new infrastructure construction, with less efforts placed on maintenance and sustainability of services. With a significant budget for the PbR component (£65.4m), it reportedly enabled DFID to gain ‘a seat at the table’ at the policy level regarding sustainability issues and the mutual
Using Payment by Results to Improve the Sustainability of Rural Water Supply Services in Tanzania

Interest in achievement of results helped to slowly align incentives of DFID and GoT towards functionality outcomes.

In 2014, following the findings of the review on GoT data systems, DFID suspended the programme payments, setting minimal threshold KPIs for the reporting system and data quality that needed to be met for the payments to commence. DFID also stated that the programme funds for PbR could not be diverted into the ‘input financing’ component of the programme. Whilst some stakeholders reportedly felt that DFID would be pressured to disburse regardless, the fact that DFID stuck to these conditions, not disbursing for two consecutive financial years, considerably strengthened the credibility of this leverage tool. Many stated that this pressure on GoT to achieve the KPIs helped secure the requisite government and political commitment to addressing key bottlenecks to receiving payments, namely improving the monitoring system, and addressing long-standing issues in GoT datasets. In terms of the wider sector context at this time, DFID’s leverage position was further strengthened by the fact that it was one of the only donors actively engaging in the sector supporting WSDP at that particular time.

However, after this strong initial leverage from DFID, some interviewees mentioned the pressure by DFID on GoT has reduced somewhat, and that the potential internal DFID pressure to disburse in the remaining years may reduce the leverage of PbR as an intervention for systems strengthening. Now that other donors have re-engaged with funding of government-led programmes (such as World Bank’s upcoming P4R programme), DFID’s leverage position is reportedly made slightly more challenging.

Some interviewees mentioned that whilst not disbursing was a key tool to leverage change, that in contrast, there was a need to disburse some funds, to ensure continued stakeholder interest in the programme.

Summary of key learning points (E):
Political and institutional commitment of the host government is essential from the outset to support systems change and a programme with significant budget can increase stakeholder attention at all levels on a neglected aspect of the sector (in this case maintenance). Withholding funding can provide key leverage that the payer of results (in this case DFID) has to garner stakeholder commitment to systems change. However, withholding funding can pose practical challenges for a donor, hence balance and adaptability in programme design is essential.

Drivers of systemic change and government commitment – is money the driver?

As mentioned in Section 1.4, an overarching assumption behind the Theory of Change of the PbR programme component was that incentive payments would be the driver of behaviours and actions of LGAs and the wider GoT towards maintenance and sustainability issues. However, numerous interviewees mentioned that ‘money was not the main and direct driver’ of the positive improvements made to date on the GoT monitoring system. Indeed, much of the improvements in the reporting rates of LGAs occurred before significant payments had been made. Various issues were mentioned by interviewees and workshop participants, and it is proposed that there has not been one single driver of systemic change in the programme. Rather, there have been multiple drivers, which may have been more or less significant to different players and at different levels within the system, and importantly, that these have changed through time. Below lists some of the key drivers that were mentioned:

*Lukas Kwezi, DFID (November 2019)*

PbR funding achieves political leverage in a way that input funding can’t.

21 It is important to note here, that the aspects noted below regarding are those points mentioned by interviewees, and therefore based on perceptions, which may or may not reflect the whole list of actual drivers of change.
The potential of unlocking sector funding and the requirement to attain the KPIs to allow the commencement of disbursements was mentioned as a key driver to garner senior GoT commitment to addressing barriers. This commitment reportedly allowed more space for dialogue on how to address data and monitoring issues.

The District Water Engineers (DWE’s) previously had a large volume of indicators to report upwards to MoW and did not always feel supported by the ministry (DFID 2019). The CDMT reportedly took a constructive and supportive role to DWE engagement and made changes to the monitoring system by reducing the volume of indicators to be reported against. This reportedly created goodwill of the DWEs to cooperate with MoW, which in turn led to increased reporting rates.

The inability to unlock PbR payments created considerable pressure at different levels. Senior Management in MoW had to report upwards that they were unable to access sector funds due to reporting and data barriers. This reportedly led to pressure being cascaded ‘down the chain’, for Regional Secretariats and DWEs to address bottlenecks. Regional Secretariats, who stood to receive 10% of the total payment to the LGAs in the region, provided some support and pressure down to the LGAs. Some District Executive Directors were reportedly critical of their DWE’s for failing to address (reporting) barriers to access sector funding.

The increased focus on results reporting and the verification of such results helped to increase transparency and accountability within the system. It also helped to stimulate inter-district competition between DWEs, with MoW officially recognising the best performing LGAs. The DWE’s from the well performing LGAs were called upon to advise other LGAs on how they could improve, and in some cases, DWE’s from well performing LGAs were rotated to underperforming LGAs, to boost progress.

Whilst many of the above imply that money was linked to the driver of change, e.g. intention to access it (rather than having received it), the points also imply other drivers were significant. Therefore, money was reportedly not the only driver of change.

**Summary of key learning points (F):**

PbR funding is an important intervention to support systems change. However, making payments - or withholding of them - can be a catalytic tool, rather than a direct driver of change. The increased transparency and accountability that PbR and verification brings about can also be a powerful driver of change, as can the recognition and rotation of well performing district stakeholders. Drivers may vary at different levels and also through time, and it is important to understand and track what these are, to help to impart maximum leverage through these mechanisms.

**Using PbR to take a phased approach to systems strengthening:**

Many interviewees talked of how the programme has taken a phased approach to systems strengthening and also that trying to address certain issues in the system before others, would have been ineffective. For example, in the early years, significant efforts were made in securing political and institutional commitment to improving data quality and to prioritise sustainability efforts. This was deemed to be an essential foundation to put in place before the programme could move forward to address improving functionality. The evolution of the eligibility requirements and minimal thresholds, in addition to evolving the pricing structure, helped to focus on and incentivise different aspects of systems strengthening through time. For example, initial requirements incentivised the creation of Council Water & Sanitation Teams and the creation of Council Water & Sanitation Plans. It also required frequent reporting by LGAs. Once

---

22 although there was reportedly reluctance by some stakeholders to accept the ‘corrected’ data, fearing that it would highlight their incompetence or inactivity
this was achieved, the focus was then on the completeness, correctness and, progressively, the accuracy of the reported data. This has helped the PbR programme to encourage the progressive strengthening of elements of the system, allowing targets to be set higher each year, encouraging successive evolutions. However, as discussed further in section 3.5, the challenge for the programme is now to make the next step from improving the monitoring of functionality rates, to improving the actual functionality of water points.

Summary of key learning points (G):

PbR payments and eligibility requirements that are phased and evolve over time are more useful in helping to progressively strengthen different elements of the system, and to continue to set and progressively revise ‘stretch targets’ for the sector. Again, adaptive programming helps to provide a conducive, practical and country-specific platform to do this.

How PbR has - and can - strengthen the system

The PbR component of the programme has been credited to have, in part, supported the strengthening of numerous aspects of the system. Below is a non-exhaustive list of areas which have been mentioned by interviewees and via reports, on how systems have been strengthened by PbR:

- The need for accurate data to report and verify results has been a major driver of improving the GoT monitoring system. Reporting and data KPIs have increased considerably (see Section 1). It has led to the creation and institutionalisation of the CDMT within MoW, and the simplification and streamlining of reporting and data updating processes.
- The external verification process used a ‘rolling inventory’ sampling approach in the initial phases of verification, which allowed the sampling tens of thousands of water points over three years. This has helped to identify thousands of water points which were not included in the GoT inventory, thus helping to improve the accuracy and breadth of the national inventory. However, the full potential of the external verification process in improving the inventory was not realised in the initial years, as the datasets were reportedly not consistently fed back from DVSP to the CDMT in the appropriate formats, for them to incorporate into the national inventory.
- As mentioned earlier, the increased focus on results-based reporting, increased accuracy and accountability on results and reporting, has been flagged as central to increasing transparency and accountability within the system.
- With mutual incentives to maximise payments, there has reportedly been an increase in inter-ministerial cooperation (e.g. between MoW and PO-RALG) and increases in the level of support to DWE’s, through the (now incentivised) Regional Secretariats.

