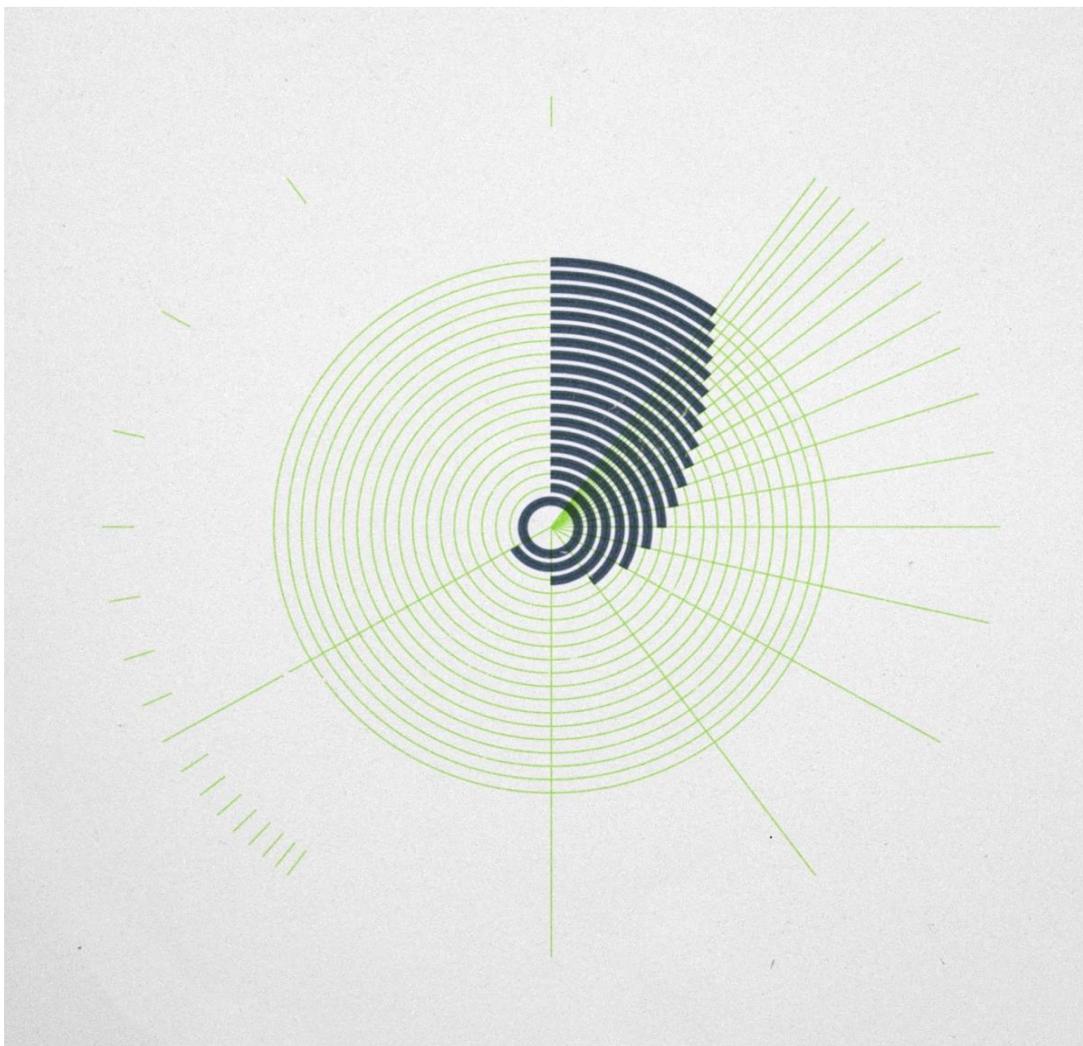


Results-Based Financing (RBF) in the Education Sector: Country-Level Analysis

Submitted to the REACH program at the World Bank



An assessment of RBF in education, Final Assessment Report

Mozambique

July 2021

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Acronyms and Abbreviations

ADB	Asian Development Bank
ADE	Direct Support to Schools – school grants (<i>Apoio Directo às Escolas</i>)
AF	Additional Financing
AM	Aide Memoire
CESC	Civil Society Learning and Training Center (<i>Centro de Aprendizagem e Capacitação da Sociedade Civil</i>)
CSO	Civil society organization
DFI	Development finance institution
DGGQ	Directorate of Quality Assurance (within the MINEDH)
DINEP	National Directorate for Primary Education
DIPLAC	Directorate of Planning (within the MINEDH)
DNFP	Directorate for Teacher Training (within the MINEDH)
DNT	Department of National Treasury
DLI	Disbursement linked indicator
DLR	Disbursement linked result
ECED	Early Childhood Education
EP4R	Education Program for Results (Tanzania)
EGRA	Early Grade Reading Assessment
EMIS	Education management information system
EP1	Lower primary level of education (Grades 1-5)
EP2	Upper primary level of education (Grades 6-7)
EPC	Complete primary school, meaning both lower primary and upper primary level are provided (<i>Escolas Primárias Completas</i>)
ESG1	Lower secondary education level (Grades 8-10)
ESG2	Upper secondary education (Grades 11-12)
ESSP	Education Sector Support Program
EY	Ernst & Young (IVA for GPE DLIs, also role as auditor of FASE)
FASE	Education Sector Support Fund (<i>Fundo de Apoio ao Sector de Educação</i>)
FDI	Foreign Direct Investment
FRELIMO	Mozambique Liberation Front [<i>Frente de Libertação de Moçambique</i>]
GBS	General budget support
GBV	Gender-based violence
GCC	Joint Coordinating Group (<i>Grupo Conjunto de Coordenação</i>)
GDP	Gross domestic product

GER	Gross enrolment ratio
GIZ	German Corporation for International Cooperation (<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i>)
GNI	Gross national income
GPE	Global Partnership for Education
HDI	Human Development Index
ICR	Implementation Completion Report (World Bank)
IDA	International Development Association
IFP	Teacher training institute (<i>Instituto de Formação de Professores</i>)
IMF	International Monetary Fund
INDE	National Institute for Education Development (within MINEDH)
IPF	Investment Project Financing
ISRR	Implementation Status and Results Report
IVA	Independent Verification Agent
KfW	<i>KfW Bankengruppe</i> (banking group), German state-owned development bank
LEG	Local Education Group
M&E	Monitoring and evaluation
MEPT	Education for All Movement
MGCAS	Ministry of Gender, Children and Social Action (<i>Ministério do Género, Criança e Acção Social</i>)
MINEDH	Ministry of Education and Human Development (Ministério da Educação e Desenvolvimento Humano)
MEF	Ministry of Economy and Finance
Mt	Mozambican Metical (currency)
NER	Net enrolment ratio
NGO	Non-governmental organization
NLA	National Learning Assessment
ODA	Overseas Development Aid
P-A	Principal-Agent (relationship)
PAD	Program Appraisal Document
PBA	Performance-Based Allocation (via the PFM4R program)
PBL	Project-based lending
PdA	Plan of Activities [<i>Plano anual de Atividades</i>]
PDE	Provincial Directorate of Education and Human Development
PEE	Education strategic plan (<i>Plano Estratégico da Educação</i>)
PER	Public Expenditure Review

PES	Social and Economic Plan (<i>Plano Económico e Social</i>)
PFM	Public financial management
PFM4R	Public Financial Management for Results Program
PforR	Program for Results Financing
POEMA	Planificação, Orçamentação, Execução, Monitoria e Avaliação (Planning, Budgeting, Execution, Monitoring and Evaluation) - capacity development program implemented by GiZ
PTR	Pupil-teacher ratio
RAP	Administration and Planning Division (<i>Repartição de Administração e Planificação</i>)
RAR	Annual Review Meeting (<i>Reunão Anual de Revisão</i>)
RBA	Results-based aid
RBF	Results-based financing
RBM	Results-based management
REACH	Results in Education for All Children program
RENAMO	Mozambican National Resistance (<i>Resistência Nacional Moçambicana</i>)
SDEJT	District Services for Education, Youth and Technology) (<i>Servicos Distritais de Educação Juventude e Tecnologia</i>)
SDI	Service Delivery Indicator (survey, by World Bank)
e-Sistafe	State Financial Administration System (<i>O Sistema de Administração Financeira</i>)
SMC	School management committee
SNE	National Education System (<i>Sistema Nacional de Educação</i>)
SSA	Sub-Saharan Africa
SSDP	School Sector Development Plan (Nepal)
SWAp	Sector wide approach
TA	Technical assistance
ToC	Theory of change
TOR	Terms of reference
TTL	Task Team Leader
UGBs	Budget management units (<i>Unidades Gestoras Beneficiárias</i>)
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
ZIP	Clusters of schools (<i>Zonas de Influência Pedagógica</i>)

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Full responsibility for this work remains with the authors, and the views it contains should not be attributed to World Bank, the REACH program, or any other stakeholder.

Executive Summary

S1. This report has been commissioned by the World Bank Results in Education for All Children (REACH) program as an assessment of the design, implementation experience, and impacts of results-based financing (RBF) in education. The study covers three countries: Tanzania, Mozambique and Nepal and seeks to explore the experience of each with RBF in education in the period since 2013. This report covers the experience in **Mozambique**.

S2. The term “results-based financing” (RBF) covers a range of instruments that have been increasingly used in education and other sectors in recent years, and defined as paying for a result to be achieved *only* if achievement can be credibly verified. It has mainly been used as a financing modality linked to disbursements to governments from development partners, including bilateral donors and international financial institutions. The use of RBF in Nepal has been part of a shift in donor preferences with respect to financing instruments and modalities. This has included the growing use of the Program for Results (PforR) financing instrument for the World Bank, Results-Based Lending (RBL) for the Asian Development Bank (ADB), and the use of a variable tranche by both the European Union and the Global Partnership for Education (GPE); all using disbursement linked indicators (DLIs) representing sector results including a mixture of process, output and outcome goals.

S3. The conditional nature of RBF provides an alternative to general budget support (GBS) or sector budget support (SBS), which from the early 2010s, donors found increasingly problematic, with a number of evaluations raising questions on the effectiveness of GBS and SBS in addressing systemic problems faced in key sectors such as education.¹ While RBF programming is distinct from other modalities in the extent and scope of conditionality, RBF program designs may vary in a number of other aspects such as rigor of reporting requirements; the degree of alignment with government financial reporting and accountability systems; the presence of safeguards; the role of technical assistance; and

whether or not they use existing basket or pooled funding mechanisms.

Methodology

S4. This assessment has addressed the following overarching evaluation question: “*To what extent, in what ways and under which conditions has RBF contributed to strengthen education systems to deliver results?*” This question is unpacked through a number of research questions that underpin the study and respond to the ToR. Research has been undertaken in two phases. The outcome of the first phase was a Preliminary Assessment Report, finalized in February 2020, following country visits in late-2019. This phase provided a comprehensive “mapping” of RBF in education. The second phase has included a further range of stakeholder interviews at national and local levels during 2020, and led to Final Assessment Reports for each country with more in-depth analysis on the contribution of RBF to education results. In addition, a Final Synthesis Report has been produced to compare and contrast the three country experiences, to identify global findings and lessons that can inform education programming and the use of RBF more broadly.²

S5. The study team has used a combination of qualitative and quantitative methods. This has included extensive documentation review, quantitative analysis of results and financial flows, and interviews with a wide range of education sector stakeholders including from development partners, NGOs and other civil society stakeholders, and with government at central and subnational levels. Local government and school directors were interviewed from Gaza, Sofala, and Nampula provinces.

Country context of Mozambique

S6. Mozambique is one of the world’s most disadvantaged countries. It is in the bottom seven countries globally for GDP per capita; ranked 180th out of 189 countries on the UN Human Development Index; and in the period from 2014 to 2020, went from 50th up to the 27th most fragile country in the

¹ See, for example, DANIDA (2014) for a summary.

² The reports are as follows: Dom et al. (2020, 2021a, 2021b); Patch et al. (2021); Holden et al. (2020), Holden and Chapagain (2021).

world on the Fund for Peace’s Fragile State Index. This reflects a context of escalating conflict, poor health outcomes, low life expectancy, low years of schooling, as well as one of the lowest levels of adult literacy. Many poverty related challenges are worse in the north and central regions of the country, and by gender; for instance, adult illiteracy is 39 percent nationally, but 54 percent in Cabo Delgado and 49 percent in Nampula, two northern provinces, and significantly worse for women than for men.³ Mozambique also has a young and fast-growing population of 30 million people, doubling in the past 25 years, bringing challenges to the capacity of the country’s education system.

S7. RBF in education in Mozambique, introduced in 2014, has thus been applied in a period when the country has become increasingly fragile, with growing conflict in the center and north of the country, and climate-related crises, including two major tropical cyclones in 2019. The 2015–16 period also saw a major corruption scandal via hidden loans to government, which led to the suspension of general budget support (GBS); this fundamentally changed the macro-economic context in which the Ministry of Economy and Finance (MEF) set its spending priorities. Less money was available, while the risks to flows of resources to the education sector from external funds were perceived to have grown.

S8. The broader political economy is complex both nationally and at local levels. With one-party rule since 1992, there is a strong executive power, with the President as head of state making most key political and administrative appointments, including provincial governors. The political and economic divide between the south, center and north is exacerbated by regional party politics. District level officials are appointed by the ruling party, and the subnational bureaucracy provides tens of thousands of jobs, understood to be a key means for securing the legitimacy of FRELIMO, the ruling party. This also intersects with sectoral appointments, such as school director roles.

Education sector performance

S9. The overall story of education sector performance in recent years has been one of increasing access, but stagnating resources, efficiency and quality. Enrolment has increased following the abolition of fees for primary education in 2004, and lower secondary schooling in 2018. Retention rates to Grade 3 are low (66 percent in 2018), and with student attendance also low it is likely that the reported figure of 8.2 million children enrolled in the education system in 2019 is a major over-estimate of system capacity; for example, a 2017 census found that 39 percent of the school age population were out-of-school.⁴ Schools tend to operate two, three, or sometimes four shifts over the course of the day, and on average there are 100 pupils enrolled per classroom. Many classrooms are of poor quality, and some classes take place outdoors. As the system expands, it has also not been possible to increase the number and quality of teachers, or to construct classrooms, at the pace needed; this links to limited resources to hire new teachers, as well as an evolving system of pre-service teacher training, with most of the current teacher workforce having received limited teacher training after leaving school. Governance challenges are complex, including patronage and corruption, with school director appointments made on the basis of political affiliation rather than merit; and with local power relationships not conducive to community/parental engagement, voice and action.

S10. These conditions contribute to very poor outcomes in the classroom, particularly in attendance, retention and learning of children. The National Learning Assessment (NLA) results in 2016 showed a picture of stagnation – around one in twenty children could achieve expected levels in basic literacy and numeracy at Grade 3. Learning outcomes were worse in the northern and central provinces, compared to the south. A 2014 World Bank Service Delivery Indicator (SDI) study across a number of low-income countries reported that 45 percent of teachers in Mozambique were not in school during unannounced visits, and a further 11 percent were in school but not in the classroom. This meant that children received less than 2 hours’

³ MINEDH (2019a).

⁴ MINEDH (2019a).

teaching per day on average, over 50 percent less than the average of countries in the survey. A SDI follow-up report in 2018 found a positive assessment of change since the 2014 report, including that teacher attendance has improved; though the study faced methodological challenges, and still highlighted severe problems with teacher attendance (30 percent), as well as low teacher knowledge, and low student learning, particularly in the north and center of the country.

S11. It is in this extremely challenging context that the Ministry of Education and Human Development (MINEDH), with support from civil society and development partners, seeks to bring about change. MINEDH reform objectives and priorities are articulated in the government's strategic plan for the sector, and its three-year operational plans and annual activity plans and budgets. The MINEDH predominates in most sector functions, with key roles split between its main departments, including the quality assurance directorate (DGGQ), teacher training directorate (DNFP), and the directorate of planning (DIPLAC). The National Institute for Education Development (INDE) has led on learning assessments, textbook content and curriculum reform.

S12. There is a well-established structure for policy dialogue, planning and coordination between the central government/MINEDH and its development partners. This is organized around regular meetings, involving sector and thematic working groups on specific issues, and the high-level Joint Coordinating Group (GCC) chaired by the Permanent Secretary with donors represented by a "Troika" from the Donor Coordination Team, as well as with civil society representation and the Local Education Group. The Annual Review Meeting (RAR) held in March reviews performance against a sector performance assessment framework; the DLIs

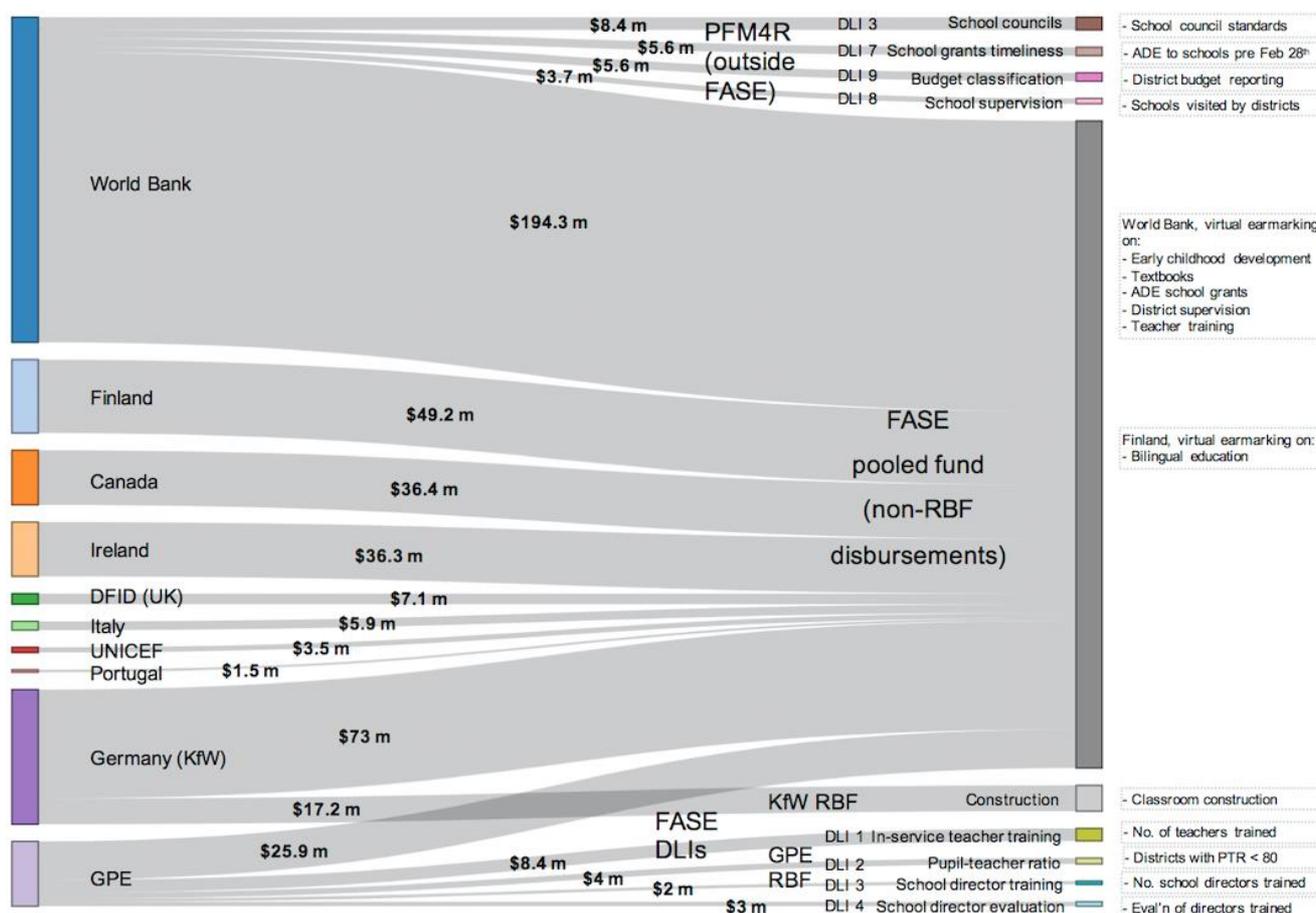
discussed in this report were included in review discussions and annual reporting in the 2015–18 period.

RBF and its contribution to education sector financing

S13. Education expenditure has been around 6 percent of GDP since 2012, and forms around 18 percent of the government budget; however, with an expanding system, over 90 percent of recurrent spending goes on salaries. Mozambique's education sector has seen substantial donor support since the end of the civil war in 1992, and donors continue to provide the majority of non-salary expenditure. Eight donors currently support the sector through a ring-fenced education sector support fund, FASE (*Fundo de Apoio ao Sector de Educação*), providing approximately USD 100 million per year, and over the years this has represented a varying share of total sector funding, from less than 10 percent up to 30 percent. While classified as funding "investment" expenditure, which is the case for construction of schools and classrooms, FASE also covers what can be considered essential (non-salary) recurrent expenditure for the sector, including: textbooks; school grants (*ADE – Apoio Directo as Escolas*); and funds for teacher training institutions (IFPs) and district supervision of schools.

S14. In alignment with the Ministry of Education's Education Strategic plan (2012–2016/19), and the subsequent three-year operational plan (2015–18), three donors – the World Bank, Germany (KfW) and the Global Partnership for Education (GPE) – used forms of RBF, seeking to accelerate a select number of reforms. shows how the RBF compares to the overall funding to the sector in the 2014–18 period. This shows that RBF in Mozambique has represented a relatively small proportion of total donor disbursements at just 12 percent.

Figure S1 Mozambique education, 2014–18, RBF potential disbursements and non-RBF actuals



Source: FASE statements EY (2016b, 2017b, 2018b), KPMG (2015, 2019). World Bank (2014, 2015, 2019c). KfW (2017). Orlowski (2016).

RBF programming in education

S15. RBF was introduced as part of the mix of donor support modalities to the sector, as above, representing a relatively minor proportion of this donor funding. It was used strategically by donors to seek to break the “inertia” in the Mozambican education system, with a focus on some specific reform processes. From this research, it appears that broadly there was strong consensus and ownership on the part of the MINEDH leadership of these reform priorities, which were closely aligned with the MINEDH’s 2012 Education Strategic Plan. Since 2014, three significant attempts have been made at using RBF in the education sector to incentivize a subset of sector results:

- The World Bank’s *Public Financial Management for Results (PFMAR)* program (approx.

USD 25 million): targeting subnational PFM reforms in health and education, with program management in the Ministry of Economy and Finance. An ambitious set of vertical and horizontal accountability reforms, with DLIs focused on the proportion of complete primary schools⁵ receiving school grants on time; proportion of complete primary schools complying with transparency/accountability standards, particularly for functioning school councils; revised district budget classification; and the proportion of complete primary schools receiving a district supervision visit.

- The introduction of *variable tranche payments* under new Global Partnership for Education funding in 201–17 (worth USD 17.4 million, alongside USD 41 million fixed tranche). Programmed as additional financing to the

⁵ A complete primary school (EPC) in Mozambique is considered to be a school that runs both lower primary (EP1), grades 1 to 5, and upper primary (EP2), grades 6 to 8. Less than half of primary schools were EPCs in 2014 at the outset of the PFM4R.

World Bank managed *Education Sector Support Program* (ESSP), as a contribution to the FASE. The variable tranche mechanism represented 30 percent of this GPE grant funding, and included a focus on strengthening the role of teacher training institutes for in-service teacher training and school director training. The DLIs included the number of Grade 1 / Grade 2 teachers with in-service training, the percentage of school directors receiving training and performance evaluation. A fourth, more ambitious indicator, sought to reduce the number of districts with pupil-teacher ratios (PTRs) above 80.

- Germany/KfW introduced a *variable tranche* to its existing funding to FASE (USD 17 million, alongside regular annual disbursements to FASE), seeking to use RBF to address the slow pace and poor quality of classroom construction. This introduced two variable tranche payments with composite DLIs focused on the number of classrooms constructed in each year, as well as completion of related studies, staff recruitment and other processes.

Findings: A) Design

S16. The PFM4R program grew out of the government's PFM Vision (2009) which led to a USD 157 million program of PFM support (2010–14) with virtually every donor in the country in support. The recognition that this did not sufficiently support subnational or sectoral PFM led to the development of the PFM4R. The program, in the design phase, shortlisted sectors to work with before selecting health and education. It therefore brought "additional" funds to education, outside of the FASE pooled fund, that were new to the sector. Reforms were an attempt to improve PFM in a context of increasing fiscal decentralization, with district services (SDEJTs) now managing 60 percent of the sector budget. Reforms therefore sought to improve vertical accountability and PFM (accountability of provinces and districts to central government), as well as horizontal accountability (accountability of school directors and teachers to school councils, representing parents and communities). To ensure greater transparency in the use of funds at the district level, the SDEJTs were upgraded to the status of budget management units (*Unidades Gestoras Beneficiárias* – UGBs) in an attempt to

improve transparency in classification of their budgets (previously the central MINEDH had little oversight of how district funds were allocated by district administrations across subsectors/priorities). In addition, the program focused on school governance and management through supervision of schools by the SDEJTs, and the functioning of school councils. The program sought to unblock the long-standing bottleneck of slow disbursement of the ADE school grants, to ensure they arrived on time at the start of the school year.

S17. In 2015, the GPE was introducing RBF to its funding to partner countries globally, with 70 percent allocated as fixed tranche, and 30 percent as variable, paid against achievement of DLIs. Guidance has since evolved, but at its core is the idea of setting DLIs which focus on transformational change, or "stretch", to achieve goals of equity, efficiency, and learning. In Mozambique, to complement the PFM4R focus on governance, the GPE DLIs focused on teacher reform, including the implementation of a new in-service teacher training strategy, which intended a cascade of training from provincial level teacher training institutes (IFPs), to clusters (ZIPs) and on to schools. Our research found some lack of clarity in documentation around the wording of this indicator, which originally had intended to focus on the application of training, but in fact focused on the number of teachers trained, particularly at the top of the cascade. The focus on school director training and evaluation was seen to be more manageable than addressing what is widely acknowledged to be the main bottleneck, namely that the appointment of school directors is not based on merit but rather on political connection/reward. An indicator addressing the high PTR for lower primary level in some districts was an important equity issue *within* provinces, though it did not specifically address a wider disparity *between* provinces – for example, in 2013 the average PTR for lower primary level in Nampula in the north was 70, compared to just 47 in Inhambane province in the south.

S18. Our research, drawing on interviews with a range of stakeholders, indicates that there was a strong degree of ownership on the part of MINEDH for the DLIs. There was some consensus between MINEDH leadership and the World Bank that PFM4R

indicators should be manageable and achievable. The MINEDH felt that these indicators represented their own priorities at the time, and gave some incentive for MEF engagement. Indicator negotiation with GPE was reportedly more challenging, and the World Bank played a facilitative role. A GPE evaluation suggested that some donors felt the process had not been fully transparent.⁶ GPE saw the DLIs as not representing sufficient “stretch”, but there was MINEDH ownership of the indicators, seen as being within their control, and this was especially important for a first time use of the mechanism. The indicators selected for RBF disbursements were largely at the process or output levels, identifying specific bottlenecks to better accountability and service delivery. These DLIs stopped short of the higher-level change desired and the ultimate goals of the MINEDH and development partners. For example, focusing on the quantity of school supervision visits, not their quality or the change brought about; or the number of teachers trained by IFPs, not the application of training in classroom practice. Assumptions were therefore made that these process or output changes would lead on to and contribute to intermediate or outcome-level results (for example, reduced teacher absenteeism, or better teaching and learning). It is hard to say that such DLIs were ambitious, and some have said they were “low hanging fruit”, though for PFM4R at least it is recognized that these were important steps, some of which had been bottlenecks for many years. Given that RBF had not been used previously in the sector, and capacity was felt to be very low, more ambitious indicators may have been counter-productive. The one exception to this was the PTR indicator, which could be seen as an important intermediate outcome, though itself needing to be part of a broader set of teacher reforms to address systemic inequity.

S19. It is extremely important to note the “hybrid” nature of the RBF design in Mozambique, particularly for the PFM4R, which included important roles for central level coaches (in MEF and MINEDH) and provincial facilitators, as well as other capacity development support – that is, roles built into the

design of the program. At the design stage, this support was combined with “downstream” incentives; the program design had originally included the intention to use performance-based allocations (PBAs) extensively at central, provincial, district and school levels. The GPE use of RBF did not have such explicit or direct use of technical assistance (TA) in its design, though as part of FASE and the World Bank’s ESSP there was scope for this. In line with the GPE approach, the incentive payment was to the MINEDH / sector level, with no targeting of financial incentives subnationally. The German/KfW focus on construction was accompanied by bilaterally funded TA to the MINEDH department in charge of planning and implementing this work.

B) Results

S20. Of the eight DLIs across the PFM4R and GPE programs, all but one were achieved in the 2014-2018 period, although some faced delays in the early years. The PTR indicator was considered not to have been achieved, with only partial payment made (USD 1 million out of a possible USD 4 million). Our quantitative analysis of this DLI notes that important changes were made, and a shifting baseline linked to the reorganization of districts in 2013, implies that the indicator was effectively achieved after all, as the baseline was not officially changed. For Germany (KfW), the DLIs were either not met or partially so, and the pace of school construction in the incentive period did not increase.

S21. A significant challenge in judging success across these programs is that DLIs defined success in narrow terms, yet for each of these there was an assumed contribution to higher-level goals/outcomes. Judging progress towards these goals presents a more mixed picture. Table S1 sets out the implied theory of change for DLIs/programs, and the results achieved against these. In this we make an assessment of the link from the DLI result to the implied higher-level goal, the contribution of the DLI to achievement, and the sustainability of any changes.

⁶ Universalia (2019).

Table S1 PFM4R DLIs and interlinked theories of change

DLI / metrics and result	Higher level goals	DLI results	Achievement of higher-level goals	RBF / DLI contribution to results	Sustainability
School councils meet criteria	- Shift in accountability at school level, more transparency, community engagement.	- Majority of councils reported to meet criteria.	- No evidence of a significant shift in local accountability. - National / system-wide change will take many years.	- Unclear. DLIs helped drive process changes, alongside coaches and facilitators.	- More qualitative analysis and understanding of local accountability dynamics needed.
ADE first tranche arrives on time	- Improved vertical accountability, transparency in district PFM. - Reduced risk of corruption/ diversion. - ADE well used to address needs of the school, improving learning environment.	- ADE first tranche nearly 100% on time.	- Reports suggest timely funding helping schools, but no evidence of improved learning environment / effective use of funds.	- DLIs helped drive process changes, alongside coaches and facilitators.	- First tranche still on time, more than one year after program.
Schools are supervised regularly, with follow-up visits	- Improved teacher / director attendance, quality of teaching and learning environment. - Improved student retention / completion and learning.	- Targets met, indicating more systematic and regular supervision of schools taking place.	- Reported improvement in teacher attendance. - Little evidence of improved teaching and learning.	- Reported correlation between supervision and teacher attendance. - Quality of supervision weak/ variable.	- Systemic / regular supervision sustainable if funding continues. - Qualitative change will require more time
District budget classification		- Target met, district services become budget management units.	- Improvement in transparency of district spending by subsector.	- Some use of PBAs to reward provinces.	- Process changes sustainable, systems now in place.

Source: Authors' assessment.

S22. A widely recognized success has been to ensure ADE funds arrive at schools in time for the start of the school year. This required cooperation between MINEDH and MEF. However, while this was an important improvement, there are some questions around the “last mile”; how funds are used, the discretion given to the school director and the potential for misuse. Ideally schools should have bank accounts and receive funds via direct transfer, but many schools still receive a check. While another DLI aimed to reinforce the role of the school council, and largely found these to be functioning, there have been questions raised as to the full extent of change. Research from civil society finds that the councils are still weak, and defer to the school director. There is some evidence that communities in some locations do not trust the school council and director in the use of these resources.⁷ While clear progress has

been made, there are complex issues which need sustained engagement.

S23. An important area of success has been the strengthening and establishment of a more systemic model for the district services’ (SDEJTs) supervision of schools. While targets specify a proportion of schools to be visited once during the first half of the school year, with a follow-up visit in the second half of the year, it is felt that this engagement alone is a positive change, even if the number of visits is limited. Once again, the target was met, but some have raised the possibility that the quantitative target for supervision may have led to some reporting of visits which did not happen due to lack of funding. Visits are made more regularly, guidelines/manuals and other tools are in place and staff have been trained in their use. However, there

⁷ CESC (2018).

is a recognition that the quality of the visits, and the professionalization of the district teams undertaking this work require more focused support. Some of the improvements can be attributed to funding from

FASE and technical support from other donors, as well as the work of PFM4R coaches.

S24. Table S2 presents the DLIs, theories of change and results for the GPE variable tranche:

Table S2 GPE DLIs and interlinked theories of change

DLI / metrics	Higher-level goals	DLI results	Achievement of higher-level goals	Contribution to results	Sustainability
IFPs deliver targeted amount of school director (SD) training, and performance evaluated	- School directors more effective, perform their roles, attend school regularly.	- Targets achieved with close to 2,000 cumulatively trained by IFPs by 2017 and 23% evaluated.	- Institutional/ political economy barriers still in place. Low impact on behavior.	- Targets helped push IFP training, but did not contribute to qualitative change.	- Role of IFPs established; systems for evaluation emerging. No evidence of sustainable change.
IFPs deliver targeted amount of in-service teacher training	- Teachers in early grades more able to deliver curriculum, more systematic peer support in schools, improved learning.	- Targets achieved with close to 17,000 cumulatively trained by IFPs by 2017.	- Little evidence of better classroom teaching.	- Targets gave new training strategy momentum, but no qualitative change.	- Role for IFPs more established, but not yet other levels of cascade.
Reduced number of districts with PTR over 80	- Improved equity in distribution of qualified teachers; Improved environment for learning.	- Target partially achieved but not recognized (due to change in baseline).	- Greater equity within some provinces but not between provinces.	- Correlation – changes likely to have been incentivized by DLI / target.	- Not sustainable, PTRs have risen, budget constraints on teacher recruitment.

Source: Authors' assessment.

S25. Again, the GPE DLIs may have been achieved, but this does not mean the real goal has been achieved, or that engagement towards these goals has been sustained. A finding from our research has been that the PTR DLI targets were reported as not having been met, and this was primarily due to an administrative reorganization of districts, resulting in a shift in the baseline number of districts with high PTRs (the baseline for the DLI was 12 districts with PTR greater than 80 in 2014; as a result of the district reorganization that occurred in 2013, the correct baseline number should have been 16 districts for 2014 or 17 districts for 2015). Quantitative analysis shows that the key provinces did increase the number of teachers in targeted districts at a faster rate than those with lower PTRs – which was the main mechanism by which the DLI was envisaged to work. However, this achievement was not recognized, and since that period some of these gains have been reversed.

S26. Important questions have been raised over the efficacy of the in-service teacher / school director training. Targets were all met, but the teacher training does not appear to have cascaded to the school level as intended, with a concern raised that by driving a focus on quantity, insufficient attention was given to the quality of training. Forthcoming GPE funded support now aims to build on this work, to focus more on school-level teacher coaching. The school director training was appreciated by trainees, but evaluations have reported minimal impact, even showing directors without training performing better than those with training. The need for merit-based appointments has not yet been addressed, though is noted in the new 2020 Sector strategy, and is likely to remain politically complex.

S27. The German (KfW) use of variable tranches in its FASE contribution appears to have had limited success. The first tranche (of €5 million, USD 6 million) was not paid, as targets for the number of

classrooms constructed were not met. The second tranche (of €10 million, USD 11 million) was partially paid in 2016, with the final payment in 2017, even though the targets were not fully met, and in fact classroom construction appears to have slowed down over the period. KfW no longer use the variable tranche mechanism, in part due to this lack of effectiveness, as well as having questions over how appropriate this is under the FASE pooled funding arrangement.

S28. A broad conclusion from this research is that while the selection of DLIs was more or less appropriate to the context, once the targets were met there needed to be more focus on the question of “What next?” The targets were not the real goals. Each of the DLIs could lead on to higher level change but, in some cases at least, the results stopped short. There has been a reported improvement in teacher attendance, based on a second SDI report in 2018, however concerns were raised on the quality of the research and data from this, and this also points to a lack of reliable data in the country more broadly. The RBF may have contributed to improved supervision, which is seen as an important driver of this improvement. There has also been other donor-led technical support outside of any RBF programming. The National Learning Assessment (NLA) for 2019 was supposed to be the culmination of the 2012 Education Strategic Plan period, and provide an update on progress since the 2013 and 2016 NLAs. However, the NLA was not completed, and the full survey is now delayed to 2021. Despite this, there is very little doubt that the major challenges to quality of education in Mozambique persist.

S29. It is possible to argue that the RBF has brought about some sustainable change. The process to get ADE funds to school on time continues to work after the end of the program-associated payments and technical support. With FASE and other donor program support, there appears to be a continued focus on improving school supervision and in-service training. However, the broader push to improve sector- and service-delivery PFM, which led to the creation of the PFM4R, seems to have stalled. The achievements of the PFM4R can be seen as

more limited in this context, and PFM risks in the sector from top level down to spending of school grants are considerable. The voice of civil society keeps these risks on the agenda for sector dialogue. In the context of the suspension of GBS in 2015, and layers of political economy and corruption scandals, this means PFM risks are as high as ever in education.

C) Finance and payments

S30. As captured in Figure S1 above, the majority of external funding to the sector uses the *Fundo de Apoio ao Sector de Educação* (Education Sector Support Fund – FASE). FASE is recorded on-budget and uses government systems, with funds flowing from the Treasury to provincial and district level, and from there to schools. The FASE is centrally managed by the MINEDH finance department, with dedicated full-time staff, and includes additional safeguards, which have been strengthened to reassure partners in the light of national and sectoral corruption scandals. FASE funds are spent in line with the MINEDH’s annual plan of activities, and have supported essential and routine expenditure as part of the expanding education system (for example, construction, textbooks, school grants, supervision). This essential nature of the FASE raises the stakes when funding becomes unpredictable.

S31. RBF made up around 12 percent of donor funding to the sector in the 2014-2018 period.⁸ Of the USD 58 million available in payments against DLIs, USD 3 million was lost through non-achievement of the PTR DLI, and USD 6 million lost when the first KfW variable tranche was not paid. Both of these losses in disbursements to FASE are in the context of ongoing annual underspends, and as such were small enough that they may not have reduced spending materially in the period. Disbursements for the PFM4R and GPE programs were slower in the early years, in part due to initial implementation challenges, as well as the time taken to establish the verification process. It was important that undisbursed funds could be rolled over to the next year for reassessment and disbursement, as this has been reported to maintain the motivation to achieve the targets.

⁸ No RBF was used in the 2019-2020 period, although the new round of sector funding, from GPE, includes DLIs to support the 2020–29 Sector Strategic Plan.

S32. As a multi-sector program based in the MEF, PFM4R funds were not channeled through the FASE, but appeared as “PFM4R” project in MINEDH’s section on investment expenditure in the budget. Three of the four DLIs were linearly scalable (that is, could be paid in proportion to performance). All disbursements were made by early 2018. At design stage, the program was envisaged as a co-financing operation with a USD 80 million contribution from the government, out of total anticipated expenditure (across health and education sectors) of USD 131 million. Within the program expenditure framework, the majority of funds were allocated to district operational costs, with allocations also to performance-based allocations (PBAs) at school, district, province and central levels. There were separate funding windows for capacity development and coaching. In practice, the actual expenditure of the program was not as anticipated. The PBAs were not used as intended, and the capacity strengthening window was under-utilized. Further, beyond the reported USD 16 million expenditure on the capacity window, PBAs, program coordination and verification, it has been hard to be clear on what the PFM4R money was spent, and indeed whether it was all spent on education. It is also not clear that there was any specific government contribution to funding activities of the program, and reporting tended just to include general government education expenditure as its contribution (that is, all of its spending), so in practice it is not clear whether any additional finance was spent and if so, on what.

S33. An important design difference between the PFM4R and the GPE and KfW uses of RBF was in the intended use of PBAs, or downstream financial incentives. The GPE and KfW variable tranche payments were paid into FASE. There may have been specific departments with lead roles in achieving DLIs, but the reward was recognized as funding for the overall plan / annual activity plan. The PFM4R on the other hand had intended to use PBAs at each level of the system, to utilize and cascade the RBF incentive effect. Staff members at the central level had expected individual payments, which were vetoed by the MEF, and at provincial level we heard that incentive payments were only made as an in-kind prize for the top three performing

provinces and districts against the DLIs. The greater part of the intended PBA budget was instead used to finance district operations, as well as workshops or other capacity development support. The intended use of PBAs at school level did not happen under the program, although performance-based school grants have subsequently been piloted (under *ADE-Desempenho*) in selected provinces/districts with ESSP funding. In general, PBAs were harder to operationalize than had been anticipated.

S34. During the period covered by this assessment, the flow of donor funds to the sector has been volatile. Contributions to FASE fluctuated, with a particularly low contribution in 2015, the year of the hidden loans scandal, the suspension of GBS, and the start of the PFM4R program. The real value of education spending stagnated as a result, with implications for the number of teachers that could be recruited, as well as capital investment. The 2015 RAR report noted the government’s assessment that this context meant the expected additional funding and incentive was lost: “however, at the moment, these funds contribute to mitigate the negative impact of the reduction of FASE funds... this the program “lost” its original philosophy of encouraging / rewarding good performance at various levels (even the school).”⁹ This captures a view repeated during our research, that any additional incentive from the program, for example for district teams, was not seen as these funds were no longer additional.

D) Coordination, capacity and accountability

S35. The RBF programs under review have sought to use and strengthen existing accountability and coordination relationships between institutions at national and subnational levels. For this research, interviews have been undertaken with stakeholders at each level of the system to capture how this has worked. In terms of RBF as an aid mechanism, the *agent* is not a single entity, but this mix of institutions that make up the system (particularly the MINEDH, provincial directorates of education – PDEs, and district services – SDEJTs), and RBF incentives interact with the relationships which function around key processes, including setting of targets, operational plans, financing, monitoring,

⁹ MINEDH (2016).

reporting, and information/ communication. Alongside the use of incentives, the provision of technical support also interacts with and strengthens these processes, including through the development of guidelines and manuals, with associated staff training.

S36. The PFM4R had a clear program structure, based in MEF, with coordination teams in each ministry, which included the key departments needed to achieve DLIs. Alongside this, the program recruited coaches at the central level, and facilitators at provincial level, to guide and support the work. The program, and the DLIs themselves, had a clear “cascade” strategy, targeting change at school level, with key roles for districts in ensuring support and accountability. At least two of the DLIs (ADE disbursements, budget classification) required specific collaboration between central MEF / MINEDH teams. Our research found a strong understanding of the DLIs and targets and respective roles in achieving them, although bringing about joint working was a significant challenge and took time to achieve.

S37. The program set clear targets for district supervision of schools, which were understood at central, provincial, and district levels. This was accompanied by a strong push from the top, to use the supervision process to monitor teacher attendance. Supervision visits have become more regular, despite some concerns about variable quality, and, as one interviewee put it, they provide schools with an important connection to the education system. It has been noted during our interviews, that there is a dual system of vertical accountability: to the provincial governor and district administrations, as well as to the MINEDH. It has not been possible for our research to determine how big an impact this has on the effectiveness of supervision as a mechanism to hold schools / school directors to account. However, the overall picture is one of improving supervision systems, contributing to improved school management and potentially to improved teacher attendance.

S38. The DLIs for the GPE support, under the ESSP, were set within broader FASE support and did not come with a specific program structure. As for

PFM4R, there were central MINEDH departments/ directorates responsible for achieving the DLIs. For example, the teacher training department (DNFP) was responsible for rolling out the new in-service teacher training strategy, which was targeted by one of the DLIs. Targets were set for each IFP on the numbers to be trained, and we found the IFPs as well as provincial departments well aware of these targets and the need to plan for them, though it was noted that the necessary funding to achieve them sometimes came too late in the year. The target focused attention on the top level of a cascade, starting at the IFP. The 2018 RAR found that while training had expanded, there had been insufficient focus on the cluster/ZIP and school levels, with insufficient articulation between levels;¹⁰ a finding supported by our research interviews.

S39. The political economy challenge presented by dual lines of accountability to provincial governors or administrations, and also party structures, alongside technical reporting to the MINEDH, has also likely played a role in limiting the effectiveness of school director training. Directors who are not appointed on merit, and owe their positions to local party hierarchies, if not intrinsically motivated, will not change their performance due to training alone.

S40. The provision of capacity development and technical assistance has played an important role, but has differed between the RBF programs. As noted, for PFM4R the coaches and facilitators played a critical and practical role in the success of the program. They helped to identify problems and solutions, agreeing joint MEF/MINEDH action plans, improving communication, and tracking fund flows. Some of these changes are reported to have continued after the program, and sometimes involved very low-cost initiatives such as setting up “WhatsApp groups” for better joint working. Alongside this, support from other donor programs may also have contributed to change at provincial and district levels; for example, the German (GiZ) and UNICEF supported POEMA training has been reported to have made a strong contribution to sector planning, management and monitoring, and GiZ and USAID support has also helped to set up online and tablet-based tools for district supervision

¹⁰ MINEDH (2019b).

and reporting. There was less direct use of TA associated with GPE DLIs.

S41. The introduction of RBF as an aid modality takes place in the context of the coordination and dialogue structure. This is reported to work well, though with some weaknesses; for instance, a GPE review noted the top-down / centralized nature of this dialogue, with limited involvement of subnational actors, and perhaps too much focus on indicators rather than the associated reforms. However, annual reviews are reported to have become increasingly results focused and stronger on substance. DLIs are tracked and discussed within the framework of sector indicators and annual planning processes, and are given an important place in this process without seeming to dominate discussions.

E) Evidence-based policy and verification

S42. The use of RBF has the potential to drive an increased focus on evidence of results, which in turn can improve the policy-making process. From our interviews, the biggest contribution to evidence-based policy making over this period has come from the combined impact of the National Learning Assessment (2013 and 2016) reports and the World Bank's Service Delivery Indicator report of 2014. These were major catalysts for change, indicating the crisis in both learning outcomes and service-delivery shortcomings. The use of RBF itself has been more limited in its impact on the availability and use of evidence, although there have been some contributions and pathways to improve information systems over the period.

S43. The PFM4R and GPE introduced independent verification to the sector, an additional source of information and a new approach to providing a check on government-reported information. The PFM4R used the *Tribunal Administrativo*, the national audit institution, as the Independent Verification Agent (IVA), creating an opportunity to improve national capacity for performance audit. For the IVA role under GPE funding, a private company was contracted, Ernst & Young (EY) but there was not an equivalent role for the KfW DLI verification. In this way, some new indicators and verification

processes were introduced, generating evidence that had not previously been reported in the sector.

S44. A key finding from our research has been that the focus was very much on the quantitative targets set under each DLI, rather than on any associated qualitative changes. Terms of reference for verification did not require this, although it is understood the *Tribunal Administrativo* did take a performance audit approach, which included a more in-depth examination of how funds were spent and recorded at school level. The *Tribunal* felt that this approach was not fully adopted, and they were not encouraged to go far beyond a more straightforward approach to verification of DLI targets. This limited the ability of the approach to improve or deepen the performance audit role and capacity of this important national institution.

S45. The emphasis in the PFM4R on supervision via the specific DLI has played a role in strengthening the supervision process and generating more evidence from this, combined with other donor support. However, as yet, information collected from supervision visits is not being reported or used in sector performance monitoring. The lack of focus and analysis around the changes in district PTRs indicates a missed opportunity to generate evidence – including from the work of the IVA – to inform ongoing policy and reform implementation. An important finding was that when the baseline for PTR changed (the number of districts with a PTR for lower primary above 80, increasing from 12 to 16 or 17, owing to the reorganization of districts in 2013), the first EY report¹¹ picked up on this and explicitly recommended that the baseline should be changed.

S46. During the period under review, there has been a perceived improvement to the annual review process, with a stronger focus on results and any underlying challenges in achieving them (for example, merit-based recruitment, cascade of teacher training to schools). It may be that the DLIs have given some focus to these issues, alongside other factors (for example, SDI reports, analysis from civil society organizations, CSOs). The annual review process is a key entry point for RBF to contribute to better evidence and its use. For the reforms being targeted, there is a need for more

¹¹ EY (2017a).

research and evidence to contribute and inform policy implementation. For now, there is a risk that focusing on the quantitative success against targets does not reflect the deeper and more complex realities at local level.

S47. Finally, a notable gap has been the lack of focus on EMIS and the reliability of data. A number of people have questioned the enrolment data, and the likelihood that per capita school funding has driven misreporting, thus there may be large numbers of “ghost” students” in reported enrolment numbers. There are also questions around the presence of “ghost” teachers in the system.

F) Adaptation and flexibility

S48. Programs setting targets over a period of years are likely to require flexibility to respond to change and adapt the management of programs to new conditions. This flexibility relates to both external events and the success or failure of program initiatives themselves, and ongoing learning and evidence that informs policy making.

S49. The period in which RBF has been applied in Mozambique has been relatively short, with a limited number of indicators overall, leaving perhaps limited need for adaptation. It is notable that for both PFM4R and GPE, programs were subject to regular World Bank monitoring / review missions, which were comprehensive and analytical, and provided real-time advice to the MINEDH and program managers. Some of this advice was taken up during program implementation, and some has informed forthcoming programming (for example, for new GPE support). This advice, alongside the approach of PFM4R coaches, enabled the program to adapt and achieve DLI targets. One shortcoming across these programs was, in some cases, not identifying and moving to new goals once initial targets were achieved. For supervision, there appears to have been a process of adapting to initial success in this way, while for ADE disbursements and school council functions there was less adaptation and refocusing on continued PFM and accountability issues.

S50. This research indicates that more adaptation and flexibility should have been applied in response

to the perceived non-achievement of the DLI aiming to reduce the number of districts with a lower primary PTR over 80. As above, changes in the organization of district administrations that had taken place in 2013 increased the number of districts nationally, and changed the baseline from 12 districts to 18 districts¹² (or 16 according to our analysis of MINEDH data). This made it significantly more difficult to meet the targets set for 2016 and 2017. The reduction from 17 districts with a PTR for lower primary above 80 in 2015, to 10 districts in 2016 and 9 districts in 2017 were major in light of the higher real baseline, but were not recognized by payment. Our quantitative analysis (see Annex 4) found a statistically significant allocation of teachers to the districts with the highest PTRs, in line with the incentive. However, the baseline was not changed, despite the IVA recommending this.¹³ There was agreement with the MINEDH not to seek a revision, and this decision potentially cost USD 2 million in additional disbursements to FASE from the GPE DLI.

S51. The use of DLIs within the FASE has been the focus of some discussion. A possible critique has been the risk of uncertainty in fund flows and the limitations it may put on flexibility of spending for the government. However, the fact that GPE disbursements were aligned to the budget calendar, and could be rolled over to the following year if not disbursed, shows some level of flexibility and predictability. Where the second KfW variable tranche was disbursed, even though it appears not all indicators were met, also suggests some flexibility, but perhaps at the expense of the credibility of the mechanism. This illustrates the potential trade-off donors face between enforcing the credibility of the RBF mechanism and ensuring predictability of fund flows to the sector, particularly where the sector is significantly dependent on external aid.

G) Risks and unintended consequences

S52. There are a number of potential risks associated with the use of high stakes incentives linked to results. That is, risks relating to whether goals are truly achieved and how agents respond. In

¹² MINEDH (2016)

¹³ EY (2017a)

broad terms these can be classified as risks relating to information, diversion and motivation.

S53. A key risk emerging from this research has been that, despite a strong rationale for selecting relatively simple, output/process DLIs, there is an information risk where there is an impression of success, taking the attention of decision-makers away from the deeper, longer term change that is needed. This might be true for school councils, where there is an incentive to report the good functioning of councils against set criteria, which could at worst be seen as a “tick-box” exercise or at best an important building block towards more complex changes in local power dynamics.

S54. There are diversion risks related to this, for instance where numeric indicators for teacher in-service training may have focused effort on pushing numbers through, without a focus on quality of training and the classroom pedagogical practice. Another risk of diversion is at a broader level of strategy. Given the focus in Mozambique on process or output indicators, and the timeframe of these programs, it is hard to know if poor performance at the outcome level is due to any diversion by RBF from interventions that could have made a bigger impact. However, it is possible to conclude that the use of RBF and the specific design of DLIs did not sufficiently account for inequity between regions and provinces. Success against DLI targets does not account for significant differences between locations, in their pre-existing capacity (for example, stronger school councils in south of country).

S55. The lack of clarity at the outset of the PFM4R in how the performance-based allocations (PBAs) would function, led to expectations for key individuals at MINEDH and province level. Notably, team members were under the impression there were personal incentives (performance bonuses) linked to targets being delivered. This may have had an initial motivating effect, but once it became clear that this was not the case, as personal payments were vetoed by the MEF, this had a demotivating effect according to several stakeholders we spoke to. This points to the importance of clarity at design stage regarding any performance framework, the importance of expectations, and the importance of placing RBF within an existing accountability

framework and understanding the factors that motivate the key staff tasked with delivering process changes in the system.

H) Cost effectiveness

S56. The research has not undertaken a cost benefit analysis. However, it is possible to estimate that the use of RBF in education does not appear to be associated with high costs to government or donors in Mozambique. The programs, and DLIs, were aligned to government priorities and reform areas agreed in the sector plan, and reporting took place within the existing dialogue structures.

S57. When comparing the use of RBF to other modalities, perhaps it is most meaningful to see the various approaches used in Mozambique as complementary: part of a toolkit for MINEDH and its partners to support reform and change management in the sector. For example, GIZ and UNICEF support to POEMA to develop capacity for sector planning and management appears to have been seen as extremely useful, and CSO-run projects in specific locations may have contributed to school accountability in more specific and qualitative ways. Yet it is important that the RBF benefits, in achieving DLIs, were on a national scale, system wide and focused on institutional issues. This report highlights that the results of RBF in Mozambique were ultimately limited by their ambition; this was an early and initial use of these mechanisms, focused on foundational processes, not yet in themselves transformative and not addressing or achieving higher level outcomes of learning or equity.

Conclusions

S58. Finally, in Table S3 below, we review each of the RBF theories outlined in the introduction, presenting evidence on the extent to which and in which ways each theory did or did not hold in the case of the use of RBF in Mozambique. Importantly, whilst there is value in highlighting specific RBF mechanisms through separately reviewing each theory, the theories are closely interlinked, they can either mirror or reinforce one another (for example, steroids and signposting both work towards focusing effort on the program results), or on the contrary, can possibly be in tension (for example, aligning all actors may be at the detriment of innovation by some agents).

Table S3 Evidence and conclusions for seven theories of change for RBF

RBF theory	Evidence / conclusion
1. Steroids	<ul style="list-style-type: none"> - The DLIs as foundational reforms may have had limited stretch. However, the PFM4R brought together central actors to address long-standing bottlenecks, and incentivized provincial / district effort to improve coverage of school supervision. The DLIs and reward to sector were known, and with support from coaches/facilitators contributed to effort / results. - GPE DLI on reducing number of districts with high PTRs was reported as not achieved. This research indicates in three of the four provinces with high PTRs, effort was induced and important results achieved. It is therefore likely that provincial education departments understood the target and took action. This happened despite significant budget constraints, but did not address inequality between provinces, and as not recognized has not been sustained. - A key challenge is whether effort towards higher level results is sustained, once DLI targets are achieved. The DLIs on school supervision and in-service training were not sufficiently focused on quality of implementation, but are receiving attention in new programming. Other reforms, importantly school council strengthening and the “last mile” of accountability for school grants (ADE) have seemingly stopped short. - The German (KfW) use of RBF in construction did not lead to a faster pace of school and classroom construction as targeted. It is unclear why this is the case, and in fact the pace of construction may have slowed in the period; however, this is likely to be an area strewn with difficulties, which DLIs alone were not sufficient to address.
2. Signposting	<ul style="list-style-type: none"> - The PFM4R articulated short-term results needed to improve school accountability and governance, directing effort and resources to these. DLIs signaled priorities, including for district and provincial education staff (who may have other competing priorities driven by local authorities / party structures). - GPE variable tranche was additional funding to the sector (via FASE), and DLIs were planned for within the annual plan of activities. The in-service training DLI linked to a new MINEDH strategy, so it is likely this may have happened anyway; though the DLI gave more weight to ensuring resources allocated to IFPs. - For the most part, GPE DLIs seem under-ambitious, and did not drive implementation through to school level change (teacher peer training, school director practice). For those provinces with high district PTRs, there appears to have been a signposting effect, although as above, this was not sustained.
3. Autonomy and innovation	<ul style="list-style-type: none"> - The indicator for district PTRs was achieved in three provinces with high PTRs, without any technical support, and with very little focus in the sector dialogue. We found no clear theory of change or plan for this. But action was undertaken by the provinces concerned with the resources they had. - There was no real autonomy under PFM4R, given the significant support from technical assistance / coaches, at central and province levels. Innovation (for example, in problem solving for ADE disbursement, improving supervision process) was mainly through the coaches or linked to other donor projects. - The GPE model gave more autonomy / room for innovation, but for most part the DLIs were straightforward, prescriptive outputs. - German (KfW) DLIs for construction were not successful, even though quite prescriptive processes and outputs were included with complementary TA. - At subnational level, apart from the provinces which reduced high district PTRs, there was limited autonomy given to provinces and districts in achieving any of the DLIs. With the degree of inequity, there appears to have been insufficient focus on the specific needs of provinces / districts.
4. Sharpening minds	<ul style="list-style-type: none"> - Lack of focus on EMIS during the period, despite potential concerns about quality of data (for example, enrolment), and these data being vital to measure PTRs.

RBF theory	Evidence / conclusion
	<ul style="list-style-type: none"> - Supervision and associated monitoring data collection by districts has improved, including use of tablets, online tools, classroom observation – to which the DLI from PFM4R may have contributed. This has potential to improve availability of data on schools, but is not yet systematically captured and used. Likely to be a focus in coming years. - Independent verification varied across RBF programs. For PFM4R, <i>Tribunal Administrativo</i> (national audit institution) used, building national capacity through well-resourced verification exercise, which was well executed. But opportunities missed to make most of performance audit approach, to examine qualitative change beyond the specific process targets. For GPE, a private firm contracted, produced professional reports, but limited in focus and insufficient analysis to generate learning, for example, around PTR levels. - Limited use of other, more qualitative analyses of the targeted reforms.
5. Labeling success	<ul style="list-style-type: none"> - PFM4R was a well-planned program, focused on the DLIs, with technical support from coaches to identify the key bottlenecks, ensure joint planning and implementation of changes towards the goals. However, while the higher-level goal was improvements in accountability and sector PFM, the focus was on specific metrics/DLIs (for example, criteria for school councils, rather than more complex local realities; ADE funds arriving on time, rather than ensuring they were spent well). Results-based planning should be able to move on, once initial targets / indicators are met. - The quality of district supervision is now getting more attention after the initial focus on quantity, representing stronger results-based management approach. Likewise, while in-service training (a GPE DLI) was initially only focused on the narrow goal of IFP implementation at the top of a cascade model, there now appears a renewed focus on school-based training, to meet the higher-level goal of improved teaching and learning.
6. Aligning all actors	<ul style="list-style-type: none"> - Sector coordination mechanisms are well established, with Local Education Group and Troika mediating donor / government dialogue. RBF has not substantially changed this, though has worked well within this. Some suggested the selection of indicators / design was not fully inclusive. - PRM4R sought to bring MEF / MINEDH together to address sector/subnational PFM and accountability challenges. Ultimately, this worked to address specific bottlenecks (for example, timely ADE disbursement), but questions have been raised over MEF engagement (for example, program Completion Report suggested need for specific MEF DLIs).
7. Sustaining attention	<ul style="list-style-type: none"> - During the period under review, specific challenges were faced by sector partners, including drought and escalating conflict and fragility. More pertinently to the RBF was the hidden loans scandal, suspension of budget support, and constraints to the sector budget. - RBF in the sector included a focus on sectoral PFM, and this has helped to improve subnational systems and accountability. However, the focus on specific DLIs rather than longer term reforms to transform accountability systems suggests more sustained attention is needed. - The changes brought about to reduce the number of districts with PTR above 80 does not appear to have been sustained, and was not even rewarded through RBF when achieved. - The climate related crises and conflict suggest the need for more targeted support to the regions in need. This has been to some extent the focus of FASE and bilateral support, but has not been addressed through adapted RBF programming.

S59. Using this framework of RBF theories has aimed to assess the way in which RBF has been used in the education sector in Mozambique. Some final reflections can be drawn on the contribution that RBF has made. This includes an additional theory for justifying RBF (outside of our framework), the idea

of *risk transfer*. This refers to donors' own responsibilities to their funders, boards or taxpayers. RBF enables donors to tell the story that they will only pay where results are achieved, to ensure money is well spent. In the aftermath of the hidden loans scandal, the suspension of GBS and other

sector level corruption, the FASE mechanism was strengthened, and perhaps in this context an additional element of risk transfer had some appeal. Within FASE, there was a longer history of using what has been termed “virtual earmarking”, or a kind of soft conditionality; funds being nominally linked to specific areas of work, or results, but without DLIs or specific conditions for tranche release. However, this risk transfer genuinely does create risks for the Government of Mozambique, particularly with FASE providing so much essential recurrent expenditure in the sector. Unpredictability of fund flow is a major risk for the sector in such a resource-constrained environment.

S60. RBF used in Mozambique was strongly linked to capacity support of various kinds – with a great deal of specific support alongside the PFM4R program, including facilitators and coaches, going to provincial level. Other donor projects also provided capacity development support for different reforms and sector institutions relevant to the DLIs. The RBF in Mozambique was therefore relatively limited, targeted to specific reforms and supported with *hybrid* elements – that is, technical assistance alongside the RBF incentives. In practice, it is likely that this is a necessity with such complex changes in a low-capacity setting. However, it can then be difficult and sometimes impossible to say which reforms and changes were motivated by the financial incentive of RBF, as opposed to the package of technical assistance and other support, including complementary donor programming.

S61. In this sense, there is a central context in which development partners and government are in partnership in the process of prioritization of goals and in delivering those goals. This is in a context with major challenges in capacity, PFM and with political economy. As per the literature on the 1990s use of conditionality, there is a long-cited and important precondition to the effectiveness of any incentive, that is, that development partners and government are aligned in what they want to achieve.¹⁴ It also links to the so-called “Samaritan’s dilemma”,¹⁵ in cases when results are not achieved and funds have to be held back – does this damage the sector that the donor is trying to help? This

means RBF has to be very carefully designed and the scale of risk has to be carefully considered.

S62. This research has indicated broad agreement that selecting DLIs at the output/process level was appropriate and proportionate to the context, and that the approach was successful in bringing about at least some of these changes. This was appropriate given that RBF had not been used in the sector before 2014, and the high level of dependence on donor funding, particularly the FASE. The DLIs can be characterized as foundational reforms, aimed to catalyze, and give momentum and focus to a process of change. In this sense, the DLIs were not ends in themselves, but key steps towards more important changes: shifts in accountability, qualitative changes in school management, and in the capacity and practice of teachers and school managers. It was expected that achieving the DLIs would contribute to intermediate and higher-level outcomes.

S63. Most of the RBF DLIs were achieved in full, and in some cases quite early in the programs. This could indicate that the incentives were effective, but may also indicate that these were “low-hanging fruit”; not “stretch” indicators, to use the GPE terminology. The perception of many stakeholders is that at the time, these indicators represented critical bottlenecks, or important changes that needed to take place for strategies in the sector plan to be effective. However, looking at the results, a more complex picture emerges about the success of these programs. Each DLI illustrates that while the foundations for change were being put in place, there were limitations to the depth and quality of this change. For example, the GPE indicator on reducing high district PTRs, aimed at a higher-level change in the system, had a clear equity dimension and could plausibly have contributed to improved retention and learning. However, for this to contribute to higher level outcomes it would need to be part of a broader set of teacher policy reforms which might address equitable teacher recruitment and allocation within districts (that is, urban/rural) and between provinces (that is, north / central / south). This links also to teacher pre-service training, employment conditions and motivation. As it is, there was no attention to

¹⁴ For example, see Killick (1997).

¹⁵ Buchanan (1975).

extending or sustaining the change in such a way that further outcomes could be achieved.

S64. Drawing on this country study and as inputs to the synthesis of three country experiences of which this study forms part,¹⁶ the following few headline suggestions are made:

- Pay careful attention to the design of any cascaded or downstream RBF incentive. Unless this is acceptable to government and well-designed, it can cause confusion and even demotivation of the very officials tasked with delivering key changes for the program.
- Ensure that in-depth analysis of the equity of changes incentivized by DLIs is undertaken, and that this includes detailed indicator definitions. By incentivizing one particular aspect of equity (for example, within-province distribution of teachers), broader and more important dimensions of equity may be lost (for example, between-province distribution of teachers, and within-district distribution, or the focus on primary schools not classified as “complete” in the Mozambican context).
- Have a very clear pathway to success. Understand that in the absence of individual bonuses, which are unlikely to be implemented within a government bureaucracy, then incentives operate at the institutional level. This means they will only function if the bureaucracy is motivated to collectively secure funds for the sector. If individuals do not “buy-in” or understand the goals set by the DLIs, then incentives may lead to demotivation.
- Ensure that the financial implications of non-payment are clearly understood prior to starting any RBF project, in particular when finance is funding essential expenditures (as in FASE), where the implications may therefore be very severe in terms of potential opportunity costs.
- Where there is an intention to leverage complex behavior change, in the interaction between schools and communities, consider the selection of DLIs carefully and the associated analysis and technical support that will be needed at the local level. Any RBF incentive is likely to weaken as it moves further down the “cascade” towards school level.
- Be clear on the expectations for the verification process, in particular the degree of evaluation and qualitative information that is built into the process. Where the verification lacks this, ensure there are alternative sources of information to provide an assessment of change.
- Seek to ensure clear process of transparency and dialogue on results with a wide range of sector stakeholders, including in discussion of verification findings and presentations at annual sector review meetings.

¹⁶ See Dom et al. (2021b) for the full set of lessons and recommendations from the Final Synthesis Report of this three-country study.

1. Introduction

1. This report has been commissioned by the World Bank Results in Education for All Children (REACH) program¹⁷ as an assessment of the design, implementation experience, and impacts of RBF in education. The study covers three countries:

- **Mozambique**, the subject of this report, which introduced RBF with the World Bank's Public Financial Management for Results program from 2014 to 2018, and has in the same period had RBF used by the Global Partnership for Education (GPE) and Germany (KfW). The total value of RBF to date in Mozambique has been smaller than in Nepal or Tanzania, at just under USD 60 million, or 12 percent of donor financing to education from 2014 to 2018.
- **Nepal**, which following piloting of RBF by the World Bank in the 2013–15 period, shifted to receiving the major share of donor finance to education via RBF, funding the government's School Sector Development Plan (SSDP) from 2016. RBF financing to the sector has six joint financing partners involved, and is worth USD 400 million, covering over 80 percent of potential external finance to the education sector in the period from 2016 to 2021.
- **Tanzania**, which introduced RBF alongside the "Big Results Now" initiative in 2014, with sector finance linked to results for the World Bank, the UK's Department for International Development (DFID) and the Swedish International Development Cooperation Agency (Sida). RBF programming in the period since 2014 has been linked to over USD 500 million of potential disbursements to the sector.

2. The research has been undertaken in two phases. The outcome of the first phase was a **Preliminary Assessment Report** for each country, finalized in February 2020, following two-week country visits in late-2019. This phase provided a comprehensive "mapping" of RBF in education and important elements of the broader country context. This **Final Assessment Report** is the conclusion of the second phase, with more in-depth analysis on the contribution of RBF to education results including quantitative analysis on a smaller number of RBF mechanisms / disbursement linked indicator (DLI) areas selected.

3. The research led to a final **Synthesis Report** to compare and contrast the three country experiences, and identify findings and lessons that could inform education programming and the use of RBF more broadly.¹⁸

1.1 Theories of RBF underpinning the research

4. The term *results based financing* (RBF) covers a range of financing instruments that have been increasingly used in education programming, as well as in other sectors, in recent years. RBF instruments are defined as those paying for a result to be achieved *only* if achievement can be credibly verified. In education, RBF includes forms of contract that disburse on results such as, for example, children enrolling and learning, or the number of classrooms constructed. This contrasts with instruments that transfer resources unconditionally or simply pay input costs, for example salaries, or materials for construction.

5. RBF is a broad term that can cover uses such as performance-based grants to schools or local authorities, performance-based pay, development impact bonds, or conditional cash transfers, among others. RBF has, however, mainly been used as a financing modality by international aid donors. This has included the growing use of financing instruments such as Program for Results (PforR) by the World Bank, Results-Based Lending (RBL) by the Asian Development Bank (ADB), and the use of a variable tranche by both the European Union and

¹⁷ REACH is a multi-donor trust fund established in 2015 and funded by the World Bank Group, Norway, Germany and USAID. The main purpose of the program is to contribute to the evidence base around RBF in education.

¹⁸ The Preliminary Reports are referenced as, for Tanzania, Dom et al. (2020); for Mozambique, Patch et al. (2020); and for Nepal, Holden et al. (2020). The Final Assessment Reports are referenced for Tanzania as Dom et al. (2021a); for Nepal, Holden and Chapagain (2021). The Synthesis Report is referenced as Dom et al. (2021b).

the GPE. All link disbursements to results. RBF approaches have also increasingly been used by bilateral aid agencies such as the UK's Foreign, Commonwealth & Development Office (FCDO) and Sida.

6. As an aid modality, the conditional nature of RBF provides an alternative to most uses of general budget support (GBS) or sector budget support (SBS). From the early 2010s, donors found these modalities problematic, with a number of evaluations raising questions on the effectiveness of GBS and SBS in addressing systemic problems faced in key sectors such as education.¹⁹ RBF modalities can be contrasted to more "traditional" input-based financing modalities,²⁰ where activities and expenditure are accounted for more directly, independent to results achieved or with much looser conditionality. Input-based financing modalities also tend to include greater fiduciary reporting requirements.²¹

7. RBF has also been used within countries in performance-based transfers of resources from central to subnational levels of government, as well as in performance grants to schools, and to teachers in the form of performance-based pay. There is often a link between donor-led RBF and "downstream" RBF between central and subnational levels of government – and this can be in-built to the design of the programming. This is the case in Nepal as this report will discuss.

8. The theory of RBF is often framed in terms of principal-agent theory. The *principal*, seeks to achieve a specific goal by incentivizing the recipient of funds, the *agent*, to undertake the activities required to achieve it. The theory provides some clear ways through which RBF may work – broadly these can be split into the idea the agent will put more effort or resources into achieving the specified results [*steroids*]; that the goal will see effort diverted or resources prioritized [*signposting*]; and that paying for results as opposed to inputs could give the agent more autonomy to achieve results [*autonomy and innovation*]. Proponents of RBF also claim other ways in which it may improve education systems. These include improvements to evidence systems [*sharpening minds*]; results-based planning [*labeling success*]; bringing actors together in cooperation and coordination to achieve the goal [*aligning all actors*]; and finally, by "contractually" defining results, RBF provides a mechanism to focus on the goal over time, whatever else may be changing [*sustaining attention*].²²

9. RBF also faces risks and potential unintended consequences. Some of these link to the inherent challenges of measurement and the information asymmetry in which an agent knows more about what has really been achieved than the principal; and that any measure or metric is always likely to be imperfect. There are therefore risks of "gaming" in which the result is reported as being achieved when this is either not true [*cheating*] or only true in a narrow sense [*fudging*]. For certain types of indicator, there can also be equity risks where subgroups of individuals are easier to reach, and prioritized to achieve the target, possibly at the expense of harder-to-reach subgroups [*cherry-picking*]. RBF mechanisms include third party verification in order to address some of these risks, however any verification process is also subject to the same risks and challenges with measurement.

10. While principal-agent theory provides insights as to why RBF might work and its risks, alternative theories²³ and empirical literature, point to other risks of RBF. Notably people and institutions respond to other forms of accountability than just financial incentives – for example electoral accountability, peer-to-peer

¹⁹ See, for example, DANIDA (2014) for a summary.

²⁰ This includes instruments such as Investment Project Financing (IPF) for the World Bank, Project Based Lending (PBL) for the ADB, and the use of a *fixed tranche* by the European Union and GPE.

²¹ While RBF programs are distinguished as a modality in the use of conditionality, they can vary in the degree of difference to other modalities on a number of other aspects. These include the rigor of evaluation required; the degree of alignment with government financial reporting and accountability systems; the presence of safeguards; the role of technical assistance; and whether or not they use existing basket or pooled funding mechanisms.

²² These theories are based on a large literature survey, including the work of REACH, in World Bank (2017a).

²³ This includes *stakeholder theory* – individuals' attitudes are not always selfish / relationships are interdependent, that is, principal and agent can influence each other; *institutional theory* – individuals adapt to the system of norms, values and beliefs within their institutional environment; and *prospect theory* – individuals base their decisions on subjective perceptions of change, and may aim more to minimize loss than maximize gain. See Cuevas-Rodríguez et al. (2012).

accountability, and intrinsic motivation. As a result, there can be risks of *demotivation*, where the introduction of a monetary incentive crowds out other incentives for carrying out the same actions; and *loss aversion*, in which actions are taken with perceived low risk due to the high stakes of the RBF incentive. Potential unintended consequences also include the risk of *diversion*, in which the RBF incentive leads to deprioritizing other important goals in a way that is suboptimal. Finally, there are risks relating to the financing mechanism itself, that is, the flow of finance linked to the RBF mechanism. As payment is generally *in arrears*, but the costs of activities are experienced *up-front*, if results are not achieved non-payment may lead to shortfall in finance that may have knock-on effects.

11. The theories of how RBF may work, together with some of the countervailing risks are summarized in Table 1. These theories are used to structure the final findings and Conclusions in Chapter 4 of this report.

Table 1 Theories of how RBF works and associated risks

RBF theory	How it works ...	Risks
Steroids	RBF induces more effort (and/or resource) to achieve specified results. A goal is more likely to be achieved if a payment is made on its achievement, because more effort will be put in to achieve the goal by agents.	Gaming risks relating to the RBF metric, such as <i>fudging</i> where success is in appearance only. Demotivation by crowding out other accountability mechanisms.
Signposting	RBF focuses effort (and/or resource) to achieve specified results. Within finite limits to efforts/resources, allocations of effort/resource to specified results reduce those to less important areas.	Diversion risks if there is a suboptimal resource allocation, with important areas deprioritized because of the RBF incentive. Cherry-picking risks, in which less costly or politically favored subgroups or regions see greater resources, in part because they are more likely to reach a target.
Autonomy and innovation	RBF provides greater discretion regarding how to achieve specified results. Paying for results on a goal can allow the agent to work out the best way to achieve that goal and to use their local knowledge to innovate, if the principal leaves space for this.	Loss aversion , with innovation curtailed, owing to perceived riskiness of actions in relation to RBF (non-) disbursement. A large number of indicators reduces the space for policy discretion.
Sharpening minds	RBF improves evidence and evidence-based policy. As more accurate measurement is required to document and verify results, RBF may increase the quantity and quality of evidence available on results and, further, help improve policy and planning.	Compromised evidence systems or verification process, owing to the need for the RBF to be perceived as successful and funds to flow.
Labeling success	RBF improves results-based planning. As goals are labeled as the results of interest, planning may focus more systematically on <i>results</i> – identifying bottlenecks to these results, and actions to address these, with associated indicators.	Lack of ambition if results are simple to achieve, or achieved within the time-scale, with years still to go to the end of the plan period. Financial flow risks because payment is in arrears or via non-achievement, meaning fewer resources for sector or unpredictability of fund flow.
Aligning all actors	RBF improves coordination between key institutions. As results are clearly identified, the policy dialogue is more focused, with ensuing collective action made more likely by the incentivized nature of the framework.	Dispersion of actors and coordination; for example, donors focusing on “their DLIs” as opposed to the overall sector plan.
Sustaining attention	RBF maintains the focus on specified results during a period of change through its contractual nature, more than would be possible with a traditional (non-contractual) results framework.	Inflexibility: inability to deal with and adapt to changing context over time, because of the fixed nature of the RBF “contract”.

Source: Authors, drawing on a large literature survey, including the work of REACH, in World Bank (2017a).

1.2 Change in education systems and levels of results

12. Results-orientation and policy prioritization in education implicitly start and end with the student at the center. Thus, outcomes and impact of the education system are measured through the results for students, in their progression, their learning and their life chances from education including the skills and qualifications they attain. While there is some degree of consensus around certain measures of student goals – for example basic literacy and numeracy skills for children in primary education as a pre-condition for effective secondary and further education – no single measure will capture all of the goals, outcomes or impacts that we care about. Notably, student well-being in terms of safety, physically and mentally, is the foremost concern of any parent, but is often not captured by quantitative metrics of education systems.

13. Together with student learning and life chances, a number of other areas are critical and can be framed as other *outcomes* of the system – for example, access to school, including attendance, retention, and progression; and equity according to gender, ethnicity, or disability. *Intermediate outcomes* – for example, the quality of service delivery in terms of the teacher’s presence in the classroom, and their capabilities, alongside manifold *processes, inputs, and outputs*, from teacher training facilities, to the condition of classrooms, provision of learning resources such as textbooks, and set of accountability systems, standards, and supervision, underpin and ultimately determine the performance of the system in terms of student outcomes.

14. The education system includes these inter-related subsystems that drive the results for students. RBF can involve results across this spectrum, and the level of results that is targeted interplay with some of the theoretical drivers of benefits and costs of RBF. This includes the types and interrelationships of institutions involved in education delivery, including the ministry of education and central agencies, and subnational levels of government, and down to the school, the teacher and in the classroom where learning ultimately takes place. Table 2 below highlights the common definition for these different “levels” of DLI within the education system, and particular types of indicator that might be tackled. Further delineation of the types of indicators that can be chosen for RBF is set out in Box 1.

Table 2 Levels of metrics used in RBF in education

Level of indicator	Definition	Examples of area of focus	Important considerations
Process	A change to sub-systems of education that determine how resources are managed, people and institutions are held accountable, or information is generated.	Grant management system Accuracy of EMIS data Curriculum framework	The number of people and institutions involved in process changes may determine complexity. Some processes are likely to link to political economy considerations.
Output	The provision of a good or service that is required for delivering education but is far from a predictor of success of the system.	Number of textbooks delivered Number of teachers trained	Degree to which there is a measure of the quality of the output as well as its quantity.
Intermediate outcome	An indicator that is a strong predictor of student outcomes but that does not constitute a goal in itself of the education system.	Pupil teacher ratios Teachers employing improved classroom practice	Measurement can be very difficult and costly, particularly to be nationally representative.
Outcome	A clear achievement of a goal for the intended beneficiaries of education.	Learning outcomes Gross or net enrolment ratio	Averages need to be disaggregated to subgroups to understand equity.

Source: Authors

Box 1 Levels of indicators in education systems

Results-based financing (RBF) involves the selection of specific indicators – metrics or measures – that will underpin disbursement. Often known as disbursement linked indicators (DLIs), these form the primary focus for the goals or changes that the RBF seeks to incentivize. As these changes or goals form part of education sector strategies and planning processes they can focus on different levels of the system as well as different actors within the system. The classification of where a particular DLI focusses on is often separated between *outputs*, *processes*, *intermediate outcomes* and *outcomes*. The general assumption is that RBF will not specify particular *inputs* or *activities* as these are the means to achieve a result rather than the result itself.

Donor financing using RBF, such as that explored in this assessment, tends to include DLIs across a mixture of these levels. This is a reflection of the many types of changes and results targeted in the complex setting of an education sector plan. This adds some complexity to the theories of RBF in that there is an implicit (or explicit) causal logic between different levels – i.e. that *these* process and output changes will lead to *these* intermediate outcomes, and in turn this will lead to *these* outcomes for students. For example, improved teacher training institutions [process], with numbers of teachers trained [output], leading to improved classroom practices [intermediate outcome], in the hope this will improve learning of students [outcome]. In the case where all of these levels are made to be DLIs within an RBF program, this is likely to limit the theory of change on autonomy and innovation – i.e. in the case above the strategy to achieve greater learning is already set out, and the strategy itself may be incentivized by DLIs.

1.3 Research questions and study methodology

15. This assessment seeks to explore the experience of each country with RBF in education in the period since 2013, addressing the following overarching evaluation question: **“To what extent, in what ways, and under which conditions has RBF helped education systems to deliver results?”** The question is unpacked through a number of research questions that frame the study and respond to the Terms of Reference (ToR) (see Annex 1). These include:

- A. Design** – What goals did RBF seek to address? What indicators were chosen and at which level of the results chain? What was the design process? How was RBF envisioned to lead to improved results and were other elements of design, such as technical assistance, used?
- B. Results and impact** – What were the results achieved via the use of RBF? To what extent did the achievement of indicators represent the achievement of underlying goals? What was the contribution of RBF to the achievement of indicators and goals? Were the results of RBF sustained over time and beyond the period of RBF programming?
- C. Financing, payments, and financial flows** – What were the financial flows and payments made linked to RBF? Was RBF financing additional to education sector finance, or would financing have been still provided by other financial mechanisms without RBF? Were financial incentives passed on to different tiers of government?
- D. Co-ordination, capacity and accountability** – How did RBF relate to or change the coordination mechanisms between donors and governments? Did RBF change accountability relationships between central and subnational levels of government? How important was the role of capacity development, including technical assistance, in the results of RBF?
- E. Evidence-based policy and verification** – How was RBF used to address evidence systems? Did the process of results generation and verification built into RBF mechanisms lead to improved evidence of results? Did changes in evidence systems lead to changes in national systems of accountability and feed into improved education sector programming?
- F. Adaptiveness and ongoing change** – Was RBF, either at the level of individual indicators or the overall programming, adaptable to either the context, the perceived ambition of targets, changes in policy priorities, or perceived adequacy of metrics? Did adaptiveness and ongoing change in RBF represent an appropriate use of flexibility?

G. Risks and unintended consequences – Were there specific cases of perverse or unintended consequences linked to RBF for specific goals or indicators of change (for example, diversion of effort, gaming, etc.)? Were there other unintended consequences of the RBF programming linked to the overall use of RBF as a modality (for example, volatility of financing flows, quality of evidence systems, level of flexibility of programming, etc.)?

H. Cost-effectiveness – What were the major costs associated with (or attributable to) the use of RBF? What were the major benefits? What effect has RBF had on the overall cost-effectiveness of spending on education?

16. This final report includes the overall findings from both phases of research and is structured around these research questions. To address them, the study team has used a combination of qualitative and quantitative methods. This has included extensive documentation review, quantitative analysis of results and financial flows, and interviews with a wide range of education sector stakeholders including in government at central and subnational levels, as set out in Table 3. A full list of stakeholders consulted is in Annex 2.

Table 3 Study methodology

Method	Details
Education system review	Detailed appraisal of each country education system, recent historical and political context, sector performance and trajectories, and review of sector plans and evaluations.
RBF ‘mapping’	Identification of all RBF schemes in education (covering primary and secondary level). Analysis of how they interact, and a detailed review and mapping of all DLIs in the EP4R in Tanzania; the PFM4R, GPE variable tranche and German (KfW) use of RBF in Mozambique; and the use of RBF in the SSRP (2009-16) and SSDP (2016-21) in Nepal.
Key informant interviews	Interviews with: <ul style="list-style-type: none"> • Central government stakeholders at MINEDH, MEF, and education agencies. • Development partner and civil society stakeholders. • Provincial and local government stakeholders. • School principals and school council chairs.
Quantitative and qualitative review of DLI performance	Review of DLI results, disbursement and financial flows; assessment of their complexity; measurement and risks that emerged. Detailed assessment of design, experience, evidence and timing of results, and links with non-incentivized measures of success and overall sector performance.
Quantitative analysis of subset of DLIs	Deeper qualitative and quantitative analysis undertaken on a selection of DLIs, notably the GPE pupil teacher ratio (PTR) DLI in Mozambique; the out-of-school children enrolment DLI in Nepal’s SSDP; and the PTR and early learning (literacy) outcome DLIs in Tanzania.
Assessment against theories of change of RBF	Analysis of RBF contribution to results, the presence of incentive effects and behavioral responses, and broader systemic benefits and costs of the use of RBF.

17. The research set out to look for any and all RBF in basic education in the three countries.²⁴ The mapping of RBF found that despite some selective use of subnational RBF beyond these programs, the majority of RBF in terms of financial value and scope has been linked to donor aid. Where subnational RBF was found, it was mainly linked to the larger sector programs with donor support, i.e. as an incentivized component of the programs as opposed to purely ‘home grown’ uses of RBF. It is because of this finding that the research has mainly focused on the large-scale uses of RBF as an aid modality in each of the three countries, and on which this Final Assessment Report for Mozambique also principally focusses.

²⁴ The study did not cover higher education or early childhood education.