A paper by Brown, Kwezi & Mutazamba (2018) provides a useful summary on how some of these drivers of change are conceptually linked to the PbR programme component.

Summary of key learning points (H):

Delivering PbR through host governments has the potential to strengthen nationwide monitoring systems, build asset inventories and increase commitment towards programme outcomes. It can strengthen internal capacities and support systems to attain results and

---

23 An inventory approach is where, for each village that is sampled, the team survey all the DPs and WPs that are shown in the reference inventory data received from MoW and also include any additional WPs that are found in the village but not shown in the reference inventory data. The ‘rolling inventory’ is where statistically sound methodologies are applied to ensure that all villages across Tanzania are surveyed during the successive years of verification. However, whilst the sample sizes will continue to be statistically valid, within the existing DVSP contract (Phase 4, 5 and 6) full nationwide coverage will not be possible.
Removing barriers to payments, as well as leading to increased transparency and accountability within the sector.

**Strengthening intra-government cooperation**

Whilst the volume of information that this sub-theme is based on is limited, some interviewees mentioned the following learning points about PbR and its linkage with strengthening intra-governmental cooperation:

- PbR potentially incentivises cross-ministerial collaboration (for example between MoW and PO-RALG), with a mutual interest to deliver results. Indeed, increased communication and collaboration between Ministries has been noted by some interviewees;
- However, the extent to which MoW actively supported decentralised functions (LGAs) to deliver results, beyond the CDMT support for data improvements, was reportedly less systematic and may have been symptomatic of wider hierarchical dynamics between central and local government;
- As the PbR programme component was delivered across ministries, there were some challenges of indirect lines of accountability.

Moving forwards, with the establishment of RUWASA in 2019 and the incorporation of the DWEs into this new structure, the former challenges of inter-ministerial dynamics may be somewhat addressed. This will be looked into in the next (2020) programme-wide learning report.

### 3.3 Monitoring systems, and verification of results

This theme presents learning arising from the monitoring and reporting by GoT of results and the process and methodology of verification of these results by different programme Service Providers.

**Government reporting and monitoring processes:**

Prior to the PbR programme, DWEs were expected to collect over 200 indicators per month, had dual lines of data reporting (to MoW and PO-RALG) and received limited feedback on the data which they sent ‘upwards’ (DFID 2014). Research by DIME (2017) suggests that the magnitude of this upward accountability on the DWEs affected the extent that they were able to focus efforts ‘downwards’ to supporting the COWSOs/CMOs within their districts. In 2016, CDMT streamlined the monitoring indicators which DWEs were required to report against monthly and, through their actions and the DVSP verification process, DWE’s started to get feedback and be held accountable for the quality of the data they reported.

The DIME (2019) report stated that ‘only 53.6% of community respondents (e.g. CMOs/COWSOs/VEOs) have ever reported water functionality data to DWEs, most of them infrequently’. Elsewhere in the region, there have been pilots in the use of Mobile-to-Web technologies to support large-scale reporting of the status of WASH services at community level. These technologies could potentially aid the efficiencies of entering and processing data from the community level upwards. However, whilst there have been some recent efforts by the CBSP, the application of such technologies to ease reporting and monitoring systems has been relatively slow to emerge. Some interviewees rationalised this by stating that it is essential to

---

24 The LGAs, including the District Water Engineers, were under the President’s Office Regional Administration & Local Government, whilst at central level, the Ministry of Water had responsibility for oversight and reporting on this programme.

25 For example, DFID Zambia has supported the development and nationwide upscaling of a mobile-to-web system for community level reporting of hygiene and sanitation indicators.
first develop the culture and processes of reporting and data usage, before starting to bring in technological solutions to increase efficiencies of such processes.

Summary of key learning points (I):
The streamlining or rationalisation of indicators and increasing feedback loops on data reported from decentralised levels can help in increasing the culture of reporting and data usage in the sector. Whilst technology may provide opportunities to radically improve efficiencies in monitoring systems, the foundations and principles for reporting need to be built before introducing such ICT tools.

Definitions, and measurability:
The definitions of ‘water point’ and modes of measurement of functionality has posed practical challenges in the reporting and verification process over the years. One challenge related to the lack of a common understanding across all stakeholders (e.g. MoW, DWEs, DFID, DVSP) as to what is being reported, verified and paid for. For example, there was significant confusion between the definition of a ‘water point’ and a ‘distribution point’26. More recently, there has been deliberations around whether to include private water points (and how to define this) and moving forwards, how to consider domestic connections, not only public taps, in the verification and payments process. The main lesson from these challenges is that all key stakeholders should be aware of, and agree with, the details of the methodology, terminologies and definitions used in the verification process, prior to the verification cycle commencing.

There has also been the challenge of measuring functionality, which itself is not a static nor easy-to-define state. Different rounds of verifications have used distinct proxy indicators for functionality, linked to yields, stroke tests and, in some cases, other proxy indicators, such as whether the water point has ‘hardware problems’ or perceived water quality issues. Verification teams have needed to match functionality categories with the highly heterogeneous conditions they find in the field27, which has arguably led to somewhat complex definitions of functionality28.

To verify the accuracy of government results, it has been essential that the verification definitions align with those used by government in its reporting of functionality. Indeed, as the original data on functionality rates comes from community-level reporting, it is also key that these community stakeholders are using the same definitions of functionality and measurement methods as the verifiers. However, it appears that there has been relatively limited outreach to the level of the community on this particular aspect over the years. This gap is critical in understanding the discrepancies and eventually in closing the loop on improving accuracy as the programme matures.

Understandably, the evolution of definitions and means of measurements have evolved each year of the verification, which has allowed the measurements to become ever more aligned with field realities; however, these variances may pose challenges to the longitudinal analysis of results between years.

26 A distribution point is the infrastructure from which water is distributed – a hand pump, tap stand, water kiosk are all examples of Distribution Points. However, if a tap stand has multiple taps, the tap stand itself is a distribution point and the tap on the tap stand represents a water point. A water point is a public tap or standpipe at which water emerges from an ‘improved’ water supply scheme. A water point can be a source by itself, for example a protected spring, a protected dug well or a borehole with a hand pump.

27 For example, in response to the survey in Phase 3, how to classify ‘outage’ (e.g. water points reportedly working but not flowing within 48 hours at the time of visit. This could be due to scheduled water rationing or mains electricity cuts affecting the pumping at that time, or ‘locked’ water points.

28 For Phase 3 verification, there were 5 categories: Functional, Functional Needs Repair, Not functional, Locked, and Abandoned.
Summary of key learning points (J):
Functionality is a difficult result to measure, in part due to heterogeneity in field conditions and the use of several proxy indicators to define functionality status. Definitions that adequately reflect the diversity of field conditions tend to be complex, which may not align to more binary and simple definitions which would be needed for community-level reporting of functionality status. Wherever possible, the measurability of functionality should be established from early on in the PbR process, with definitions and measurement methodologies developed, agreed and widely disseminated prior to cycles of verification. Such measures can then, if needed, be adapted as new insights are gained in the subsequent reporting and verification cycles.

Timing of the verification and implications:
The payment of results, and therefore the verification process, is done annually. A reference dataset is provided to the DVSP (for example, the October 2018 reference inventory data - CDMT dataset), and the verification is carried out based on these data. With functionality status being variable over time, it is essential that there is a minimal time lag between the reference data month and the field-level verification.

Tanzania generally has two rainy seasons per year, and the verification rounds 1-4 have taken place during the second, smaller rainy season (named locally as the ‘vuli season’), between October and December. With proxy measurements of functionality in the verification process being based on flow rates and yields, the (seasonal) timing of the verification and the reference dataset used, this may influence the extent of water points found to be functional. However, the timing of the verification process is also influenced by a wide range of other factors, such as the GoT financial year, DFID’s financial year and annual cut-off for aid disbursements, and is also potentially influenced by the elapsed time period between the LGAs receiving feedback on the verification results and receiving the payments, as well as the next round of verification.

Summary of key learning points (K):
Where functionality is defined based on yields, the optimal reference dataset (month) and verification time would be the driest month. However, multiple factors influence the timing of the verification, such as seasonality, and annual financial years of the donor and the payee. With such multiple factors, there is limited scope for delays in the verification and payments process.