1.4 Study limitations

18. The assignment has been affected by the COVID-19 pandemic, with the outbreak occurring between the first and second phases of the work. This means that the original plan to travel to each country for the second phase was curtailed, and interviews were carried out in large part remotely via telephone or the internet. While the second phase of research was still able to cover a wide range of stakeholders, including at subnational levels of government, the pandemic inevitably limited the ability to further probe some of the sampled RBF mechanisms in more depth – in particular to triangulate the quantitative results of RBF with the more qualitative perspectives of local stakeholders, including at the school level.

19. Data availability has been a significant additional challenge of the research. Back in November 2019 and several times after that, the Mozambique study team requested access to EMIS data, which summarized sector performance data at district level over the past few years. The team also sought to get access to the Service Delivery Indicator (SDI) 2018 survey data from the World Bank, for more detailed comparisons. It took some time to gain any traction on data, and the SDI 2018 data were never accessed. However, we were able to get district-level data on pupils, teachers and pupil-teacher ratios (PTRs) for lower primary level (but not other levels) for the 2013 to 2020 period. Those data form the basis of the analysis in Annex 4.

20. The research followed a process evaluation approach, and therefore aimed to find plausible contribution of RBF to results and systems change. Given the complexity of education systems, and each country context in terms of political economy, public financial management (PFM) systems, and a range of external and exogenous factors and events in the period studied, there is always a challenge around distinguishing factors of causality. The approach taken was to use the different sources – key informant interviews, document review, data analysis and regression analysis for a subset of DLIs – to closely analyze the experience of all DLIs within the RBF programming, while also looking beyond them to data and research that was not incentivized by this programming. At times stakeholders had different perspectives and opinions on how change had occurred and critically whether changes were positive or negative for sector performance. We have aimed to reflect the diversity of views, though inevitably at times we have taken a position based on the rounded view of evidence in terms of plausible contribution.

1.5 Structure of this report

21. This introduction has attempted to provide some important contextual and background theoretical factors that a reader will need to understand to follow the rest of the report. Chapter 2 – will set out important background information on Mozambique, its education system and results, and will introduce the main uses of RBF in the period from 2013 to 2019. The central findings section – Chapter 3 – follows the evaluation framework and questions set out above. Chapter 4 then draws conclusions from the research on each of the major theories for RBF set out in Table 1 in Section 1.1 above.

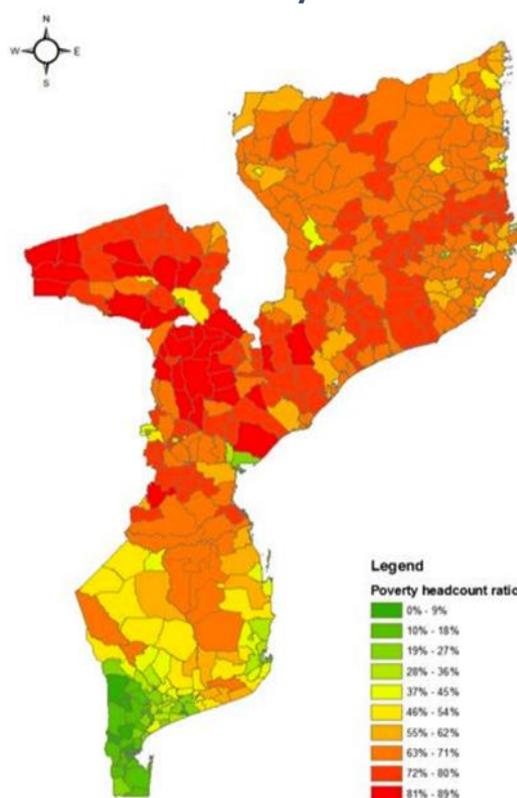
22. Annex 1 sets out the Terms of Reference. Annex 2 provides the list of stakeholders interviewed. Annex 3 shows some of the major events in the recent experience of Mozambique in terms of political economy, as well as major developments in the education sector, including the periods of RBF programming. Annex 4 provides background quantitative analysis conducted with the help of colleagues from the University of East Anglia on specific DLI-related questions, informing the findings section. Finally, Annex 5 provides the detailed results of the RBF programming in Mozambique.

2. RBF in Education in Mozambique

23. Mozambique has a range of challenges that rank it as one of the most disadvantaged countries in the world. These include its low gross domestic product (GDP) per capita, for which it is placed in the bottom seven countries.²⁵ Income within the country is unevenly distributed, and the majority live in or near absolute poverty (see Figure 1). The country is fragile, with limited state capacity;²⁶ subject to major climate shocks, including two major tropical cyclones during 2019; and faces ongoing and increasing conflict in northern and central regions.²⁷ The UN's Human Development Index (HDI) ranked Mozambique 180th out of 189 countries in 2019, reflecting its position among the poorest countries for life expectancy, years of schooling and gross national income (GNI) per person. Other major human development challenges include high prevalence of HIV, at 12.5 percent of the population, and low use of basic sanitation, with only an estimated 24 percent of the population having coverage.²⁸

24. While there has been economic growth in recent years, it has mainly been linked to foreign direct investment (FDI) in "mega-projects" in resource extraction.²⁹ Offshore gas, in particular, has transformational potential for the country's finances and has allowed borrowing to increase in recent years on the promise of the future windfall. However, the benefits are yet to accrue from these long-term investments, and in general the mega-projects have not generated widespread job opportunities for the country's young and growing population of 30 million people, which is increasing at 3 percent per annum.

Figure 1 Mozambique poverty headcount by district



Source: IMF (2016).

2.1 Political economy

25. Mozambique has seen one-party rule since the civil war ended in 1992, with parliamentary elections won by incumbents, the Mozambican Liberation Front (FRELIMO), in all six presidential general elections held since then. President Nyusi, who came to power in 2015, was reelected in October 2019 in an election which observers described as "not free, fair and transparent and [whose] results are not credible".³⁰ The final EU observer report noted severe irregularities, including ballot stuffing and police brutality towards opposition, Mozambican National Resistance (RENAMO) and Mozambican Democratic Movement, party

²⁵ GDP per capita in 2018 was USD 498, with just Somalia, Malawi, Niger, Burundi and the Central African Republic with less (World Bank, World Development Indicators, December 2019 version).

²⁶ In the period from 2014 to 2020, Mozambique's rank in the [Fund for Peace's Fragile State Index](#) went from 50th most fragile in the world up to 27th, reflecting high levels of poverty, weak public service provision, and growth in the number of refugees and internally displaced people linked to escalating conflict.

²⁷ The current conflict has been most severe in the far north in Cabo Delgado Province, where since 2017 an estimated 1,000 people have died and at least 100,000 have had to leave their homes. See [The Economist](#), April 2, 2020.

²⁸ World Bank World Development Indicators (WDI), December 2019 version.

²⁹ Following major discoveries of offshore natural gas in 2010, Mozambique became the second-largest destination of inward FDI in Sub-Saharan Africa. FDI inflows were the highest in the world as a share of GDP in 2013 at 43 percent.

³⁰ FRELIMO won 73 percent of the vote, up from 57 percent, in the October 2014 general election. CIP (2020).

agents.³¹ In major opposition areas, observers noted “an astonishing reversal of results” from 2018 municipal elections.³²

26. The President is head of state and all branches of the Executive. He appoints the Prime Minister, provincial governors, the Governor of the Central Bank, and other institutional figures such as the Attorney General, and the presidents of the Supreme Court, the Constitutional Council and the *Tribunal Administrativo* (auditor general).³³ The strong executive power base links to relatively weak provinces. FRELIMO historically has been a southern force,³⁴ while the opposition RENAMO draws from groups in the center of the country. The political disparity further exacerbates the economic divide between the south from the center and north of the country.³⁵

27. Around half of Mozambicans live in the 52 urban municipalities, which hold local elections and have a semblance of local democracy. The other half live in the 111 rural *districts*, which have no local democracy and are ruled directly by FRELIMO-appointed officials. The subnational bureaucracy provides tens of thousands of jobs and this is understood to be one of the main means of retaining legitimacy for the ruling party – that is, opportunities are distributed by the center to *clients* whose loyalty is secured by patronage (perks, rent, economic privileges).³⁶ This means that provincial and district appointments can be made on the basis of political affiliation and party loyalty, and not for merit-based reasons – as set out below, this is also thought to be true of school directors (head teachers).

28. Connected to this system of clientelism, Mozambique faces entrenched corruption, described as “endemic” across the government system. This political corruption has been characterized as both a quest for enrichment and a means to secure political power.³⁷ In the former category, between 2014 and 2016, major *secret loans* were uncovered, with loans worth around USD 2 billion found to have been taken by three government-owned companies without the knowledge of either the Mozambican Parliament or the donor community.³⁸ “Low-level” corruption is also said to be commonplace, including bribes and side-payments for access to many public services, public utilities, tax and customs officials, procurement contracts (including inflated public contracts), as well as in the police and judicial system.³⁹

29. In December 2018, the government announced that an investigation over two years had uncovered that 30,000 out of 348,000 civil servant workers were “ghost” workers – with a cost to the treasury of USD 250 million between 2015 and 2017.⁴⁰ It is unclear if any of these were teachers (see Section 3E).

³¹ “EU observers also noted... intentional invalidation of votes for the opposition, altering of polling station results... many cases of poll workers, civil servants, electors, and observers found with ballot papers outside of polling stations. Irregularities were observed in all provinces, and were made possible through the inaction or complicity of local electoral authorities.” (EU 2019).

³² <https://foreignpolicy.com/2020/03/07/mozambique-is-a-failed-state-the-west-isnt-helping-it/>

³³ Norwegian Institute of International Affairs (2017): “Formal checks on the executive remain in place with regard to justice, human rights and anti-corruption: the National Assembly appoints the Citizen Ombudsman (Provedor de Justiça), but it remains a weak institution with few real powers. Both the National Assembly and the Tribunal Administrativo (auditor general) can inspect the national accounts, and the Central office for the Combat against Corruption (GCCC) can theoretically hold government officials accountable, although immunity rules for politicians are impediments to accountability.”

³⁴ Though because of natural resource finds in the northern province of Cabo Delgado and the President coming from this area, the political geography has become more complicated in recent years.

³⁵ This has been reflected in some limited success for RENAMO at local elections in 2018, in which they won 8 out of 52 municipalities in the country, which were within central and northern provinces.

³⁶ Norwegian Institute of International Affairs (2017), Macamo (2006), and Pérez Niño and Le Billon (2016).

³⁷ Nuvunga and Asiak Orre (2019).

³⁸ This included borrowing by two state-owned enterprises, Proindicus and MAM, disclosed in April 2016, for about USD 1.4 billion. Borrowing of USD 850 million from a third state-owned enterprise, Ematum, was discovered at an earlier stage in 2014 (IMF 2019c).

³⁹ <https://www.ganintegrity.com/portal/country-profiles/mozambique/>

⁴⁰ BBC, December 11, 2018 “Mozambique busts ‘30,000 ghost workers’” - <https://www.bbc.co.uk/news/world-africa-46520946>

Growth and then suspension of GBS

30. Following the civil war, Mozambique's development has been highly reliant on foreign aid, with ODA at 87 percent of GNI in 1992, and just below 30 percent in 2001.⁴¹ From 2000, a "common framework agreement" existed with a joint donor program of General Budget Support (GBS). By 2005 this involved 17 development partners, including the World Bank, operating with loose conditionality around poverty reduction.⁴² Mozambique was at the time seen as both a "testing ground" for such new modalities, and as a donor "success story".⁴³ GBS continued to grow over the next decade, from USD 160 million in 2004, when the first memorandum of understanding for GBS was signed, to USD 273 million by 2015.⁴⁴ An evaluation of GBS for the period 2005 to 2012 found that it was "no longer exerting a significant influence on the overall effectiveness of aid", in part because the policy dialogue was not taking place at sectoral or thematic level. However, the evaluation did attribute significant improvements in the education sector over the period to GBS – "the expanded levels of provision could not have been financed in the absence of GBS."⁴⁵

31. Some donors had pulled out of GBS support in 2012, but the hidden loans scandal saw the suspension of GBS, and it remains suspended. The scandal alerted donors to major underlying corruption and governance issues.⁴⁶ The gap in the budget has been partially met by borrowing.⁴⁷

2.2 Education system performance and priorities

32. Within the context set out, Mozambique finds it challenging to deliver basic services. Despite large rises in initial enrolment at age six, outcomes have been poor in terms of retention in schools, progression to secondary level, and learning levels. There is persistent inequity between the north and south/central regions, and between urban and rural areas, and girls face particular challenges.

33. The education system has expanded access at a time of high population growth. This has increased the challenge and cost of delivering equitable and good-quality teaching and learning. The system nearly achieved full enrolment in the first cycle of primary education, but there is a significant inefficiency in the system, with high levels of drop out and repetition, and low completion of the full primary cycle. Many children are over age for their grade and it is estimated that around 15 percent of children of primary school age are out of school.⁴⁸ Secondary access has improved from a low base, but remains low, with a gross enrolment ratio (GER) of 41 percent in lower secondary level.⁴⁹ As set out in Section 3E, below, the data on which these statistics are based are also highly questionable.

34. There are many reasons for access and efficiency challenges in the sector. On the demand side, poverty is the main driver, associated with the costs of education, parental attitudes, and distance to school. Girls face challenges, including high levels of child marriage and early pregnancy, and the risk of abuse and school-related gender-based violence (GBV), along with a lack of reporting and referral mechanisms. Key factors on the supply side include the lack of and quality of infrastructure, more problematic in the center and north of the country. An estimated 9 percent of classes are held outdoors, and only around half of classrooms are constructed from brick

⁴¹ ODA was stable in absolute terms, at around USD 1 billion per year from 1992 to 2004, moving up to roughly USD 2 billion per year in the period 2008–14, but as a proportion of GNI it reduced from 20 percent in 2007 to 14 percent ten years later, in 2017.

⁴² Linked to Mozambique's PRSP (Batley et al., 2006).

⁴³ De Renzio and Hanlon (2007).

⁴⁴ [Press release](#) from the Irish Embassy, September 21, 2015.

⁴⁵ ITAD (2014).

⁴⁶ KfW (2017). A major implication of the loans scandal was a major depreciation of the metical. The metical lost more than half its value against the US dollar in the period from mid-2015 to late-2016. This had significant implications for the macroeconomy. The inflation rate increased from 3 percent in 2015 to 13 percent in 2017 (linked to the reliance on imports). World Bank, World Development Indicators (WDI).

⁴⁷ UNICEF (2017) and UNICEF (2018).

⁴⁸ World Bank (2020c).

⁴⁹ MINEDH (2019a).

or cement.⁵⁰ Further, nearly 40 percent of schools do not have adequate toilet facilities, and 30 percent lack access to water.⁵¹ The number of primary schools increased at around 2 percent per year from 2011 to 2018, and the number of classrooms at a rate of just 1.5 percent. This compares to growth in student numbers of 3 percent in that period. The ratio of students per classroom was close to 100 by 2018 as a result.

35. Owing to the shortage of both teachers and classrooms, schools operate on a shift system. Primary schools operate with two or three daytime shifts and an evening shift for older pupils and adults, while secondary schools have two daytime shifts and an evening shift. The first shift begins at 6:30 or 7:00am, depending on daylight hours and on whether the school has electricity. The shift system makes the students' day shorter than it would otherwise be, especially in urban areas, where shifts are common.⁵²

36. Connected major challenges include the number of teachers in the system, with high pupil teacher ratios (PTRs), particularly for lower primary level (this will be discussed much more later in the report, because it was a focus of RBF programming). In addition to all these challenges, the quality of service delivery has been found to be very low. A World Bank Service Delivery Indicator (SDI) report in 2014 had a big impact on how the government and its partners viewed sector priorities, revealing significant problems in the quality of education at school and classroom levels. The study showed that 45 percent of teachers were not in school during unannounced visits, and a further 11 percent were in school but not in the classroom when they were supposed to be teaching. The level of absence for school directors was similarly high. Teacher subject knowledge was also found to be very low in Portuguese language, mathematics and pedagogy.⁵³ Teacher absenteeism contributed to children receiving less than 2 hours teaching per day, over 50 percent less than the average of countries in the survey. A second SDI survey, which showed improved indicators, was conducted in 2018, although more severe problems remain in the north of the country, as shown in Table 4.

Table 4 Service-Delivery Indicator surveys for 2014 and 2018: summary

Indicator	SDI 2014	SDI 2018			
	Total	Total	South	Center	North
What providers know (ability)					
Math score (out of 100)	30.4	43.1	50.4	46.7	33.3
Portuguese score (out of 100)	32.3	40.9	41.7	44.5	35.4
What providers do (effort)					
Teacher absenteeism (%)	45.0	29.8	19.1	28.1	40.9
What students know (learning)					
Portuguese score (out of 100)	19.0	31.2	54.8	22.6	19.9
Math score (out of 100)	25.0	31.4	37.8	29.6	27.4
Total (out of 100)	21.0	31.3	46.3	26.1	23.7

Source: World Bank (2015a), and Bassi et al. (2019).

37. The SDI 2014 study, along with National Learning Assessments for Grade 3, introduced in 2013, indicated the level of the "learning crisis" in Mozambique and highlighted the need for a stronger focus on teacher management, and teacher training and preparation. A follow-up National Learning Assessment in 2016 indicated that only 5 percent of Grade 3 children developed basic reading and writing skills at the expected level, and the assessment indicated worse performance than in 2013.⁵⁴ Outcomes were again worse in the central and northern

⁵⁰ MINEDH (2019a).

⁵¹ UNESCO (2018).

⁵² Reinikka (2019).

⁵³ World Bank (2015a).

⁵⁴ MINEDH (2020a).

regions of the country, with only 2 percent of children in Grade 3 in Cabo Delgado and Manica provinces reading at the expected level, compared to 17 percent in Maputo City. The 2016 assessment introduced mathematics, and only 8 percent of Grade 3 children could demonstrate the problem-solving expected of them. The National Learning Assessment scheduled for 2019 did not get completed, limiting the ability to track more recent progress in learning outcomes.

38. In the context of these challenges, the Ministry of Education and Human Development (MINEDH) and development partners have sought to bring about change through a series of three Education Sector Strategic Plans since 1999, the most recent of which started in 2012 and ended in 2019. A new (fourth) plan has recently been approved for the period 2020–29.

39. Over this period, these Education Sector Strategic Plans, and three-year Operational Plans, have prioritized primary education and have focused on the overarching goals of increasing access while reducing gender and regional disparities, improving quality, and strengthening the administrative system at all levels. Within this framework, some of the priority reforms have been teacher recruitment and training, and school governance and management strategies, as well as school construction and the continued provision of textbooks and learning materials. A bilingual education strategy was launched in 2019, as an alternative to the current delivery through Portuguese as the sole language of instruction; however, bilingual education has limited reach to date and will require teachers who can deliver the curriculum in local languages.⁵⁵ School governance has focused on the provision of school grants (*Apoio Directo às Escolas*, ADE), along with enhanced involvement of school councils, and training for school directors and managers. Broader institutional and administrative capacity development has focused around changing roles under decentralization, particularly for district-level services (District Services for Education, Youth and Technology; SDEJTs), and their role in school financing and supervision. These areas will also be big areas of focus for this report, because they have been targeted by RBF programming as priorities.

40. These reforms took place in a context of longer-term governance challenges – patronage and corruption scandals, with school director appointments made on the basis of patronage rather than experience and competence; weak information on outcomes and expenditure at school level; lack of community mobilization and empowerment, and power relationships at local level not conducive to parental voice and action.⁵⁶

2.3 Education sector functions and coordination of external support

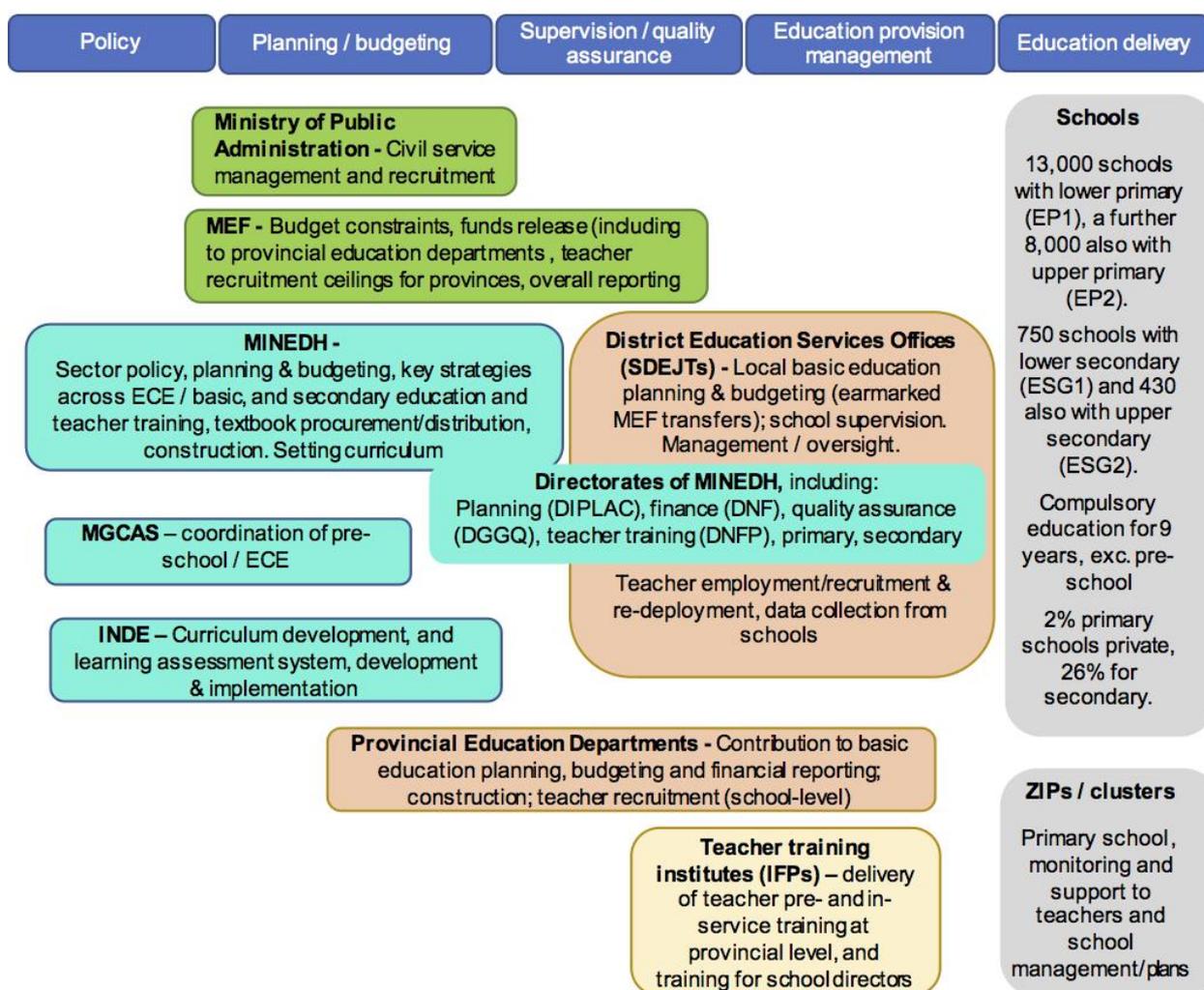
41. The education system sits within the broader structures of the government in Mozambique, with two lines of accountability from schools to the provincial administration, as well as to the central MINEDH. School directors are appointed through provincial administrations and report to the district administrator, who reports to the provincial governor, which is a political appointment. Provincial governments follow the sectoral organization of the center, so provincial directorates of education and human development (PDEs) implement and coordinate MINEDH operational plans. SDEJTs, play a key role through the supervision of schools, teacher recruitment and pay, and through school grants. Indeed, around 60 percent of the national budget for education is now spent at district level.⁵⁷ These accountability and technical relationships play a central role in a number of the reforms ongoing in the education sector, and on which RBF has been focused.

⁵⁵ Portuguese is the official language of the nation, but in 2007 only half of Mozambique's population spoke Portuguese as either their first or their second language, with 11 percent speaking Portuguese as their first language, mostly in coastal regions. There are 21 national languages. See http://www.catedraportugues.uem.mz/lib/docs/lusofonia_em_mocambique.pdf

⁵⁶ UNESCO (2018), Reinikka (2019), MINEDH (2020a), Norwegian Institute of International Affairs (2017).

⁵⁷ UNICEF (2017) and UNICEF (2018).

Figure 2 Mozambique education sector functions and key institutions



Source: Authors

42. The MINEDH leads the development of the strategic plans, with technical support from and dialogue with partners, including civil society organizations (CSOs). The Education Sector Strategic Plans are implemented under three-year Operational Plans and annual Plans of Activities (PdAs). The PdAs set out all government and external funds allocated to activities. A recent Global Partnership for Education (GPE) evaluation noted that Operational Plans have tended to be “developed in a top-down fashion and did not rely on provinces and districts for [their] elaboration, nor did [they] provide distinct policy prescriptions for different parts of the country.”⁵⁸ While the MINEDH sets policy and strategy, with targets for the sector, and communicates these to subnational levels, the accountability of school directors and district education directors to their district administrators and provincial directors may mean there is not a direct line of accountability at the sector level. This has been raised in different analyses,⁵⁹ and was mentioned during our research by a number of interviewees.

43. The Directorate for Teacher Training (DNFP) within the MINEDH takes the lead on planning the pre- and in-service training of teachers, delivered mainly through 24 public teacher training institutes (*Instituto de Formação de Professores*; IFPs) at provincial level (there are also 11 private teacher training institutes). Between 5,000 and 8,000 teachers are recruited annually, with ceilings set by central government and passed down to provinces and districts.

⁵⁸ Universalia (2019).

⁵⁹ World Bank (2017d).

44. Key monitoring functions include the work of the MINEDH's Directorate of Quality Assurance (DGGQ), which sets national standards, and guides the work of Districts and SDEJTs in school supervision. The National Institute for Education Development (INDE) sets the National Learning Assessment (introduced in 2013 for Grade 3 and conducted every three years) as well as overseeing any revision of the curriculum.

Sector finance

45. Education budgets are prepared on the basis of a five-year Medium-Term Fiscal Plan, directed by Sector and Operational Plan priorities, then on an annual basis as proposals within the government's Social and Economic Plan (PES). This annual budgeting process starts in July each year (led by the MINEDH's departments of planning and finance) and links closely to the PdA. The budget and PdA are discussed with partners in the Joint Coordinating Group (GCC, see below), through which process donors confirm their commitments. The education budget proposal, and PES, are negotiated with the Council of Ministers and the Ministry of Economy and Finance (MEF) and submitted to Parliament.⁶⁰ Once approved, the budget is registered in the e-Sistafe system, and resources should then be spent in line with the PdA.

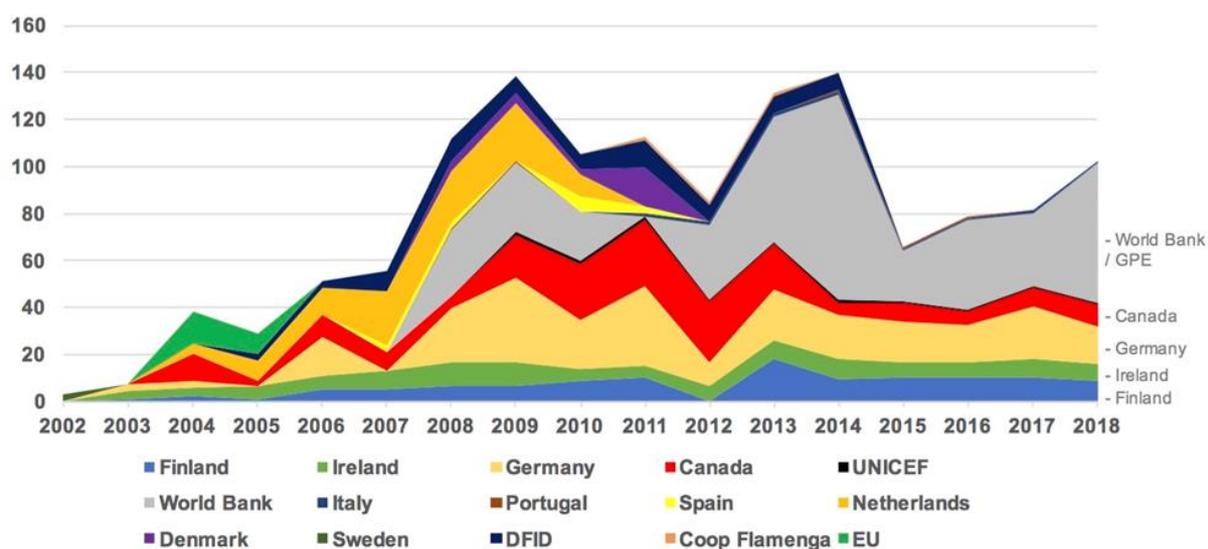
46. Spending in the sector is constrained, especially when over 90 percent of the government recurrent budget for the sector is allocated to salaries. As a proportion of GDP, education expenditure has remained close to 6 percent since 2012. Education also forms fairly consistently around 18 percent of the government budget. While these benchmarks are generally higher than average in terms of regional comparisons, as the country remains very poor, expenditure in absolute terms is still very low. In addition, with huge increases in the school population, expenditure per pupil in primary education in real terms was the same in 2018 as it had been in 2012.⁶¹

47. The majority of external funding to the education sector in Mozambique comes through the *Fundo de Apoio ao Sector de Educação* (Education Sector Support Fund; FASE), a "ring-fenced" multi-donor pooled-fund set up in 2003 to support the implementation of the sector plan, providing an average of USD 100 million per year. The FASE is centrally managed within MINEDH and funds are recorded on-budget, use government systems and procedures in execution and procurement, with resources remitted to the Single Treasury Account (*Conta Única do Tesouro* - CUT). Funds flow directly from the Treasury to provincial and district levels, and from there to schools – using the fiscal system e-Sistafe. While the fund uses national systems, it includes additional safeguards.

48. Since its inception, 16 donors have contributed to FASE, with the same nine donors supporting the sector since 2015. The largest contributing donors over this period have included the World Bank, GPE, Germany, Finland, and Canada. The GPE (initially via the EFA Fast Track Initiative) has been contributing since 2007, with funds managed by the World Bank along with its own IDA (International Development Association) funding; in 2018, World-Bank-managed funds, including the GPE contribution, constituted 59 percent of FASE inflows, see Figure 3.

⁶⁰ UNICEF (2018).

⁶¹ Analysis of data from MINEDH (2019).

Figure 3 Annual Sources of FASE Funds by Donor: 2002–18 (USD, millions)

Source: FASE financial statements and audit reports (KPMG 2015; EY 2016b; EY 2017b; EY 2018b; KPMG 2019).

49. FASE has ranged from up to 30 percent of total sector funding and now down to around 10 percent. It is the main source of funding for non-salary expenditure in the sector, and plays a crucial role in MINEDH's capacity to implement the sector strategy. FASE is used to fund a number of core expenditures, including school construction and maintenance, school grants, textbooks and learning materials, teacher training, and district/provincial services (including supervision). Funds put into FASE are fungible and can be used to support any expenditure in the MINEDH annual PdA; remaining balances for a given year automatically carry over to the following year. In its original memorandum of understanding, there was a clear intention that funds going into FASE should not be earmarked or conditional. However, gradually, some donors have tracked specific expenditures against their contributions ("virtual earmarking") which outline eligible expenditure items (used by the World Bank ESSP) and also introduced mechanisms such as variable tranche payments against outputs. There has been some debate about whether this is appropriate within the context of the fund (see Section 3C /Box 10).

50. Other external support, which is not channeled through the FASE, includes funding from bilateral donors and UN agencies. Germany, which finances its FASE contribution through its state development bank, KfW, has also provided parallel technical assistance; and the German development agency, GiZ, has provided technical support (in Sofala and Inhambane provinces), including through the development and implementation of POEMA,⁶² a comprehensive package of materials and training for decentralized education management. USAID provides significant levels of financing to education, with a strong focus on early grade reading,⁶³ training teachers and working with school directors. The projects are implemented through a number of partners, including CSOs.

51. UNICEF has focused on pre-primary education, in-service teacher training, girls' education (retention and addressing school-related GBV), and strengthening education management (central and subnational). National and international CSOs run education interventions and projects, including working with communities and parents on the right to education and school accountability. The main education platform representing national CSOs is the Education for All Movement, which includes national CSOs within its membership and acts as the main voice for civil society in policy dialogue and review forums. Some of the main partners include national organizations such as the *Centro de Aprendizagem e Capacitação da Sociedade Civil* (CESC; a civil society organization with strong research focus, and a strong focus on social accountability, through community score cards and local-level

⁶² POEMA (*Planificação, Orçamentação, Execução, Monitoria e Avaliação*) is a capacity-development program for public sector management across the country, which includes planning, budgeting, implementation, monitoring, and evaluation. GiZ implements POEMA training in two provinces, UNICEF in three, and the government in the remaining provinces.

⁶³ USAID has supported early grade reading for some years, including the *Aprender a Ler* initiative from 2012–16 (USD 24 million) and the current *Vamos Ler!* program from 2016 to 2021 (USD 76 million).

studies), (*Ajuda de Desenvolvimento de Povo para Povo*; ADPP – a well-established organization offering teacher training, among other services).

52. There is a well-established structure for policy dialogue, planning and coordination, between the central government (led by MINEDH) and its development partners. One focus of this is an education performance assessment framework and results framework, with indicators across the output and outcome results chains, and which is the basis for joint sector monitoring. This partnership is organized around some key meetings and processes:

- Sector and Thematic Working Groups: formed to address specific technical areas, including financing, human resources, construction, and primary education. Donor representatives and CSOs are active members of these and they can contribute to the process of formulating plans and annual performance review.
- The GCC (Joint Coordinating Group): a high-level strategic group meeting held monthly and chaired by the Permanent Secretary, which includes key MINEDH directors, the three members of the Donor Coordination Team (the *troika*), and three civil society representatives. The “Troika” is how donors coordinate their participation; members volunteer for a three-year term, rotating the chair annually, with a new member coming in each year. The chair also plays the role of GPE Coordinating Agency.
- Two Extended Joint Coordination Group meetings (GCC-Alargado), with all partners, including the Local Education Group (LEG) members, to review the current year’s progress, and develop the Social and Economic Plan, PdA, and State Budget for the upcoming year. These meetings take place towards the end of year, and play a key role in enabling partners to plan and communicate their support and annual commitments. The LEG has an operational/coordination and information-sharing function and involves a wide range of donors, and CSOs as well as the MINEDH.
- The Reunão Anual de Revisão (RAR; Annual Review Meeting) is held in March each year; an annual performance report is prepared ahead of the RAR, with inputs from Working Groups where appropriate. The RAR report (annual performance report) is the most substantial annual update on key results within the sector.

53. This dialogue and partnership structure, and its relationship with the RBF and broader accountability within the sector is addressed further in Section 3D below.

2.4 RBF in education

54. As part of the first phase of research, the team mapped the use of RBF in the sector, a more detailed write-up of which is available in the Phase 1 preliminary report.⁶⁴ A key finding from the first phase mapping was that RBF has been used by donors, but has not been taken up by government in the way it finances the sector. We note, however, that a pilot has been developed to introduce a performance-based component to school grants, which are funded by the donors through the FASE.

55. In alignment with the Ministry of Education’s (MINEDH) 2012 Education Sector Strategic Plan, three donors – the World Bank, Germany (KfW) and the GPE – have utilized forms of RBF to accelerate a select number of reforms. This was in part a reflection of perceived challenges to the efficiency and effectiveness of the resources donors were providing through FASE. Thus, during the period since 2014, there have been three main applications of RBF in the sector,⁶⁵ aiming to incentivize a subset of sector results:

⁶⁴ See Patch et al. (2020).

⁶⁵ Another use of RBF in the sector was under Education Sector Support Program (ESSP) Component 3, Supporting Community-Based Early Childhood Development. ESSP introduced a results-based model for contracting CSOs as third-party providers of early childhood development services. This support constituted a partial scale-up of the National Strategy for Early Childhood Development project

- The Public Finance Management for Results (PFM4R) program (2014–18) which has focused on improved, transparent and accountable school-based management.
- The introduction of variable tranche payments under GPE funding to the FASE to focus on improved teaching and teacher management. The GPE funding was included within the World-Bank-managed Education Sector Support Program (ESSP), which started in 2011 with five components, reduced to three components in 2015. The 2015 Additional Financing to the ESSP introduced the variable tranche including the use of DLIs for the 2015–17 period.
- In 2014, Germany (via KfW) introduced an element of RBF to its FASE contribution, in response to the slow implementation and poor quality of school construction, a technical area on which KfW had led since 2003. On top of its annual disbursement to FASE, two variable tranche payments were conditional on the implementation of plans for classroom construction. The approach was not seen as successful and has been discontinued.

56. This study focuses on the main RBF programs, the PFM4R and GPE/ESSP use of DLIs, and to a more limited extent the use of DLIs within FASE by KfW. Section 3A, below, gives more analysis of the design rationale of each program and approach. Table 5 sets out the key features of the programs.

Table 5 Design features of main RBF programs in education in Mozambique

Design feature	PFM4R	GPE	KfW
Governance	Multi-sector program. Program Coordination Team based in MEF (National Treasury Directorate; DNT), reporting to a high-level Program Management Committee. Teams in MINEDH and the Ministry of Health at Directorate level.	RBF as 30% of GPE contribution in 2015 Additional Financing. Managed by World Bank alongside the ESSP. GPE funds paid into FASE account, National Treasury. FASE controller within MINEDH finance department monitors or facilitates all FASE financial management. Activities planned under PdA process.	KfW contribution paid into FASE, with new variable tranches introduced to be paid against indicator performance. Use of FASE financial systems and annual planning review processes.
Indicators	- Proportion of complete primary schools that comply with defined standards for transparency and accountability - Proportion of complete primary schools receiving funds on or before February 28 of each year - Revised district-level budget classification by subsector, configured and applied - Proportion of complete primary schools visited for supervision by SDEJTs	- Number of teachers (Grade 1 and 2) with in-service training - Number of districts with a pupil-teacher ratio over 80 - Number of primary school directors having participated in training - The percentage of the trained school directors having their performance evaluated	- 800 classrooms completed in 2014 - Completion of pending construction-related studies - Hiring of technicians - 80 percent of works scheduled to conclude in 2015 are actually finalized; - PdA for 2016 includes the construction of at least 1,000 classrooms
Monitoring & verification	DLI independent validation/ verification by the <i>Tribunal Administrativo</i> (National Audit Institution) required by the World Bank prior to disbursement. Primary reporting on DLI performance from government information systems. World Bank “make the final decision on achievement of DLIs for the purposes of disbursement.”	Independent verification by private company – EY.	No independent verification, but use of national reporting and German-supported technical assistance (TA).

(DICIPE), focusing on 350 rural communities in five pilot provinces. Providers were contracted and paid on the basis of a results-based disbursement framework to deliver a basic service package.

Design feature	PFM4R	GPE	KfW
Value	USD 25 million (for education) [An additional USD 25 million was within the program and directed to the health sector.]	USD 17.4 million [This was introduced alongside a fixed tranche of USD 41 million.]	USD 16 million (€15 million) [This compared to total potential German disbursements in 2014–18 of USD 96 million.]
Financial incentives (for different levels)	Performance-based incentives intended at central, provincial, district and school levels. Payments against DLIs rolled over when missed.	Paid into FASE. No subnational incentives. However, FASE funds significant activities at provincial and district levels.	Paid into FASE. No specific departmental or subnational incentives. Payments against DLIs rolled over when missed.
Time schedule	2014–18 (formally to 2019, though activities ended in 2018)	2015–18	2014–16
Ancillary components	Program windows for coaches and facilitators and for other capacity development.	No specific GPE ancillary support, though FASE may fund associated TA and capacity-development.	KfW provided parallel TA to MINEDH department of construction.

57. These were all aid-financed RBF programs, with the GPE and KfW contributions managed as part of the FASE funding and governance arrangements, while PFM4R was a multi-sector program with its own governance in the MEF (the National Treasury Directorate, DNT), using the World Bank's Program for Results (PforR) instrument and run with its own program management structures, albeit within the structure of the government system and with government staff alongside specialist technical experts.

58. For GPE, this was an early application of what was then a new innovation in its funding model for country support. Since 2015, the GPE model has evolved and more guidance has been developed. The model was envisaged to include a *fixed tranche*, with the option for additional funding of 30 percent based on performance in a *variable tranche*, which would represent ambition for the sector and would contribute to improvements in equity, efficiency, and learning outcomes. The selection of indicators is elaborated further in Section 3A below; the indicators were largely drawn from the existing performance framework for the sector under the MINEDH's Education Sector Strategic Plan (2012–19) and were reviewed as part of the joint annual review meeting (RAR).

59. Performance-based payments (or performance-based allocations; PBAs) were envisaged within the PFM4R design, as part of the cascading use of RBF. As will be noted later in this report, the use of such PBAs was much more limited than envisaged. The context was not ready for use of performance payments at school level across the whole country. However, a pilot was set up – *ADE Desempenho* (or *ADE-D*; "performance-based ADE") under ESSP/FASE funding, to test different models in selected districts within three provinces (Gaza, Niassa, and Sofala). A rigorous evaluation was set up to test the model, although there have been problems with the evaluation design and data. It is understood that the model will be piloted further before considering national-level rollout (See Box 9 in Section 3C for more detail).

60. Independent verification is a key element in the design of RBF programs (discussed in detail in Section 3E below). The PFM4R program used the national audit institution – the *Tribunal Administrativo* – which provided both a financial audit of program expenditures, and independently validated the quality and accuracy of DLI reporting prior to disbursement through a performance audit methodology. According to the World Bank's design document, the *Tribunal Administrativo* "has an established track record of providing high-quality and timely financial audits for Bank operations."⁶⁶ The program completion report found that using the Tribunal had contributed to building national system capacity for this function.⁶⁷ For the GPE, however, the independent verification agent role was contracted out to a private firm – Ernst & Young (EY). For KfW, our research has had less access to program reporting, but it is understood that the work used established government reporting systems with technical assistance within MINEDH; however, there was no separate independent verification.

⁶⁶ World Bank (2014).

⁶⁷ World Bank (2019c).