The methodology and process of verification (method, process and practicalities):
The methodology of verification has experienced certain challenges over the years. The shifting administrative boundaries and lack of standardised and harmonised GIS Shape Files posed a challenge in geo-localisation of the water points. Whilst there is a unique code identification system for water points in Tanzania, it is understood that this is not widely used and that community-level reporters (such as COWSOs and CMOs) are often not aware of the code of their water point.

The sample size for field-level ‘accuracy’ verification in the first three years was relatively large, with around 50,000 distribution points sampled annually. A ‘rolling inventory’ approach was taken for sampling, allowing the verification process to help to build the national water point inventory. However, the exercise of sampling water points for verifications purposes has major challenges. First, the sample needs to be large enough to be representative at the LGA level, since that is the level at which functionality and accuracy needs to be estimated. Second, the estimates need to be accurate enough to detect changes in LGA behaviour regarding functionality. That is because functionality is affected by several factors (e.g. lifecycle of water points).
machinery, rainfalls, etc.), while PbR’s incentive payments attempt to specifically reward LGA efforts.

A further challenge related to drawing on samples for verification purposes, is that the functionality levels of the wider LGA have to be inferred, and therefore they come with some uncertainty. Some level of uncertainty is expected in every verification – the sample is drawn in such way that it is statistically representative, and inference based on the sample findings is reliable within a specified confidence interval. In the first phases of PbR verifications, the functionality estimates were generally reported as averages, without the corresponding confidence intervals reflecting uncertainty, leading to suggestions from DIME to include such confidence level information in future verification analysis and results.

Summary of key learning points (L):

Having a unique water point code identification system can ease the process of verification of results. The sample size of verification needs to be adequate to deliver representative results at the LGA level and to be accurate enough to detect LGA efforts in improving functionality and accuracy. However, the larger the sample size, the more expensive the verification process, and hence potentially the more challenging it will be for the host government to sustain verifications after the DFID programme funding ends.

Scope of the DVSP and added value of verification:

The large sample sizes of the field verification surveys not only provided an opportunity to expand and improve the nationwide water point inventory, but also posed opportunities to the sector to gather quantitative data with which to inform policy and strategy. However, due to challenges in the methodologies in the early phases of verification, the scope of verification phase 3 was limited to data collection on functionality, rather than collecting additional data which did not directly relate to verification of reported data. In Phase 4 the opportunity was taken to add additional (non-payment related) questions to the field verification questionnaires.

Through the DVSP’s nationwide verification activities, they have exposure to some of the challenges in the government reporting and data management processes, however their Terms of Reference does not require capacity building or mentoring of GoT on this issue, only to provide feedback to GoT. The reasons for this are understood to be to avoid overlap or duplication with the scope of work of the CBSP. Some interviewees mentioned that there could be efficiency gains if DVSP had a clearer role in feedback on verification results and advising on areas of systems strengthening, providing this were done in complementary manner, rather than duplicating CBSP’s inputs and also did not affect their independence in the verification of GoT data

Summary of key learning points (M):

Large scale verification surveys present an opportunity not only to verify results, but also collect additional information that can help inform policy and strategy, for example on the root causes of non-functionality and what could be done to address them. Independent verification Service Providers can gain detailed insights into the host government monitoring system and should have a role to play in providing feedback and advice on how to improve the system, providing this does not compromise their independence.

Credibility and trust of verification process and results:

In the early cycles of the verification process there were issues related to the verification methodology and definitions used, for example through measuring water points rather than distribution points in the first year Whilst this may have been due in part to a lack of stakeholder

---

30 Some interviewees mentioned that the feedback from DVSP was more limited in the first year, and that generally, there has been opportunities to strengthen the effectiveness of feedback provided by DVSP to GoT. This aspect also relates to the effectiveness of feedback being received at the LGA level (not only at national level), which is further discussed in Sections 0 and Error! Reference source not found..
coordination and communication on the verification methodology at the design phase, it reportedly has undermined some of the confidence and credibility of key stakeholders in the verification process in the early years.

In the first two years, there was limited and/or delayed feedback to the LGAs of the findings of the verification and in at least one year, payment was made to the LGAs without providing clarity on the verification results, and how they were used to calculate the amounts paid. The LGAs were reportedly not always kept updated as to the verification methodology and indeed communication across 181 LGAs was a challenge. A DIME report (2017a) stated that 30% of the DWEs eligible in PbR’s Phase 1 disagreed that the external verifications conducted in November 2016 fairly reflected the state of functionality in their districts. As the PbR Theory of Change assumes that being rewarded for results is a driver for efforts to improve those same results, the lack of credibility of verification of results could theoretically undermine the effectiveness of incentive payments.

From a practical perspective, the DVSP found that taking photos of all of the sampled water points during verification helped to provide further evidence which could be used in case of disputes by DWEs. Individual LGA result summary sheets were also developed in later verification rounds also to help LGAs to understand and question the results. Indeed, the use of a purpose-built mobile app to collect the verification data helped to strengthen the accuracy and reliability of verified data, with the app collecting GPS coordinates and photos systematically for all sampled water points.

### Summary of key learning points (N):

The credibility and trust of the verification process and the results produced is essential for the PbR system as a whole to effectively incentivise behaviour change. The verification methodology needs to be defined and mutually understood and agreed by all key stakeholders and the results need to be fed-back to those generating the data (in this case the LGAs), to boost understanding and ownership of the findings. Effective communication is key to underpin this and requires investment in time and resources; in other words it cannot be expected to happen as an unplanned spin-off or side-line benefit.

### 3.4 Eligibility, incentives, disbursements and fund usage

This theme presents learning arising from the financial aspect of the PbR programme component, including the setting of pricing structures to define the incentives, the process of channelling funds through the government Public Financial Management Systems (PFM) and how the funds were used at the LGA level. Annex 3 presents how the payment structure has evolved through time.

#### Understanding of the incentives and payments:

Linked with the previous learning point, if the results-based payments are expected to effectively incentivise behaviour change and actions of LGAs, these same LGAs need to clearly understand how the payments are calculated and what they need to do to maximise such payments in future. The PbR programme component is relatively complex and also relatively new as a concept to the rural water sub-sector in Tanzania. The payment calculations are also relatively complex, with different categories of functionality (see footnote 288) leading to full or partial payments and with different weighting factors to payments based on the KPIs of the data

---

31 which links to the issue raised in section 3.1 related to the need for strong coordination, communication and governance arrangements in the PbR programme component.

32 However, this issue reportedly was most pronounced in the first two years, and has since been improving considerably in recent years. The issues highlighted were also highlighted in each Annual Review, and actions taken to address these issues.

33 In Phase 3 and 4 verifications, the DVSP used DataVision’s Tikiti app.
Using Payment by Results to Improve the Sustainability of Rural Water Supply Services in Tanzania

(e.g. the completeness and accuracy). Whilst complexity in the payment calculations is in part necessary to reflect field realities, one interviewee suggested that “the incentive needs to be simple enough to communicate in a sound-byte” – that is to say it needs to be easy to understand and communicate to a range of audiences from communities to ministers. As mentioned in Section 1, progress was made towards simplifying the payment structure across PbR phases, including by the following: removing the higher £1,500 payment; removing eligibility criteria such that all 181 LGAs now receive a payment; removing Completeness and Correctness from the accuracy component of the payment, such that only Accuracy now weighs on it; and streamlining the payment structure into two additive components (Functionality and Accuracy). However, despite all of these measures, the structure and definitions used are arguably still relatively complex for widespread understanding across a varied group of stakeholders.

Besides the issue of complexity and associated stakeholder understanding in some of the early verification cycles, there was limited communication to the LGAs as to what the subsequent incentive payments would be based on (e.g. what elements they would be incentivising and what weighting would be placed on these)34. There was also the previously mentioned limited communication and feedback on the verification results in the first two years. Now with 181 LGAs enrolled in the PbR scheme, communication has been somewhat of a challenge, although the MoW in 2018 did develop a communication strategy, seeking to address this very issue.