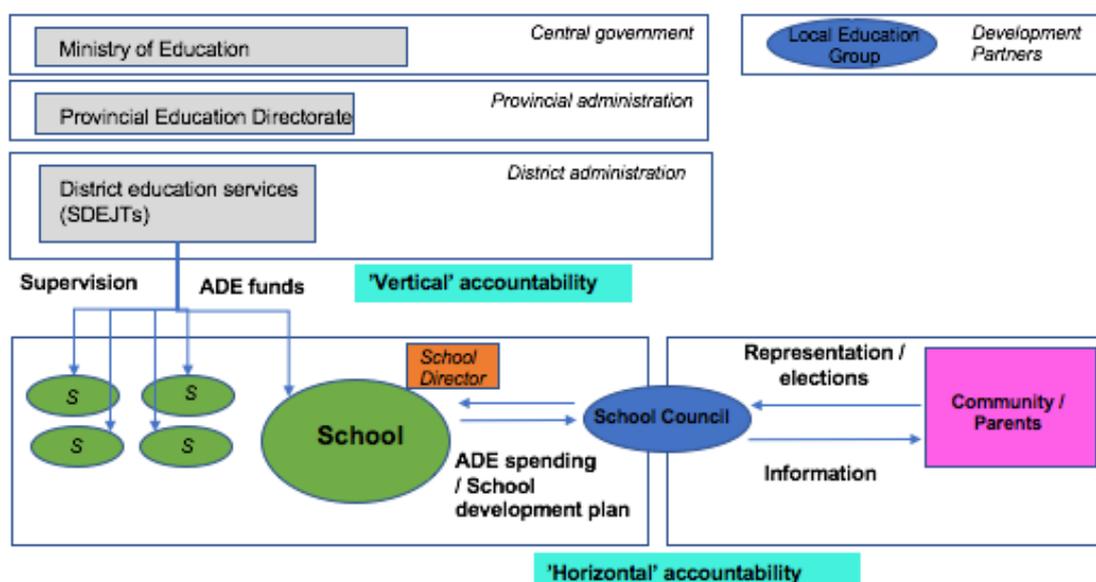
3. Findings

A. Design

61. As set out in Chapter 2, the education system in Mozambique faces major challenges in the quality of service delivery – low teacher attendance and knowledge, lack of capacity and low attendance of school directors, and low-level corruption, including with school resources. There are also potentially issues with “ghost” teachers on the payroll (see Section 3E). The system is short on both teachers and classrooms, and many schools are classified as being in a “precarious” condition, with some of them holding classes outdoors. These challenges mean students receive few instructional hours in the classroom, with a poor quality of education even when both student and teacher are present, leading to very low learning outcomes and 42 percent of children not completing primary schooling.⁶⁸ Many of these issues are not unique to Mozambique but have been found to be more severe here than elsewhere, especially in the north and center of the country, with slightly better performance in the more prosperous south.

62. The Ministry of Education (MINEDH), since the 2012 Education Sector Strategic Plan, had some notable and clear objectives for reform, building on initiatives that had dated back several years. School accountability was foremost among these, with low teacher attendance contributing to low student attendance and learning, and an overarching “inertia” needing to be broken – “through good local governance, it is intended to ensure everyone’s involvement and responsibility for quality education.”⁶⁹ Accountability reforms were both “vertical”, in the form of monitoring, supervision, and support from district officials to schools; and “horizontal”, through parent and local community involvement in school councils. The district and school council functions had been in place for some time, playing a role in monitoring standards, holding teachers and school directors to account, and safeguarding children from violence.⁷⁰ However, it was recognized that this system did not function well, and reforms sought to strengthen both lines of accountability. This approach is illustrated in Figure 4.

Figure 4 Strategy for School Accountability within Mozambique



63. In this context, the World Bank introduced RBF through its PforR lending instrument, to encourage and support changes in the functioning of these accountability systems. Mozambique was undertaking increasing fiscal decentralization at the same time, with more resources transferred to district level. With low capacity, the

⁶⁸ UNESCO (2018).

⁶⁹ MINEDH (2015).

⁷⁰ In particular gender-based violence (GBV) at upper primary and secondary levels, which has long been a major issue in Mozambique.

reforms faced a number of challenges in public financial management (PFM). During 2013, this led to the design of the first World Bank RBF initiative, which was the development of the PFM for Results Program (PFM4R) in the health and education sectors.

The development of the PFM program by the World Bank – the PFM4R

64. The World Bank's PFM4R program was designed to align with and focus on the horizontal and vertical accountability reforms while strengthening PFM in the education sector. From 2009, the government had a new 10-year "PFM Vision" following on from a period in which the e-Sistafe financial and accounting system was rolled out.⁷¹ A total of 19 donors, including the World Bank, had provided USD 157 million over the five-year period 2010–14 in coordinated support to PFM reforms and capacity development. However, this support did not focus on the implementation of PFM reforms in sectors, provinces, and districts. The World Bank developed the PFM4R out of extensive diagnosis within the larger PFM program, and worked with the MEF to propose the new program focused on addressing PFM weaknesses in service-delivery processes. This led to a search for sectors to work with, and a significant opportunity for the MINEDH and education sector to bring additional focus and resources to tackle system bottlenecks with targeted reforms.⁷²

65. The USD 50 million PFM4R program allocated (approximately) USD 25 million of funds to the education sector (and the other half to the health sector). This funding was outside of the ring-fenced sector support fund (FASE) and the World Bank's main International Development Association (IDA) loan to the sector. This was therefore an additional allocation to the sector – although the objectives were closely linked to the activities that the World Bank and other development partners fund through FASE.

66. The program recognized the need to support the delegation of financial authority to district education services (SDEJTs), starting with the upgrading of their accounting status as budget management units (*Unidades Gestoras Beneficiárias*; UGBs) with associated transparency in budget management/classification (DLI 8).⁷³ Work for this DLI was already underway – the 2012 Sector Plan had noted "currently, the SDEJTs are not yet UGBs, which makes the budgeting and planning process, as well as its management, difficult. Since expenditure in education absorbs a large part of the district's budget, a solution to this problem is expected to be found as from 2013."⁷⁴ The DLI then targeted clearer reporting of expenditure as a result of this change. Previously, resources had passed through the district administration to the SDEJT, and it was not possible to track financing.

67. SDEJTs had a key role in the effective transmission and use of school resources, particularly school grants – known as "Direct support to schools" (*Apoio Directo às Escolas*; ADE). The timeliness of these payments, which were rarely disbursed to schools before the start of the school year, formed the second DLI (DLI 7).⁷⁵ ADE was initially set up by the World Bank in 2003, and was embedded in the system of sector support to primary schools in 2006, and then secondary schools in 2008.⁷⁶ It is transferred from the National Treasury to districts, then on

⁷¹ The e-Sistafe refers to a broad package of PFM systems – the electronic government accounting/financial management information system, the treasury single account, and budget formulation and execution modules, as well as key institutional aspects such as the SISTAFE law's regulation. Use of the e-Sistafe for centralized execution of line ministries' expenditure at the level of the MEF was rolled out on a pilot basis to three ministries, including education, in 2005, and to 22 line ministries in 2006.

⁷² The PFM4R (2014–18) covered both the health and the education sectors; as set out in Chapter 2, these were selected from four sectors that the World Bank was *shortlisting* for the program, which aimed to address and unlock PFM bottlenecks for service delivery; from the MEF down to the Ministry of Education/Health and to subnational levels. Five out of nine DLIs focused on the health sector and the other four on education.

⁷³ "This will allow the presentation of the sector budget at the district level by sector program, using the functional classifier, thus contributing to greater transparency in the allocation of funds. At the same time, it allows for increased direct control by SDEJTs over their budget, facilitating their execution." MINEDH (2016).

⁷⁴ "UGBs have financial authority to execute government budget and draw/or request payment to contractors from treasury in accordance with government rules and procedures. Institutions without UGB status are dependent on other UGBs for their financial operations" World Bank (2013).

⁷⁵ ADE is the only resource schools receive from government for purchasing the likes of pens, pencils, and notebooks for students, undertaking basic maintenance, providing latrines, and carrying out other functions – with decisions on spending made at school level.

⁷⁶ This followed the abolition of school fees, and provided in their place the basic resources for schools to function.

to schools, and funded by donor contributions to the sector via FASE. The World Bank's 2016 Public Expenditure Review concluded that the ADE grant was critical to the functioning of schools, but that the amount provided was too low to cover their basic needs,⁷⁷ and where they could afford to, communities often supplemented it with contributions. The late disbursement was also found to be driven by delays in the budgetary transmission from the National Treasury/MEF. The DLI was therefore framed to ensure that the "first tranche" of ADE transfers should be received by February 28, at the start of each school year. There is a "second tranche" of ADE due for schools in the second half of the year – the timeliness of this was not incentivized by the DLI in the PFM4R.

68. School councils were meant to play a role in deciding how ADE should be spent, as well as checking that resources were correctly spent – further, in theory, the second tranche of ADE was only disbursed if adequate reporting on the first tranche expenditure had been done. It was recognized that school councils' capacity for this role was very weak and that school directors might not actively involve them. A DLI was put in place to address these concerns (DLI 3) – with the appraisal noting "although the criteria for election and composition of school councils encourage participation by parents and local communities, there is little evidence that school councils are effectively engaged in managing school-level activities."⁷⁸ This aligned to the 2012 Education Sector Strategic Plan, which noted: "school councils should be empowered in order to take responsibility for formulating the schools' development plans and for applying and being held accountable for the resources made available to the sector. They should also be accountable for the schools' performance, in terms of the children's learning, and guarantee that schools are healthy and safe places, free from abuse and violence."⁷⁹ Practical conditions were then defined in an MINEDH manual for a "functioning" school council; for example, holding elections, "displaying" the amount of ADE received, and contributing to the school development plan. A quantitative target for the proportion of primary schools meeting these conditions was set.

69. Finally, the PFM4R recognized the need to improve the structure of supervision of and support for schools (DLI 9). Monitoring and supervision of schools had for many years been the responsibility of education officers at province and district level, with monitoring funds provided via FASE. The system had been described in the past as "ad hoc" and central MINEDH officials also conducted school monitoring visits as part of their work. The 2012 Education Sector Strategic Plan set out a vision for "more professional management, aimed at achieving better results", which would require "motivated and competent human resources" and "existence of quality standards and stricter compliance in their application". Strategic priorities included harmonized planning, budgeting, execution, and monitoring and evaluation processes and instruments. Further, the Strategic Plan set out the need for "developing the human resource capacity, including more rigor in its management, more realistic planning in terms of targets to be achieved, and supervision directed at the dynamics of classroom pedagogy."

70. As such, these reforms were also seen as vital to address PFM in the sector. As Box 2 sets out, the design focus was very tightly aligned with the horizontal and vertical accountability reforms set out within the 2012 Education Sector Strategic Plan, and we found strong ownership of the MINEDH in this process, particularly in the selection of the DLIs.

⁷⁷ The value of ADE is linked to the number of children at school, as measured by EMIS, and valued at roughly USD 2.50 per student in 2011 up to USD 3.50 by 2015 (World Bank 2015).

⁷⁸ World Bank (2014).

⁷⁹ MINEDH (2012).

Box 2 Strong ownership of the MINEDH for the PFM4R Indicators of Change (DLIs)

The PFM4R program was developed in the 2011–13 period by the World Bank with the Program Appraisal Document (PAD) and Financing Agreement finalized in 2014. The design process involved consultations at different levels, working with MINEDH and the MEF to identify problems and see how they could be addressed through DLIs. These sought to address bottlenecks to the financing and accountability of schools, with the overall program outcome presented as more transparent and accountable management of complete primary schools.¹ The intermediate outcome for this change was the collaboration of the MEF, MINEDH and provinces and districts to achieve PFM changes, with the same theory of change (ToC) set out for the health sector.

The MINEDH leadership at the time, as set out in interviews with us, had very clear intentions of the PFM4R reforms instituted and took strong ownership of them; this ensured the program goals aligned with MINEDH strategy. This view was also the consensus of World Bank representatives. The selection of DLIs involved negotiation between senior management within the MINEDH, the MEF, and the World Bank. There was a consensus that it was important to set indicators which were manageable and achievable, some of which focused on changes needing MEF engagement (for example, around fund flows). The World Bank recognized the importance of this process of “joint identification” of DLIs to build ownership and buy-in to the approach, recognizing also that the sector is highly aid-dependent and that there would be a risk in selecting overly ambitious indicators. The picture that emerges is one of the MINEDH managing to select indicators it felt were relevant in terms of their priorities, and feasible in terms of the control they would have over their achievement.

¹ DLIs 3, 7 and 9 all related specifically to complete primary schools (EPCs; *Escolas Primárias Completas*), which at the point of design of PFM4R (2013) referred to 4,068 primary schools with classes up to Grade 7, out of a total of 11,164 primary schools. This implies just over 60 percent of the primary school population. The decision to focus on complete schools was based on the assumption that they would have more capacity for the requirements of school-based management. At design, it was recognized that this represents less than half of all primary schools, and while they are distributed across all provinces, they are more concentrated near to urban areas. It was envisaged that this approach could extend to all schools if successful (World Bank, 2014).²

GPE DLIs in additional financing

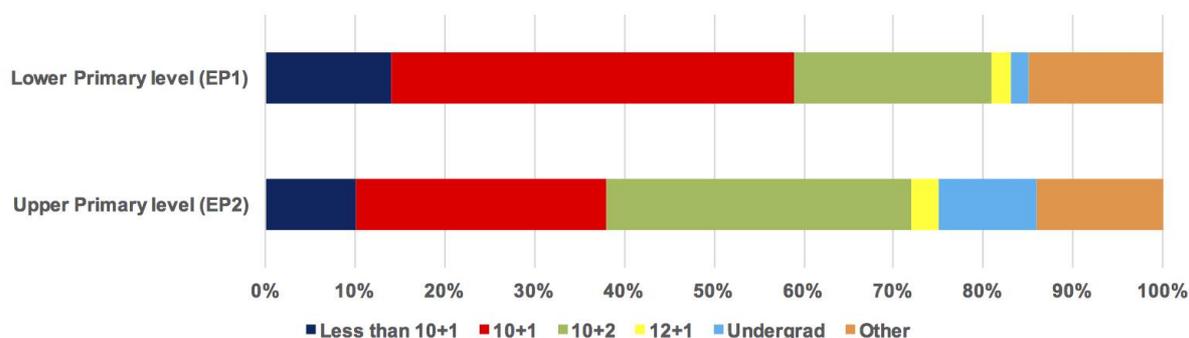
71. In 2015, the GPE finalized its additional financing to the sector. The GPE support sat within a broader theory of change based on the development of a robust sector plan and support to its implementation. In this context, this involved inclusion within the World Bank’s Education Sector Support Program (ESSP) with USD 57.9 million from GPE programmed alongside USD 50 million of IDA loans from the World Bank. Globally, the GPE was introducing RBF to increase the focus on results, under its “70 percent *fixed*, 30 percent *variable* model”. Guidance has evolved since the design of the ESSP additional financing, but the core idea of using DLIs under variable tranche funding from the GPE’s perspective is to bring a focus on transformational change, with indicators representing “stretch”, and a focus on the three global priorities of equity, efficiency, and learning.

72. The MINEDH took a similar approach to the PFM4R when negotiating DLIs for the GPE financing. This meant aligning with other key policy priorities from the 2012 Sector Plan. The development of the 2015–18 Operational Plan provided further detail on this work, and was produced in part as a requirement to receive the GPE financing. The GPE indicators focused more directly on the quality of teaching in schools, via teacher training, training of school directors, and the pupil-teacher ratio as DLIs. The DLI selection is reported to have involved negotiations between MINEDH, World Bank, and GPE, with consultation of the Local Education Group (LEG). The recent GPE evaluation found that some donors felt the consultation had not been fully transparent or could have involved the LEG more actively.⁸⁰ Interviews under our research suggest that the MINEDH negotiations with GPE were not easy, and that the World Bank played a facilitative role in this. There seems to be some consensus that the GPE saw the DLIs as not representing sufficient “*stretch*”, and that in future it may expect more ambitious indicators for the variable tranche component. Nonetheless, there was MINEDH ownership of the DLIs, and this was seen as important, not least for this first use of the RBF mechanism within GPE funding to Mozambique.

⁸⁰ Universalia (2019).

73. The focus on in-service teacher training was in part a recognition of the lack of skills of teachers in the system even following their pre-service training. Pre-service teacher training had seen a number of changes since 2000, including increasing the entry requirements to the teaching profession to a 10+1 model (that is, completing 10 years of school with 1 year of teacher training) in 2007. This was credited with increasing the number of new teachers with training. Subsequent reforms to extend the entry requirements and years of training (to 12+3) are still being piloted. As changes can only gradually feed into the workforce – with an average of between 5,000 and 8,000 teachers entering the profession each year in the 2014–18 period – the bulk of existing primary teachers have had little pre-service education and training – see Figure 5.

Figure 5 Primary school teachers by level of education they have received (2016)



Source: MINEDH (2019a)

74. A new strategy for in-service teacher training was put in place and approved in 2016. The strategy built on previous initiatives⁸¹ with a *cascade* model. Selected teachers or coordinators from the cluster (*Zona de Influência Pedagógica; ZIP*) level⁸² would be trained at teacher training institutes (*Instituto de Formação de Professores; IFPs*). Those trained at IFPs would roll out training at the ZIP level to other teachers (ZIP clusters constitute around five schools, and so are seen as a manageable scale grouping for this cascade model). Teachers who receive training at the ZIP level are then expected to cascade the training to their colleagues in peer training in each school. The strategy has focused on the teaching of reading, speaking, writing, and basic mathematics, and uses the “lesson study” approach – working together to identify challenges, planning and observing lessons, and reflecting on the application of strategies.

75. The GPE DLI specifically focuses on in-service training for teachers in the first cycle of primary school, consistent with the priority being given to the early grades. The DLI simply targeted the number of teachers to be trained (GPE DLI 1), although notably the original 2015–18 Operational Plan included wording of the indicator that would measure the extent to which teachers applied their training. In fact, our document review reveals a lack of clarity in the wording of this indicator. The verification reports at various points use the Operational Plan wording (focused on application of training) as well as the final formulation (focused on numbers trained). In addition, it is not clear whether the target of numbers trained refers to those trained at the *top of the cascade* (at IFP level), or *below* (at ZIP and then school level). These issues are covered further in Sections 3B and 3D below. Despite these issues, the intention of the indicator was to give some momentum to the implementation of this new strategy and to enhance the role of IFPs in delivering in-service training.

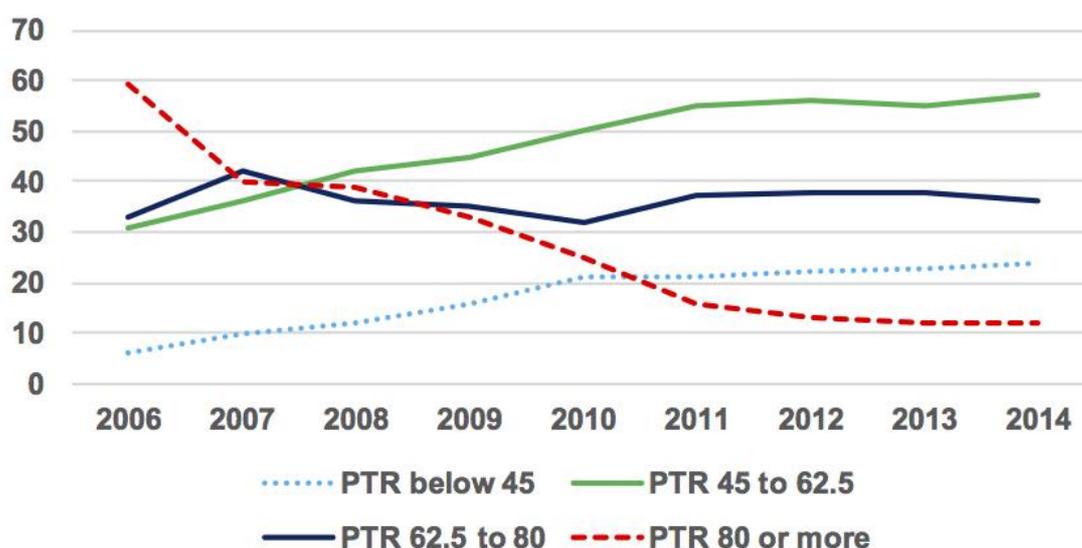
⁸¹ World Bank (2011) stated “Since 2008, the IFPs have conducted continuous training activities for primary school teachers and managers, led by the IFPs trainers, and this program benefited greatly from an increase in FASE funding in 2008.” Models for training included the CRESCER model from 2005 – *Cursos de Reforço Escolar: Sistemáticos, Contínuos, Experimentais e Reflexivos*. This was replaced by the Programa de Desenvolvimento Profissional e Contínuo dos Professores (PDP/CP).

⁸² Zonas de Influência Pedagógica, known as school clusters in other countries. A cluster of three to six schools, providing pedagogical support to or between teachers.

76. The GPE additional financing also focused on a more systemic issue of school management, through the training of school directors.⁸³ The World Bank’s SDI study in 2014 found that directors were often absent, and this was highly correlated with teacher absenteeism, or teachers being present in the school but not teaching in the classroom. It is widely acknowledged that school directors are politically connected appointees, reporting to district administrators, who in turn report to provincial governors. This makes it unlikely for them to be fired or otherwise held accountable. This is noted by many stakeholders as a “*perennial*” problem, and has not been seen as feasible for development partners or even the MINEDH to address.⁸⁴ While training of school directors would not address these fundamental institutional issues, it was seen as being within MINEDH control and a way to improve their performance in the job.

77. School directors had been trained in previous sector plan periods. However, harnessing the IFPs in training school directors and other managers with a new course was viewed as an initiative to improve matters. A course was developed by the National Institute for Education Development (INDE) and “piloted to success in 2014”.⁸⁵ The World Bank and GPE’s contribution to FASE would help to fund the activities, which would be carried out by the IFPs. The GPE therefore included an indicator on the number to be trained, for “strengthening the role of directors as school managers and providers of pedagogical support.” In addition, a separate indicator was developed for the evaluation of directors trained, where “specific attention would be paid to the performance evaluation of the trained directors, the year after they have benefited from the training program. This performance evaluation is considered an important tool to motivate behavior change amongst school directors.”⁸⁶ Thus, the two indicators were focused on the quantity (GPE DLI 3), and the quality of school director training (GPE DLI 4). The latter evaluation indicator also aimed to improve the accountability of school directors.⁸⁷

Figure 6 Number of districts by PTR, lower primary: 2006–14



Source: MINEDH (2015)

78. The final indicator for the GPE variable tranche was the pupil-teacher ratio (PTR), with a measure aimed at reducing disparities by reducing the number of districts with a PTR at lower primary (EP1) level of above 80 (GPE DLI 2). This was a recognition of inequality in PTRs despite improvements in the overall average PTR in the

⁸³ School director is the term used for head teacher or school principal.

⁸⁴ Although the new 2020 education strategy may seek to do so.

⁸⁵ World Bank (2015b).

⁸⁶ World Bank (2015b).

⁸⁷ 2015 PAD states: “Specific attention would be paid to the performance evaluation of the trained directors, the year after they have benefitted from the training program. This performance evaluation is considered an important tool to motivate behavior change amongst school directors. Performance will be measured in terms of efficiency and effectiveness of school management to improve assiduity and learning.”

previous few years - as shown in Figure 6 this situation improved since 2006 but progress stagnated from 2011 to 2014. Compared to others, the DLI included very little detail on a theory of change for its achievement, as set out in more detail in Box 3.

Box 3 The pupil-teacher ratio at design stage

The PTR has been a key education sector indicator over a number of years. While the upper primary (EP2) ratio has remained steady and is below 40, the lower primary (EP1) ratio increased from below 60 in 1992 to 70 in 2002, and then soared to 76 in 2006 following the abolition of school fees and the push towards universal primary education. The average PTR for lower primary then began to fall, reaching 64 in 2011. A period in which the number of new teachers out-paced new enrolment, an investment possible in part because of General Budget Support (GBS).¹ However, from 2011, the PTR for lower primary plateaued.

The PTR faces significant inequality between and within provinces, highlighting inequities in teacher distribution; the PTR in Nampula in 2012 was 72, while it was 49 in Gaza Province. The higher PTRs in the northern provinces combined with intra-provincial inequality mean a number of districts have had very high PTRs, some above 80 and some above 100 for lower primary level. The threshold of a PTR of 80 for districts was chosen as the DLI for PTRs, with a baseline understood to be 12 districts set out in the 2015 Operational Plan and in the World Bank appraisal document, and a target to reduce this to eight districts in 2016 and then two districts in 2017.¹ However, as set out in Section 3C below, the baseline reported in the 2015 Operational Plan had not taken into account the 2013 district reorganization, in which the total number of districts increased. A revised baseline should have been considered as either 17 (in 2013 and 2015) or 16 districts (in 2014), with implications for the results.

Despite the specificity of the indicator, there was no clear theory of change (ToC) linked to this intermediate outcome indicator in the World Bank appraisal document. The most substantiated ToC was within the 2015 Operational Plan, which set out: *“Bearing in mind that the allocation of new teachers to the districts is the responsibility of the provincial governments and that hiring and placing teachers in schools is the responsibility of district governments, these aspects will be prioritized in the training of PDEs [provincial education departments] and SDEJTs [Districts]. At the central level, in negotiations with the Ministry of Economy and Finance, account should be taken of disparities intra-provincial levels in terms of teacher availability in determining and negotiating the goals of hiring teachers.”*

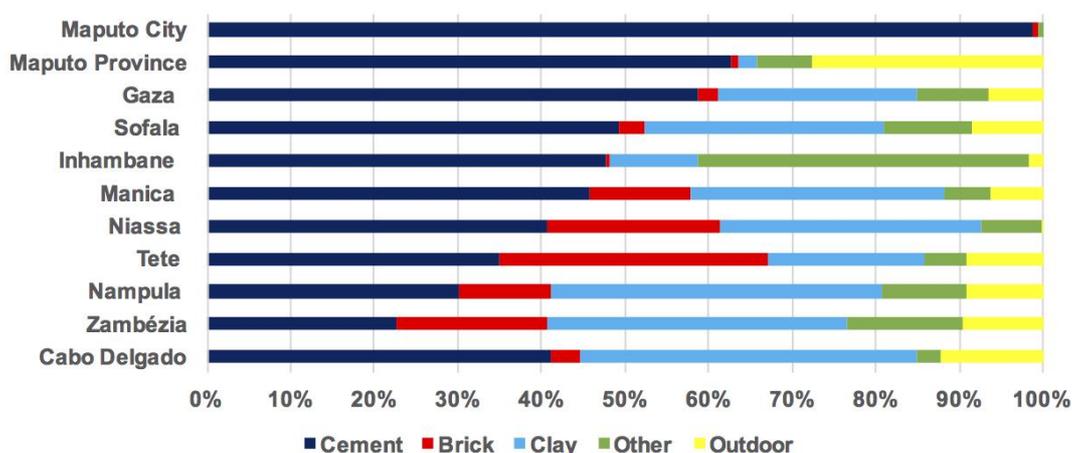
¹ Lawson et al. (2014). ² World Bank (2015b).

The German use of RBF in construction

79. Construction of schools and classrooms has been funded primarily by donors since the civil war, and still is to this day. In the period between 2004 and 2014, significantly fewer classrooms were created in the course of FASE than planned. Just over 7,500 classrooms were built, compared with the 60,000 planned.⁸⁸ Classrooms continue to be in a major deficit. As shown in Figure 7, in provinces in the center and north of the country, there are proportionately fewer cement or brick classrooms, while up to 9 percent of classrooms are classified as outdoor. Slow progress has been put down to a range of challenges, including natural disasters; however, it is also understood to be caused by inadequate capacity. Germany (KfW) had traditionally supported this area of spending and “for several years, [KfW] had flagged the issues that (i) classroom construction had remained significantly below targets and that (ii) many quality issues were identified... Confronted with the lack of progress in the area, Germany turned to the instrument of a performance tranche to exert pressure. In parallel, it provided bilateral finance for a management consultancy to the school construction unit, which, at that time, was under the responsibility of DIPLAC.”⁸⁹ The German use of RBF in construction was therefore introduced for targets in 2013, with a €5 million (USD 6 million) allocation due to be paid in 2014, and a €10 million (USD 11 million) allocation for 2016 to be paid in 2017. In total this amounted to 12 percent of Germany’s total potential allocation to FASE and the education sector in the 2014–18 period.

⁸⁸ KfW (2017).

⁸⁹ Orłowski (2016).

Figure 7 Classrooms by classification of material: 2018

Source: MINEDH (2019a)

80. Germany (KfW) appear to have used a range of indicators for the two years, without a clear formula for scaling payment or for delineating how many indicators would need to be met. On the contrary, “the decision about whether or not to disburse was discretionary on the basis of the overall progress rather than on each indicator.”⁹⁰ As set out in Section 3C, this has made tracking progress for this RBF somewhat difficult.

Summary of DLIs

81. Across the programs, DLIs were mostly chosen at process or output levels, identifying specific bottlenecks that could contribute to the delivery of planned reforms for improved accountability and quality. Some stakeholders have indicated that these processes and outputs represented significant changes at the time. The DLI that was “furthest” along the results chain was the GPE DLI for the PTR – which can be classified as an intermediate outcome indicator. Other indicators stopped short of intermediate change; for instance, focusing on quantity of supervision visits undertaken, not the quality of supervision; or number of teachers receiving in-service training, not a measure of the quality of the training. This then means further assumptions are needed for outputs to contribute to outcomes. Improving teacher attendance was a clear goal of the reforms, and this could be characterized as an implicit intermediate outcome of the programming, though it was not used as a DLI.

82. Apart from the DLI on district-level PTRs, it is hard to say that the DLIs represented a significant “stretch”, to use the current GPE terminology – one respondent with experience on the PFM4R program characterized the program’s DLIs as “low-hanging fruit”. But as set out in the next section on Results (Section 3C), the DLIs were all selected with broader goals in mind. The PFM4R pre-appraisal expected better school management to lead to better performance against “many key outcomes, including textbook availability, infrastructure maintenance, student and teacher attendance, enrolment and retention, and eventually learning outcomes.”⁹¹ The GPE indicators were part of a set of measures that were “crucial to the improvement of learning outcomes”.⁹² With the World Bank as grant agent, the two parts of RBF were also presented as complementary in addressing system bottlenecks. While much less has been written on it, the German use of RBF on construction expenditure within FASE also aimed to address systemic bottlenecks in the completion of school classroom construction, which would be crucial to addressing problems of access and equity in provision and to improving learning environments.

⁹⁰ Orłowski (2016).

⁹¹ World Bank (2014).

⁹² World Bank (2015b).

Other important components of RBF programming

83. The PFM4R was the first application in Mozambique of the World Bank's PforR instrument. For the World Bank, "the PforR shifts the focus of World Bank engagement from transactions to systems improvement and shifts risks from the Bank to the client." The program combined the financial incentives of RBF with significant technical support, including a Program Coordination Team, coordinators within each ministry and facilitators at province level, as well as a coaching window, and a capacity-development window. The Coaching Window provided paid positions within the Ministry to support the change processes, while the Capacity-Development Window provided a call-down fund for other support. We were told that these roles were not considered to be "traditional TA" but rather were more intensive "change management" roles, focused to a large extent on bringing different stakeholders together to solve problems.

84. The PFM4R design also adopted the explicit intention to target incentives, noting that "the flexibility of the PforR instrument allows the government to develop its own schedule of performance-based allocations (PBAs) and capacity development. The government can adapt the mix of PBAs and capacity development as implementation experience evolves. This increased government ownership and ability to manage resources is key to the focus on accountability embedded in the PforR approach."⁹³ The PFM4R planned to use performance-based allocations (PBAs) paid to the education budget through the treasury system, against achievement of DLIs. This aimed to incentivize key actors at each level of the system, from central MINEDH departments, down to provincial and district teams, as well as schools themselves. This is touched on in Sections 3B, 3C, and 3D below, but it is clear that PBAs were not used in the way or with the amount of funds anticipated in the design of the program.

85. The PFM4R pre-appraisal set out that its design "puts in place mechanisms to facilitate this alignment and for consensus building across ministries."⁹⁴ Overall, the PFM4R can be seen as a hybrid RBF design, in that financial incentives are supplemented by the above range of supportive elements to the sectors, line ministries, and down to provinces and districts – that is, elements that could be utilized in a non-RBF-project-based modality.

86. In the case of GPE/ESSP, there was less of a direct approach to the provision of technical assistance and capacity development, and no targeted financial incentives to subnational levels. The interventions themselves were funded through FASE, and DLIs would be achieved through the implementation of activities planned and funded under the annual PdAs. The GPE variable tranche funding therefore can be viewed as sitting together with support coming in the form of policy dialogue, financing, technical support, and monitoring.

87. The German (KfW) use of variable tranche for construction was linked to its established bilateral support for technical assistance, mainly to the MINEDH's construction department. The new support alongside RBF included bilateral finance for external consultants to support the school construction unit. No subnational incentives were used for this instance of RBF.

⁹³ World Bank (2014).

⁹⁴ The World Bank's PFM4R appraisal (PAD) also mentioned two small pilots carried out prior to the program, which generated some key lessons: (1) the active cooperation of MEF directorates (not just the PFM reform unit) and sector ministries is critical to the identification and resolution of PFM bottlenecks to service delivery in sectors; (2) it was important to have flexible sources of funding in order to undertake diagnostics, mobilize technical assistance and build consensus among diverse sets of government officials on solutions; (3) supportive follow-up was critical to helping managers address emerging implementation challenges and adapt as needed; and (4) rewarding performance for solving PFM problems could be a powerful way to align incentives across government (World Bank, 2014).

B. Results and impact

88. This section looks at the reported results of RBF programming in Mozambique, whether the underlying goals were achieved, whether the RBF incentives contributed to the changes, and whether this ultimately led to improved education outcomes for students.⁹⁵ As with other sections, this is based on a combination of qualitative and quantitative analysis, the latter in more depth for the GPE DLI on PTRs (see Annex 4).

DLI achievements – summary of the reported results of RBF

89. Out of the eight DLIs across the PFM4R and GPE programs, all but one were achieved in the 2014–18 period, although some faced delays. A recent completion report for the PFM4R program rated the efficacy of the program as “substantial”, where “the Program recorded noteworthy achievements that... included increased funds flow to primary schools through districts and school grants, enhanced supervision, greater involvement of parents and communities in the management of schools... through school councils, and the establishment of a more transparent participatory resource management at the school level.”⁹⁶ This was reflected in all DLIs being considered achieved with all disbursements made. GPE indicators were achieved, with the exception of the number of districts with a PTR below 80, and the 2014 target for the German RBF in construction was also not reached. Details are provided in Table 6, with more complete detail in Annex 5.

Table 6 Summary of performance on DLIs in Pfm4R and GPE DLIs

Indicator	Value	Target	Achievement or disbursement
PFM4R: March 2014 – March 2017 (Y1–Y3) for targets			
DLI 3 Proportion of complete primary schools that comply with standards for transparency and accountability, as defined, agreed and distributed in 2014	Y1: \$3m Y2: \$3m Y3: \$3m	Y1: Manual developed and approved Y2: 50% of schools meet standards Y3: 60% of schools meet standards	Y1: Manual approved but delay in distribution Y2: Manual distributed Y3: 76% reported by SDEJTs as meeting standards (100% according to verification sample of 179 schools) Delay, then full disbursement.
DLI 7 – Proportion of complete primary schools which receive direct school grant funds on or before February 28 each year	Y1: \$2m Y2: \$2m Y3: \$2m	Y1: 50% of complete primary schools (EPCs) receive ADE before February 28 Y2: 70% receive Y3: 90% receive	Y1: 17% receive (according to verification sample of 66 schools) Y2: 98% Y3: 99% (100% according to verification sample of 179 schools) Disbursements rolled over and all made by program close.
DLI 8 - Revised district-level budget classification by subsector, configured, and applied	Y1: \$4m Y2: \$2m	Y1: System configured to classify expenditures by subsector and budget prepared by subsector classification Y2: Budget prepared by subsector classification	Y1: Transformation of SDEJTs into UGBs. No direct reporting on whether budget prepared according to subsector classification. Y2: Budget prepared according to classification (verification agent initially did not understand what the indicator meant) Full disbursements made.
DLI 9 - Proportion of complete primary schools visited for supervision by SDEJTs	Y1: \$1m Y2: \$1.5m Y3: \$1.5m	Y1: Supervision manual complete and distributed to SDEJTs Y2: 25% EPCs visited and 40% with follow-up visits Y3: 50% of EPCs visited and 60% with follow-up visits	Y1: Produced with delay in distribution Y2: 47.7% + 16.3% - from verification agent Y3: 75% + 63% follow-up. Verification agent found 63% / 20% - but was considered to have undertaken the IVA visits early, so government data was used as the official result. Delay but full disbursements made.

⁹⁵ Subsequent sections look at how the finance from RBF flowed into the education system (C), the cascading of incentives to subnational levels and the process of coordination and technical assistance (D), the evidence systems and verification process of RBF (E), how the programming adapted over time (F), perverse and unintended consequences of the programming (G), and the cost-effectiveness (H).

⁹⁶ World Bank (2019c).

Indicator	Value	Target	Achievement or disbursement
GPE AF DLIs: 2015–17 calendar years (Y1–Y3) for targets			
DLI 1 - Number of teachers (1st and 2nd grade) with in-service training	Y1: \$2m Y2: \$3m Y3: \$3.37m	Y1: Program elaborated, tested and adjusted Y2: 1,650 teachers trained Y3: 8,250 teachers trained (cumulative)	Y1: Achieved Y2: 4,170 trained Y3: 16,961 trained (cumulative) All disbursed
DLI 2 - Number of districts with a PTR over 80	Y2: \$2m Y3: \$2m	Baseline: 12 districts with PTR>80 Y2: Reduce districts with PTR>80 from 12 to 8 Y3: Reduce districts with PTR>80 to 2	Y2: 10 districts with PTR>80 Y3: 9 districts USD 1 million only disbursed based on scaled achievement in Y2
DLI 3 - Number of primary school directors having participated in director training	Y2: \$1m Y3: \$1m	Y2: 800 Directors trained Y3: 1,800 Directors trained (cumulative)	Y2: 939 trained Y3: 1,970 trained All disbursed
DLI 4 – % of the trained school directors having their performance evaluated	Y2: \$1.5m Y3: \$1.5m	Y2: 10% of directors with performance evaluated Y3: 20% of directors with performance evaluated	Y2: 11.1% evaluated (by DGGQ) Y3: 23.4% evaluated (by DGGQ) All disbursed
Germany (KfW) use of DLIs in construction			
<p>First tranche of €5 million (\$6 million) linked to construction: 1,000 planned classrooms in 2014 FASE budget / audit of stalled works / new evaluation methodology / ToR for technical evaluation</p> <p>Second tranche of €10 million (\$11 million):</p> <p>1 - No. of classrooms completed in 2014, minimum 800</p> <p>2 - Completion of studies by 2014 and discussion on recommendations</p> <p>3 - Number of technicians hired in 2015</p> <p>4 - 90% of the works planned to start in 2015, start on time</p> <p>5 - 80% of the works planned completed in 2015</p> <p>6 - 90% of the works with provincial and district participation in delivery</p> <p>7 - All provinces with standard construction cost framework</p> <p>8 - At PdA 2016 planned at least 1,000 classrooms</p>		<p>First tranche DLI considered not achieved €5 million disbursement not made. Decision discretionary, and not clear exactly why decision not to disburse was made.</p> <p>Second tranche 2014 – 1200 classrooms constructed, 2015 – 400 classrooms constructed, €8 million disbursement made in June 2017; €2 million made in Dec 2018 Unclear on what basis disbursements made as classroom construction did not reach target.</p>	

Source: *Tribunal Administrativo* (2015, 2016, 2017, 2019), EY (2017a, 2018a). World Bank ISRRs, Project completion report for PFM4R (World Bank, 2019c). Full disbursement made against indicators unless otherwise stated.

Achievements of the PFM4R program

90. As set out in Section 3A, the PFM4R had ambitions to improve the accountability of the sector – in terms of supervision of schools by districts, and the better functioning of school councils. While the quantitative indicators were achieved, the detailed assessment of this research has shown there are questions as to the quality of some of the results, as well as the contribution of RBF to the changes that were experienced. Table 7 presents an assessment of results against a fuller theory of change for the various RBF indicators used in Mozambique, in terms of the implied expression of the goal for each DLI, and the interlinked intermediate outcomes and outcomes, as well as the likely sustainability of achievements. While progress has been made, there was recognition among those we interviewed that some areas still require deeper change to become established and improved accountability to be achieved.

Table 7 PFM4R DLIs and interlinked theories of change

DLI / metrics	Higher-level goals	DLI result	Achievement of higher-level goals	RBF/DLI contribution to results	Sustainability
School councils meet criteria (DLI 3)	- Shift in accountability at school level, more transparency, community more engaged and contribute to change. Reduced risk of corruption or diversion of funds. - Retention/completion and learning	- Majority of councils reported to meet criteria	- No evidence of a significant shift in local accountability - National and system-wide change will take many years.	- Unclear. DLIs helped drive process changes, alongside coaches and facilitators	- More qualitative analysis and understanding of local accountability dynamics needed
ADE first tranche arrives on time (DLI 7)	- ADE is well used to address needs of the school, improving learning environment - Retention, completion and learning	- ADE first tranche nearly 100% on time	- Reports suggest timely funding helping schools, but no evidence of improved learning environment or effective use of funds	- DLIs helped drive process changes, alongside coaches and facilitators	- First tranche still on time, more than one year after program
Schools are supervised regularly, with follow-up visits (DLI 9)	- Improved school accountability and reduced risk of corruption. Improved teacher/director attendance, quality of learning environment, quality of teaching - Retention/completion and learning	- Targets met, indicating more systematic and regular supervision of schools taking place.	- Reported improvement in teacher attendance. - Little evidence of improved teaching and learning	- Reported correlation between supervision and teacher attendance. - Quality of supervision weak/ variable	- Systemic or regular supervision sustainable if funding continues - Qualitative change will require more time
District budget classification (DLI 8)	- More transparency and vertical accountability and effective use of funds. Reduced risk of corruption or diversion of funds	- Target met, district services become budget management units.	- Improvement in transparency of district spending by subsector	- Some use of PBAs to reward provinces	- Process changes sustainable, systems now in place

91. The simplest result of the program was DLI 8 – *District budget classification*. This required technical cooperation between the MEF and MINEDH, focusing on the functional classification within e-Sistafe and establishing SDEJTs as budget management units (UGBs), with associated transparency in budget management and classification. This has been seen to contribute to greater transparency, enabling analysis of spending by subsector. Program reporting indicates that this enabled decision-making for improved school-based management, textbook availability, infrastructure maintenance, and other areas which contribute to improved outcomes.⁹⁷

92. A clear and positive result of the program, was for DLI 7 – *timeliness of ADE fund flow*. Throughout the research, there has been wide recognition of the achievement made in getting funds to school in time for the start of the school year, and that this was seen as a long-term challenge. The change involved cooperation between the MEF and the MINEDH, which in itself was recognized as an important step. Implementation reports also suggest there has been an improvement in second tranche payments being made on time, but there are

⁹⁷ World Bank (2019c).

mixed reports because data on the second tranche are not systematically reported. The changes involved a large amount of coordination across government levels (see Section 3D) and were viewed as a clear example of the success of the program by many stakeholders.

93. While the DLI measured the timely payment of funds to the school, it did not ensure that schools spent it effectively. To some extent, this was covered in part by other indicators within the theory of change. However, as set out in Box 4, the “last mile” of ADE is still a significant unknown.

Box 4 ADE and the “last mile”

The Direct Support to Schools (ADE) grants are channeled to schools through the district education services, and can be used by schools to purchase materials for teaching and learning and to cover the operational costs of schools, in accordance with MINEDH guidelines. These guidelines include a list of eligible expenditures, with 70 percent of the grant to be used in line with this list. The remaining 30 percent can be used for other discretionary needs of the school, which are often related to maintenance or minor construction works. A component of ADE is designed to cover some basic costs for deprived students.¹ The grant is disbursed in two tranches: the first at the start of the school year (January/February), and the second in the middle of the year, on presentation of documentation of expenditure. For many years, most schools did not receive this funding when they needed it, at the start of the school year, and a PFM4R DLI was designed to change this. In addition, there has long been a concern that funds are not well used, or are even misused, at the school level; the ADE has colloquially been known as “support to the Director’s wife” (*apoio a esposa do director*).

The funds are transferred by the district services either through a check (paid to the school account or to the account of the school director), via a bank transfer, or in cash. The MINEDH/MEF intention is to increase the number of schools receiving funds via a transfer, but most primary schools still receive a check. A 2015 ADE evaluation found that 90 percent of primary (and half of secondary) schools receive checks, and that this presents a risk in terms of transparency and security.² There is therefore still potential for misappropriation at the school level, and also that the correct amount is not transferred to schools.

The MINEDH wanted to ensure a stronger role for communities in the planning of this funding and in ensuring it was spent properly. This is meant to be achieved through the school council, which should meet criteria for inclusive elections (gender, parental involvement), participation in school development planning, and the display of information on ADE allocations and plans. ADE funds are managed at school through two commissions: one for receiving funds and procuring the goods/services, and one for verifying the expenditures. A member of the school council should be on each of these commissions.

There has been significant progress in ensuring timely disbursement of the first tranche of ADE, which has been seen by many as a key success of the PFM4R program. However, some stakeholders interviewed have raised concerns that there is insufficient attention to how well such funds are spent, how this is contributing to school improvement, and the degree to which school councils have been able to play a stronger role in school management. Verification of the DLIs was not used to improve understanding of these issues, but rather to check the specific targets. While on paper these targets have been met, the reality in schools is more complex, with school councils and community members not in a position to challenge the authority of school directors. This is not to say progress has not been made, but that this is a complex issue which needs a long-term strategy and engagement.

¹ “The Direct Support to Schools Program (DSS), supported by the World Bank set up a School Quality Fund which was initially allocated to 8,300 primary schools in the form of annual grants which are spent on the most pressing educational needs. At the school level, grants were managed by the school council, composed of teachers, the school principal, the community, and the district education director” (Rose and Greeley, 2006). ² EY (2016a)

94. Improving the functioning of school councils was a critical step in shifting accountability for school management and performance (DLI 3). The changes revolved around a new manual, distributed to schools in 2015/16, which set out the ideal functioning of the school council. This led to a specification of four criteria for measuring this DLI: that school councils should be elected, with elections occurring every two years; that a school development plan should be approved by the council; that all school council members participate in planning and execution of ADE fund; and that the amount of ADE should be displayed in a display case (*vitrina*).

95. The DLI was met in full, and interviews with school directors and district officials during this research indicate that councils are playing their role more effectively, particularly in financial management issues, including the commissions to spend ADE funds and receive materials in the school. However, questions have been raised about the depth of this change in practice. It is broadly felt that school directors remain the senior partner in this relationship, and many school councils remain unclear about their roles, responsibilities, and rights. The fact that training for school councils was in many cases undertaken by school directors could have undermined the effectiveness of the process, where there were tensions in giving more authority to the councils/community. Various reports, including from the PFM4R Program itself, identify challenges, for example noting the weak involvement of the council in school development planning. With new council elections every two years there is also a need for ongoing and repeated training and support. Overall, despite the progress made, this calls into question the extent to which this DLI can really be seen as a proxy for the real shift in school accountability.

96. The DLI 9 on school supervision was selected to institute regular visits as part of strengthened vertical accountability, and support to schools. As set out in Box 5, school supervision is funded through FASE, and represents one of the main recurrent costs for district services (SDEJTs). While supervision visits were reported as increasing rapidly in 2016 and 2017, a number of sources, including our interviews, highlight that the funds for supervision are insufficient and not always timely. Interviews have indicated that SDEJTs often have to make choices on which schools to visit, and this may be driven by the cost, meaning harder-to-reach schools are not visited in some cases. However, it was also widely reported during the research that district supervision was now happening regularly and more systematically than before. There was also a difference between the data from self-reporting (75 percent of first visits undertaken, 63 percent of which had a follow-up), and the verification by the *Tribunal Administrativo* in the year to March 2017 (Y3 of the program) (63 percent of first visits, 20 percent with follow-up). This was said to be an issue caused by the timing of the visit, although with low sample sizes, there could simply be measurement error in the indicator.

Box 5 Transformation of the system for school supervision

School supervision by district services was identified as a key component in school governance, ensuring more systematic vertical accountability in terms of monitoring of and support to schools. The Operational Plan 2015 noted that “there was little consistency and focus on supervision [with] poor follow-up of recommendations.” The plan set out to improve the quality and regularity of supervision. This was included as a DLI under the PFM4R, and was in this way aligned to MINEDH plans.

This indicator has received sustained attention, and is still reported on as a priority within the most recent annual review reports, even after the end of the program. This includes reporting on the quantity of supervision (percentage of schools visited) and the performance of schools. Changes have taken place over the RBF programming period – supervision visits have clearer guidelines, staff at SDEJTs have been trained in their role, and visits happen more regularly. This kind of capacity development was supported by the PFM4R coaches and provincial facilitators. Progress has been reported in improving reporting to provincial directorates of education and human development (PDEs) and the central MINEDH.

With FASE funding, the MINEDH has developed a database to capture the results of supervision and a tablet-based system for conducting visits, and these innovations have been funded from the PFM4R Program and FASE and with technical support from GiZ and USAID. Training of SDEJTs has been undertaken under the POEMA initiative and resources (GiZ, UNICEF). These are important capacity improvements in the system, though are not yet fully functional, and their use seems to vary by province or district. In our interviews with district and school directors, there was a broad trend identified of more systematic and comprehensive supervision visits taking place, though with fewer tablets available in northern areas.

Limitations include the lack of funding for supervision, with the most recent RAR report indicating that this leads to fewer follow-up visits to schools than set out in targets.¹ It has been noted in our interviews as likely that many schools are not visited and there is some recognition that the quality of supervision is variable or still weak in many cases. Recognizing that school directors are often political appointees, some interviewees raised questions over how much authority the SDEJTs have to address poor performance, and there may be an incentive to report positively on performance across the district. There have also been reports that with limited funding for supervision,

but pressure to meet the target of visiting 70 percent of schools (plus follow-up visits), some supervision visits are reported as happening but do not in fact take place (for example, supervision reports are not found at school level).

Reporting at the RAR 2020, which still includes a focus on this indicator, indicates some variation between provinces, with 100 percent of schools reported as receiving a first visit in Maputo City and Manica Province, compared to 74.6 percent and 55.5 percent in Tete and Cabo Delgado provinces.² The proportion of schools receiving second visits also varied considerably. It is important to note that the final verification report for the PFM4R undertaken in 2018 found 63 percent, 20 percent, across 32 SDEJTs, in addition to a number of challenges to reporting and some districts without any supervision.³ In the absence of further such verification / validation exercises, it is possible that government figures over-report the amount of supervision being undertaken.

¹ MINEDH (2020b). ² MINEDH (2020b). ³ *Tribunal Administrativo* (2019).

97. It should also be noted that the design of the PFM4R program focused its DLIs on complete primary schools (those which include both lower primary, Grades 1–5, and upper primary, Grades 6–7). The program design documentation recognized that this represented less than 50 percent of schools. The rationale was that these schools and communities were more likely to have the capacity to implement reforms. The proportion of complete primary schools increased to 62 percent in 2018; however, the number of complete schools varies greatly between provinces; from 37 percent in Niassa to 97 percent in Sofala. The upshot is that around a third of primary schools nationally still only offer lower primary education, and these schools are more likely to be in more remote and rural areas. It is likely this may mean further inequalities, for example, less supervision for these schools, and visits to non-complete primary schools were not incentivized, nor have they been reported.

Achievements of the GPE variable tranche RBF

98. Table 8 presents the theory of change for the various RBF indicators used in GPE support, in terms of the implied goal for each DLI, and the interlinked intermediate outcomes and outcomes.

Table 8 GPE DLIs and interlinked theories of change

DLI/metrics	Higher-level goals	DLI result	Achievement of higher-level goals	DLI/RBF contribution to results	Sustainability
IFPs deliver targeted amount of school director training, and school directors' performance evaluated	- School directors more effective, perform their roles, attend school regularly	- Targets achieved with close to 2,000 cumulatively trained by IFPs by 2017 and 23% evaluated.	- Institutional or political economy barriers still in place. Low impact on behavior	- Targets helped push IFP training, but did not contribute to qualitative change	- Role of IFPs established; systems for evaluation emerging. No evidence of sustainable change
IFPs deliver targeted amount of in-service teacher training	- Teachers in early grades more able to deliver curriculum, more systematic peer support in schools, improved learning	- Targets achieved with close to 17,000 cumulatively trained by IFPs by 2017.	- Little evidence of better classroom teaching	- Targets gave new training strategy momentum, but no qualitative change	- Role for IFPs more established, but not yet other levels of cascade
Reduced number of districts with PTR over 80	- Improved equity in distribution of qualified teachers; Improved environment for learning	- Target partially achieved but not recognized (due to change in baseline).	- Greater equity within some provinces but not between provinces	- Correlation – changes likely to have been incentivized by DLI/target	- Not sustainable, PTRs have risen, budget constraints on teacher recruitment

99. As noted above, the target for the DLI of *Districts with PTR above 80* was not met. This was the indicator most focused on change at a higher or intermediate outcome level – and was also the DLI with the clearest equity focus. The story on the DLI is a lot more complicated than indicated in program and annual review or RAR

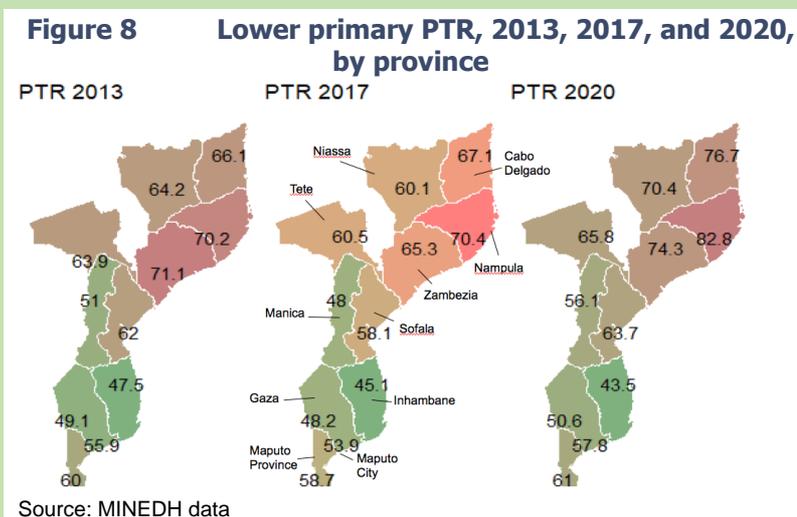
reporting. Analysis conducted for this assessment found that more was achieved with the indicator than has been understood. As set out in Box 6, there was a shift in the baseline number of districts with a PTR greater than 80, which made the target much harder to achieve.

Box 6 Analysis of the most challenging DLI to achieve – the PTR

Prior to the RBF programming period in Mozambique, average PTRs had been falling. The average PTR for lower primary (EP1) decreased from 73 in 2008 to 63 in 2012. However, the lower primary PTR remained much higher than for upper primary (EP2, at 33 in 2012) or secondary (41 in lower secondary, 29 in upper secondary in 2012). The high ratio for lower primary was also inconsistent across the country, with major inequality between provinces, and as low as 46 in Inhambane in 2013; while above 70 for Nampula and Zambezia. There was also inequality within provinces, and within-province inequality was measured by the number of districts with a PTR lower than 80 at lower primary level, which became the DLI.

We undertook extensive quantitative analysis (see Annex 4), to assess whether in the 2013–17 period there was any statistically significant effect correlated with the DLI targets (which were for 2016 and 2017). We looked at the effect between and within provinces, particularly in terms of the change in teachers, looking at whether teachers were allocated to those districts and/or provinces with higher PTRs.

The key finding from this analysis is that teachers did not become more equitably distributed between provinces over time; however, within provinces there was a statistically significant effect of teachers being more equitably distributed towards districts with higher PTRs. Thus, within provinces, the number of teachers in districts with higher PTRs increased at a faster rate than in districts with lower PTRs, and particularly districts above the threshold of 80 for lower primary. This effect appeared to be strongest in Zambezia province, but also was present for Nampula, and Niassa province, with no significant effect apparent in the period in Cabo Delgado – the four provinces within which were the vast majority of districts with PTR>80.



Despite this, the DLI target itself was not reached, and this was largely because of the baseline. The 2015 Operational Plan had set out a baseline of 12 districts with a PTR above 80 in 2014. For some reason, this had not taken account of the district reorganization in 2013, in which the total number of districts increased from 128 to 163. This increased the number of districts in the category above 80, from 12 to 16 districts in 2014 (or 17 in 2013 and 2015).¹ If using 2014 as the baseline year, there was then a reduction of 6 districts by 2016, and 7 districts by 2017. This meant that the GPE DLI target of a reduction of 4 districts (from 12 to 8) of 2016 was surpassed, and the cumulative reduction of 10 districts (from 12 to 2) was partially achieved. Applying the scaled formula used for the GPE disbursement criteria, we calculate the full disbursement of USD 2 million should have been made for 2016, while USD 1 million should have been made for 2017. Compared to the total of USD 1 million for both years disbursed in the program period, this means the government missed out on USD 2 million of disbursement that it arguably should have received.

Importantly the finding suggests that there was an effect, implying a message may have been passed down from the central to the provincial level. However, this achievement was not recognized via the DLI. This effect came through a within-province effect. However, as Figure 8 shows, between-province inequality in PTRs persist and PTRs had gone up significantly in the more northern provinces by 2020. The number of districts with a PTR above 80 for lower primary has also increased substantially again, so any DLI effect did not persist. More detail is set out in Annex 4.

¹ The MINEDH set out in March 2016 (MINEDH, 2016) there should be a higher baseline (in which they said the baseline should now be 18 districts for 2014). The June 2017 IVA report also recommended changing the baseline (EY, 2017a).

100. As set out in Section F, the PTR example raises questions about the adaptability of RBF, as if the definition of the baseline had been updated, this would have allowed the achievement to be recognized, and USD 2 million extra would have been disbursed. The baseline was not updated, although this was in agreement of all parties, but given the change in baseline was understood as early as March 2016, and the first verification report from EY (June 2017) also recommended that the baseline should be changed, it appears an opportunity was missed.⁹⁸

101. The DLI which set targets for the number of teachers receiving in-service training was achieved for all years. This was seen as an important step towards implementing the MINEDH's new strategy to address the previous limited coverage of in-service training. However, as noted above, there is some lack of clarity around this indicator; the in-service training uses a cascade model, and it is not clear whether the intention was to measure the delivery of training at all levels (IFP, ZIP/Cluster, and school). It appears that the targets only measured training at the IFP level, and did not capture success in implementing the cascade down to the school level. Independent verification reports capture some part of the story of delivery to ZIP level, but not to schools. The IVA reports indicate a range of numbers of teachers trained, depending on the focus; this seems to indicate the GPE targets were relatively low and easily achieved, and the MINEDH had its own targets which were harder, and represented delivery at least to ZIP level.⁹⁹ These IVA reports indicate some challenges in the implementation of the cascade, as might be expected. There is broad agreement that training at ZIP level, and more particularly at school level, has not been undertaken consistently and has likely had limited impact on classroom teaching to date.

102. One view expressed during the research indicated a significant risk that the focus on numbers of teachers trained at IFPs undermined a more quality-focused approach to implementing the strategy in ZIPs and schools. RAR reports capture the numeric indicator, without reflecting on the quality of training and change in classroom practice. Reviewing the 2015–18 Operational Plan indicates that a different indicator was considered, which would have measured the application of training in classrooms. This was not used for the DLI in the final design, perhaps because of the challenge of measurement. The teacher training strategy, which this DLI was intended to support, emphasized the need for training to reach the classroom; it is not clear that this has yet happened as a result of this approach. It is notable that the new World Bank and GPE program is planning a much stronger focus on technical work at the school level to support teachers and will include piloting of school-level implementation using a coaching model.

103. The DLIs for *School director training/evaluation* were also achieved with relative ease. Interviews indicate a broad recognition that there was some value in the training and that the systems have been improved by rolling this out more systematically at IFPs in each province. Training had been overly theoretical but was made more practical, and included case studies. Our interviews with school directors and district services recorded some benefits from the training. The training has not, however, been broadly seen to have a great impact on school director behavior or performance. For some, young or new appointees, there has been obvious merit in giving them some awareness of their roles and responsibilities, and the tools to carry them out. This research has seen little evidence that the performance evaluation of directors has been reported on and used. Confirming the core challenge, a number of stakeholders have indicated that the problem is appointments which are not based on merit, and where directors have the wrong attitude to the job, the training is not likely to bring about great change.

104. A recent evaluation of the 2012–19 Education Sector Strategic Plan, also covered by the 2020 RAR report, notes that when evaluating school directors, the directors who had not received training appeared to perform better than those who had. It is unclear why this is, but the analysis suggests the trained directors do not apply what they have learned, and there is limited interaction between them. The untrained directors are new and perhaps keener to apply the rules/guidance, demonstrate more cooperation with other directors, and potentially

⁹⁸ MINEDH (2016) and EY (2017a).

⁹⁹ IVA reports – EY (2017a, 2018a).

receive more support from districts, being identified as more in need. This presents a very uncertain picture of the efficacy of the training, and illustrates some of the institutional challenges.

105. The GPE indicators linked to PFM4R reforms, including the ability of schools to effectively spend ADE or for school councils to hold leadership to account and play a role in the spending. As noted above, there are a number of risks associated with the management of ADE funds. In design, it was recognized that there are political and perceived intractable challenges in the appointment and accountability of school directors. So, while the training has been reported to have value, it seems likely the institutional challenges need to be addressed before such training can have an impact on the capacity of school directors.

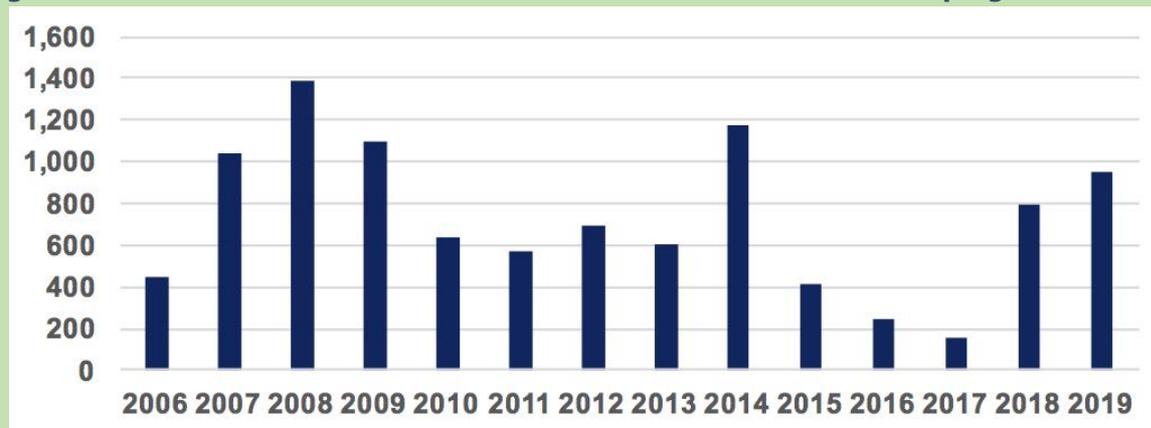
106. Finally, the results from the German (KfW) RBF variable tranche payments to construction were very mixed. The results and overall approach are set out in Box 7. What has emerged from this is the apparent lack of success in using this approach to dealing with the bottlenecks to more rapid and efficient school construction.

Box 7 Results of the German variable tranche RBF in construction

Germany's financial support to the sector is managed by KfW, through which funding has been channeled through FASE since its inception in 2003. KfW also provides technical assistance through complementary measures and has taken the lead on school construction for some years. In 2014, in response to slow implementation and poor quality of construction, KfW introduced an RBF element to its contribution. The intention was to use a variable tranche with DLIs to incentivize delivery against outputs, with the focus on the Construction Department within the MINEDH.

This first tranche of €5 million (USD 6 million) scheduled for 2014 and paid on 2013 results was not disbursed. Following this, a second variable tranche of €10 million was agreed (as a bonus payment above the annual payment to FASE); the conditions for this tranche included completed construction of over 800 classrooms, and a number of other criteria focused on establishing technical support and processes, and planning of or budgeting for new classroom construction in the Ministry's annual plan of activities (PdA).

Figure 9 Classrooms constructed via the accelerated construction program: 2006–19



Source: MINEDH (2020b).

KfW did not use 'DLI' terminology, but indicators were very much at the output/process level, and the delays suggest the mechanism was not successful in dealing with the bottlenecks for speedier implementation of construction plans. As shown in Figure 9, on the contrary, the period from 2013 to 2016 saw a lower rate of classroom construction than the previous period. Despite this, an assessment was made in which approximately €8 million of the tranche was paid in 2016, later than anticipated, with partial payment, owing to incomplete achievement of targets. The final €2 million was paid in late 2017. KfW have now dropped the use of this mechanism from its programming to FASE, in part because of a perceived lack of effectiveness and results, and in part because of a concern that to use RBF in this way within FASE can be a distraction to the MINEDH's own planning and delivery processes.

¹ RAR 2013: (MINEDH, 2014): "In 2013, 608 classrooms were completed, below the target of 1,000 classrooms. Despite the improvements observed in the planning and management of the program, the lack of liquidity that occurred at the end of 2012, at the beginning and end of the year 2013, contributed to the stoppage of some works and, consequently, to the failure to reach the target."

The contribution of the RBF to the achievement of DLIs and goals

107. The programs under review represent an early use of RBF in the Mozambican education sector, and perhaps as a reasonable starting point, targeted changes at output/process level. By definition, these targeted metrics stop short of the real goals, with significant assumptions being made in terms of the contribution to further intermediate changes (for example, improved teacher/director attendance, better teaching) and outcomes (that is, learning, retention, and completion). In the timeframe of these programs, it may not have been realistic to expect significant change at the outcome level from such interventions, though RBF is usually associated with some level of ambition. In terms of learning, given the lack of a national assessment since 2016 (the 2019 assessment has not been finalized/reported), it is not possible to verify whether learning has improved. However, a number of indicators show performance remains very problematic – retention to Grade 3 has declined over the period, falling from nearly 70 percent in 2014 to 66 percent in 2018.¹⁰⁰ In terms of outcomes, the overall the performance of the sector, to which RBF has made a relatively narrow contribution, has not been good.

108. The success in achieving most of the DLIs to some extent indicates the effectiveness of the programs, though it may also suggest targets were easily achieved and may not have represented a stretch for the MINEDH. Some important processes and systems have been put in place or strengthened, including for timely ADE disbursement, school supervision by district services, and giving impetus to the IFP role in delivering in-service teacher training. Taken as a whole, the PFM4R program has brought about or contributed to changes in school accountability systems. However, these changes – as articulated in the DLIs – were not ends in themselves, but important steps towards reform, which will require sustained attention and perhaps technical support over many years. For all of these DLIs, the important question is “What next?”

109. For some of the DLIs, while meeting the targets gives an appearance of success, there are more fundamental questions about the quality or depth of change; for instance, whether the fact that school councils meet certain criteria represents a real shift in accountability, or whether training school directors has led to more accountability and more effective school management. Progress in implementing a cascade model of in-service training by IFPs seems to have been carried down to ZIP level with varied success, and the degree and quality of the delivery of training at school level is very unclear with an apparent absence of evaluation on the topic.

110. The PTR indicator reveals an interesting story. This represents a significant inequality in how human and financial resources are distributed across and within provinces, and was always likely to be a complex indicator. The DLI was reported as not met, when in fact it seems there was progress but this was not recognized. Our research did not identify in any documentation a plan for meeting this DLI and associated targets. However, interviews suggested broad awareness that MINEDH had a target to reduce district PTRs. The change in the organization of district administrations made measuring change more complex. However, some change took place and perhaps an opportunity to build on this was lost. While progress within provinces, between districts, could be an important starting point, the big differences in PTR between provinces was not being addressed, and between-province inequalities have got worse over time (up to 2020).

111. Where change has happened, and targets have been met, it is not easy to unpack the specific contribution of the RBF from other factors. However, for some of the DLIs there has been a credible contribution made. The improvement in ADE payments was clearly helped by the technical approach taken by coaches working with MEF/MINEDH teams, but the DLI and financial reward to the sector provided an incentive to engage in this work. The improved supervision systems likewise received technical support, but the DLI and associated targets were well understood (at the district and province levels as well as by the MINEDH) and contributed to more systematic

¹⁰⁰ There has been no systematic effort to improve the quality of EMIS data in recent years. As a result, there are likely to be systemic errors in reporting, most likely with over-estimates of enrolment and of the number of teachers. This means that all results in the context must be read with a degree of caution.

and regular school visits. This may also have contributed to improved teacher attendance (see Box 8).¹⁰¹ If there has been an improvement in teacher attendance though, it is clear there was a strong push from the top and that the high-profile findings from the 2014 SDI report were the key driver in making this issue such a strong political and policy priority.

Box 8 Have accountability reforms led to improvements in teacher attendance?

The completion report for the PFM4R program claimed that the PFM4R “results are important contributors to better school performance, for instance where enhanced supervision contributed to the reduction of teacher absenteeism.”¹ In particular, it is reported that greater frequency of district supervision of schools has contributed to an improvement in teacher and school director attendance. The 2018 SDI report had noted an improvement in teacher attendance of 16 percent from the 2014 SDI report.³ This is also reported by MINEDH in annual review reports.³

The implication is that the supervision process, even if there are limitations in quality, drives some improvement in teacher attendance. This is hard to verify and there have been questions over the reliability of the recent SDI 2018 data (which unfortunately we were unable to analyze as we were not given access to them). This would be a significant finding and contribution to higher-level outcomes. Our research does indicate that teacher attendance has been a priority issue for the MINEDH, and has been given significant attention from the highest levels down through the system, including as part of the supervision process. It has also been noted, however, that attendance remains a significant challenge, and that even where teachers are in school, their presence in the classroom is not guaranteed. This remains an area needing more attention and perhaps more quantitative and qualitative research or analysis, to understand the trends in teacher attendance and the barriers to and causes of non-attendance in different parts of the country.

¹ World Bank (2019). ² Bassi et al. (2019). ³ MINEDH (2020b).

112. The intended use of performance-based allocations (PBAs) to either departments/offices or individuals was at most minimal, and so is unlikely to have made a contribution to the achievement of indicators. The contribution from the RBF was therefore more from motivation to gain additional financing to the sector, or was driven by the motivation to meet targets cascaded by MINEDH leadership. The next sections look in more depth at the use of financial incentives, the way in which different levels understood and responded to targets, and how these were supported through use of technical assistance.

113. The PFM4R, as well as other work under ESSP/FASE funding, aimed to improve school and local governance and transparency. However, these programs did not explicitly address corruption within the education system, including in procurement of textbooks and construction tenders, schools selling the free textbooks with which they are provided,¹⁰² the existence of “ghost” teachers (*fantasmas*)¹⁰³ on the payroll; sexual abuse in schools; and side-payments (*refresco*), low-level corruption where though services are in principle free of charge, “in fact people have to pay to pass examinations, to be moved up a class.”¹⁰⁴

Sustainability

114. It has been reported during this research that the disbursement of ADE to schools is still on time, and school supervision by district services (SDEJTs) is still happening in the years after the end of the PFM4R program. This is without DLIs/incentives or the support provided by coaches and facilitators. The sector performance report

¹⁰¹ The 2018 SDI report indicated an improvement in teacher/director attendance and made a link to more systematic supervision by districts. It is hard to verify this, and there are some questions over the quality of the data under the second SDI.

¹⁰² <https://clubofmozambique.com/news/mozambique-racket-in-the-sale-of-primary-school-text-books-uncovered-aim-report-154135/>

¹⁰³ In 2011, in the provinces of Nampula and Cabo Delgado, it was discovered that salary sheets included a large number of “ghost” staff (*fantasmas*). The salaries were being channeled directly into the accounts of the provincial directors, as well as to heads of district-level departments (Tvedten and Picardo 2019).

¹⁰⁴ “At lower levels and among poorly paid teachers, nurses, security guards, waste-collectors and others, smaller-scale everyday corruption or *refresco* is in many ways what “makes the system tick”. It is pragmatically accepted because it facilitates life, either by maximising efficiency in achieving objectives, or by minimising risks” (Tvedten and Picardo 2019).

continues to report against some of these indicators, showing that they continue to be met and improved.¹⁰⁵ The data from school supervision are being reported from districts to the central level, and while it is not understood to be subject to independent verification, it is part of the regular annual reporting. However, the broader reforms that were the focus of the PFM4R, to drive greater school accountability and transparency in PFM, do not appear to have been sustained, at least as far as our research has determined. School councils require significant and long-term attention, and the progress in getting funds to school on time needs to be built on to better understand how schools are using this funding and how it can be better used to improve school and system performance.

115. The in-service training focused on under GPE funding is still taking place, and as long as it is funded – whether through FASE or the government’s own budget – it is likely to remain a priority. A new program funded by GPE, again through FASE, intends to extend the focus of the in-service training to the ZIP and school level through introducing coaching. This indicates a sustained or even increased focus on in-service training, albeit with continued donor support.

116. As noted, the focus on pupil-teacher ratios is more complex. There is no sustainable change, and improvements made have now been reversed. The challenges in reducing high PTRs are significant, with constraints on the wage bill and recruitment of new teachers, continued growth in student enrolments, and the forthcoming reorganization of primary and secondary education under the new education system law (2018), which will be implemented in coming years. This will require significant political as well as technical effort.

117. Sustainable change, whether in terms of school governance or teacher training reforms, will require sustained effort and focus, reflection on progress and challenges, and new articulation of goals. In this context, this should happen under the new 2020–29 Education Sector Strategic Plan, which has recently been agreed, and through the established process for annual review and dialogue, which seems to function well. A key question will be how such interventions and recurrent costs are captured over time in the national budget. Whether RBF itself is sustained, through adoption within the national systems is not certain. There is some interest within the government in general and the MINEDH in particular in testing the performance-based ADE (ADE-D) model, but this is still at a pilot phase. These aspects are discussed in the next section (Section 3C, Financing and payments).

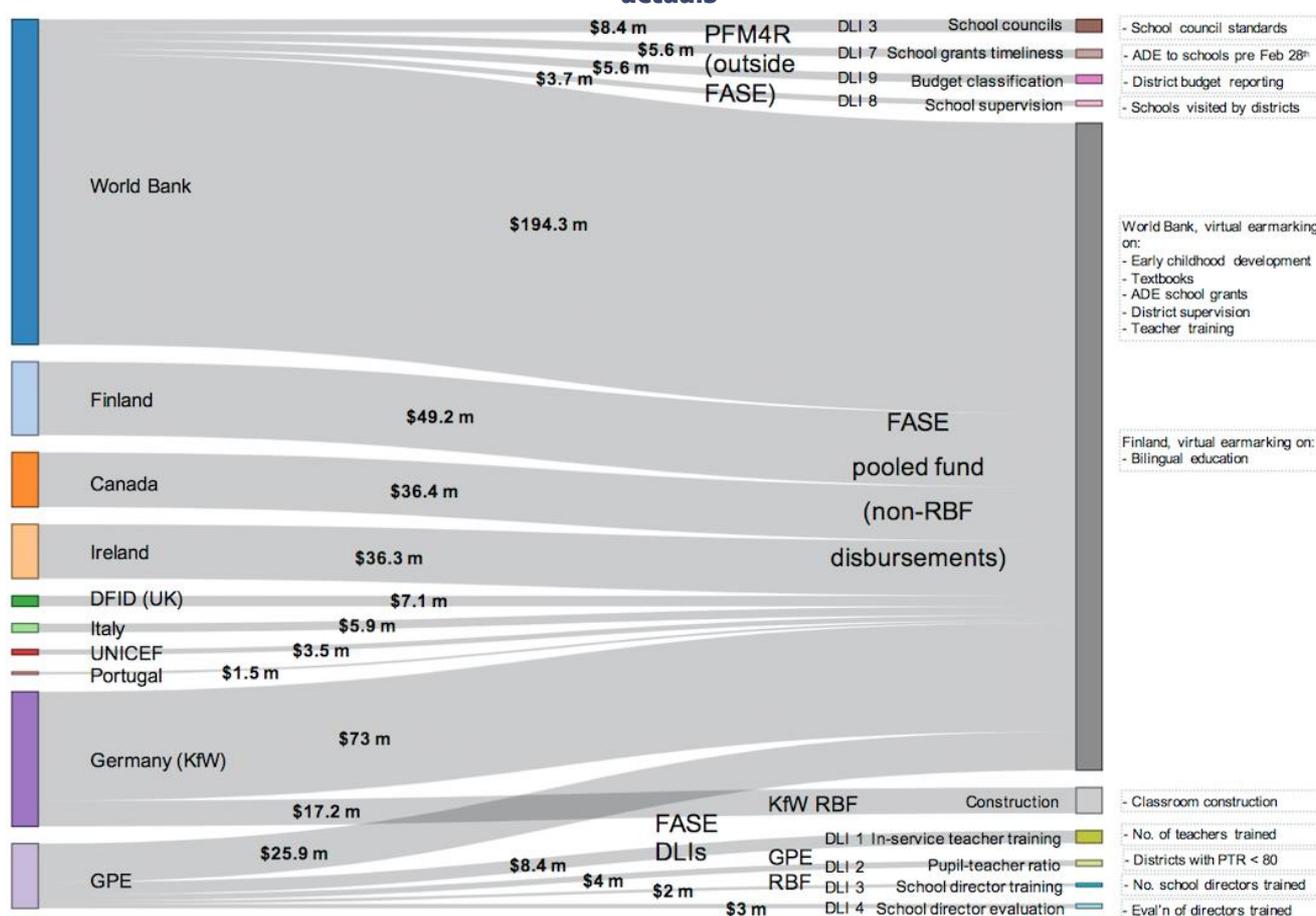
¹⁰⁵ MINEDH (2020b).

C. Financing and payments

118. The majority of external funding to the education sector in Mozambique comes through the *Fundo de Apoio ao Sector de Educação* (Education Sector Support Fund; FASE), a multi-donor pooled fund managed by the MINEDH, set up in 2003. FASE is not used for teacher salaries or other civil service salaries. Instead, it funds the majority of what is classified as “investment” expenditure within the sector, including school construction and maintenance, school grants (ADE), textbooks and learning materials, teacher training and district/provincial services (including supervision). It is thus the main source of non-salary expenditure for the sector, and the sector is heavily reliant on donor funds. Parts of the FASE contribution, notably from the World Bank ESSP, as well as from Finland, are “virtually earmarked”, meaning they should only be spent on certain cost categories, a form of ‘soft’ conditionality compared to the ‘hard’ conditionality of RBF.

119. Figure 10 shows how the RBF compares to the overall funding to the sector in the 2014–18 period. RBF in Mozambique constituted just 12 percent of potential total donor disbursements. Of the USD 58 million available, with USD 3 million lost on the GPE DLI on the PTR, and the USD 6 million lost on the German construction RBF, the final value of RBF disbursements to the sector was USD 49 million, 12 percent of donor funding to the sector in the period.

Figure 10 Mozambique education, 2014–18, RBF potential disbursements and non-RBF actuals



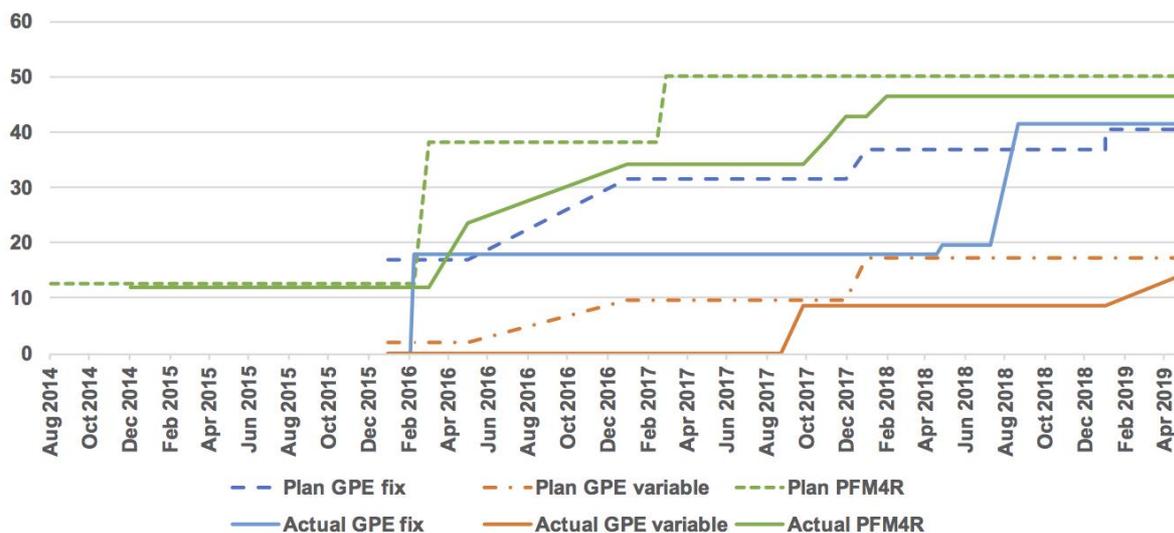
Source: FASE statements EY (2016b, 2017b, 2018b), KPMG (2015, 2019). World Bank (2014, 2015, 2019c). KfW (2017). Orlowski (2016).

Financial flows from RBF

120. Disbursements for both the PFM4R and the GPE variable tranche were slower than anticipated (see Figure 11), in part because of the time taken for verification, and in part because of slow initial progress on the DLIs. Project status and implementation reports for the PFM4R program also show that progress on education

indicators was slower than in the health sector for the first two years of the program. An important principle of the program was that undisbursed funds could be carried forward, so that an unachieved (or partially achieved) target could be rolled over to the next year for reassessment and disbursement. It has been noted, including through discussions during this research, that this flexibility helped keep responsible departments and staff motivated to achieve the targets.

Figure 11 Disbursement under the PFM4R program and GPE additional financing, planned schedule vs. actual schedule (USD, millions): 2014–19



Source: World Bank PFM4R ISRRs. The final amount disbursed for the PFM4R was lower because of the change in the exchange rate to Special Drawing Rights to USD.

121. PFM4R funds were not channeled through the FASE, but appeared as “PFM4R” project in MINEDH’s section of investment expenditure in the budget. The specific use of the funds was not defined in the program appraisal document, but the program used national systems for budgeting, procurement and financial management. Disbursements were made against the four DLIs for education, alongside five DLIs for health. Three of the education DLIs were linearly scalable, meaning disbursement could be made in proportion to performance, with a minimum floor of 60 percent improvement against targets. In practice, as set out in “Results and impact” (Section 3B), all DLIs were found to be achieved by the end of the program, and all the disbursements had been made by February 2018.

122. At design, the PFM4R was established as a contribution to the government’s own PFM reform program, managed by the MEF. This was therefore seen as a co-financing operation, with a USD 50 million contribution from the World Bank, and USD 81 million from government – total anticipated program expenditures therefore of USD 131 million. The program used the government chart of accounts to budget expenditures, including those of the two ministries involved (Health and Education). The program expenditure framework included capacity-development costs of USD 8 million and Program Coordination and Operational costs of USD 3.8 million managed by the Program Management Committee in the MEF. For the education sector, the expenditure framework anticipated USD 93.3 million, the majority of which was for district operational costs, as well as USD 8.3 million for both “performance-based allocations” (PBAs) to schools, and separate PBAs to district, provincial, and central levels.

123. In practice, the actual expenditure of the program was not as expected. The PBAs for schools were not utilized, while the PBAs for government were used but not as intended. The finance for capacity strengthening was not used to the degree expected, with just a quarter of the allocation utilized. There was no systematic tracking of how resources were spent by the MINEDH, and reporting, including audits of the program, recorded almost the entirety of the education budget as the government’s “contribution” – which made tracking very

difficult. This tallies with delays in staffing the program, and in low utilization of resources for capacity strengthening, which came out of interview for this research. The planned costs linked to education and joint funds, as well as actual expenditure of the program, are shown in Table 9 below.

Table 9 PFM4R funding planned vs. actuals (USD, millions)

Planned Government of Mozambique share	FY14	FY15	FY16	FY17	Total
Specific budgeted costs (education and joint areas)					
Operational costs (education)	22.9	23.8	25.0		71.7
PBAs – school funds	2.5	3.5	2.3		8.3
Other PBAs – central, provincial, district levels	2.5	3.5	2.3		8.3
Capacity strengthening (health, education, MEF)	1.8	2.2	4.0		8.0
Program coordination and operational costs (MEF)	0.8	1.5	1.5		3.8
Actual expenditure (education and joint areas)					
Operational costs (education)	585	619	460	281	1,944
PBAs – school funds	0	0	0	0	0
Other PBAs – central, provincial, district levels		1.8	2.9	3.6	8.3
Capacity strengthening (health, education, MEF)	0	0	1.1	1.1	2.1
Program coordination and operational costs (MEF)	0	1.2	2.0	2.0	5.2
External Audit (<i>Tribunal Administrativo</i>)	0.1	0.3	0.2	0.3	0.8

Source: World Bank (2019c) and World Bank (2018). Costs estimated on the basis of available exchange rates. FY: financial year.