Summary of key learning points (O):

For PbR to be effective, it is important that the payees (in this case the LGAs and RS’s) are clear on how the payments will be calculated and hence what they need to do to maximise payments. There is a trade-off between complexity of the calculation of the payment structure – which better allows payments to reward field realities – and the simplicity of the calculation, to aid stakeholder understanding and buy-in. Timely communication is essential to ensure the payee’s understanding of the pricing structure of the upcoming payment round, that they receive feedback on the results and how they can improve in rounds. Responsibilities for such communication at different levels needs to be clearly defined between the payer and payee (and verifier where applicable), and where necessary, supported with adequate resources. Communication of results should be in easy-to-understand formats and customised for the different audiences (e.g. central government and local authorities).

Pricing structures, formula of the incentive and what it incentivises:

As mentioned, DFID initially had two payments to LGAs (£1,500 and £300). This dual payment was revised in 2017 to a single payment (see Annex 3). This modification was mainly to underline the programme focus on maintenance (and avoiding mis-interpretation of objectives of the higher-level payments by the LGAs), rather than new construction and also had the benefit of simplifying somewhat the pricing structure of the incentive payments.

The relative weighting of payments based on factors such as data completeness, correctness and accuracy has evolved through time (see Annex 3). This has allowed the payments to take a phased approach to incentivising successive improvements in the system, particularly relating to the strengthening of monitoring. However, the pricing structure has a strong effect on what the payments are incentivising (providing that the LGAs actually understand the pricing structure), and in 2019, DIME proposed that whilst incentivising improved data accuracy was appropriate, that there were unintended effects due to the fact that the formula aggregated the accuracy weight directly into the functionality payment. For example, if an LGA did really well in terms of functionality (e.g. 90% of its water points estimated as functional), but had low accuracy in its reporting (e.g. wrongly reporting most of those water points as “functional need repairs” instead of “functional”), its PbR incentive payments would be close to zero. In such

34 Although it may be that decisions on the pricing structure were not made at this early stage in the annual reporting-verification cycle.
situations, the payment structure placed an overly heavy weighting on data accuracy and failed to incentivize PbR’s end-goal, namely functionality. As a result, a suggestion was made to restructure the Phase 4 payment formula into two components (one for functionality, and one for accuracy) which are separate and additive. That way, the largest weight is now placed on functionality, and such unintended effects are avoided. This linkage between focus on accuracy and functionality outcomes is discussed further in Section 3.5.

**Summary of key learning points (P):**

The pricing structure – that is, the way in which the payments are calculated and factors which weight payments - is highly influential in what actions the payments incentivise, assuming that the payee fully understands how this is calculated. Pricing needs to be set in such a way which reinforces commitment to achieving the desired outcomes, whilst at the same time avoiding perverse incentives which may lead to un-helpful behaviours. A phased approach to encourage progress on the means on which to achieve these outcomes may be most desirable.

**Qualification Support Grants (QSG), eligibility criteria, minimal thresholds and pressures to disburse:**

For the LGAs to enrol on the PbR programme, minimal eligibility criteria were for the first year of the scheme defined as entry thresholds. These included having reported monthly datasets for at least three months prior to the reference data month and also that the LGAs had in place a Council Water & Sanitation Team and a Council Water & Sanitation Plan (see Annex 1). Initially, only 57 LGAs met these entry requirements and, as a result, DFID agreed to provide Qualification Support Grants (QSGs) to some of the LGAs which applied, but did not yet meet the criteria; these QSGs amounted to £5,000 per LGA for Phase 1, and £10,000 per LGA for Phase 2 (see Annex 3). Whilst there was some technical support provided to the LGAs through the CDMT / CBSP to strengthen reporting and data systems, it is understood that there was relatively limited TA provided by MoW to the LGAs regarding the development of the Water & Sanitation Plans or for the Council Water & Sanitation Teams. The verification of the presence of the plans and coordination teams focussed more on ‘form’ than ‘function’; that is whether these plans and coordination teams existed, not on their quality or actual functioning or utilisation. Whilst the requirement to set up the plan and teams were envisaged by DFID to help stimulate discussions at the LGA level on establishing such aspects (not necessarily having them achieve a high level of functioning), nevertheless, the full benefit of DFID requiring these LGA initiatives as a pre-requisite to enrolment, may not have been reached. This requirement for LGAs having the Plan and Team was removed in later phases of verification. There were also concerns raised by DIME that the amounts paid per LGA for the QSG was sometimes higher than the payments made to the enrolled LGAs based on their performance, with DIME arguing that the potential results payments needed to be higher than QSGs, to encourage the enrolled LGAs to improve on their performance.

DFID achieved strong commitment to improving GoT monitoring systems, through the establishment of minimal KPIs for reporting and data quality which had to be attained for the programme to proceed. As mentioned in section 3.2, this was a strong leverage point for DFID in the initial phase of the programme. However, there has since been some flexibility to the initially defined thresholds, which may be reflective of the need to ‘lower the bar’ to match the field realities and difficulties of achieving systems change at the pace initially envisaged.

**Summary of key learning points (Q):**

Setting minimal requirements for PbR payments to start, and for payees (in this case Local Government Authorities) to enrol, is a strong driver to encourage action on systems strengthening. These requirements should be strategically developed, with potential support provided to achieve them and verification should robustly measure them, to avoid ‘token’
Using Payment by Results to Improve the Sustainability of Rural Water Supply Services in Tanzania

The process of getting the funds from DFID to the LGAs:

The timeframes for the results payments to be transferred through PFM systems from DFID down to the LGAs took much longer than expected, spanning around 3.5 months in Phases 1 and 2. Once finally credited in the LGA’s accounts, there was also considerable uncertainty within PO-RALG and LGAs as to how to access the funds, with which budget codes, etc.; these issues are well documented (see DIME 2017a). These delays and lengthy processing timeframes led to a reduction in the time that the LGAs had to spend the funds before the GoT financial year-end closure. This is further discussed in section 3.5.

In PFM cycles the timing and predictability of disbursements (by DFID) and resources to be received (by GoT) are critically important to inform both organisational planning and decision-making. However, defining the amount to be paid is theoretically only possible once the verification results are available. This posed a practical challenge to DFID, wherein it needed to make all payments by the end of December each year, prior to the verification of results, which tended to be available only in January or February. To address this issue, DFID Tanzania and GoT Ministry of Finance defined a mechanism which allowed DFID to disburse of a certain proportion of funds - based on forecast using the previous year - to be held as an intermediary step by the Bank of Tanzania. The Bank then retains these funds and only releases them to implementing agencies when the final verified results are released (or a portion of them) to MoW based on the written request of DFID.

Reportedly, funds that are unused can continue to be held until the following year, or reconciled\(^{35}\). This still meant that DFID needed to predict possible payments to be made in lieu of verification data and may have then needed to ensure payments made were in the order of magnitude to what was disbursed. Again, the potential pressure to disburse funds may, theoretically, pose a risk to decision-making on the pricing structure, for example.

**Summary of key learning points (R):**

Where using the PFM systems of host governments to transfer payments to payees, the in-built protocols, risks and timeframes for such processing need to be made clear in advance, understood by all involved stakeholders and tracked, to increase reaction to, and accountability for, potential delays. The annual timing of financial year closure, verification and disbursements, may require the donor to transfer funds before the results of the verification can provide the precise payment amounts needed. Where this is the case, efforts are needed to ensure that this will not influence the definition of payment amounts to match the amount initially transferred, potentially calling for ring-fencing of such funds.

**Usage of the funds received at the LGA level:**

A key feature of results-based financing is that those receiving payments have the ‘space’ and flexibility to define the most appropriate course of action to achieve the desired results. This would imply LGAs have some form of discretion on how the incentive payments are used within their respective authority. However, following the first payment cycle, MoW was reportedly concerned that significant proportions of the funds were being used by the LGAs for costs such as fuel, vehicles and staff per diems, rather than on infrastructural investments. There was reportedly a view that the LGAs may be mis-managing the payments. In response to this, in 2017 MoW circulated a letter defining guidelines for the usage of the funds, including a cap of 30% of funds being used for personnel, fuel or per diem purposes, and encouraging the

---

\(^{35}\) If there is a deficit of funds, MoFP would request balance of payment from DFID, and if funds are more (although this circumstance has not materialised as yet), they can be reconciled in the future payments through deduction from the amount DFID transfers.
remaining funds to be used for procuring supplies (such as spare parts) and commissioning works for infrastructure maintenance and rehabilitation\textsuperscript{36}. This action may have conveyed a somewhat paternalistic approach from MoW to the LGAs, and it also raises the question as to whether MoW had a clear understanding at the time of the requirements for improving water point functionality and the best way to achieve these results (i.e. the investments needed to support post-construction follow-up and technical guidance for communities).