Performance-based allocations – downstream financial incentives from the PFM4R

124. The PFM4R’s downstream performance-based allocations (PBAs) were set out in the program budget between school-level PBAs, and government PBAs. In practice only the government PBAs functioned during the program period, and not as had originally been envisaged. At the same time, the idea of school-based PBAs evolved over the course of programming into a pilot known as *ADE desempenho* (performance-based ADE). Box 9 outlines that this has mainly been a World Bank initiative, with some buy-in from government, and a problematic pilot being expanded into a much larger projected part of programming for the new 2020–29 strategy period.

Box 9 ADE-D: using performance-based allocations within the education system

The PFM4R program set out at the point of design to test the use of performance-based allocations (PBAs) at different points of the education system, to incentivize results. Our research, and review of program reporting, indicates that PBAs were in fact not used in the way intended.

At the outset, team members of the Program Coordination Team (PCT) within the MINEDH, as well as facilitators at province level, were under the impression that they would receive individual incentive payments based on the achievement of results. It is unclear where this impression came from; however, it was said to have been “vetoed” by the MEF at some point early in the program. The PBAs allocated were then shifted to an in-kind prize system for the top three performing provinces and top three performing districts in the key PFM4R DLIs as targets. The planned financial incentives were, for example, used to buy work mobile phones for key staff, and used for training and workshops to achieve DLI targets for budget classification at district level and ADE disbursements.¹

The program design had also set out the intention to use PBAs at the school level, to motivate school managers to improve performance – with USD 8.3 million allocated. This was not implemented as part of the program and the funds were not spent, most probably because key stakeholders did not consider the school funding and governance system ready for such an innovation. The focus in the early phase of this program was on ensuring funds were disbursed on time, and that some basic accountability systems were in place.

However, under the related funding from the World Bank managed ESSP, as a contribution to the FASE pooled fund, the MINEDH has piloted the use of PBAs as part of the ADE school grants, as *ADE-Desempenho* (ADE-D, or performance-based ADE). The objective was to reinforce the role of district services, school councils and

communities in school accountability systems, and ultimately to contribute to better director and teacher attendance, more instructional time, and improved learning outcomes.

The pilot was started in 2017, in 12 districts across three provinces (Gaza in the south, Sofala in the center and Niassa in the north); one of which would act as a control group. The pilot tested three different models: two based on a number of composite indicators, and one which focused only on reading skills in Grade 3. The data generated by the pilot baseline were reportedly of very poor quality, indicating low capacity at the district level for reliable data collection and literacy assessments.²

A World Bank technical note considered some key lessons from the pilot, including the following:

- The indicator scheme was too complex and verification means were not reliable.
- Learning outcomes are hardly improved by this type of program without any further support to schools and teachers.
- District authorities have weak capacity and received limited resources to perform their monitoring responsibilities.
- Such a monitoring scheme is expensive to scale up.

It is understood that a new phase of piloting, at larger scale than in this first phase, will be funded by new ESSP/GPE funding through FASE. Many challenges remain in place for such an approach to work and for it to be taken to scale, not least the risks presented by district and school council capacity, the risk of collusion between schools and districts and/or school councils, and the lack of capacity for the kind of robust monitoring and verification that would be needed. It seems possible that the risks outweigh the potential benefits to the education system in Mozambique at this time.

¹ OPM (2018). ² World Bank (2020b).

125. Program reports note that PBA funds were also allocated both to training at different levels and to some SDEJT expenditures.¹⁰⁶ As noted above (for DLI 8), districts which classified the budget and execution correctly, received additional supervision funds.¹⁰⁷ The PFM4R Mid-term Review (MTR) in 2016 noted that in the MINEDH budget for that year, the Ministry had applied PBAs to provincial (PDE) and district (SDEJT) levels, as a result of meeting the first verified indicator, the DLI for budget classification at district level (DLI 8). The MTR notes this payment provides “additional funding to the PDEs [provinces] and SDEJTs, as well as [ensuring] the programming of specific activities that aim to achieve the remaining targets.”¹⁰⁸ It was also noted at that point that it had been harder to operationalize PBAs than envisaged, and that owing to more limited external funding than anticipated, the incentive payments were lower than planned. Program reports confirm this, with PBA funds allocated to tasks such as the revision of the ADE manual, supplementing FASE funds for supervision, and even the payment of ADE grants and training of SDEJTs.

RBF linkages to education expenditure

126. FASE expenditures are in principle ‘on-budget’ and use government systems. Funds flow directly from the Treasury (central government) to provincial and district levels, and from there to schools. While the fund uses national systems, it includes additional safeguards such as external audit, prior review of procurement processes by the World Bank (particularly for textbooks), more detailed recording of expenditure, and regular financial reports. Despite the safeguards, the period of RBF followed corruption scandals within the sector. In November 2012, the MINEDH discovered that some of its staff had syphoned off payments for fictitious salaries at central level over a long period of time. The fraud did not involve FASE funds, but donors became nervous, in part because they learned about the incident through the press. In 2015, a further high-profile case did involve FASE funds, with fraudulent payments to a construction company building a tourism school in the north of Mozambique. Safeguards were strengthened following these incidents and the hidden debt scandal in the 2015–

¹⁰⁶ World Bank (2017f).

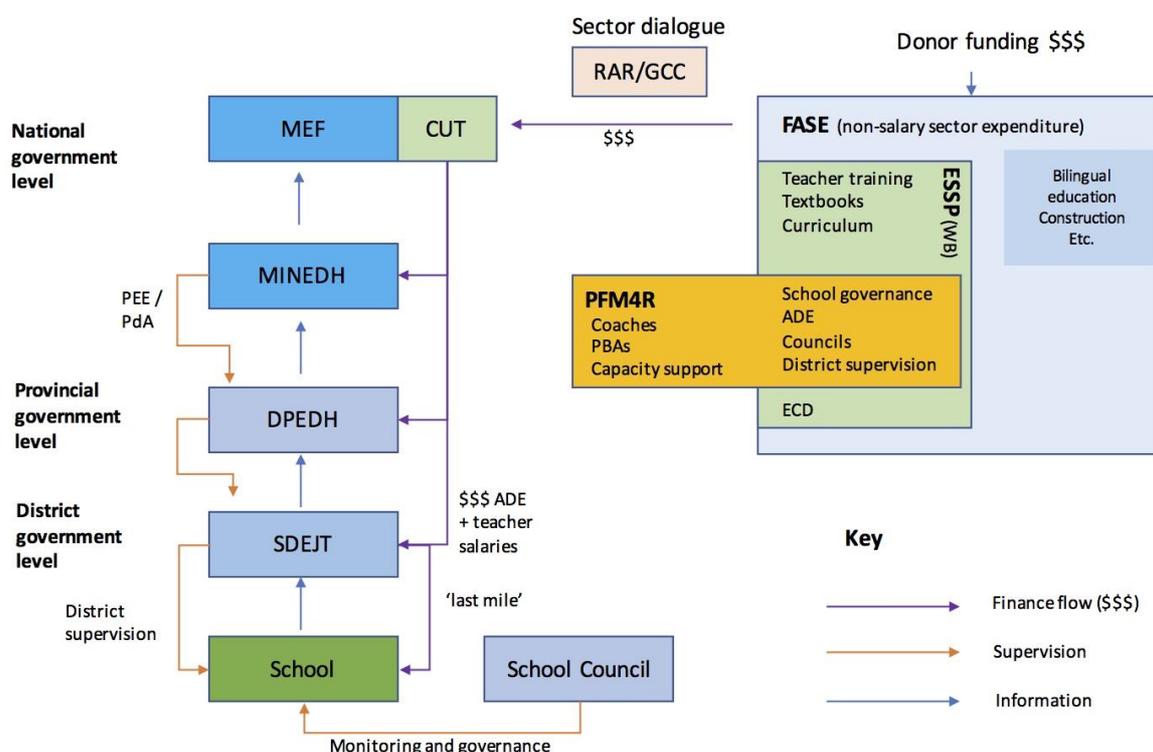
¹⁰⁷ World Bank (2017b).

¹⁰⁸ World Bank (2016).

16 period (see Section 2.1). This included an e-Sistafe module for payment of salaries (called e-folha), which had better built-in controls and verification mechanisms; as well as stronger internal rules in the e-Sistafe system.¹⁰⁹

127. While both programs brought “new” funds to the education sector, the PFM4R was a stand-alone program, separate to the World Bank’s main education sector support through its long-running ESSP program (Figure 12 depicts the overlaps.). The GPE additional financing was however aligned directly to the ESSP program and thus was to be paid into FASE. GPE funds of USD 57.9 million in the period 2015–19 were contributed to FASE, programmed alongside IDA funding of USD 50 million additional financing. Of this total, USD 17.4 million was planned as variable tranche payments against DLIs; 30 percent of the GPE contribution went to ESSP. The German RBF in construction tied €15 million (USD 17 million) to RBF in the 2014–18 period, around 18 percent of the German total potential contribution to FASE. However, as noted, only €10 million (USD 11 million) was disbursed, so it made up approximately 12 percent of the German (KfW) contribution in the period. Unlike the PFM4R program, in the GPE and German (KfW) use of RBF, there was no explicit plan to pass on incentives through PBAs, and no evidence has been found in this research that incentive payments were made to subnational levels for achieving targets.

Figure 12 Operation of ESSP and PFM4R, overlaps and links to province, district, and school level



Source: Authors.

128. The overall ESSP contribution to the FASE is “virtually earmarked” to five intervention areas and these are considered *eligible* expenditures (books, ADE, district supervision, teacher and director training, M&E and research).¹¹⁰ The earmarking of ESSP funds aims to ensure that sufficient funds are allocated to and used for specific interventions. The Bank disbursed on the basis of forecasts in the annual plan of activities, while recognizing the fungibility of FASE funds between the categories specified. The MINEDH reports to the World Bank on those earmarked expenditures; however, this reporting does not generally affect disbursements (see

¹⁰⁹ Orlowski (2016) + RAR 2013 (MINEDH, 2014)

¹¹⁰ World Bank (2015b)

Section 3H on cost-effectiveness). For the variable component, payment against DLIs is made after achievement of targets; the MINEDH requests payment after their verification by the IVA, and payments are made in the same way into FASE. German RBF did not have a separate means of verification.

129. Under this arrangement, GPE and German variable tranche funds paid against DLIs were transferred into the central FASE fund, and were not specifically tracked against activities. Donor funds going in to FASE were fungible, and intended to contribute to the broad range of activities set out in each annual plan of activities, drawing from the 2015–18 Operational Plan. A 2016 FASE review highlighted that the original memorandum of understanding (MOU) did not foresee conditions or earmarking of the kind used by GPE and German variable tranches. While the review stressed that there was no evidence that such arrangements had had a negative impact on the sector, it highlighted the risk of increased uncertainty in fund flows and limitations in flexibility of spending (see below).¹¹¹ However, it is also possible that such arrangements have enabled the MINEDH to protect spending for and focus on the implementation of key reforms. This brought an element of RBF into FASE that had not been there previously (see Box 10).

Box 10 The FASE, its memorandum of understanding and the place of earmarking and variable tranches

The FASE was established in 2002 with its first memorandum of understanding (MOU) signed by Canada, Denmark, the Netherlands, Ireland, Sweden, and the World Bank. The MOU has since been revised in line with each cycle of the Education Sector Strategic Plan (PEE) (that is, in 2006, 2012, and now in 2020 for the new PEE). This MOU sets out the governance arrangements for donor contributions, including fund flows, financial management and procurement, monitoring, reporting, and dialogue. The dialogue structure for the sector is set out in an Annex to the MOU, including the “Troika” approach, annual review meetings (RAR) and other regular coordination meetings. This timetable, particularly the RAR, was aligned to the GBS review process. The Planning and Financial Management Working Group, which includes donor participation, has the mandate to monitor the implementation of the MOU.

The FASE is centrally managed within the MINEDH, under the responsibility its finance department, with dedicated full-time staff; significant FASE funding flows to provinces and districts. FASE funds are well aligned with and use government budget and PFM systems, though with additional safeguards for the donors, which allow for funds to be tracked and audited separately. The MOU stipulates that key reports are prepared, including a quarterly Financial Report on FASE funds; an annual audit of the end-of-year FASE Financial Reports, an annual Performance Report ahead of the annual RAR meeting, and an annual plan of activities (PdA). In addition, the annual Procurement Plan is submitted to the World Bank for prior review. Donors must also approve the annual PdA, but otherwise funding is fungible and are not tied to specific budget lines or outputs.

The original FASE MOU was clear that funds should not be earmarked or conditional. However, gradually some donors have tracked specific expenditures against their contributions (“virtual earmarking”), and have introduced mechanisms such as variable tranche payments against outputs, which are discussed further below. There has been some debate about whether this is appropriate, summed up in the recent GPE Evaluation as a trade-off as such arrangements within FASE “have the potential to strengthen accountability for inputs, processes, and outputs for the sector, but may also reduce predictability and add complexity to planning, monitoring, and evaluation.” The 2016 FASE Review made clear recommendations to limit the use of such mechanisms, given the potential risk to predictability and flexibility in the use of donor funds. The MOU was revised again, in 2020, with consideration given to the place of RBF mechanisms within the fund and its architecture.

The 2016 FASE Review also noted the critical role of FASE in funding routine expenditures as part of expanding the coverage of the education system, as opposed to what could be seen as a more typical donor intention to fund change and reform. Thus, a significant proportion of FASE expenditure has been taken up by textbooks, construction, school grants, and supervision. This means that the opportunity cost to non-disbursed funds to FASE in terms of essential expenditure at school-level, may be significant.

¹ Universalis (2019). ² Orłowski (2016).

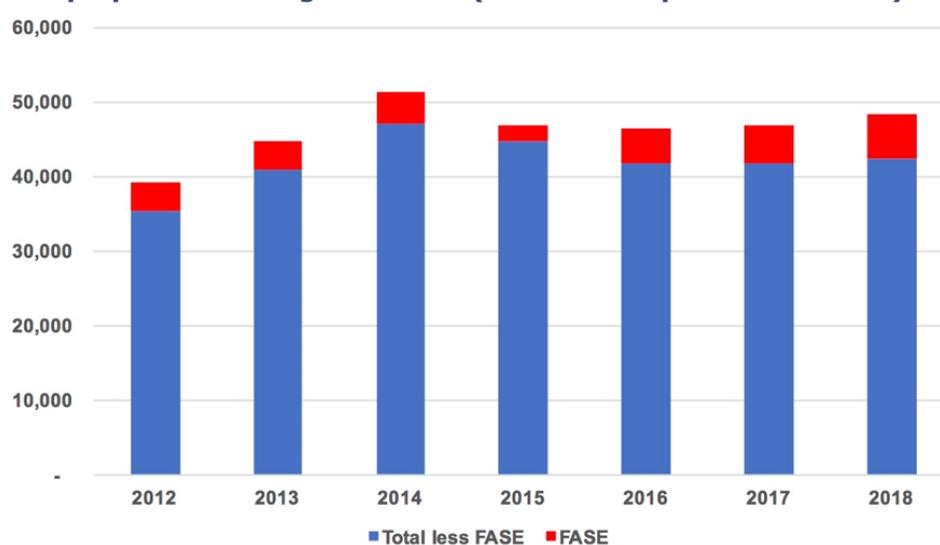
¹¹¹ Orłowski (2016).

130. The FASE funds receive annual audits every year, which have been conducted by either EY or KPMG in recent years. Despite improvements, the audit reports produce much more information on the exact amount and timing of donor disbursements, and less information on the exact use of FASE expenditure. This makes it somewhat challenging to track the expenditure of key areas within FASE such as textbooks, construction and ADE from year to year. In addition to this, despite being external to FASE, the PFM4R funds may have been used for FASE purposes. In 2016, this included the use of PFM4R for the second tranche of ADE. This was outside of the intended use of the PFM4R funds but also suggests a relative lack of clarity in the exact use of external financing within the sector.

Aid volatility and RBF

131. The period of RBF covered by this assessment was particularly volatile in terms of flows of donor funds to the sector. Overall, donor contributions to FASE have fluctuated over the past 10 years between 30 percent of sector funding to less than 10 percent of sector funding; but as shown in Figure 13, 2015 saw a particularly low donor FASE contribution.¹¹² This was the beginning of the period in which additional inflows came from the PFM4R Program and was also the year of the hidden loans scandal and the suspension of GBS (see Chapter 2), which meant that the overall government budget was squeezed.¹¹³ Partly as a result of this crisis, the real value of education spending stagnated during the 2013–18 period, with implications for the number of teachers government could hire, and the level of capital investment in the sector.

Figure 13 Education spending in real terms (Mt, millions; real value in 2018 Mt), and proportion coming from FASE (donor sector pool contribution)



Note: Analysis of data from MINEDH (2019), and FASE financial statements and audit reports. Inflation rate used from World Bank WDI, accessed October 2019. Given currency fluctuations, the total education spending per year varies from USD 750 to USD 1,500 million.

132. Aid volatility led the government to assess the early experience of RBF as very challenging: “this approach has been contributing to the unpredictability of funds for the following years. When the Ministry agreed to participate in the PGFoR [PFM4R], these funds were considered to be additional funds (premiums). However, at the moment, these funds contribute to mitigate the negative impact of the reduction of FASE funds, observed in 2015, and expected for the following years... Thus, the program “lost” its original philosophy of encouraging / rewarding good performance at various levels (even the school).”¹¹⁴ This was linked with the way that funds flowed in the program, as set out below.

¹¹² UNICEF (2018).

¹¹³ Following the depreciation of the metical after the hidden loans scandal, the value in meticals of USD contributions increased. This is part of the reason for the increasing share of FASE contributions in the 2016 to 2018 period.

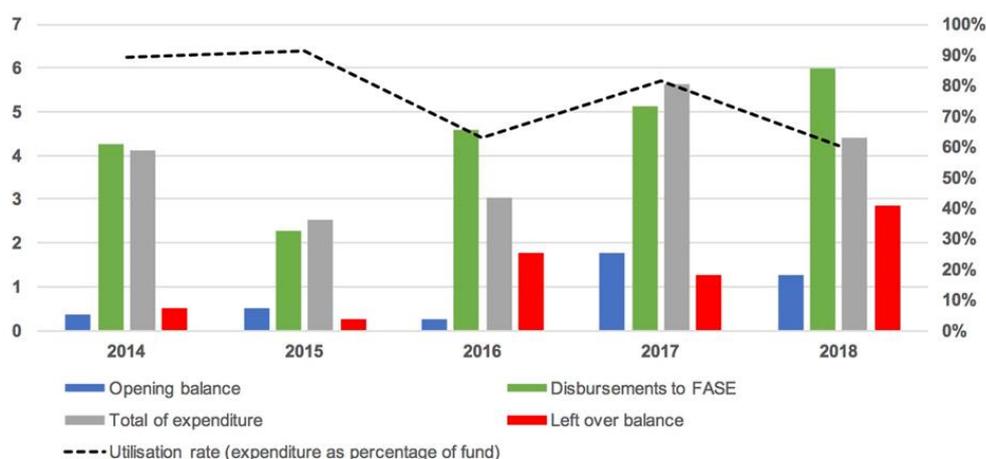
¹¹⁴ RAR 2015 (MINEDH, 2016).

Capital expenditure under FASE

133. As set out, the FASE funds a mix of recurrent expenditure items within the sector, including support to IFPs, district supervision, and school grants (ADE), and is the main source of capital expenditure for the education system, directly funding construction spending. The German use of RBF in construction aimed to align with the accelerated construction program and improve the efficiency of construction expenditure within the system. However, the time-line for construction projects clearly tends to exceed the annual cycle, and as such there are additional challenges to the planning of capital expenditure and the risks of aid volatility to this area of spending. An evaluation of KfW's support to construction has set this out as follows: "The annual potential construction volume was restricted by the FASE funds whose availability fluctuated from year to year, as well as by highly limited funds for investments from the MINEDH budget."¹¹⁵

134. There have been found to be differences between the budget in the plan of activities and the final budget for construction as recorded in e-Sistafe, linked to lower disbursements than committed by donors, which created constraints such as having to cancel tenders for construction and external inspection. The lowest percentage of budget allocation for construction was 51 percent in 2015, which was linked to a reduction in the construction budget. This was the period of the hidden loans scandal, in which some donors had decided to "freeze" their disbursements until the circumstances could be clarified.¹¹⁶ Construction challenges have been assumed to drive FASE's inconsistent utilization rate, which has been variable in the 2014–18 period as shown in Figure 14. Another driver of this variability may be late or incomplete donor disbursements.¹¹⁷

Figure 14 Utilization rate of FASE fund (percentage), with balances in FASE, disbursements, expenditure and remaining balance (Mt, billions), 2014–18



Source: FASE financial statements and audit reports (KPMG 2015; EY 2016; EY 2017; EY 2018; KPMG 2019)

135. As illustrated in Figure 14, expenditure rates do not always meet the level of disbursement, and funds may be carried over to the next financial year. Given the timing, the loss of €5 million (USD 6 million) in 2014 from the KfW construction RBF may have had a more tangible effect on sector expenditure than the USD 3 million loss linked to PTR performance from the GPE in 2016. This is because the left-over balance was so much higher in later years. For example, in 2018 it was USD 48 million, compared to USD 7 million in 2015. This in turn has implications for the costs of non-disbursements and whether these "bite" in terms of a reduction in the de facto expenditure. This issue is discussed further in the cost-effectiveness section below (see Section 3H).

¹¹⁵ KfW (2017).

¹¹⁶ SWECO (2018).

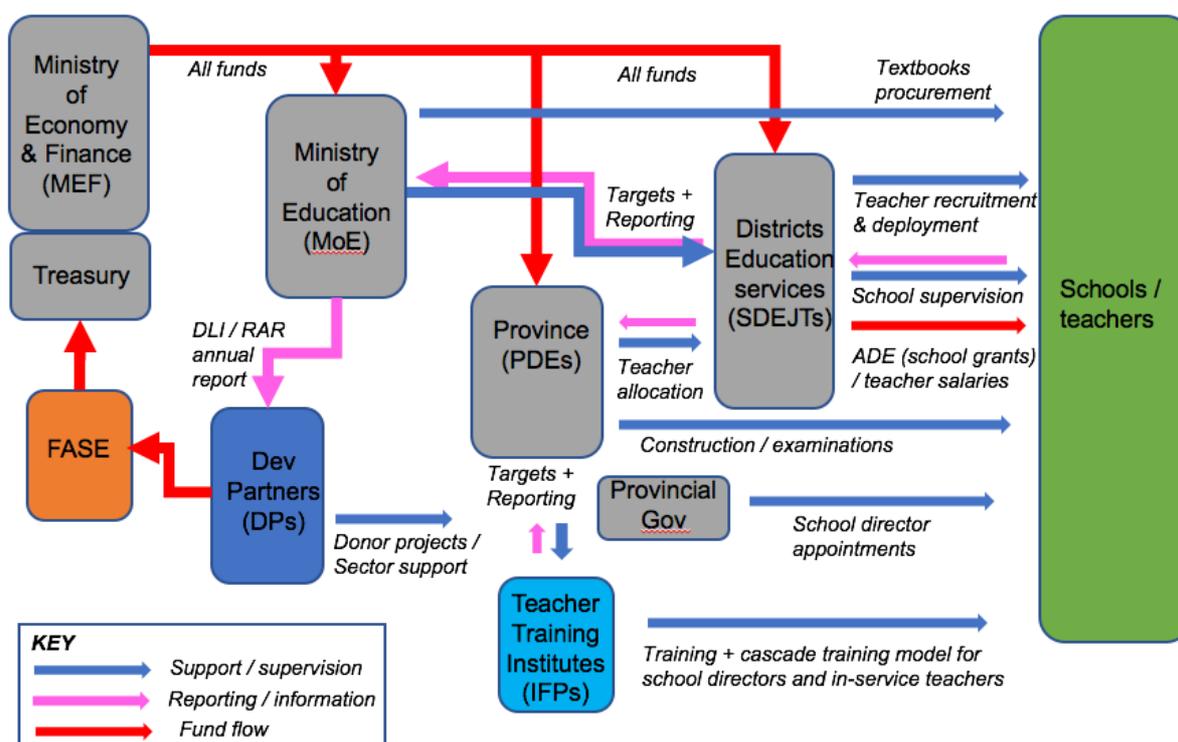
¹¹⁷ UNICEF (2017).

D. Coordination, capacity, and accountability

136. The RBF programs under review have sought to use and strengthen existing accountability and coordination relationships between institutions at national and subnational levels. In Mozambique, this includes provincial directorates of education and human development (PDEs) in the country’s 11 provinces; and at district level by District Services for Education, Youth and Technology (SDEJTs), sitting within each of the 111 districts and 52 municipalities in the country.¹¹⁸ For this research, we have interviewed directors of PDEs in the provinces of Gaza, Nampula, and Sofala. We also interviewed directors of 10 SDEJTs across these three provinces, both municipalities and districts, and representatives of four teacher training institutes (IFPs), in addition to the school directors of 10 primary schools (see Annex 2 for the full list of those interviewed). This qualitative research has provided some additional perspectives on how accountability relationships have functioned during the period of RBF under review.

137. As set out in Chapter 2, the simpler theory of RBF places it in the context of a principal, who pays for the results, and an agent, who undertakes activities to achieve results, and receives the funds. In practice, in the case of results-based aid, the *agent* is made up of the full set of different institutions of the government, including the MEF, MINEDH, and subnational tiers of government, plus schools and school councils, with the addition of school clusters (ZIPs) and IFPs in this instance. These institutions have a set of existing accountability relationships, including setting targets and making operational plans, financing, monitoring, reporting, and information and communication. For RBF to succeed, incentives should work with and/or strengthen these relationships.

Figure 15 Structure of government in Mozambique, finance and information flows



Source: Authors.

138. As noted in Section 3C, in terms of financing, the payments by the World Bank (for PFM4R and GPE/ESSP variable tranches) and by Germany (for RBF in construction) were made to the central level, with very limited use of incentive payments at other levels. Whether and how RBF has led to a focus on specific results and induced

¹¹⁸ Reorganizations in 2013 and 2016 reduced this from 128 districts and 53 municipalities.

effort among officials or units within the bureaucracy and at service-delivery level relates to the relationships between the MEF and MINEDH, within and between the departments of MINEDH, and in subnational structures, particularly PDEs and SDEJTs.¹¹⁹ Alongside the use of DLIs or financial incentives, programs have provided technical support and capacity development, and sought to strengthen the regulation, guidelines, and support provided from one level to the next. These efforts have in some cases been closely linked to the DLIs (as under the PFM4R program), but are also associated with the broader work of FASE and other bilateral programs or projects and some NGOs.

139. The achievement of any of the DLIs would require inclusion within the MINEDH's three-year Operational Plan and each annual plan of activity, which should link to annual activity plans at province and district level. It has been noted, for instance in the GPE Evaluation, that there has been inconsistent use of indicators and targets at the subnational level. Our research found that while there seemed to have been a good understanding of the specific DLI targets, it is generally not possible to track specific indicators for the provinces within annual activity plans or sector reports.¹²⁰ It has also been noted that there can be divergence from the national priorities at decentralized levels, perhaps in response to local needs; there can thus be "interference" from political priorities, resulting in a reallocation of resources to other actions.

Cascades in the PFM4R

140. The PFM4R program was designed to address sectoral and subnational bottlenecks in the PFM system which impact on service delivery. The program structure was based in the MEF, and put in place mechanisms for collaboration between the two ministries. This included a Program Coordination Team (PCT) within the MEF, and a Sector Ministry Team within MINEDH with representatives from the key departments involved in achieving each DLI, to ensure a degree of coordination within the sector-level implementation. This research found a very strong understanding at this level of the program objectives and DLIs. As already noted (in Section 3A), the program structure included coaches in each ministry, and facilitators in each province or PDE, closely working with SDEJTs. The program sought to bring about change at the school, as the point of service delivery, with a key role for districts in ensuring support and accountability. DLIs and related technical support focused on district, school, and school council functions, and at the same time required significant effort by central ministries (MINEDH/MEF). Box 11 outlines how coordination across levels was crucial to successful change in the timely disbursement of ADE.

Box 11 Steps required to address timely disbursement of ADE

Before 2016, ADE had never been disbursed in a timely manner. Addressing the timeliness of disbursements required coordinated and targeted actions by a number of actors. This required problem-solving that would cascade to school level, with many actions coordinated by the PFM4R program coordination team (PCT), together with the National Treasury Directorate (DNT) in the MEF and the MINEDH team of relevant directors and technical staff. This included the following challenges and related actions:¹

- 1) Central level: Budget approval delays and lack of donor/FASE funds in CUT (single Treasury account) at start of school year. **Action:** Joint action plan for the MEF and MINEDH with responsibilities and deadlines for each ministry. MEF to mobilize funds at end of year, off-setting any shortfall or late disbursement by FASE donors ahead of new school year. Multi-sector team to conduct disbursement process.
- 2) District level: SDEJT role in ADE disbursement adding complexity. **Action:** Inscription of ADE funds in SDEJT budget through a single expense item, to enable better monitoring. Training of SDEJTs on new responsibilities as Budget Holding Entities (UGB). Revision and printing of ADE procedures manual.
- 3) School level: Majority of schools not having bank accounts prevents direct transfer. **Action:** collaboration between MEF and MINEDH to register all schools, enabling them to receive a Fiscal Identification Number (NUIT) and a bank account.

¹¹⁹ Province and district education authorities also report up to the provincial governor and administration, as well as to the central MINEDH, representing a more complex flow of accountability, not explicitly addressed in the RBF theories of change or design.

¹²⁰ Universalia (2019) + RARs - MINEDH (2016, 2017, 2018, 2019b, 2020b).

4) Monitoring: lack of reporting and communication between levels. **Action:** Improving communication and monitoring within MINEDH, including a monitoring tool to track when funds arrive at school.

The PFM4R contributed to this at the central level by contributing Coaches to facilitate high-level technical meetings between the two ministries, and assist the development of joint action plans. Coaches also supported the revision of the ADE procedures manual and the development of monitoring tools. Province-level Facilitators also played a role in engaging the provincial directorate and training the district teams.

¹ OPM (2018).

141. The RBF focus on school governance/management took place in the context of ongoing reforms, channeling funds to schools and giving districts more responsibility in both financial management and the supervision and monitoring of schools. As with ADE, the PFM4R DLI on budget classification at the district level required effort at the MEF-MINEDH level to agree the systems and upgrade SDEJTs to UGB status and to put in place changes within e-Sistafe. There may have been some resistance from district authorities to the increased transparency this brought, but the targets were easily achieved and while associated with training and support to SDEJTs, the main work was seemingly done at the central level. It is unclear the degree to which this change has genuinely addressed broader PFM risks.

142. The district supervision function had originally been more centrally managed, but during the period of the RBF programming, the MINEDH (led by the Ministry's Directorate of Quality Assurance; DGGQ) was putting in place systems to monitor performance and develop the role and capacity of SDEJTs. The PFM4R clearly focused attention on this, and the associated target of 70 percent of schools being visited (with 50 percent of these receiving follow-up visits) was well known both centrally and at province and district levels. There has also clearly been a strong push from the top, to focus on teacher and director attendance in schools and to use the supervision process to do this, driven by the high-profile findings from the 2014 SDI report of low teacher attendance.

143. District supervision visits are quite comprehensive, covering school management, teacher attendance, and pedagogical issues. They identify issues and challenges at the school level and are meant to result in reports identifying these, which are then sent to the province. They also leave recommendations at the school for action by the school director and managers, and its council. Interviews during this research indicated that the quality of this work by district supervisors is variable, and these recommendations are not always to be found at schools. SDEJTs use supervision to monitor teacher attendance, and can apply salary deductions for days not present; while this came up in some of our interviews, it is understood that this is applied more in some provinces and districts than others. This was not a feature of the RBF, but its application may be more systematic, owing to more regular supervision.

144. Supervision visits, as one interviewee at province level put it, provide schools with an important connection to the education system. Regardless of its quality, the visit itself brings more scrutiny and importantly, at the school level, a perception of scrutiny. In theory, problems are identified by supervision visits, a process can be followed and warnings given, with follow-up at the second visit. However, the role of SDEJT visits is generally characterized as to support schools. Schools are within the structure of the district/provincial administration, and this division of accountability was described by one respondent as a "delicate situation", with district supervisors politely explaining the change needed. It is not possible from our field work to draw firm conclusions on the impact of these parallel lines of accountability, to both the provincial governor and the sector ministry. Overall, our interviews at district level supported the picture of improving supervision systems, and that these are contributing to better school management, teacher attendance, and even teaching.

145. For school councils, the story looks a little different. There was progress in establishing criteria for a functioning school council, and a process by which to monitor this. However, as set out in Box 12, it is more complex to bring about change from above in the way schools and communities interact.

Box 12 No quick fix for school councils

Our research included interviews with 10 School Directors in Nampula, Gaza, and Sofala provinces. With a small sample size and non-randomly selected schools, caution is of course needed is when using these interviews to provide any generalizations about how schools have experienced reforms in recent years. Unfortunately, we did not have the opportunity to meet with school council or community members, though a useful report based on qualitative research by CESC (a civil society organization with a strong research focus) gives some nuance to the overall picture.

At the school level, the national systems set out that school councils should be elected and should play a crucial role in holding schools and school directors accountable, ensuring transparency around use of ADE funds, and developing school plans. These standards and processes were set out in the School Council Manual, revised and disseminated by the PFM4R program by March 2016 (end of Year 2 of the program), with training and training kits for school directors and council members. Some of the training for council members was conducted by the school directors. Supervision visits by the SDEJTs reported that the majority of school councils were functional, having met defined criteria. Our interviews with district and school directors indicated good awareness of the manual and guidelines, and the usefulness of the training kit, and broadly reported that councils were improving their use of them. All directors reported that their school councils were functioning and had met several times in the previous year.

The improved functioning and greater accountability of school councils is, however, a complex change in behavior, and during this research a number of people have questioned the depth of the change that has taken place so far. As might be expected, there are some caveats reported in terms of the basic functioning of the councils; for instance, some stakeholders reported that elections did not always bring in sufficient new members, that there was a lack of understanding among council members about their role, or that paper work was not well kept. These challenges might be expected as the reform becomes established.

The DLI measured the administrative processes which act as proxies for a shift in accountability, but the reality is more complex. In better-off urban areas, particularly in the south, school councils may already have had an understanding of their role, and the motivation and capacity to undertake it effectively. In other areas, particularly in the north, there is less capacity for this (including low levels of literacy in the community) and perhaps less effort from the school director to hand over this authority. Interviews undertaken during our research suggest that there has not been a real culture of communities demanding more accountability from the school, and that a shift of this kind will require significant effort and time.

Qualitative research by CESC has indicated there can be limitations on the extent to which councils themselves are representative of, or are effectively communicating with, communities.¹ With this lack of transparency, comes a resulting lack of trust among communities and parents. The research also indicates a strong sense of hierarchy at this level, with some limitations on the innovation and autonomy of council members. Others have pointed to the economic barriers, notably: *“The level of participation in school councils is significantly higher in urban wealthy areas of the country. According an interviewed facilitator, this is because there are no financial incentives for stakeholder to become school council members. Instead, school councils rely on volunteers which is not viable for many economically disadvantaged people.”*²

This indicates that the information from the DLI was imperfect (see Section 3B). The DLI focuses on some important processes that needed to be in place. But it may be hard to incentivize deeper changes to accountability in this way, and hard to find a simple measure which captures it. Changing long-established behavior and attitudes will take sustained support at the local level, and will need to address ingrained political economy issues.

¹ CESC (2018). Qualitative research undertaken in selected districts/schools in Manica, Nampula and Gaza provinces. ² OPM (2018).

The role of capacity development and technical assistance

The PFM4R program envisaged a mix of facilitation, capacity building, incentives, and communication. In this design, there were separate funding windows for coaching/facilitation and capacity development; the former seems to be more focused on change management processes and problem solving, the latter to fund additional TA needs, training, and equipment. In reality, the role of program Coaches and Facilitators was found to be crucial to the success of the program, and enabled a link between central and subnational levels, alongside the MINEDH's own systems. They played a practical role in identifying specific problems, for instance by bringing MEF/MINEDH technical staff together to find solutions and agree a joint action plan, and improving monitoring and communication to track the flow of ADE funds. Mostly, these joint MEF/MINEDH processes are reported to

continue in the years after the program has finished. However, program reviews¹²¹ and some of our interviews have noted that, while there are examples of collaboration between the two ministries on specific issues, overall, the MEF was not sufficiently engaged, and the program bureaucracy was seen as problematic, leading some to suggest specific DLIs for MEF would have helped.

146. The coaching window was critical to the program, with five coaches recruited at the start of the program – one in the MEF and two in each of the line ministries, though by the time the program got under way it seems there was only one coach in each of the ministries. Under this window there were also facilitators in each of the provincial departments of education, working with program focal points (existing staff members tasked with program roles). The mix of coaches and facilitators made a critical contribution to the achievement of the PFM4R DLIs. The coach based in MINEDH played an active, problem-solving and facilitative role. For example, in achieving some of the DLIs – ADE tranche release, and budget classification/upgrading of SDEJTs to UGB status – the coaches enabled high-level meetings between the MEF and MINEDH, to develop a joint action plan, and ensure provinces and districts were informed and trained on implementation and monitoring.¹²² Some of the key activities undertaken by the coaches and facilitators included supporting the revision of manuals (for ADE, district supervision, school councils), development and use of monitoring tools (for example, for tracking ADE disbursements), design and delivery of training (for example, to SDEJT staff), and coordination and planning of school supervision by SDEJTs. This central role was complemented well by the work of provincial facilitators. Interviews at province level have confirmed the important role played by the provincial facilitators, including helping to set up processes which have continued after the program. However, we were also told that coaches were not present enough in northern and central regions of the country, with insufficient travel budget during the program.

147. While coaches and facilitators played this important role, support from other projects and organizations was also mentioned by stakeholders. For school management and the capacity of school councils, there has been support from a number of civil society organizations (CSOs) in different locations around the country, some funded under other donor projects. In fact, CSOs have been working in specific locations with school councils for many years. Some reports used and interviews carried out during this research suggest that this kind of support can contribute more effectively to the qualitative change that is needed locally, in empowering councils to hold schools accountable, to engage and inform the community, and to work with SDEJTs, giving them information needed for vertical accountability. Some of ten school directors we spoke to that had effective school councils mentioned support from (local and international) CSOs in the training they had received.

148. One specific example of how ESSP/PFM4R and other development partner support aligned was in the development of online and tablet-based tools for district supervision, developed in cooperation with GiZ and USAID. This kind of partner support was mentioned in a number of our interviews at district and school level as playing an important role. The capacity building for education planning, management, and monitoring developed under the POEMA Program has also had significant support from GiZ and UNICEF, is relevant to achieving a number of objectives more broadly, and may have contributed to achieving DLIs through provincial/district planning and resource management. Judging by a number of interviews and reports, including interviews with staff at province and district level that we spoke to, the POEMA Program appears to have made a very important contribution to sector management, particularly at province and district levels, though its application has been different across provinces. An interview with the Provincial Directorate in Sofala particularly noted the support from GiZ in this respect.

149. The Capacity Development Window under PFM4R was set up for demand-driven support, with proposals made to the PCT for consideration and funding. However, it is also noteworthy that PBA funds could also be used for training, and other activities, which could be considered part of capacity development in a broad sense. The

¹²¹ OPM (2018).

¹²² OPM (2018).

capacity development window was not found to be effectively used. This was linked to major challenges in financial management for the first few years of the program – PCT delays meant disbursements for approved capacity development proposals were made with delays between three and six months, which was not in the spirit of the design of the window.¹²³

Cascades and technical support linked to the GPE variable tranche

150. The use of DLIs within the GPE/ESSP program was managed as part of broader FASE support, without the specific program structure and staffing that came with PFM4R. As for GPE variable tranche indicators, there were central MINEDH departments/directorates responsible for achieving specific DLIs. There was less involvement for the MEF, though there was a point of interaction focused on provision of the program budget. There was some coherence between the focus on school director training/evaluation and the PFM4R focus on school governance. The key central departments involved in developing teacher and school director training/evaluation were DNFP/teacher training, INDE, and DGGQ /quality control. IFPs, which were under PDE authority, played a key role in the planning and monitoring of training.

151. In-service teacher training was rolled out by the DNFP, with targets set for each IFP being met. The IFPs were aware of these targets and the need to plan to meet them, even though we heard that funds sometimes came too late in the year for implementation. The challenge, noted in Section 3B above, is that the target focused attention on the first tier of a cascade, without ensuring follow-up to the cluster (ZIP) and school levels (see Box 13). Our interviews at district and school levels indicate that the cascade was reaching the ZIP level to some degree, though it is not clear to what extent the school-level training was implemented. In the annual sector performance (RAR) reports, the focus is mainly on the indicator, but there is a discussion on the institutional links between IFPs, ZIPs, districts, and provinces, and an acknowledgment that teachers at school/ZIP level do not meet frequently, given other time constraints. It is notable that the new GPE program will invest more heavily in the school-level observation and coaching of teachers, indicating possibly that this needs a different kind of support and attention. There has been other bilateral project support of this kind (for example, from USAID, UNICEF, and NGOs), working with ZIPs and schools directly, on which this approach will build.

Box 13 Teacher training and the cascade model

Teacher training has been the focus of a number of reforms over the past two decades. In 2007, the existing teacher training centers were replaced with the new Teacher Training Institutes (IFPs) and a pre-service training course of one year, with an entry requirement of 10th Grade (that is, a 10+1 model). This model continues to date, but it has been recognized that it does not provide the quality of teachers needed. So, alongside this, the system has been testing a 10+3 model, with the intention of phasing out 10+1 eventually, as teachers upgrade their qualifications. Another model, of 12+1, has also been put in place.

In all of these reforms, there have been acknowledged trade-offs between the costs (less qualified teachers are paid lower salaries) and the ability to meet demand (longer courses reduce the capacity of IFPs to meet the demand for trained teachers) on the one hand, and the quality (teachers with more years in school and longer training should have improved knowledge of the curriculum and teaching methods) on the other.