In addition to the prescriptive nature of fund utilisation sent down by MoW, at the District level the DWE’s may not have had full autonomy on decision-making on how the funds would be used. According to local government protocols, decisions must be discussed and approved by a district-level committee, which includes local elected politicians, who may not be aware of the purpose and objectives of the payments and may not have aligned incentives to that of the PbR desired outcomes.

It is unclear the extent to which the DWE’s (or MoW more widely) has undertaken a full diagnostic analysis on the causes of poor functionality and data accuracy, to inform and guide the LGA’s use and investments of the incentive payments. It is also unclear the extent that DWE’s used the previously mentioned Council Water & Sanitation Plans to define how the funds would be used.

Further research is currently being undertaken on the usage of payments at the LGA level, so further insights on actual usage will be presented in future (e.g. 2020) learning cycle reports.

Due to the aforementioned delays in channelling payments to the LGAs, in certain years there were very limited timeframes to spend the funds before the closure of the GoT financial year, thereby creating further challenges. Arrangements for carrying-over the funds into the subsequent financial year are reportedly not straightforward. The lack of LGA predictability on the amount of funds to be received by the PbR payments made it more challenging for them to plan how to best utilise them. Whilst few LGAs reported that the delayed payments meant that the funds could not be spent (DIME 2017a), it did have implications for what the funds were spent on. According to DIME, in Phase 1, many LGAs used the funds on items which could absorb funds quickly and help to fix non-functional systems (such as procurement of materials for maintenance, or commissioning maintenance works). This could be a consequence of the short timeframe allowed for spending in Phase 1, and therefore could detract from longer-term actions for which expending funds would take more time. In Phase 5, DIME will conduct case studies of how LGAs spent their PbR funds.

Some interviewees mentioned the potential role of Civil Society Organisations (CSOs), who are present in the districts and working in WASH, in helping to advise and also hold to account the DWEs for their usage of the funds.

**Summary of key learning points:**

It is important to understand the level of autonomy that the payee has to define how the payments are spent and to understand who else may influence these decisions. Adequate timeframes are required to utilise the funds between payment cycles, not only on ‘quick fixes’ but also to address root causes and barriers to functionality and data quality. All those stakeholders influencing how funds should be spent should be clear on the objectives of the funds. Decisions on how the funds are spent can benefit from prior diagnostic analysis of the issues and potential solutions and there may be scope to engage CSOs to help advise and hold to account how the payees utilise funds. Early communication of results can help the payee to plan for the fund use, even prior to the funds being received in their accounts.

\textsuperscript{36} Interestingly, findings from multi-country studies on rural water supply sustainability, often point to the lack of local authority recurrent costs (for things like fuel, transport allowance etc) as a key inhibitor to the local authority providing ongoing, post-construction support to community service providers, which is deemed important to support the sustainability of services (World Bank / Aguaconsult 2017)
3.5 Achieving outcomes (improved functionality)

This theme presents learning relating to the programme’s efforts to improve functionality rates of rural water supplies — that is, efforts towards the wider desired outcomes of the PbR programme component.

Moving beyond ‘means’ (monitoring systems) to get to ‘ends’ (functionality):

Whilst functionality has been an objective from the outset, a strong focus on the PbR programme component to date, particularly for the first three phases, has been on incentivising the improvement in monitoring and data systems, which is essential for the PbR scheme to operate. Indeed, there have been considerable improvements in many of the key performance indicators of the monitoring system (albeit verified rates of data accuracy still have considerable scope for improvement). However, improved monitoring and data systems in themselves are not the PbR programme component’s overall objective, which is to drive improvements of functionality rates. Some interviewees relayed the need to work on both aspects in parallel (i.e. water point functionality and data accuracy), while reflecting in the weighting of priorities that water point functionality is PbR’s ultimate end.

However, with data and monitoring systems being in such a poor state at the beginning of the programme, some interviewees also argued that the foundations for institutional commitment to functionality and monitoring functionality needed to be established first, before considerable progress could be made on achieving the functionality outcomes. As such, the no-cost extension to the programme and adaptive programme management have helped create the space for this evolution of focus on the programme through time.

The extent to which improved data systems will lead to improved functionality in turn depends on the degree to which the LGAs (and wider GoT) are using the data to inform their activities and investment decisions, and the extent of linkages between monitoring and maintenance actions. There is as yet limited evidence on this aspect, including investigating more innovative approaches to maintenance provision, which would also benefit from a robust and comprehensive monitoring system being in place. A number of examples of performance-based arrangements for maintenance have emerged recently and are showing promising results (Lockwood; 2019).

Whilst many interviewees were able to state the improvements on reporting and data statistics during the programme, few interviewees and workshop participants involved in the 2019 Learning Cycle data collection were able to recall whether, from their understanding, there had been changes in the rates of functionality through time. Whilst this may imply a bias of key stakeholders in their current (2019) focus on the ‘means’ rather than the ‘ends’, it may also be due to the lack of longitudinal data trends between verification cycles (due in part to inter-annual comparability of methodologies and definitions of verification) to ascertain trends in functionality rates through time.

Summary of key learning points (T):

PbR requires strong data and reporting systems. However, there can be a risk in overly focussing on improvements in these dimensions and efforts are needed to ensure an ongoing focus on the ‘end goal’ of improving functionality rates. There is a need to build the wider linkage between improving data and improved decision making and planning based on this data to improve functionality outcomes.

---

37 Reflected, for example in how payments were calculated from Phase 1 including functionality
38 Although it may be possible to analyse trends in the indicators for the ‘hard definition’ of functionality over the years.
Using Payment by Results to Improve the Sustainability of Rural Water Supply Services in Tanzania

Maintenance arrangements and models:

At the time of programme design, the main model recognised by GoT policy for rural water supply service delivery was that the day-to-day delivery of services was undertaken by community management organisations (CMOs) or COWSOs, who were to be supported by LGAs. As such, the programme has been designed based on this service delivery model and much of the research (such as that led by DIME) has focussed on this model. Research by DIME has identified shortfalls in the capacity of CMOs to take on the envisaged COWSO functions and highlights that in certain areas, COWSOs did not perform significantly better than CMOs, therefore raising questions as to whether upgrading CMOs to COWSOs would achieve the improvements in sustainability envisaged by GoT.

However, some interviewees of this 2019 Learning Cycle reflected that it may have been relevant to also consider additional models for management and maintenance of rural water supply services, such as those being trialled in the East African Region. Overall, some interviewees remarked that there was not always a clear and direct linkage, or pathway, from the reports submitted by CMOs and COWSOs to feed GoT data systems and how maintenance actions are planned for and financed, particularly those actions commissioned directly by the community level service providers.

Summary of key learning points (U):

Whilst mindful of sector policy, initiatives seeking to improve maintenance outcomes in the rural water sub-sector should consider a range of maintenance service delivery models, potentially testing various models and how they can work with PbR. There should be a clear linkage between reporting of data, and maintenance activities.

Roles and responsibilities between LGAs and service providers (e.g. COWSOs/CMOs):

According to GoT policy, rural water supply service providers (e.g. CMOs and COWSOs) are responsible for the maintenance of their rural water supply infrastructure, although LGAs are expected to provide support for "major repairs". However, the boundary between minor and major repairs is often unclear, including for financing, leading to some ambiguities in roles and responsibilities for maintenance. With the aforementioned rush for LGAs to spend PbR funds in certain years, it is unclear if that has led to some LGAs providing support to COWSOs on works which may normally be expected to be the responsibility of the community service providers themselves (e.g. providing replacement taps, etc). Further research is needed to determine the extent of this challenge for improving functionality rates and DIME’s new Maji Endelevu initiative may help to provide relevant data in future years.

Some interviewees have remarked that the responsibilities for reporting on functionality data and undertaking most maintenance actions, rests with the community level service providers (rather than the LGAs). As such, it could be questioned whether the incentive payments should be channelled to LGAs, or directly to the CMOs or COWSOs, or indeed to third party maintenance service providers, where this may be possible. It is understood that DIME’s Maji Endelevu research will look into the issue of how payments may more directly benefit service providers.

39 Recent research indicates that very high levels of functionality can be achieved, at least at a proof of concept scale, based on private maintenance arrangements, with performance-based contracting and with strong roles for public sector in oversight and governance (Lockwood; 2019; McNicholl et al; 2019).

40 Although this option was ruled out early on in the programme design, but DIME’s Maji Endelevu study will define how increasing the link between the LGA and CMO/COWSO can be done.
Whilst significant efforts have been made in improving reporting systems of the LGAs, some interviewees questioned the extent that the programme had been able to engage with the community level service providers, either on maintenance or reporting issues, with one interviewee referring to them being the ‘missing link’ in the PbR programme component to date.

**Summary of key learning points (V):**

*Decisions on who to pay for the results should include consideration on what falls within the mandate of those receiving payment, and whether other stakeholder groups are critical to achieve the ultimate results of better performing water supply services. If there are additional groups, consideration should be made as to how they can be more clearly engaged and potentially also benefit from the incentive payments to service providers more directly.*

**Complementary actions in the sector needed to achieve outcomes:**

The PbR programme component channels payments to decentralised levels of government, based on their results against a set number of reporting criteria. However, there are several wider sector-level actions which are needed to ensure an enabling environment for progress to be made and results to be achieved at the local level, such as the process of registration of COWSOs, capacity building for maintenance, and clarifying roles and responsibilities for maintenance). However, with incentive payments being focussed only at the decentralised level and on the LGAs, there was theoretically no PbR incentive to achieve these wider supporting actions, for example at the level of MoW. In 2017, DFID introduced additional, ministry-specific performance payments for PO-RALG and MoW, with payment based on progress towards attainment of agreed actions. Certain actions required the collaboration of both Ministries, hence these payments also aimed to incentivise joint action.

In 2019, “Maji Endelevu” was launched as a ‘complementary intervention’ to the PbR programme component, to test how strengthening the linkage and communication between COWSOs/CMOs and LGAs may improve water point functionality. Maji Endelevu consists of quarterly action-learning consultations between these two parties, attempting to overcome grey areas in water policy and finding solutions to outstanding breakdowns. In an effort to produce a rigorous impact evaluation, Maji Endelevu was designed as a Randomized Controlled Trial: it is implemented in a randomly drawn treatment group consisting of 156 villages spread across 40 districts. Baseline and endline data are collected in both the treatment and control groups, and once implementation is complete by the end of 2020, an impact evaluation will be produced.

**Summary of key learning points (W):**

*Where channelling payments to decentralised entities, clarity is needed about what wider sector-level conditions should be in place to improve the overall enabling environment for progress at decentralised levels, and to consider how such actions can be stimulated. This may lead to a PbR structure that incentivises action at various levels of the system simultaneously, rather than focussing on one (set of) stakeholders at one level only.*

### 3.6 Equity and Value for Money (VfM)

This theme presents provisional learning points related to Value for Money (VfM) and equity on the PbR component of the programme. It should be noted that at this stage, there are limited concrete learnings arising from this theme, and findings presented below have a relatively limited base of information at this stage. However, the theme has been included in this report in part to flag areas where further research and learning could occur in future.

**Achieving VfM in the programme, and in achieving outcomes**


Each functioning distribution point is eligible for receiving a PbR payment of £300 per year. From interviews with programme stakeholders, it appears that the basis for defining this amount seems to have been largely driven by estimations on what the programme budget could afford, and on expectations of results that could be achieved. It may not have been primarily based on an analysis on the life cycle costs of common rural water supply technologies (e.g. calculating the amount likely to be needed to support maintenance and sustainability efforts). However, one DFID interviewee did mention that this amount is broadly comparable with the findings of other studies undertaken in the region, which estimate a required investment of some US$1 -3 per person per year to support sustainable rural water service delivery (e.g. Smits et al 2011). Additionally, one interviewee questioned what methodology could be used to define how much is ‘enough’ to incentivise behaviour change away from new construction towards efforts on sustaining water services.

The amount needed to sustain rural water supply services is likely to vary – and possibly vary widely across districts and between technology types. However, an incentive pricing structure that reflects such heterogeneity, whilst potentially delivering better VfM through more customised payments, would add further complexity, with the aforementioned risks in diminished stakeholder understanding and hence potential effectiveness of the incentive structure.

**Summary of key learning points (X):**

The setting of the incentive, in this case, price per functional water point is likely to vary by sub-context (e.g. across districts), is not straightforward and needs to be sufficient to incentivise behaviour change, whilst not being excessive and therefore resulting in poor value for money. There may be a trade-off between complex payment structures, which reflect field realities and maximise VfM, and the need to have simple structures to boost stakeholder understanding.

**Ensuring an equity-focus in programme support and gains**

To ensure fair and equitable distribution of incentives, the original design of the PbR component envisioned that the scheme would start in a limited number of LGAs, starting with those with least functional water coverage (35% as a primary criteria) and expand nationally to cover more LGAs over time, eventually encompassing the whole country. The consideration to prioritize LGAs with least coverage was based on the assumption that most of these LGAs would be those with limited institutional delivery capacity and mostly situated in difficult hydrogeological environments, in which abstraction and distribution of water is most challenging. However, the independent data verification in 2014 found poor levels of reporting and data accuracy across all LGAs. As a result, this initial assumption was dropped. Data accuracy was fundamental for PbR to precede and is critical for measurements of future performance to enable PbR disbursements. With this consideration in mind, qualification of LGAs for the PbR programme was tied to specific deliverables relating to the improvement of reporting and data quality. This decision led to the improvement of reporting and commencement of implementation of PbR in 2016.

As PbR rewards success, there is a hypothetical risk that those LGAs who benefit the most from the scheme would be the ones with the highest rates of functionality and those with the most robust monitoring and data systems. This would imply that it would have less impact in the districts most in need of external support, which can be assumed to likely be among the poorer or least capacitated.

As LGAs start to get the bulk of funds in the remaining three phases of PbR, there is a theoretical

---

41 This is the case in 2019, however this was not always the case, as mentioned in Section 3.4
42 Prior to this programme, research commissioned by DFID found that only around $0.3 per capita was allocated annually by Government (DFID 2015).
risk that they prioritise repair and maintenance in easy to reach communities at the expense of more challenging and isolated ones. If it materialises this behaviour may lead to increased inequality in service provision between and within the LGAs.

In addition to the above, there is also the risk that having a single, nationally standardised payment per functional water point, would not reflect the diversity of costs of sustaining services between districts\(^{43}\). However, these are theoretical distinctions and are not based on data analysis to date.

Again, to design an incentive structure that fairly compensates for such diversity in field conditions, would likely entail a complex structure, which would hamper the understanding of stakeholders and potentially also increase the overall cost of operating the PbR scheme.

**Summary of key learning points (Y):**

As PbR rewards those that can deliver results, it theoretically may not focus funds on the communities and districts that are the poorest, most challenged hydrogeological, and most in need. This risk should be monitored, and actions taken if it were to materialise. As with VfM, there is a trade-off between having complex payment structures that fairly reflect the diversity in costs of sustaining services between districts, and the need for simplicity in the structure to aid stakeholder understanding, as well as making the whole PbR operation affordable and sustainable. All of this requires data to drive decision making, which may only be available through analysis of successive years of such a PbR programme, therefore difficult to analyse adequately, in some cases, from the outset.

---

\(^{43}\) For example, theoretically, the costs of monitoring and supporting communities to sustain services is likely to be lower in more densely populated LGAs, which may have relatively better road and communication networks, and potentially higher capacity of service providers, and potentially higher ability to pay of residents. This is in contrast to more remote, sparsely populated districts, where road and communication issues drive up the costs of monitoring, and ability to pay tariffs may be lower.
4. Conclusion

As detailed in section 1.4, there were a number of assumptions to the Theory of Change, which are listed in DFID (2019). This paper concludes and summarises the key learning contained in this report relative to these assumptions, as presented in Table 2.