It has been recognized that in-service training for teachers has not received sufficient attention, and there was a lack of any coherent system. All teachers need opportunities for continuing professional development, especially those teachers whose initial training came through the 10+1 model. There is little articulation between the in-service training and teacher qualifications and career paths, and there was little focus on how teachers could reform their classroom practice to implement the revised curriculum. In 2017, a new in-service training strategy was approved for implementation, which placed the IFPs at the center of delivering in-service training, using a cascade model that replicated training at ZIP/cluster level using experienced teachers, then at school among peer groups.

The focus of RBF was the selection of a DLI which set annual targets for the number of Grade 1 and 2 teachers to be trained at IFPs. This was accompanied by program support to teacher training for early grade reading and math. It is notable that under the MINEDH's Operational Plan for 2015–18, it had articulated an indicator as: "Number of

¹²³ World Bank (2016).

teachers from the 1st cycle of Primary Education (1st and 2nd classes) who, having participated in the new training program, apply in the classroom the methodologies of teaching to read, write and speak in Portuguese.” The focus on measuring the application of training in the classroom was dropped from the indicator chosen as the DLI. The DLI focused only on the first level of the cascade, at the IFPs, without incentivizing change and implementation at the ZIP or school level.

Join annual reviews (RAR) have continued to track the implementation of in-service training reforms. The 2018 RAR found that while the in-service training had expanded over the years, the training at ZIP and school level had not been implemented properly, and identified insufficient articulation between the different levels (ZIP, IFP, districts, provincial departments) and limited monitoring as causes, with recommendations made for improvement.¹ Similar findings were recorded in the 2020 RAR.² During our interviews, the MINEDH indicated the need for more work at the school level, with a stronger approach to monitoring and providing support at the school level. The school directors interviewed were aware of the training and the approach to cascade from IFP, to ZIP and on to schools. The rollout of this strategy, with more focus on school-level mentoring, teacher observation and practice, has been included in the proposed new GPE funded support, expected to start in 2020/21. This ongoing focus was reiterated in interviews during this research, with the MINEDH continuing to see this as a priority reform.

¹ MINEDH (2019). ² MINEDH (2020b).

152. The GPE/ESSP focus on school director training and evaluation complemented the PFM4R focus on school governance and management. There was some recognition that the real systemic challenge was, and still is, the appointment of school directors. The training was developed by INDE and DNFP and targets passed on to IFPs to roll out the training in each province (after initial piloting in three regional centers). However, as noted in Section 3B, the training has not brought about improved performance, and this is likely the result of existing parallel accountability systems, outside of the sector line, in which school directors report to district administrators and upwards to provincial governors. Our interviews suggest that for those directors who are not already intrinsically motivated, this may negate the potential positive impact of training. We also heard from some interviewees that there was not sufficient follow-up to the training.

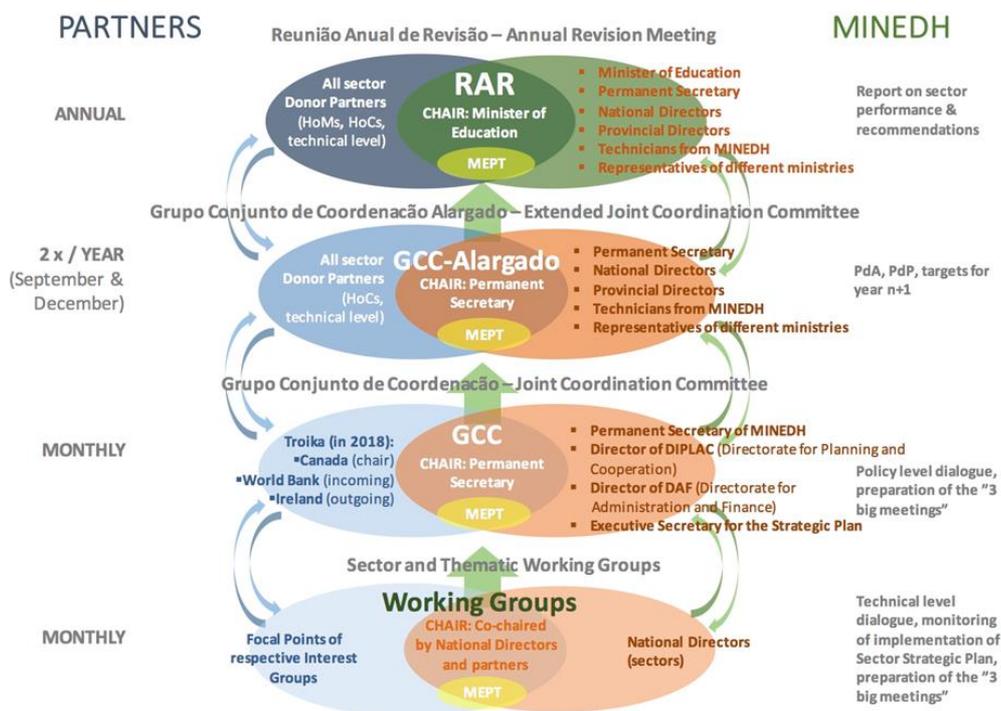
153. There was a less direct use of technical assistance to support the achievement of the GPE DLIs. FASE does not operate as a program, but funds a range of activities under the MINEDH PdA, for which some technical assistance is recruited. The 2016 FASE review noted that technical assistants and advisers were mainly located in the planning and finance directorates, the central Procurement Unit and the Construction Unit. The 2016 review noted limited recruitment of international technical assistance (TA) (instrumental in developing systems, processes, and planning), and more widespread recruitment of national technical assistants, who may often function as contract staff of MINEDH. FASE procurement plans indicate a significant number of consultancy assignments, of which it can be assumed some have contributed to the implementation of interventions or activities associated with achieving ESSP/GPE DLIs (for example, teacher and school director training), although they clearly cover a much wider range of activities. As such, TA played a less significant role than under PFM4R. It is notable that the proposed new GPE program anticipates a more coordinated approach to planning and managing TA under FASE funding, to support implementation capacity both within MINEDH and locally.¹²⁴

RBF and the sector coordination between donors and government

154. RBF is applied to education in Mozambique in the context of broader donor support and the established coordination and dialogue structure, introduced in Chapter 2 above and represented in Figure 16 below. This process evolved during the period of general budget support and is now very much built around the FASE; the terms of reference for this dialogue between the MINEDH and development partners are outlined in the FASE memorandum of understanding. Non-FASE partners are also involved in the different groups.

¹²⁴ There has been (and continues to be) important technical support by development partners with complementary support outside of FASE. For example, ESSP reports indicate the World Bank provided some technical assistance to teacher policy, for the design of in-service training strategy, and the technical expertise that comes with World Bank missions has been noted as important in planning and review. Other partners have provided parallel support to teacher training, including UNICEF, GiZ, USAID and some CSOs, though it is not clear to what extent this may have contributed to the specific DLIs.

Figure 16 Development partners and the MINEDH, partnership approach in the Mozambican education sector



Source: MINEDH presentation to GPE partners (May 2018).

155. This dialogue structure and partnership are broadly considered to work well; the recent GPE Evaluation found a consensus among donors and MINEDH that the relationship is strong, and can address difficult issues. However, reviews have acknowledged some weaknesses or challenges; the need for more consistent technical engagement in the working groups, particularly from donors, in order to look beyond the monitoring of indicators, to explore options and solutions to achieve results. The GPE Evaluation indicated that some feel there is too much focus on indicators, that there may be too many indicators, and that there is not enough emphasis on the quality of reform implementation. The dialogue process has been seen by some as quite cumbersome and time-consuming, and at times overly process-focused, though it has been seen to focus more on results in recent years. Importantly, the process is also seen as overly centralized, with very limited subnational involvement and representation only of those CSOs with a presence in Maputo.

156. The design of the RBF programs and the selection of indicators/DLIs, the reporting against them and the disbursement of funds was a new way of working for the sector. Progress against all indicators from the sector/operational plan is assessed in the GCC meetings, and action plans for the coming year are discussed along with the budget, with partners communicating their commitments. The Annual Review Meeting (RAR), and the performance report feeding into it, is the chance to review performance, including against the DLIs. The RAR reports set out progress against the DLIs in much the same way as against other sector indicators. The DLIs seem to have an important place in the discussions but do not dominate the process. It is notable that RAR reports continue to cover the RBF DLIs or related technical discussions, even after the programs have ended. The structure of the dialogue provides opportunities for partners (FASE donors, non-FASE donors, CSOs) to engage at the policy level as well as in more operational and technical discussions.

157. The introduction of DLIs for GPE funding had some implications for the broader partnership. As GPE funds were channeled through the FASE, there has been some debate locally, picked up by FASE reviews¹²⁵ and the GPE evaluation,¹²⁶ as to whether this contributed positively or negatively to the operation of the fund. A concern has been that DLIs – and other earmarking of funds within FASE – can lessen the flexibility of FASE funding, tending to “projectize” funds rather than contributing to a broader MINEDH approach to planning and prioritization. On the other hand, there is also some consensus among stakeholders that the DLIs have helped focus attention on some agreed priorities and ensure monitoring of these activities and outputs.

¹²⁵ Orłowski (2016).

¹²⁶ Universalia (2019).

E. Evidence-based policy and verification

158. The use of RBF makes it possible to focus on evidence of results, and this in turn has the potential to improve the policy-making process – *sharpening minds* of policy makers and sector stakeholders. From our interviews and desk review, it is clear that the 2014 Service Delivery Indicator (SDI) report and the earlier National Learning Assessment (NLA) in 2013 were major catalysts for change in the sector, showing the value of evidence for stimulating action.¹²⁷ The provision of evidence, on quality at the point of service delivery and on learning outcomes, led to a significant shift in the policy dialogue within government and between partners, which in turn stimulated the use of RBF to seek to break the “inertia” felt to be present in the education system.

159. The period of RBF implementation has not been as productive in this regard. The NLA in 2019 was not completed, despite being considered as the final outcome measure of sector performance for the 2012–19 Education Sector Strategic Plan period. The second SDI report in 2018 from the World Bank provided an update on sector efficiency measures, including teacher attendance; however, it may have faced methodological problems in its research in terms of the quality of data collection. The EMIS system itself has received very little attention in the 2014–19 period, and may be beset by problems, including “ghost” teachers and “ghost” students (see Box 15 below). However, there were some pathways for RBF to improve information systems, with some minor improvements in the period.

Evidence within the RBF programming

160. The use of RBF in Mozambique was on a relatively small scale. The DLIs form a subset of the results for the sector; but they tended to sit outside the main results framework sections of the annual sector reports (RARs), even for the GPE district PTR indicator, despite it being a natural fit with other indicators within the results framework (national average PTR and provincial parity PTR). However, during the programming period at least, systematic reporting on all DLIs was expected. With the exception of the German DLIs, which only appeared in one RAR report, the other DLIs were relatively clearly reported on each year.

161. The PFM4R and GPE introduced independent verification to the sector, which provided an additional source of information and the idea that there should be some checks on government-reported information. The use of the *Tribunal Administrativo*, the national audit institution, as the independent verification agent (IVA) under the PFM4R also intended to improve and institutionalize performance audit, with potential spillovers to national accountability systems. The GPE variable tranche used a contracted third party, Ernst & Young (EY), for the IVA role; and the German RBF had no equivalent verification entity.

162. There were some important pathways by which the use of RBF might contribute to improved evidence systems, and might in turn influence sector policy and strategy. These included the following:

- Timeliness of ADE – the DLI within the PFM4R provided a focus on ADE being received by schools, which had not been an indicator of progress up to that point.
- Budget classification – the DLI 8 within the PFM4R specifically aimed to improve information on subsectoral expenditure, which had not been clearly reported in the past.
- The DLI on functional school councils provided a quantitative measure on whether they were functioning, which had not existed before.
- The DLI on supervision provided an indicator on the percentage of schools covered, which had not existed before the PFM4R.
- The improved system of supervision also provided new sets of data on school performance.

¹²⁷ The GPE evaluation (Universalia, 2019) placed both sources as key justifications for the strategies set out in MINEDH’s 2015–18 operational plan, which was felt to significantly clarify the intended reforms of the 2012 Sector Plan. The ESPIG/GPE application which required this plan in place was also then central to this.

- Verification through the PFM4R undertaken by the *Tribunal Administrativo* provided independent checks, as well as some degree of quality assessment on the above indicators. This also had the potential for strengthening national systems of performance audit.
- The GPE DLI on the evaluation of school director training provided the potential for a check on the quality of directors on important dimensions of performance.
- The GPE DLI on district-level PTR provided a new focus at district level. The PTR had only been reported as an average for province level in sector performance up to 2014.
- The pilot of ADE *Desempenho* (performance-based ADE) provided an evaluation of what might work in terms of incentives for schools.

163. The RBF programming therefore created some new indicators and processes, which generated evidence that had not systematically been reported in the sector. The test of whether this improved evidence systems is in part whether these were institutionalized beyond the period of RBF, and in part whether they improved the quality of information in the sector and its use in the policy-making process.

164. Each DLI was reported using national systems, and involved self-reporting by SDEJTs and provincial departments, or IFPs in the case of the teacher training and school director training. The PTR indicator was generated from the pupil and teacher numbers linked to EMIS. As noted above, the DLIs were mainly at process or output level, identifying specific system bottlenecks which hindered priority reforms. Table 10 provides an assessment of the effect of the potential channels for improving evidence systems both during the RBF programming period (2014–18) and beyond (2018 to date).

Table 10 Potential pathways for improving sector evidence from RBF

Pathway to improved sector evidence	Change to evidence system during program period (2014–18)	Sustainability of evidence beyond program period (2018 to date)
Timeliness of ADE	<ul style="list-style-type: none"> • Timeliness of ADE was not reported prior to program but was reported regularly during period within budget execution section of RARs. • Second tranche of ADE timeliness was not reported systematically. 	<ul style="list-style-type: none"> • Timeliness of ADE no longer an indicator for first or second tranche.
The DLI on functional school councils	<ul style="list-style-type: none"> • Proportion of complete primary schools with functioning school council defined during program period and measured. 	<ul style="list-style-type: none"> • Functional school councils not an indicator beyond the PFM4R period.
The DLI on supervision on the percentage of schools covered	<ul style="list-style-type: none"> • The number of schools covered – complete primary schools – was reported regularly during period. 	<ul style="list-style-type: none"> • The percentage of schools covered by supervision is still reported in ongoing RARs.
The improved system of supervision	<ul style="list-style-type: none"> • Improved supervision system linked in part to DLI, as well as other donor involvement. Data platform means more data on schools generated by SDEJT supervision and forwarded to province and MINEDH level. • No systematic reporting of data gathered by the new system. 	<ul style="list-style-type: none"> • Data from the supervision system are not yet formally aggregated or reported.
Verification through the PFM4R undertaken by the <i>Tribunal Administrativo</i> and national systems of performance audit	<ul style="list-style-type: none"> • The <i>Tribunal Administrativo</i> attempted to look at some quality aspects of the DLIs in verification role; however, there was little demand for this and capacity was also low, with little capacity building offered. 	<ul style="list-style-type: none"> • While <i>Tribunal Administrativo</i> continue on other projects, they have not developed a systematic role in the education system beyond their normal financial audit role. Performance audit not institutionalized.
Evaluation DLI of school director training	<ul style="list-style-type: none"> • Evaluations were conducted by the quality directorate (DGGQ) within the MINEDH, to achieve the DLI, but were not reported more broadly. • One evaluation report was done of director quality. Possible linkage to changing the school director training curricula, but otherwise not clear. 	<ul style="list-style-type: none"> • Director training continues and DGGQ continue to do evaluations of directors. Information not widely reported in annual evaluations (RARs), and not clear how it is used.

Pathway to improved sector evidence	Change to evidence system during program period (2014–18)	Sustainability of evidence beyond program period (2018 to date)
The DLI on district-level PTR	<ul style="list-style-type: none"> The baseline for the indicator changed during the program period, as set out in the RAR 2015 (MINEDH, 2016), although was not recognized by GPE. The first verification report, in June 2017 (EY, 2017a), also recommended that the baseline should be updated. 	<ul style="list-style-type: none"> District-level PTR has not led to a more detailed assessment of teacher allocation and equity. Reporting still largely based on provincial differences, with targets, although growing disparities.
ADE-Desempenho pilot	<ul style="list-style-type: none"> Performance-based allocations (PBAs) to schools were not carried out within the PFM4R as intended. This evolved into ADE-Desempenho pilot. Pilot had data issues and inconclusive results. 	<ul style="list-style-type: none"> ADE-Desempenho being rolled out on a larger scale for 2020–29 Sector Strategy with greater funding from GPE and World Bank, in spite of lack of evidence in favor of this approach.

Quality vs. quantity of evidence on sector changes

165. A strong theme from the research has been a gap between the DLI indicators that have mainly been quantitative, and the qualitative changes that may have taken place. This was highlighted by a number of interviewees as a weakness with potential risks in terms of unintended consequences and prioritization within the sector (see Section 3G). This includes the following observations:

- For teacher in-service training, the IVA reports checked that training materials, plans, and budgets were in place, but the IVA was not tasked to check the quality or effectiveness of the training, or whether it led to any changes at the school level.¹²⁸ Given the DLI was measuring one step in a cascade training strategy, it could be argued that this was a missed opportunity. The original wording within the 2015 Operational Plan had been: “Number of teachers in the 1st cycle of Primary Education (1st and 2nd classes) who, having participated in the new training program, apply in the classroom the methodologies of teaching to read, write and speak in Portuguese.”¹²⁹ However, this shifted to “Number of teachers (1st and 2nd grade) with in-service training” in reporting, and the indicator simply became a count of teachers trained, with little clarity on what was being counted (which teachers and which level of cascade) or whether the training was either efficient or effective.
- The establishment of regular district supervision of schools was verified by the *Tribunal* against the target of 70 percent of schools receiving a first visit, 50 percent of which receive a follow-up visit. The data were self-reported by districts, and verified by the *Tribunal* (for example, checking school reports, noting school director signature or whether reports had been left at the school). This research team has been told by several interviewees that it is likely some proportion of these visits did not happen as reported – and in 2017 the IVA found a deviation from the government self-reported data from SDEJTs, which indicated issues with the data. This was disputed on the basis of the timing of the *Tribunal's* field work; however, it is not clear that issues with self-reported data were then ever fully addressed.¹³⁰ There is little doubt that more supervision is happening, but there has not been sufficient focus on the reliability of these data or indeed on the quality of supervision and whether or how it has led to changes in practice at the school level.
- As set out in Section 3B, supervision significantly improved during the RBF period, with the DLI from the PFM4R having made some contribution, but also because of the improvements from the system supported by USAID/GiZ involving tablet-based forms for data collection at school, as well as training undertaken of SDEJT supervisors, as part of POEMA with GiZ and other project support. This is work in progress, but is starting to provide stronger and deeper data on school performance, which is sent to the Ministry and the department of management and quality assurance (DGGQ). Despite this, the

¹²⁸ IVA reports – EY (2017a, 2018a).

¹²⁹ MINEDH (2015). The wording in Portuguese: “Número de professores do 1º ciclo do Ensino Primário (1ª e 2ª classes) que, tendo participado no novo programa de capacitação, aplicam na sala de aula as metodologias de ensinar a ler, escrever e a falar em Português”.

¹³⁰ The government data were therefore used and over-rode the IVA information source in this instance.

data have not yet been centralized or reported in a way that is covered in sector performance reports or discussed with development partners. A number of development partner stakeholders indicated that they had expected such an improved system. In turn, the ADE Desempenho (performance-based ADE – see Section 3C), implicitly assumes that the quality supervision system would provide data that could be used to make additional school grants (ADE) linked to performance, which appears to be a problematic assumption.

- The GPE DLI on districts with PTR above 80 does not appear to have been given significant attention. The IVA reports suggest extensive analysis of MINEDH data was done in the verification process.¹³¹ However, the write-up was very brief, and there was no indication whether there had been analysis of where progress was made or not made and what actions were taken (analysis which again was not required from their terms of reference). The verification reports did, however, make mention of the change to the baseline change due to district reorganization in 2013, and recommended that the baseline should be updated.¹³² This DLI could have warranted more forensic investigation – see Box 14 below, and Annex 4 for our own review of the PTR data.

Box 14 *PTR and different measures of equity*

The GPE PTR indicator has focused on an equity measure of the distribution of teachers across districts – for lower primary level (EP1). The DLI uses a threshold measure (districts over a PTR of 80), which is one of a number of measures on PTR with different targets that have been and could be measured in the sector:

- **National average PTR:** The PTR in primary schools has been an indicator reported on over many years, including under GBS, in the period up to 2011, which saw improvements in PTR with more teachers recruited.
- **Provincial parity:** The Operational Plan 2015 increased the focus on parity between provinces, and the sector has had a target for the ratio from the highest PTR province to the lowest over time.
- **District parity:** The DLI focuses on high PTRs via those districts with an average PTR greater than 80 (for complete primary schools - EPCs). There are other measures of within-province inequality that could have been used.
- **Within-district parity:** It is widely reported that it is significantly harder to recruit and retain teachers in rural schools. As a result, within districts teachers are likely to be clustered in urban areas. There is no direct measure of parity of PTRs within districts. However, the 2016 update of the three-year Operational Plan did highlight the need to distribute teachers to what are known as “N3 areas” – more remote rural areas in which it is harder to recruit teachers.¹
- **Distribution of teachers by pay-grade and qualification:** Teachers in urban schools generally have higher levels of training than those in rural areas, where most teachers have lower levels of training. Upper primary (EP2) and secondary (ESG1, ESG2) levels also have teachers with better qualifications than lower primary (EP1), and these teachers also receive substantially higher salaries than the majority of lower primary (EP1) teachers.²

The annual sector reports (RARs), over time, have consistently reported only on the national average and provincial parity measures, and these can be said to be consistent measures from before 2012 to the 2020–29 Strategic Plan. The district parity indicator which was the focus of the DLI became a focus in sector performance reports (RARs) during the RBF period and has remained reported for subsequent RARs. Overall, the reporting on the equity of PTRs across and within provinces has remained superficial and the deeper challenges with achieving equity in teacher distribution have not been systematically addressed.

¹ MINEDH (2017b). ² UNESCO (2018)

¹³¹ IVA reports – EY (2017a, 2018a).

¹³² EY (2017a).

The scope for performance evaluation alongside RBF

166. The verification process was used to check whether numeric targets had been met or not. Terms of reference for verification did not require any qualitative analysis or reflections on the changes being brought about; however, the *Tribunal Administrativo* was selected for the PFM4R as the independent verification agent (IVA) in part to strengthen national systems of performance audit. The *Tribunal* reported that it took the opportunity to develop a stronger approach to performance audit. It looked more qualitatively at the way funds were spent and recorded at school level, including the late disbursement of the ADE second tranche, but this information and analysis does not appear to have been used. The focus was on whether the DLIs had been met, and this was also the case for Ernst & Young (EY), who provided the IVA role for the GPE variable tranche indicators. However, an important constraint is that in undertaking this exercise at the national level, it may not have been feasible to achieve a sufficient sample size to make accurate judgements against some of the indicators (for example, for school supervision) and there were some methodological issues that needed addressing, including the timing of verification visits.

167. Looking at the overall process of verifying DLI achievement, and the work associated with the specific areas of reform, RBF does not seem to have generated a significant focus on how these specific outputs are contributing to broader or higher-level results. Each DLI could have been taken as a lens on changes in school accountability and management, the practice of school directors, and the process of developing improved teaching and learning in schools. The recent GPE Evaluation of support to Mozambique noted that some felt the focus of central stakeholders was too much on the indicators themselves, rather than the broader contribution to education quality.¹³³

168. As the *Tribunal Administrativo* is the national audit institution for Mozambique, the decision to work with it was in line with the aim of using and “strengthen[ing] national systems”; this was also a partnership the World Bank had prior positive experience with. For GPE/ESSP, a decision was taken, after considering a number of options, to contract a private firm, Ernst & Young. During this research, it was not possible to meet the GPE IVA, and somewhat less information has been gathered on this verification experience than for PFM4R. The research indicated a broadly positive experience among partners in using the *Tribunal Administrativo*, and with the resources available for the program, it was possible for the *Tribunal* to conduct a more comprehensive performance audit than it would normally be able to do, and it was able to receive capacity development support alongside this. However, as with other elements of capacity development, the potential was underutilized, and this was ascribed by one interviewee to for a failure to be proactive in developing a capacity-building approach for the *Tribunal* in particular.

169. Our research indicates that a number of people question the enrolment data in primary schools, which could have been inflated due to per capita funding through ADE; this has not been questioned in any reports, although the UNESCO Policy Review¹³⁴ highlighted that the first cycle primary enrolment was higher than the population for the same age group. This has a number of implications, but certainly could call into question the PTR itself as a measure. It appears that foundational work on EMIS data has not been undertaken in the period since the 2012 Sector Plan, and, as set out in Box 15, this may have caused the presence of “ghost” pupils in the system to be missed, questioning the overall veracity of the EMIS system.

170. Alongside the issue of “ghost” pupils is a potential issue of “ghost” teachers. Periodic “proof of life” exercises have been carried out by the Mozambican state for all civil servants. Most recently, in 2018, the government announced that an investigation over two years had uncovered that close to 10 percent of the civil service were on the payroll but not actual employees, with a cost to the treasury of USD 250 million between

¹³³ Universalialia (2019).

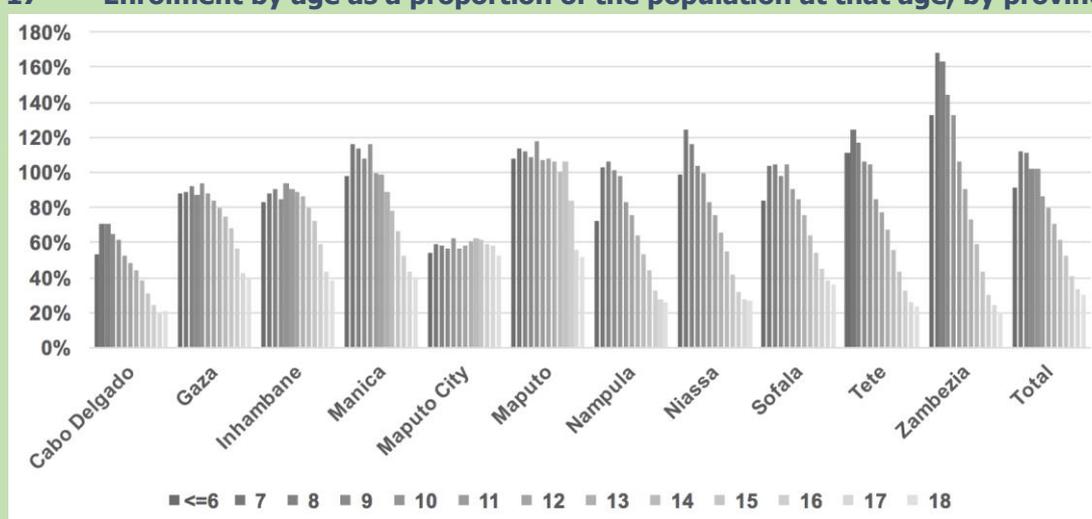
¹³⁴ UNESCO (2018).

2015 and 2017.¹³⁵ It is not stated in press reports whether any of these were teachers or, if so, how many; however, as teachers form the largest group of employees of the civil service it is likely they were represented. It is therefore notable that to date these major potential issues with EMIS have not been addressed, and the issue of “ghost” teachers has not been mentioned in the annual reporting of any sector or in other document since the scandal of 2012 in Nampula.

Box 15 EMIS, enrolment numbers, and “ghost” pupils

A significant limitation with the PTR as an indicator, is that it is made up of EMIS-generated information. Analysis of enrolment numbers in particular highlights a potential issue with “ghost” pupils, particularly in northern provinces. Figure 17 below shows the proportion of pupils at different ages reported as enrolled, as compared to available population information by age. The data may indicate issues with census information on population; however, it is more likely that it represents an issue with enrolment data. Deviation in growth rates of pupils (Annex 4) also point to “ghost” pupils being a more likely explanation.

Figure 17 Enrolment by age as a proportion of the population at that age, by province: 2018



Source: MINEDH, 2019a

UNESCO notes possible “double registration” at the start of the school year – “it could be that many children first register with the school, but do not participate or drop out before the end of the year; they register again the following year but are not recorded as repeaters. Statistically they appear twice as a new entrant.”¹ Given that ADE school grants are linked to a per-pupil formula, there is a risk that inflation of numbers could be happening to secure additional resources. In one interview, we had with district services (SDEJT), we were told 2,000 “ghost” pupils had been removed from the data in their district, an initiative that appeared to be linked to their own professional drive as opposed to any top-down directive, and we were able to corroborate this story in the district data. This suggests the problem may be much more widespread.

¹ UNESCO (2018).

The interaction of RBF and evidence-based policy

171. The contribution of evidence to the policy-making process could be in the form of identifying bottlenecks that have been addressed or in the linkage between bottlenecks being addressed and the related outcomes being achieved. There have been weaknesses in both in the period.

172. The *Tribunal Administrativo* conducted its validation exercise after the MINEDH’s own reporting, then reported to the Program Coordinator in MEF, copied to the Minister of Education (and Health); the Program Coordinator forwarded IVA reports to the World Bank. It was noted in our interviews that no opportunity was

¹³⁵ BBC, December 11, 2018 “Mozambique busts ‘30,000 ghost workers’” - <https://www.bbc.co.uk/news/world-africa-46520946>

taken to bring the *Tribunal* to present at sector meetings, and overall, the institution was kept at arm's length from other development partners. This limited the potential for sector-wide learning from the exercise, and it may have been because of the high stakes involved and the need for the program to present a picture of success to sector stakeholders.

173. The annual sector review and dialogue provides some key moments for learning more deeply about the qualitative changes experienced in the sector from year-to-year. Civil society organizations, among others, can be well placed to contribute to this kind of evidence and reflection, and generally this is done through the partnership with the Education for All Movement. While this provides a coherent and coordinated voice in the dialogue, it has been noted that opportunities may be missed to look at specific work in more detail. Our research reviewed several excellent reports produced by CESC, a Mozambican CSO, that provide in-depth qualitative research on the accountability challenges faced. However, it appears this has not been widely shared or discussed. Indeed, for the kind of reforms under review, more qualitative research is needed, to understand local dynamics and behavior change. This may indicate untapped potential for a deeper process of learning about what is working in reforms. There is a risk of RBF in this case promoting simplistic quantitative story-telling on change within the sector that does not reflect on deeper challenges and realities.

174. The terms of reference for the *Tribunal Administrativo*, to validate an indicator as met, required two provinces to meet the targets, increasing to four provinces, according to stakeholders. While the verification/validation process was done in a thorough way, the required reporting was very much focused on the quantitative achievement of targets, rather than qualitative judgements on the work (for example, on the quality of school supervision, or the work of school councils). From the design of PFM4R though, the intention was to keep the exercise simple; a verification of MINEDH reports, not an evaluation. The involvement of the *Tribunal Administrativo* has continued to some extent to conduct performance audits in the education sector, but funding is more limited than under the PFM4R program. This also raises the question as to whether there is a need for ongoing verification of achievements in the sector; for instance, verifying the reporting that schools continue to receive ADE on time and District supervision visits.

175. The approach has potentially then missed direct follow-up work to the initiatives from the 2012–16 Sector Plan that were reflected in the PFM4R programming. This includes moving attention on to the issue of the timeliness of the second tranche of ADE or the timeliness of other transfers made via FASE, including to supervision for monitoring and to IFPs for training, neither of which are systematically reported. Attention could focus on deepening and extending the sector PFM reforms, for more transparency and accountability in the use of sector funds, particularly at school. Further steps were taken to strengthen the supervision system, with tools and capacity building for supervisors, but other issues remain to be addressed, such as the issue of insufficient allowances to undertake supervision of more rural schools, which came up frequently as an issue in our discussions with SDEJTs. Some of these have will be taken up in the new 2020–29 Sector Plan; however, the RBF programming does not appear to have generated evidence and analysis that is informing the next phase of planning.

176. For the ESSP/GPE, with the introduction of the variable tranche and DLIs in 2015, the Program Appraisal Document (PAD) stipulated that disbursements against DLIs would be made on the basis of verification by a different IVA. This work was contracted to a private firm, Ernst & Young, who conducted two verification exercises for the three-year period, after an initial year's delay in the appointment. The methodology adopted included sampling of provinces, document reviews, meetings with MINEDH departments, and missions to visit IFPs, PDEs, and SDEJT offices. No schools were visited, but a random sample of teachers and school directors were contacted by phone to confirm their attendance at training. This research team has not been able to contact the IVA team to discuss the process or any issues and challenges met – as the individuals involved have apparently now left EY. The nature of the indicators and targets was such that, again, the verification exercise was largely a quantitative exercise; there was some verification of training plans, the curriculum, and materials, but this exercise was not designed to measure any more qualitative changes brought about.

177. Stakeholders reported to us that since 2017 there has been an improved approach to sector performance reporting under the RAR. Previously, there had been a focus on the proportion of planned activities completed, with little attempt to link activities to outcomes. The GPE evaluation suggests that the change in the quality of RARs was driven by the impact of the NLA 2013 data on learning and SDI 2014 data on teacher attendance and quality. That evaluation also suggests that the additional financing for ESSP from World Bank and GPE contributed to this shift through its updating of the strategic matrix and reporting structure. It is clear from more recent RAR reports and interviews conducted during this research that the process has improved and is more results-focused. The more recent reports include some focus on the key underlying challenges; for example, the need for merit-based recruitment of school directors, the cascade of teacher training to school level and the functioning of school councils, among a broad range of performance areas. It may be that the DLIs have put some of these issues on the agenda, but it is also likely that reporting from other sources – including CSO analysis, or analysis from other bilateral donor projects – have provided important detail and nuance to the dialogue.

178. The implementation of more systematic performance evaluation of school directors could have created better information flow on school management and governance, and was in fact designed to be undertaken by the central MINEDH Directorate of Quality Assurance (DGGQ). However, little evidence has in fact emerged from the evaluations that have been undertaken.

179. One specific development that could have generated a stronger evidence base was the *ADE Desempenho* (ADE-D) pilot. The use of performance-based allocations (PBAs) or financial incentives at the school level was envisaged in the PFM4R design but was not implemented (see Section 3C). Instead, this was piloted under ESSP/FASE funding, with an evaluation to generate learning. However, it has been reported that the pilot evaluation not well designed, and there were many problems with the data and results they generated. This was an intention to generate evidence, and has contributed to the new GPE program design, in which it will be further tested.¹³⁶

180. Finally, it is notable that the reporting on construction within the annual sector reports (RARs), as with the German (KfW) use of RBF, reporting was very sparse. While the number of classrooms and their state – precarious or not precarious – is reported regularly, this does not delineate losses due to natural disaster or conflict, and it is not clear from the documentation the degree of implementation of the accelerated construction program, until the RAR 2020 at least.¹³⁷ It is then not clear what the “result” was considered to be for the number of classrooms constructed DLI by either the government or KfW. It is possible this is linked to the relative lack of formality in the available documents on RBF reporting for the KfW use of RBF, including in the government’s annual sector reports, particularly compared to the available information for the World Bank and GPE uses of RBF. This may show that indicators need to be very well specified each year, in order for the government to be clear on what they should report. However, as previously noted, we have had much less information and/or documentation on the KfW use of RBF, so it is possible bilateral and non-publicly available information exists.

¹³⁶ World Bank (2020b).

¹³⁷ MINEDH (2020b).

F. Adaptation and flexibility

181. Programs setting targets over a period of several years are likely to require flexibility to respond to change, and ideally some degree of adaptive management to respond to new realities and the successes or failures of existing and previous initiatives. The degree of *flexibility* or inflexibility of the mechanism may be a critical factor in how successful it is, linking to theories of change for RBF of improving evidence-based policy, and results-based management – which implicitly include the idea of *adaptation* – how sector plans, strategies, and policies respond and adapt to new information.

182. The period covered by RBF programming in Mozambique, and the focus of this report, was predominantly between 2014 and 2018. This fell within the coverage of the 2012–19 Education Sector Strategic Plan and the 2015–18 Operational Plan. It was an eventful period for Mozambique (see time-line in Annex 3), bracketed by elections in October 2014 and October 2019, and inclusive of the hidden loans scandal in 2015–16 (see Chapter 2) which had major repercussions for how donors support the country including the suspension of general budget support (GBS) during 2015.¹³⁸ The country, along with others in the region, experienced major drought linked to the 2014–16 *el Niño* event. It had two major tropical cyclones in 2019, and conflict continued to escalate in Cabo Delgado province and in other areas of the center and north. This context may have significantly affected school drop out, while damaging the precarious school infrastructure on which the education system depends.

183. Flexibility and adaptation apply not only to *external* events, but to the successes and failures of the programming itself, and the ongoing learning of policy makers in the process. Thus, it is possible when targets are achieved that new goals and targets could be defined as sector stakeholders seek to tackle further bottlenecks within the system. This section sets out findings of where flexibility applied and whether this was appropriate, and areas where new focus was brought in. In addition, it highlights where major changes might have led to more flexibility but where it was not applied.

Flexibility applied within RBF programming

184. The PFM4R spanned the period 2014 to 2018, with a completion report produced in 2019. However, the key DLIs generated incentives in the 2015–17 period. This was also the period covered by GPE additional financing DLIs, as well as the German use of RBF for part of its contribution to construction spending through FASE. Given the limited time period, and limited number of indicators overall, there was also limited need for flexibility or adaptation within the programming period. Despite this, there was significant evolution of the PFM4R, particularly in terms of the balance of the windows of the program – capacity building, coaching, performance-based allocations (PBA), verification, and the definition of the DLIs themselves.

185. Both the PFM4R and the GPE variable tranche, the latter managed as part of the World Bank's ESSP, were subject to the usual monitoring systems of the World Bank. This involves regular missions and the production of Aide Memoires. The reviews are comprehensive and analytical, and seem to have provided real-time advice to the management of programs. Some of this advice has been taken up in the lifetime of the support, while other aspects appear to have informed follow up-programming, specifically for the new GPE-funded support currently being developed and appraised for a 2021 start.

186. The focus of the DLIs was for the most part on quite specific outputs and processes, and it is possible to see at the program level some initial implementation challenges, which required specific actions. For the PFM4R, this involved the work of coaches and facilitators working in their problem-solving role with MINEDH and MEF technical staff, to organize meetings, work on revised manuals, and implement training. This is part of the character of this program, described earlier in this report, and shows how the structure allowed for the identification of bottlenecks and action to achieve the DLIs. As noted, the DLIs/targets were all met, despite

¹³⁸ This in turn had knock-on effects in terms of depreciation of the currency, and the amount of resources the government had to support the education and other social sectors.

some initial delays in the first years, showing the successful adaptation. However, these cannot be characterized as significant adaptations, and the focus of the program did not change.

187. As noted under Section 3B above, DLI targets were met during the life of the program. There does not appear to have been a strong focus on identifying new targets relating to school financing, governance and accountability. For instance, where the DLIs for ensuring the first tranche of ADE reached schools on time, there was little attention on the second tranche, which some reports indicate is still disbursed late for many schools. While indicators for school councils meeting criteria were reported as met – as measured by quantitative process metrics – there does not appear to have been further attention on the real strengths and weaknesses in school council functionality or engagement in school governance. Both ADE and school councils also seemed to fall away from sector-wide reporting in annual sector reports from 2018 to 2020. This may indicate reduced prioritization, but also shows there was not a continual process of problem-solving around the many remaining PFM and accountability issues. The performance-based ADE (*ADE Desempenho*) provides an evolution and is a major focus of the 2020 Education Sector Strategic Plan and new GPE and World Bank programming. However, this does not appear to address the many reporting and accountability issues still existing, and this may give the false impression that these issues have been resolved.

188. The focus on district supervision was successful in establishing systems for more regular school visits by SDEJTs. The target for visits was met, and this has since been the focus from MINEDH and partners on supporting the process to improve – district supervision continued to be reported in the annual reporting from 2018 to 2020. This has involved further training, putting in place tablet-based monitoring tools and online reporting. This has received support from other donor-funded projects as well as within FASE. Under the new strategic plan and new GPE program further work on this is envisaged.

189. For the GPE/ESSP DLIs, the targets for teacher and school director training, and director evaluation, were seemingly met with relative ease, and no adjustments were needed. There was not, as noted above, a significant focus on whether the cascade to schools was being implemented effectively and so it is possible to argue that more adaptability could have been applied. If this had been recognized during implementation, the program could have been adapted to ensure more attention to the school/ZIP level of training, or targets could have been adjusted to give more focus on this. The school director evaluation DLI was meant to help improve director accountability and performance; however, there is no evidence that it did so, and the evaluation itself appears to have become a tick-box indicator, at least in terms of the verification.

190. One area with lack of flexibility was the district PTR DLI from the GPE variable tranche. The DLI target was not met, and the baseline was not updated to reflect the district reorganizations, which took place in 2013 and increased the number of districts. The reorganization effectively changed the baseline and may have been an oversight of data systems at the design stage. The 2015 Operational Plan had specified 12 districts with a PTR over 80, which was then corrected by the MINEDH in the RAR 2015 (March 2016) to 18 districts. Our analysis of data shows the correct figure from 2014 to be 16 districts, while there were 17 districts with a PTR over 80 in 2013 and 2015. This made it significantly more difficult to meet the targets set for 2016 and 2017 of 8 districts followed by 2 districts respectively. As shown in the Results section (Section 3B), the achievements of 10 districts in 2016 and 9 districts in 2017 were significant and indeed statistically significant changes, as shown in Annex 4.

191. The first verification report in June 2017 recommended that the baseline be updated to reflect the administrative changes.¹³⁹ The PTR baseline issue was picked up in the World Bank's Aide Memoire in 2017, where "the sector demonstrated great progress on this indicator", given the new baseline. This noted: "[W]hile

¹³⁹ IVA report (EY, 2017a): "It should be noted that from 2014 to 2016 the country adopted a new administrative division that culminated in the increase in the districts, a fact that will have negatively influenced the indicator achieved in 2016 in relation to the target. The Independent Verification Agent proposes to adjust the target due to the new administrative division, in order to reflect the real performance of MINEDH."

a revision of this DLI target would be recommended, the Ministry of Education has decided to leave it as it is, as the GPE Secretariat indicated that such a revision would require approval by their Grant Committee, which would be time-consuming."¹⁴⁰ For the GPE, it would be normal in such a situation for the Ministry to appeal and for the target to be changed. Whatever the reason, it is clear this cost USD 2 million in additional funds for FASE.