Table 2: Summarising key learnings against the initial Theory of Change assumptions

<table>
<thead>
<tr>
<th>Assumptions of the Theory of Change</th>
<th>Learning points related to these</th>
</tr>
</thead>
<tbody>
<tr>
<td>That money would incentivise LGAs to focus on repairs and maintenance, and that the amount of money is sufficient to change behaviour towards maintenance activities.</td>
<td>The PbR funds helped to stimulate attention and action on monitoring and maintenance, however the funds themselves were likely not always the only driver for change – rather, according to interviewees, it was arguably the internal pressure relating to not receiving the funds that drove much of the change in the early years of the programme.</td>
</tr>
<tr>
<td>That the causes of the breakdowns of the water points can be influenced by the LGAs through maintenance (e.g. rather than being fundamental design flaws).</td>
<td>To date, much programme focus and weighting of the incentives payments has been on strengthening monitoring systems, and the extent to which incentives stimulate maintenance actions requires further investigation, as does the amount of funds required (e.g. per water point) to achieve behaviour change.</td>
</tr>
<tr>
<td>That there is a robust data and monitoring system in GoT for the verification of results.</td>
<td>The monitoring system of government initially was not sufficiently strong to allow the PbR process to operate. However, DFID helped to achieve considerable commitment to improving the system, through setting minimum monitoring system KPIs to be achieved prior to payments being made.</td>
</tr>
<tr>
<td>That functionality can be accurately measured.</td>
<td>Measuring functionality is complex, and often requires proxy indicators. There is a trade-off between complex definitions of functionality to reflect the diverse conditions in the field, with the simplicity needed for stakeholder communication, and for the community-level reporters (e.g. CMOs/COWSOs) to use in terms of how they report on functionality status of their water points.</td>
</tr>
<tr>
<td>That the mechanism to transfer the financial incentive is credible and trusted.</td>
<td>Likewise, complex definitions, and weighting formulae for payments, whilst positive in that they better reflect the actual performance and status on the ground, can pose challenges for stakeholder understanding (and hence, understanding of the incentive, and therefore wider effectiveness of the incentive to stimulate behaviour change).</td>
</tr>
<tr>
<td>That the PbR mechanism and incentive is understood by LGAs.</td>
<td>Communication about the results, and also about how future payments will be calculated, is essential to help LGAs to plan their activities to maximise payments.</td>
</tr>
<tr>
<td>That there is adequate capacity within GoT and the LGAs to act and benefit from the scheme (or such capacity can be sourced through technical assistance (TA).</td>
<td>Technical assistance has been necessary to improve GoT reporting systems. PbR can stimulate internal (GoT) support systems to stimulate progress at the LGA level.</td>
</tr>
</tbody>
</table>

44 Here, not receiving funds refers to situations whereby LGAs or MoW were unable to unlock payments due to not meeting minimal requirements for payments, or LGAs receiving limited payments due to poor performance (e.g. low accuracy of data and/or low rates of functionality).
5. Recommendations arising from the 2019 annual programme-wide learning cycle

The preceding sections of this report outline some of the diverse learnings that have arisen from the PbR component of the programme since its design in 2014 until the end of the third verification cycle, in March 2019. These learning points were identified during the process of the 2019 annual learning cycle, and were generated from a desk review, bi-lateral interviews and a stakeholder workshop, on 6th December 2019. Based on the presentations of these learning points, participants in the workshop identified and agreed a number of core areas for the programme to focus on in the coming period, in terms of actions to address past issues, and also areas for further review and research. These included the following six points, with each point cross-referred to the summary learning point box numbers (e.g. ‘A, D’):

1) Improving communication about the payment structure and results (and associated payments) to LGAs (now superseded by RUWASA District Managers), and to also share this information with parliamentarians and civil society more broadly (see learning points N, O, R);
2) Investigating and addressing the causes of low data accuracy, particularly at the community level, and further considering and strengthening the linkage between community-level reporting, and maintenance (see learning points I, S, T, U, V);
3) Further analysing the VfM and equity aspects of the PbR programme component (see learning points X, Y);
4) Strengthening the governance and communication arrangements for programme delivery, namely strengthening the frequency and effectiveness of DFID-RUWASA-DIME-DVSP-CBSP coordination meetings (see learning points B, D, M);
5) Further analysing how future programmes can adapt to emerging conditions, such as the progressive shift from public standpipes towards household water connections and wider service level indicators;
6) Further discussing the annual timings of the reporting-verification-payments cycle, particularly given the implications of the timing of the upcoming elections in Tanzania in 2020 (see learning points K, R).

6. Next steps

The draft contents of this report were shared with stakeholders in the workshop in December 2019, and circulated for additional feedback in January-February 2020. Once this report is finalised, there will need to be discussions as to how the relevant insights are cascaded on to key stakeholders who were not present in the workshop for further dissemination and follow-up. It is envisaged that RUWASA and DFID would take responsibility for disseminating the findings of this report to stakeholders within Tanzania, whilst the DVSP and DFID would seek opportunities to disseminate relevant findings to global-level stakeholders, such as DFID Headquarter staff, and the wider (global) WASH sector.

Whilst this report was based largely on desk review, interviews and a stakeholder consultation, there is the need to collect further information from a wider range of stakeholders, such as other associated Ministries in GoT, and also from decentralised stakeholders such as the DWEs. This will be done during the 2020 learning cycle and findings from this captured in the 2020 learning report.

As this 2019 learning cycle had a long time period to cover, it did not have the scope to focus down on any particular theme or issue in detail. Future learning efforts only covering a one-year cycle, may be

---

45 These were mainly actions to be taken by RUWASA and also in some cases, to be further analysed by DFID, DIME and DVSP.
46 Through discussion in the workshop, this recommendation was elaborated to include; further consideration on different maintenance service delivery models, and considering what motivates community members to report monthly on their functionality status.
more in-depth and focus on certain thematic issues. These priority areas for learning on the programme in 2020 need to be defined and agreed by the key stakeholders, and this will lead to the annual updating of the annual programme-wide learning strategy.
Bibliography


Carlitz R (2016); Money Flows, Water Trickles – Explaining the Disconnect Between Spending and Clean Water Access in Tanzania


DFID (2016): DFIDT PbR water sector communication 30 July 2016 (untitled PPT presentation)


DIME (2017b): The Power and Processes of the Payment by Results Program. A process evaluation of the Payment by Results (PbR) program in Tanzania’s rural water supply sector


DIME (2019a) Performance evaluation of the payment by results scheme in the rural water subsector in Tanzania. 2018 Annual Report

DIME (2019b): Maji Endelevu: Progress Report #1 May to July 2019


DVSP (Ecorys) (2019): Phase 3 DVSP Management – Consolidated findings report

DVSP (Ecorys) unpublished: Feb 2019 After Action Review - DVSP


IMC (2018) Independent 2017 Annual & Baseline Data Verification of the PbR Scheme in Rural Water Supply Tanzania. Final report v3.4

IRC/WEL Group (2015): Independent Verification of the baseline data for the PBR Scheme in the Water Sector in Tanzania
Using Payment by Results to Improve the Sustainability of Rural Water Supply Services in Tanzania


JMP 2019 data file, accessed at: https://washdata.org/data/downloads#TZA


Kwezi, L (2019): Payment by Results: An end or a means to an end? Blog posted on 5th November 2019, accessible here: https://www.ircwash.org/blog/payment-results-end-or-means-end

Kwezi, L (undated): Using results based financing and adaptive programming to improve water service delivery in rural Tanzania. A review and adaptation to the theory of change


MoWI (2015a); National Rural Water Sustainability Strategy 2015-2020


Annex 1: Detailed Theory of Change of the PbR component of the programme

Source: Phase 2: Rural Water Supply & Sanitation Programme Business Case, 2014
Annex 2: Sources of information for this report: Interviewees and workshop participants

<table>
<thead>
<tr>
<th>No.</th>
<th>Organisation</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RUWASA</td>
<td>Eng. Loishiye Ngotee</td>
</tr>
<tr>
<td>2</td>
<td>RUWASA</td>
<td>Eng. Clement Kivelago</td>
</tr>
<tr>
<td>3</td>
<td>RUWASA</td>
<td>Enoch Wagala</td>
</tr>
<tr>
<td>4</td>
<td>RUWASA</td>
<td>Bahati Joram</td>
</tr>
<tr>
<td>5</td>
<td>RUWASA</td>
<td>Singolile Mwamwaja</td>
</tr>
<tr>
<td>6</td>
<td>Ministry of Water</td>
<td>Stewart Mwanjala</td>
</tr>
<tr>
<td>7</td>
<td>Ministry of Water</td>
<td>Dorisia Mulashani</td>
</tr>
<tr>
<td>8</td>
<td>Ministry of Water</td>
<td>Winston Bohela</td>
</tr>
<tr>
<td>9</td>
<td>Ministry of Finance</td>
<td>Jabir Selemman</td>
</tr>
<tr>
<td>10</td>
<td>Mbeya Region (RUWASA)</td>
<td>Eng. Mathayo Athuma</td>
</tr>
<tr>
<td>11</td>
<td>Arusha Region (RUWASA)</td>
<td>Eng. Joseph Makaidi</td>
</tr>
<tr>
<td>12</td>
<td>RUWASA</td>
<td>Eng. Hamis Mashindike</td>
</tr>
<tr>
<td>13</td>
<td>Dodoma DC</td>
<td>Eng. Wolter S. Kirita</td>
</tr>
<tr>
<td>14</td>
<td>Tunduru DC</td>
<td>Eng. Primy Damas</td>
</tr>
<tr>
<td>15</td>
<td>Mkuranga DC</td>
<td>Eng. Upendo Lugongo</td>
</tr>
<tr>
<td>16</td>
<td>Ministry of Water</td>
<td>Eng. Jackson Mutazamba</td>
</tr>
<tr>
<td>17</td>
<td>DFID</td>
<td>Lukas Kwezi</td>
</tr>
<tr>
<td>18</td>
<td>DFID</td>
<td>Gertrude Kihunrwa</td>
</tr>
<tr>
<td>19</td>
<td>DIME</td>
<td>Matilda Kivelege</td>
</tr>
<tr>
<td>20</td>
<td>DVSP</td>
<td>Will Tillett</td>
</tr>
<tr>
<td>21</td>
<td>DVSP</td>
<td>Alena Cierna</td>
</tr>
<tr>
<td>22</td>
<td>DVSP</td>
<td>Machibya Magayane</td>
</tr>
<tr>
<td>23</td>
<td>DVSP</td>
<td>Stefanie Henke</td>
</tr>
<tr>
<td>24</td>
<td>DVSP</td>
<td>Kema Koronel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIME</td>
<td>Aidan Coville</td>
</tr>
<tr>
<td>ECORYS (DVSP)</td>
<td>Amy Weaving</td>
</tr>
<tr>
<td>CDMT (RUWASA)</td>
<td>Bahati Joram</td>
</tr>
<tr>
<td>Wel Group (CBSP)</td>
<td>Chris Brown</td>
</tr>
<tr>
<td>IWEL (DVSP)</td>
<td>Don Brown</td>
</tr>
<tr>
<td>DFID</td>
<td>Gertrude Kihunrwa</td>
</tr>
<tr>
<td>Tawasanet</td>
<td>Herbert Kashililah</td>
</tr>
<tr>
<td>(formerly) Ministry of Water</td>
<td>Jackson Mutazamba</td>
</tr>
<tr>
<td>DIME</td>
<td>Jerome Sansonetti</td>
</tr>
<tr>
<td>Oxford Policy Management</td>
<td>John Pinfold</td>
</tr>
<tr>
<td>WEMA (DVSP)</td>
<td>Kema Koronel</td>
</tr>
<tr>
<td>DFID</td>
<td>Lukas Kwezi</td>
</tr>
<tr>
<td>WEMA (DVSP)</td>
<td>Machibya Magayane</td>
</tr>
<tr>
<td>ECORYS (DVSP)</td>
<td>Rachel Norman</td>
</tr>
<tr>
<td>WaterAid</td>
<td>Severine Allute</td>
</tr>
<tr>
<td>DataVision (DVSP)</td>
<td>Steph Henkie</td>
</tr>
</tbody>
</table>
### Annex 3: Summary of Eligibility Criteria and Payment Structure Used in different Phases of PbR

This summary data table was provided by DFID.

<table>
<thead>
<tr>
<th>PbR phases</th>
<th>Eligibility Criteria (for the LGA to be subjected to Independent Data Verification and receive PbR payments from DFID)</th>
<th>Payment Structure</th>
<th>LGAs which received final payments after independent verification</th>
</tr>
</thead>
</table>
| **Phase 1** (2016) | • Existence of WASH plans  
• Existence of functioning council water and sanitation teams  
• LGAs that had submitted at least four reports from October 2015 to March 2016 or submitted a report in each of the three months from January to March 2016 | • £50 per functional WP  
• £1,500 per additional functional WP  
• Qualification Support Grant of £5,000 | 74 LGAs |
| Reference Data from August 2016 | 57 LGAs had WASH plans and functional CWST and had submitted at least four reports from October 2015 to March 2016 or submitted a report in each of the three months from January to March 2016.  
17 LGAs had WASH plans and functional CWST but only reported three times from October 2015 to March 2016 but not consecutively from January to March 2016. | | |
| **Phase 2** (2017) | • Existence of WASH plans  
• Existence of functioning council water and sanitation teams  
• LGAs that submits report each month  
• The level of data completeness should be at least (90%) and the level of data correctness should be at least (65%); and Data Accuracy 60% | • £50 per functional WP  
• £25 for locked functional WP  
• £1,500 for additional functional water point  
• Qualification Support Grant of £10,000 | 129 LGAs |
| Reference Data from June 2017 | 129 LGAs reported monthly, had WASH plans and functional CWST and only met the completeness and correctness criteria. 19 LGAs reported monthly, had WASH plans and functional CWST and met all the three data quality criteria (completeness, correctness and accuracy). | | |
Using Payment by Results to Improve the Sustainability of Rural Water Supply Services in Tanzania

| Phase 3 (2018) | • Existence of WASH plans |
| Reference Data from August 2018 | • Existence of functioning council water and sanitation teams |
| | • LGAs that submits report each month |
| | • The level of data completeness should be at least (100%) and the level of data correctness should be at least (80%); and Data Accuracy 70% |

181 LGAs reported monthly, had WASH plans and functional CWST and only met the completeness and correctness criteria. 1 LGA reported monthly, had WASH plans and functional CWST and met all the three data quality criteria (completeness, correctness and accuracy).

| 181 LGAs | £300 per functional WP |
| | £150 for locked functional WP |

---

47 This was not paid during the first year as 2016 was a baseline payment.
48 Only to LGAs who reported three times from October 2015 to March 2016 but not consecutively from January to March 2016 would receive a Qualification Support Grant.
49 This includes 57 LGAs and 17 LGAs - although the DVSP collected data at DP level and hence the payment was made at DP level. The 17 LGAs only received QSG but the 57 LGAs were paid based on verified functional water points in relation to their reporting accuracy (Reporting accuracy x number of functional water points in August 2016 baseline x £50).
50 The half payment of £25 was introduced for the first time for every water point which was found locked at the time of verification but was perceived as functional by users/Community Management Organizations. This was done purposely to factor in the reality of rural water supply in Tanzania and to avoid penalizing LGAs in situation where water points were locked due to rationing or other related reasons in the communities.
51 It is important to note that the higher payment £1,500 for additional functional water point was almost negligible as only few LGAs (i.e. 36 which qualified for both phase 1 & 2) were eligible for this payment and majority of them didn’t have proper recording of additional functional water points.
52 To all 129 LGAs that meet PbR criteria to further help them improve reporting and data quality.
53 Payments were made to 129 LGAs using a sliding approach for calculating weighting factor, considering completeness, correctness & accuracy as weighted factors against the data quality thresholds of 90%; 65% and 60% respectively.
54 Payments were made to 129 LGAs using a sliding approach for calculating weighting factor, considering completeness, correctness & accuracy as weighted factors against the data quality thresholds of 100%; 80% and 70% respectively.

The figure below presents the items arising from the December 2019 workshop activity on the participatory co-development of a programme timeline, with some additional information added during the review process of this report.