192. The use of DLIs within FASE has been a cause of some debate about whether this undermines the broader approach to a government-led program and priorities and increases the risk of uncertainty in fund flows and limitations in flexibility of spending. However, the approach set out in the GPE and ESSP additional financing (design document) aims to ensure flexibility and predictability of funding. A single annual disbursement was made, timed to link to the budget cycle, based on achievements verified by the end of March (for the previous year's targets). Undisbursed funds could be carried forward where targets were partially achieved, and disbursements could be made in proportion to the level of achievement, above a floor set for each DLI. For both programs, it has been noted that the flexibility to roll over payments in this way to the following year was motivating to technical departments and staff, in that they knew further efforts would still be rewarded.

193. It is noteworthy that the brief German (KfW) experience with using DLIs as part of variable tranche payments within FASE, also included delayed payments, owing to non-achievement of DLI targets. In the end, it is understood, the first variable tranche was not paid, while the second was paid, though some years late. This research has not had the opportunity to examine this process in detail. It may be that the rolled-over payment meant the change was incentivized eventually if not as planned. However, if the intention was to speed up construction, the rolling over of tranches may not have had the right impact; it may have been necessary nonetheless to ensure predictability of finance for school construction. As it is not apparent all of the German (KfW) indicators were achieved, and disbursement was based on discretion, this is a case in which flexibility did apply; however, potentially at the cost of the credibility of the RBF mechanism.

Flexibility of programming and use of funds

194. As highlighted in Section 3A, the PFM4R program design included a clear intention to use performance-based allocations (PBAs) – that is, incentive payments – at different points of the education system, including for central MINEDH staff, at province and district levels, and at school. This was not implemented. There was apparently some misunderstanding around whether this would be applied as payments to individuals or departments, and some loss of motivation when anticipated payments were ruled out by the MEF. The payment of incentives to schools was not applied, probably on the basis that the system was not ready for this. This innovation was later piloted separately under ESSP as *ADE-Desempenho*, or ADE-D. This could represent a sensible adaptation, if the situation was not appropriate for what would have been a radical measure. World Bank mission reports and mid-term reviews involved some discussions with MINEDH about using incentives more broadly, with a proposed "incentives team" within the Ministry; however, this research has not learned any more about such work, which does not seem to have been implemented in practice.

195. The RBF programs did not determine that funds should be spent in a certain way, although the ESSP and KfW tranches earmarked expenditure within FASE, and the PFM4R provided resources outside of FASE. As set out in the Finance section (see Section 3C), the budget crunch in 2015–16 led to some reinterpretation of how funds from the PFM4R should be spent, and may also have limited FASE expenditure, particularly for construction during 2015. The major change appears to be that the original conception of financing for the PFM4R did evolve. Areas such as school-based PBAs were not used, and evolved into *ADE Desempenho*, while the Capacity-Development Window was under-utilized.

¹⁴⁰ World Bank (2017g).

G. Risks and unintended consequences

196. As set out in Chapter 1 (Table 1, in Section 1.1), there are a number of risks when creating high-stakes incentives linked to results. These include *information risks*, for example, the risk that goals may not *really have been* achieved and might only *appear to have been*; these are sometimes known as *gaming* risks.¹⁴¹ Payment on reported results inherently creates a potential perverse incentive in the reporting process, which may include, in the extreme, *cheating*, in which neither the goal nor the measure is achieved, despite being reported so; or in less extreme cases, *fudging*, in which the metric may be achieved, but this does not mean the goal has been achieved (perhaps because of imperfections in the measure). Risks also include "*cherry-picking*", where incentives lead to suboptimal outcomes in equity. Gaming risks relate to the credibility of information on results generated as part of the RBF – and Section 3E above on evidence discusses some of these.

197. Other risks relate to more complex ways in which the *agent* (the recipient of the funds) in RBF might respond to the incentive. These include the risk of *demotivation*, where the introduction of a monetary incentive "crowds out" other incentives such as that of peer-to-peer accountability. Another risk is *loss aversion*, in which the agent chooses to take actions they perceive as low risk, because of the high stakes of the RBF incentive, but which might not be the optimal policy choices for good long-term results. Another set of potential unintended consequences of RBF is covered by the risk of *diversion*. Without a counterfactual comparison, these are hard to assess – however, this would indicate that important goals were deprioritized because of the focus brought by RBF. Other risks of RBF relate to the financing mechanism itself; that is, *Cash Flow* or the flow of finance linked to the RBF mechanism – this is partially covered in Section 3F.

198. From the outset of RBF programming, the World Bank rated the overall risk as "Substantial".¹⁴² This was partly due to technical risks, such as the PFM4R Program requiring close inter-ministerial working, and engagement of central ministries with lower levels of government. It also included fiduciary and disbursement risks, such as a lack of trained personnel at school level and weak school councils with limited participation, which could lead to unaccountable use of school funds.¹⁴³ Finally, it included some direct risks of the RBF modality itself, particularly this one: "Data verification: Effective results-based management requires robust data systems capable of providing credible information on results. The current state of data raises some concerns to the completeness, timeliness, and integrity of information generated by these." While not explicitly stated, this indirectly implies risks such as gaming, fund flow risk, or other potential unintended consequences of RBF frequently cited in the literature.

How risks materialized in RBF programming in Mozambique

199. As suggested under Results (Section 3B) and Evidence (Section 3E) above, the selection of metrics at the output level created some new flows of information, some of which were introduced into the broader sector results framework, and reported on in annual review reports. Other DLIs were problematic in terms of the measurement of quality, which was often not included, as opposed to quantity – including with respect to the functioning of school councils, the coverage of supervision visits, and the numbers of teachers trained. In such cases, the achievement of DLIs may have given the impression of success, while taking the attention of key decision-makers away from the critical and more complex issues involved in implementation and bringing about behavior change. While the program DLIs together can be seen as the necessary building blocks towards more accountable school governance, it is possible that as each indicator was easily met at a bureaucratic or process level, the effect was to give a false impression of the degree of change that was really happening.

¹⁴¹ Clist (2016) calls such cases "*fool's gold*".

¹⁴² World Bank (2014).

¹⁴³ World Bank (2015b): ESSP PAD, which covered the GPE additional financing variable tranche, also raised the channeling of the grants through FASE, which is funded by ten partners, involves substantial coordination and "contributes to elevate the Stakeholders risks to Substantial".

200. Other DLIs in which information risks materialized include the DLI focusing on the number of teachers given in-service training in IFPs, at the top of the cascade model. This may have led to insufficient focus on how this training was passed on to teacher peer groups in schools. Equally, school director training targets were easily met, but the change at school level was limited and the evaluation did not really capture the quality of the training itself, as intended. Again, these DLIs can be seen as important building blocks, but may have given an impression of change and success which was not represented at the point of delivery. Table 11 provides an assessment of such risks for RBF as well as of other unintended consequences for each of the DLIs.

Table 11 PFM4R and GPE DLIs and links to risks and unintended consequences

DLI/metrics	Information/gaming risks	Diversion/motivation risks	Equity risks
School councils meet criteria (DLI 3)	<ul style="list-style-type: none"> Potential “tick box” definition of councils being “functional”. School councils trained by school director (SD), who may have incentive to not promote improved ‘bottom up’ / horizontal accountability relationships. 	<ul style="list-style-type: none"> Not addressing fundamental power dynamics between councils and school director. Focus on quantitative target may exacerbate existing tensions, where community do not trust school director or council. Risks relating to tasks being mainly completed by PFM4R coaches rather than MINEDH staff. 	<ul style="list-style-type: none"> Coverage of EPCs only may miss other (more disadvantaged) primary schools, and secondary schools. School councils in some regions/districts already higher capacity, more targeted support needed.
ADE first tranche arrives on time (DLI 7)	<ul style="list-style-type: none"> The “last mile” of ADE not measured (that is, for example, ensuring that funds transferred are not taken by school directors for their own use). 	<ul style="list-style-type: none"> ADE funds arriving at school on time, but with insufficient scrutiny around how effectively they were spent. Expectations for personal incentives not met, risk of demotivation (true for other PFM4R DLIs as well). 	<ul style="list-style-type: none"> Coverage of EPCs only (require running both lower primary and upper primary, so potentially poorer schools running only lower primary may have missed out).
Schools are supervised regularly, with follow-up visits (DLI 9)	<ul style="list-style-type: none"> Risk that some reporting of visits that did not happen, due to lack of funds or need to meet target 	<ul style="list-style-type: none"> Risks that the quantitative target diverted attention from the logistics of supervision – particularly for access to more rural schools 	<ul style="list-style-type: none"> Coverage of EPCs only. Risk that schools selected for visits are near to district center
District budget classification (DLI 8)	<ul style="list-style-type: none"> Simple indicator to meet, little definition on sectoral budgeting would be considered adequate. 	<ul style="list-style-type: none"> Lack of clarity on FASE fund expenditure, including on ADE, textbooks, and supervision. UGB reform of DLI does not seem to have solved this issue. 	<ul style="list-style-type: none"> Unclear how district capacity taken into account, or any training in e-Sistafe, and how this varies geographically.
IFPs deliver targeted amount of SD training, and SDs performance evaluated	<ul style="list-style-type: none"> SD evaluation potentially was a “tick box” exercise, and did not give information on changing practices over time. 	<ul style="list-style-type: none"> Not addressing SD motivation, and selection process. 	<ul style="list-style-type: none"> Unclear process for SD selection, potential for nepotism.
IFPs deliver targeted amount of in-service teacher training	<ul style="list-style-type: none"> Lack of clarity on how/whether cascaded training measured. 	<ul style="list-style-type: none"> Strong priority on early grades, may have diverted from upper primary/ secondary. Focus on numbers may have diverted attention from quality of training and classroom change. 	<ul style="list-style-type: none"> Would need more targeted support to lower capacity ZIPs and schools.
Reduced number of districts with PTR over 80	<ul style="list-style-type: none"> Very little transparency on district-level information. Comes from EMIS system with potential for “ghost” teachers and pupils. 	<ul style="list-style-type: none"> Risk of upper primary or secondary teachers being reallocated to lower primary to reach target. Lack of recognition of progress risks demotivation. 	<ul style="list-style-type: none"> Possible diversion of effort from the provincial inequality which drives inequity in PTRs across country. Does not incentivize changes within districts, e.g., for schools in rural areas vs towns.
Construction	<ul style="list-style-type: none"> Very weak reporting of construction within annual performance reports (RAR). 	<ul style="list-style-type: none"> Numeric targets not identifying or addressing institutional bottlenecks Rolling over payment does not incentivize faster implementation 	<ul style="list-style-type: none"> With price cap, potential that construction would take place in “easier to reach” places. No obvious geographical strategy.

Risks related to the motivation and actions of government actors

201. It has been reported that under the PFM4R, individuals or team members had anticipated incentives which were not in the end approved or paid by the MEF. This may have been a misunderstanding or, more likely, an element in the design which was not approved, as it was not compliant with the government's system. It may have led to some demotivation, though those reporting this were clear that it did not stop them from implementing their work. It is hard to know from our research if this had an impact on the quality of implementation, but it is certainly possible to raise expectations that cannot be met, and this is a risk that should be noted in the future.

202. Qualitative research undertaken by a Mozambican CSO has indicated that despite some of the reforms to school councils and school funding through ADE, there remains a degree of distrust on the part of some school communities at least.¹⁴⁴ It was not possible to interrogate this further through our research, with constraints to the second phase of field work. However, discussions and interviews with a number of stakeholders indicate that school governance, and the relationship with communities is complex, and varied across the country. The program intention to bring about a shift in local accountability, therefore, is likely to need some years. There could also be a risk that if numeric indicators are perceived to have been met – for instance, if school councils meet criteria that show they function well – then sustained attention and investment in this will not be forthcoming, and the tensions or other issues of communication and participation are not addressed, and may in fact be exacerbated.

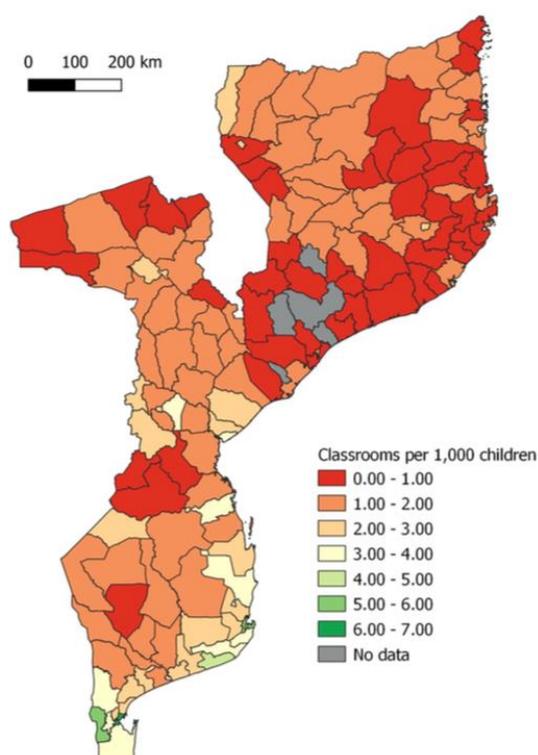
Risks relating to equity

203. The design of DLIs did not sufficiently account for existing differences between regions and provinces. It could be argued that, as a result, the reporting gives an impression of success, when in some locations the conditions were already in place – for example, in the functioning of school councils and district supervision, which may already have been in place in the better-resourced and higher-capacity southern provinces. The SDI data show significant variation between provinces, suggesting a need for a more differentiated approach to supervision and support to schools.

204. Classroom shortfalls are much higher in the north and center, where schools are more likely to have three sessions per day to fit the students in. Classrooms classified as "Precarious" (straw, clay, other), as opposed to "Conventional" classrooms (concrete or brick), are also more common in the north and center. As such, an equity-promoting policy might be to prioritize the construction of classrooms in those areas (see Figure 18 showing the availability of secondary classrooms), which clearly did not occur.

205. The reader may notice similarity between Figure 18 above and Figure 1 at the opening of Chapter 2, and in Mozambique many maps of a similar kind could be drawn, all showing more bigger problems with poverty and service delivery in the center and north of the country. As with the PTR DLI, which targeted *within*-province equity, there is still very little sense the education sector has adequately tackled *between*-province equity. This

Figure 18 Availability of lower secondary classrooms per 1,000 children aged 10 to 14 years old



Source: World Bank (2020c).

¹⁴⁴ CESC (2018).

includes in sector funding, which is also skewed to the south. The focus on complete primary schools (*Escolas Primárias Completas* – EPCs) which at the outset of the PFM4R made up fewer than half of primary schools, may have also biased interventions to more urban than rural areas (EPCs require running both lower primary and upper primary).

Risks related to diversion

206. As the majority of DLIs were process indicators, it is not necessarily informative to say that outcomes were not reached, as this may simply mean that additional reform and effort were required, that the process reforms were insufficient to address the bottlenecks identified, or that in the timeframe of a program this was not enough to bring about higher-order changes. However, it is possible to see the trajectories of non-incentivized indicators and incentivized indicators. As shown in Table 12, many indicators more or less stagnated during the period, in particular retention of students to Grade 3, the national pupil-teacher ratio (PTR), and provincial parity of PTRs, as well as measures of secondary enrolment.

207. Some of these likely relate to the constraints at national budget level. For example, the number of teachers hired, essential for lowering the PTR, had been as high as 9,700 in 2011, prior to the RBF programming period (in part funded through general budget support). In the period from 2013 to 2016, at least 8,000 new teachers were contracted each year. This fell in the wake of the GBS /hidden loans crisis, with a freeze in 2017, then fell again, to around 5,000 in 2018 and 5,750 in 2019. In this case, budget constraints far exceeded any likely effect from the DLI.

Table 12 Results Framework indicators: 2013–19

Indicator	2013	2014	2015	2016	2017	2018	2019	2019 target
Net enrolment in Grade 1	77.4%	81.5%	83.9%	86.4%	84.5%	93.1%	93.3%	88%
Retention rate in Grade 3	68%	69.8%	69.1%	62.8%	64.7%	66%		77%
% of Grade 3 students attaining math & literacy competencies	6.3%			4.9% lit, 7.7% math			No assessment	12%
Lower primary PTR – national average	62.6	62.5	62.6	61.7	59.9	64.2	65	59
Lower primary PTR – provincial parity	0.63	0.67	0.63	0.65	0.64	0.62	0.66	0.69
Proportion of primary schools offering EP1 & EP2		43.8%	50.9%	56.7%	60%	62.6%	64.5%	
Secondary enrolment at G10			41.7%		34.8%	36.6%	39.6%	44%
Secondary enrolment at G11	19.6%	23.2%	24%	19%	28.8%	25.8%	24.7%	27%
Pass rate in G10	47.6%	55.3%	57.2%	39.2%				
Percentage of students (Grade 1 and 3) with Portuguese and Mathematics textbooks	89% / 59%	82% / 56%	89% / 53%	90% / 66%	73% / 62%	81% / 54%	77% / 77%	
Change in classrooms	+1,284		+1,469	+1,731		- 899		
Proportion of classrooms classed as precarious	45%	43%	42%	44%	43%	42.3%		
New teachers contracted	8,138	8,522	8,296	8,829	0	4,997	5,748	6,500
Budget execution – FASE	74%	89%	81%	86%	63%	85%	87%	

Source: World Bank (2015b): Results Framework from ESSP Additional Financing in 2015. Progress in 2014 was against original baseline from 2011. GPE DLI targets set for 2017 (so lower than 2018 target)

208. Others are less clearly related to any obvious exogenous rationale. The proportion of students with textbooks at Grade 3 and Grade 1 has fluctuated over the period and arguably worsened. This was an area funded under FASE but not incentivized by any RBF programming. It is not possible to say this is diversion: however, it is perhaps instructive this became an area of focus for the 2020 Sector Plan and the new phase of

GPE RBF from 2020 onwards. It has also had attention under the ESSP/FASE, and some reported progress in improving the procurement and distribution process.

Risks related to the overall use of RBF as a modality

209. The use of RBF/DLI mechanisms within FASE has been discussed among local partners as having the potential risk of causing financial volatility in a context where MINEDH is highly dependent on the FASE as its main source of non-salary funding for the sector. Any negative impact on disbursement could affect spending on key areas such as school grants, textbooks, and teacher training. However, this risk did not emerge in practice, in part because of the proportional use of RBF, the relatively limited funding lost, and the overall low execution rate of FASE – due mainly to delays in construction. Should the proportion of FASE/sector funding linked to DLIs increase, this risk would become more prevalent.

210. As discussed in Section 3F above, there were direct risks in financing and fund flow – execution rates are low, and FASE provides funds for key sector expenditure, much of it recurrent despite being classified as investment expenditure – for example textbooks, school grants, supervision, training, etc. These issues are discussed further in the next section, on cost-effectiveness (Section 3H).

H. Cost-effectiveness

211. The use of RBF in Mozambique has predominantly been through donor financing to the sector. RBF programming included financial incentives alongside other support, including coaches and facilitators for the PFM4R, and technical assistance for the German use of RBF in construction, with less direct support of this kind alongside the GPE financing. In this sense, it is challenging to pull out the specific contribution of the RBF incentive to the results achieved from other elements of program support. However, this section provides an overview of the main cost and benefit considerations regarding the introduction of RBF in the education sector in Mozambique in the period from 2014 to 2018, informing what this might say about the relative cost-effectiveness of using RBF to seek to improve education systems to deliver results as opposed to financing modalities that do not use RBF.

212. RBF emerged in a context in which GBS was being scaled back and subsequently suspended. There were major concerns around governance, corruption, and PFM; and RBF was felt to be needed to tackle apparent “inertia” in the education system, as characterized by the very poor service-delivery indicators (SDI 2014), and a “learning crisis” demonstrated by the 2013 National Learning Assessment. These issues link to a range of challenges in the physical infrastructure and human capacity, and the set of accountability relationships among sector actors responsible for delivering high-quality education. It was also in the context of a sector-wide approach, which from donors’ perspectives has functioned well in some respects (for example, forums for dialogue and review) but not in others (for example, limited engagement at subnational level, some limitations in donor expertise).¹⁴⁵ RBF incentives, outside FASE in the case of PFM4R, and within FASE for the GPE and German use of RBF, provided a new modality to try to kick-start certain reforms within the system. The question for donors is whether this modality added value over and above other potential approaches, and whether the added value exceeded or justified the costs.

Costs of education in Mozambique

213. The Government of Mozambique has provided a relatively consistent share of its budget to education over recent years, averaging around 18 percent. This has also been relatively constant in terms of education spending as a share of GDP at 6 percent over the 2015–19 period.¹⁴⁶ It is notable that both figures are at the higher end of UNESCO and GPE benchmarks for domestic financing of education.¹⁴⁷ It is in this light that the World Bank’s 2016 Public Expenditure Review characterized low educational outcomes, given high relative expenditure (compared to other countries in SSA) as a “paradox” in which Mozambique, “despite spending heavily on its education sectors, is seeing diminishing returns, [and] getting less bang for the buck.”¹⁴⁸ Various analysis points to explanations for this apparent paradox – the inequity of spending, particularly regarding the amounts allocated to different provinces, and the major challenges of accountability and capacity, which have been the main thrust of the RBF that was put in place in the 2014–18 period reviewed in this report.

214. The most salient aspect of education financing in Mozambique is that government takes on recurrent expenditures, while donors take on a high and increasing share of expenditure classified as “*investment*”, up from 82 percent in 2015 to 94 percent in 2019; and an increasing majority of donor funding has come through FASE in this period. In addition, many budget lines characterized as *investment* could be characterized as recurrent expenditures on goods and services. For example, *investment* includes the ADE school grants, most of which are spent on inputs such as pens and notebooks, as well as school maintenance. *Investment*, as defined, also includes textbooks, school desks, and funds for district supervision of schools, among other areas. Areas of

¹⁴⁵ Universalia (2019).

¹⁴⁶ World Bank, World Development Indicators (WDI) for GDP. RAR 2020 for education budget (MINEDH 2020b).

¹⁴⁷ The Incheon Declaration 2015 recommended that national governments allocate 4 to 6 percent of their gross domestic product (GDP) and/or at least 15 to 20 percent of their total public expenditure to education, with a focus on basic education – <https://unesdoc.unesco.org/ark:/48223/pf0000245656>

¹⁴⁸ World Bank (2017d).

more obvious capital expenditure are also covered, with construction primarily financed via FASE, an area of spending that has seen the lowest budget execution rates of any budget line in recent years.

215. This means donors have an enormous role in funding the sector and it is very difficult to characterize that spending as anything other than basic or essential, in the sense of funding required expenditures for the functioning of schools and basic teacher training system. A summary of expenditure on education in Mozambique is provided in Box 16.

Box 16 Education expenditure in Mozambique

The Mozambican education sector spent USD 915 million (Mt 55 billion) in 2019, and this increased in nominal terms at 5 percent per year since 2015. As inflation averaged 8 percent in that period, this meant the real allocation to the education sector has been falling. In addition, the fall in the USD value of the Mozambican metical (Mt), meant the value in USD terms fell to USD 700 million in 2016, having been USD 1,000 million in 2015, despite less variation in the value of local currency. The devaluation of the metical in 2016 meant that the value of donor contributions, generally fixed in USD or XDR (Special Drawing Rights), increased from 2016, as did the share of donors' contribution to the sector.

Donor funds channeled into FASE fund the majority of non-salary expenditure in the sector, and this has also increased in the period, from 80 percent in 2015 up to 94 percent in 2019. As shown in Table 13, by 2019, the external share of total expenditure amounted to 11 percent of the total, with a higher share allocated to primary schooling, and external funds predominant in investment expenditure. The vast majority of operating expenses (88 percent) is made up of salaries, while investment includes expenditure lines such as textbooks, grants to schools (ADE), as well as investment in early childhood education.

Table 13 Mozambique education expenditure, actual, in 2019, split by category (USD)

Level	Operating expenses	Investment: internal	Investment: external	Total	External share
Primary school	404	3	60	467	13%
Adult education	0.1	0.5	0	0.6	0%
Secondary school	206	2	12	220	5%
Technical education	23	0	4	27	13%
Other auxiliary services	170	2	29	201	14%
Total	804	7	105	915	11%

Source: RAR 2020, converted to USD at 61 Mt : 1 USD (MINEDH, 2020b)

The total expenditure allocation implies that for each primary school student, there was around USD 68 spent in 2019, around USD 9 of which is classified as *investment*. The allocation per secondary student was USD 367, with around USD 20 classified as investment; both of these excluded “auxiliary services” expenditure to the sector. ADE grants appear to have been between USD 1 and USD 2 for both primary and secondary students in the 2016–19 period; however, budget line expenditure for other areas (beyond the recurrent-investment split, and the sectoral split as above) do not appear to be available in any available documentation, which limits our ability (at least) to analyze exactly how FASE funds were used in recent years.

216. Donor funds through FASE therefore finance core elements of recurrent expenditure. As far back as the 2013 joint annual review,¹⁴⁹ it was acknowledged that the government should ideally take on a larger proportion of investment expenditure, including the action to “propose a timetable to progressively incorporate ADE expenses into the State budget as long as the fiscal space allows... The ADE for Primary Education in 2014 was registered in the State Budget. For 2015, funding is being proposed, at least partially, through the Internal Source

¹⁴⁹ RAR 2013 (MINEDH, 2014).

due to the reduction of FASE funds.” In practice, the degree to which this has happened appears to be limited, although a lack of detail in budget execution information makes it somewhat difficult to assess. This also raises doubts about whether the DLI within the PFM4R on district budget classification and better reporting of sector expenditure was achieved.

Costs associated with RBF

217. The use of RBF in education as a modality does not appear to be associated with high costs to government or donors in Mozambique. The focus on addressing known bottlenecks, part of priority reform areas within the 2012–19 Education Sector Strategic Plan, and largely focused on using national planning, budgeting/financial management systems, meant costs to the MINEDH were low. Overall, the DLIs were in line with agreed priorities, resources were allocated through the established process for annual activity plans and multi-annual operational plans, and reporting took place within the framework of the existing process of annual reviews. In this way, the cost to government of setting up parallel systems was limited.

218. Donors have funded the sector directly into FASE either as unconditional grants or loans, or with either “virtual earmarking” or RBF conditionality. In practice, it appears that what has been called virtual earmarking is a very unclear form of conditionality – for both the World Bank’s ESSP, in which USD 108 million was earmarked in the 2016–18 period (including the 2015 GPE additional financing), and at a much smaller scale for Finland, who allocated €2 million per year for bilingual education. In the World Bank’s case the condition was “total FASE expenditure on all five components together has to exceed payments received from the World Bank”, with expenditure fungible between components.¹⁵⁰ However, the 2017 and 2018 FASE audit reports had a short section on the earmarked components and found in the 2018 case that earmarked expenditure amounting to USD 39 million did not exceed the USD 59.7 million advanced to support the activities during 2018, and therefore virtual earmarking did not appear to be any type of genuine conditionality at all, at least not in this case.¹⁵¹

219. It therefore seems that RBF is the only form of conditionality, or “hard conditionality” (as opposed to the soft conditionality of virtual earmarking) in the sector. The German (KfW) construction RBF was much less clear than the World Bank and GPE financing, with a number of indicators connected to the variable tranche, and discretion used in the decision-making.¹⁵² The €10 million allocated (€8 million in June 2017 and €2 million in 2016) appears to have been disbursed despite results not having been fully achieved (see Section 3C). Given the limited opportunity we had to talk to stakeholders about this use of RBF and the limited mention of how decisions were taken in documentation available, we can only speculate as to the rationale. However, it appears that a decision was taken that the value of the funds to the sector was more important than the credibility of the RBF mechanism.

220. While the PFM4R program was designed to enhance national PFM systems, it did put in place its own program structure within the MEF and with a coordination team established within the MINEDH. The Project Completion Report of the PFM4R provides some estimates of the overall costs of program development and delivery. This estimates that the World Bank spent USD 663,000 in the preparation phase of the PFM4R, from 2011 to 2015; and then a further USD 1.1 million was spent during the supervision/implementation phase. This cost is estimated in terms of “staff weeks”, which amount to 116 weeks in preparation and 180 weeks in monitoring/supervision. The total of USD 1.74 million therefore amounts to around 3 percent of the total cost of the program. Other quantifiable costs include the verification agent – the *Tribunal Administrativo* in this case – estimated at USD 0.8 million. Importantly the structure of the PFM4R also had program coordination and operational costs with the PCT and coaching structure, amounting to USD 5.2 million over the course of the

¹⁵⁰ Orlowski (2016).

¹⁵¹ FASE Financial Statements – 2017 EY, 2018 KPMG. In Finland’s case, in 2015, it increased its annual contribution to FASE from €7 million per year to €9 million with the additional €2 million explicitly meant for bilingual education. The 2018 FASE financial audit only noted around half of that (Mt 55.8 million or USD 0.9 million); however, it is not clear whether Finland cut its payment as a result.

¹⁵² The review team did not see program design documentation covering the design of the RBF; it is possible this exists in bilateral agreements between Germany/KfW and MINEDH.

program. As above, this also covered the health sector as well, and it can therefore be estimated that roughly half, or USD 4 million, of such overhead costs can be attributed to the program.

221. The Project Completion Report for the ESSP covers IDA and GPE financing and goes back to 2011, so only part of this cost could be considered attributable to RBF, which was introduced in 2015. However, for comparison, for supervision/implementation in the 2015–20 period, it is estimated to have cost the World Bank USD 2.3 million or 322 weeks of staff time. There is no clear split between IDA and GPE grants for this, and given the same people were likely involved at the World Bank, there would be no clear way of doing so. However, this would amount to around 2 percent of the program cost in that period.¹⁵³ If this were split, it could be estimated that around USD 1 million of staff time was linked to the administration of the GPE financing. No estimate was provided in any documentation we have seen for the cost of Ernst & Young as the IVA.

222. For the PFM4R, it is not fully clear how the payments against DLIs were used, beyond the USD 8 million of PBAs in education, and USD 2 million of capacity strengthening spent within the program structure – although in the case of these PBAs, what they constituted is also unclear. It is suggested that funds were prioritized to cover the operational costs of district supervision and related training for district services.¹⁵⁴ This would have meant funding activities also funded through FASE (including ADE grants) – however, there is no clear analysis of how funds were spent even in the project completion report. From initial analysis, it seems likely that the PFM4R funds supplemented (through the government budget) the resources allocated for these district- and provincial-level expenditures, though the funds themselves were fungible. As set out in the finance section (Section 3C), this remains a significant unknown when appraising the PFM4R.

223. Further, there are major challenges with budget execution, which are mainly with the investment budget and linked to FASE. While recurrent expenditures have generally had execution rates of between 95 and 100 percent, “investment” expenditure execution rates varied between 59 and 81 percent during the 2015–19 period.¹⁵⁵ Much of this is tied to construction; However, due to the weak reporting, it is not possible to confirm this assumption.

Benefits associated with RBF

224. The focus of most DLIs on some important process-level bottlenecks can be seen as having benefits linked to more effective use of broader funding – largely from the FASE. This applies to the following:

- The late disbursement of ADE funds to schools had been an unresolved problem since the grants were first put in place. For the relatively low cost of this DLI (USD 5.6 million), an important step was made towards more effective school-level spending. However, it is important to note that the DLI did not show that money got over the “last mile” (see Box 4 in Section 3B), and it is acknowledged PFM risks with ADE remain.
- Improvements in district supervision – funded by FASE – could also be seen as bringing a national-level benefit to the system, long seen as needing strengthening to improve vertical accountability of schools.
- Improvements in the functioning of school councils have been presented as essential to ensure that funds are well spent, particularly ADE funds transferred to schools. The evidence on school council functioning is very much mixed (see Box 12 in Section 3D); it is therefore unclear how much of a direct or measurable benefit there has been on this to date. The improvements that have come from this approach, despite lacking any specific targeting of more disadvantaged areas, have the benefit of having taken a system- and national-level focus.

¹⁵³ The total additional financing from 2015 being USD 107 million with USD 50 million from IDA and USD 57 million from GPE.

¹⁵⁴ OPM (2018).

¹⁵⁵ MINEDH (2020b).

- The DLI for PTR at district level would potentially have had the greatest benefit to the system, and the achievements may have been under-appreciated by the programming (see Box 6 in Section 3B). However, while most DLIs required relatively little in terms of funding, meeting PTR targets for under-resourced districts, particularly if extended to the provinces, would have required additional resources, including increases for teacher recruitment, and redistribution to the poorer provinces. As there was a measurable effect (see Annex 4), this can still be said to be a cost-effective improvement linked to the DLI on PTR; even though the full payment against the DLI was not made (see Box 6), there is some ambiguity to this case.
- Progress in construction was poor, despite the eventual disbursement of the second tranche under the German (KfW) RBF. It is very unclear that there was any added value accruing from introducing the RBF element to this financing.
- The training of school directors, again seen as an important building block for school governance, has largely been seen to have had little impact.
- Very little evidence exists on how effective the in-service teacher training has been.

225. Even where important gains have been made against DLIs at the process level, it is not possible to conclude any strong contribution to changes at the outcome level, to address the deeper systemic challenges. In simple terms, the achievement of DLIs which can be characterized as “low-hanging fruit”, important though they were at the time, does not yet show benefits at the level really needed – in terms of learning/outcomes, equity, and real behavior change at school level.

226. It is important to note the reported improvement in teacher attendance, from the second SDI report in 2018, which has been associated with the improvement in district supervision. This would constitute an important benefit; for the time being our research concludes that there is not a sufficiently strong evidence base to support this, particularly the contribution of RBF to such a change in outcomes. There has been significant attention on improving teacher attendance, though at the very least it is possible to say that the use of RBF – in this case under the PFM4R program alongside ESSP/FASE funding – has given necessary attention to the role of district education services and their capacity to undertake supervision as a core function.

Overall cost-effectiveness

227. The discussion here clearly does not constitute a full cost–benefit analysis of the programming. It is possible to state however that the costs of using the RBF mechanisms do not appear to have been particularly high. Assuming in the World Bank and GPE case, non-RBF modalities would also involve substantial sectoral dialogue, including (non-RBF) indicators, within standard results frameworks, etc., there are few additional costs to RBF itself. There may be costs from additional complexity of the RBF programming in design, and in the verification process during implementation. However, these costs are likely to pay off in terms of the relative clarity on results they provided.

228. In terms of the cost-effectiveness compared to other modalities, the main downside of RBF, particularly as sector finance to FASE, is the unpredictability of funds, particularly given their essential nature to the sector. In the GPE and German (KfW) use of RBF, this effectively changed the ethos of FASE (see Box 10 in Section 3C), which had not included significant “hard” conditionality before 2014. In the case of PFM4R financing, funds were outside of FASE, though it is not clear that the funds allocated by the World Bank were spent and allocated within the education sector, as opposed to the program allocation to the Treasury/MEF. This had to do with the vague structuring of the financing, the fungibility of the financing, and the financial crunch the country faced from 2015.

229. Other donors have used (non-RBF) funds outside of FASE to good effect, notably, the GiZ support (in three provinces, part of a program costing approximately €6 million per year)¹⁵⁶ which includes POEMA. Our

¹⁵⁶ Orłowski (2016).

research found the POEMA program to be near universally praised by those who had had interaction with its training and materials. For capacity building this may have been more successful than other programming in PFM. Equally, in specific locations, CSOs have been seen to provide more in-depth and qualitative support to districts and communities, to enhance both vertical and horizontal accountability. It is probably most meaningful to see these approaches as complementary; part of a broad toolkit for the MINEDH and its partners to support reform and change management and target areas of need. However, given the challenges in bringing about meaningful behavior change at school and district levels, with the need to enhance and capitalize on intrinsic motivation of staff, such support may come with particular benefits as opposed to central-level engagement and finance.

230. The PFM4R was a hybrid program, and for the benefits that did occur, particularly at subnational levels, there was an important role for the coaches and facilitators within the program – identifying and solving problems, and developing the required guidelines/manuals and training to support implementation at district and school levels. It is not likely that the same results (even at process level) would have taken place without this additional support, for example, had the same DLIs been used without any technical support/problem-solving function.

231. The design of the PFM4R had set out to test the use of financial incentives and performance-based allocations (PBAs) at different levels of the education system – central, provincial, district, and school levels. It is notable that this was not successful. It has not been possible to determine exactly why this did not work, but the MEF did not sanction the use of such PBAs, and perhaps this was seen as not well aligned to the public sector management in the context. The use of school-level performance incentives did not occur during the period, though a scaled-up pilot is in the new 2020 Sector Plan.

232. For PFM4R the use of the *Tribunal Administrativo* meant that a national system of performance audit was used to verify results, perhaps at a higher cost than the private provider for the GPE, in which the IVA role was outsourced to EY. The likely higher cost of the *Tribunal* did reflect a much greater amount of field work than in the EY case (see Section 3E). It could be argued that the focus on improved data and evidence was in fact too limited, and more could have been done to ensure national systems were being stretched, particularly for EMIS, given its weakness.

233. Finally, it is important that cost-effectiveness does not ignore equity considerations. On this, the RBF programming has not been effective. This is in part the design of DLIs, which did not include any prioritization to the more disadvantaged north or center of the country and the provinces there-in – for example, there was no mention of constructing more classrooms in disadvantaged areas within the German RBF in construction, while even the PTR indicator, which was the only direct attempt to address equity, only tackled one dimension, which was within provinces, as opposed to between provinces, where profound inequities exist. As a result, there is no evidence that the period of RBF has begun to address these long-term and structural inequalities in education finance and outcomes.

4. Conclusions

234. In this final chapter, we draw on the study findings to assess the extent to which RBF, as implemented in Mozambique through the PFM4R, the GPE additional financing, and the German (KfW) use of RBF in construction, aligned with each of the major RBF theories set out in Section 1.1 above. These are: *steroids* (RBF induces more effort and/or resources to achieve specified results); *signposting* (RBF focuses effort and/or resources to achieve specified results and not others); *autonomy/innovation* (RBF provides greater discretion for how to achieve specified results); *labeling success* (RBF improves results-based planning); *sharpening minds* (RBF improves evidence and evidence-based policy); *aligning all actors* (RBF improves coordination between key institutions); and *sustaining attention* (RBF maintains a contractual definition of results during a period of change). This chapter is organized in sections addressing each of these theories, followed by a few final reflections. The aim of this is to use these different theories to provide a lens through which to assess the extent to which RBF has worked in the Mozambican education sector. This takes us back to the central question of this research: "To what extent, in what ways, and under which conditions has RBF contributed to strengthen education systems to deliver results?"

235. An important point to note about all the RBF used in Mozambique is that, as has been set out, the financial incentive from DLIs sits together within programs with wide ranges of other support, particularly various forms of technical assistance. As such, it can be very difficult to untangle the effect of the RBF mechanism from the broader support provided. In practice, the two can be viewed as complementary modalities, as this section sets out.

236. A second important point is that the RBF theories are all interlinked. The *steroids* and *signposting* theories are two sides of the same coin if one accepts that the degree of attention and effort, and the amount of resources available to agents are finite, and that therefore, if RBF is effective in prioritizing certain results to be achieved, other results will automatically be de-prioritized in the agents' allocation of attention, effort and resources. Another cluster of closely linked theories relates to RBF effectiveness in improving result-based planning (*labeling success*) and in improving evidence and evidence-based policy (*sharpening minds*). To plan for results, one first needs to pay attention to results; for both to be done meaningfully, one needs evidence; and ideally, there should be a continuous iterative loop between results-based planning and monitoring, and evidence-based policy. There can be a tension between effectiveness in improving result-based planning (*labeling success*) and *innovation* through greater discretion, if results "labeled" to be achieved are detailed operational targets. There can also be a tension between *aligning all actors* and *innovation* by some of the actors. It is important to keep these links and possible trade-offs in mind. These emerge throughout the sections below focusing on the seven individual RBF theories.

237. This study set out to find how RBF had been applied to the sector, whether by donors as an aid instrument, or by government within its own systems. The main use has been very much the former, introduced as part of the mix of donor support modalities to the sector, representing a relatively minor proportion of overall donor funding. It was used strategically by donors to break the "inertia" in the Mozambican education system with a focus on some specific reform processes (that is, school governance, teacher reforms. and school construction). From this research, it appears there was consensus and ownership on the part of the MINEDH leadership of reform priorities, which aligned to the government's strategic plan for the sector, and its three-year operational plans and annual activity plans and budgets.

238. The rest of this conclusions section looks at each of the theories, reflecting on the role of RBF and how it has worked, and drawing on the qualitative and quantitative evidence and findings set out in this report. The chapter concludes with some final reflections and considerations on the use of RBF going forward.

i. Steroids – RBF induces more effort (and/or resource) to achieve specified results

239. The central claim of RBF through the principal-agent framework is that a goal is more likely to be achieved if a payment is made on its achievement. The payment incentive *aligns* the incentives faced by the agent with those of the principal making the payment. The theory is that more effort may then be put in to achieve the goal. When the agent is a complex set of institutions and bureaucrats working within them, the incentive is not likely to be linked to any idea of personal gain, but by the organization's collective goals and the potential reward to the sector. In Mozambique, the most direct incentive seems to have been for the central MINEDH, although to achieve a number of indicators required efforts and resource allocation from provinces, districts, IFPs, school directors, and school councils. The question is whether RBF induced additional effort and/or the allocation of resources (within a constrained budget) by a combination of these actors and institutions, to achieve specified results, and whether this made the achievement of goals more likely.

240. For the simpler metrics used as DLIs in Mozambique, whether seen as "low-hanging fruit", or foundational reforms, it is possible to question the degree of effort and resource allocation required to achieve them. Some indicators that were achieved under PFM4R were achieved by bringing together actors within central government's MEF and MINEDH, to identify bureaucratic bottlenecks and find solutions; notably this was true for ensuring timely disbursement of school grants (ADE) to schools and changes to the classification of the district budget. However, these, and other changes brought about by the program, had been seen as bottlenecks for some years and had not been previously addressed. As such, the PFM4R brought about important changes in sectoral PFM, through "more effort" from key central actors. Equally, the increase in the amount of district supervision was a change brought about through the efforts of central, provincial, and district-level actors, and represented an important step forward.

241. This looks to be what we are calling a *steroid* incentive effect. The incentive was not directed at school-level actors, but certainly at the central level, and to some extent on province and district education officials. It is important to recognize that the effort/resource of the *agent* (in the case of PFM4R, the nexus of MINEDH and MEF), was strongly supplemented by technical assistance in the form of the coaches and facilitators (see Section 3D), which played a very large role in the achievement of results. However, interviews undertaken through this research indicated a good awareness of the DLIs and the rewards attached, which would accrue to the sector, so some incentive can be assumed from this. It is likely, though, that the results would have been significantly less without the direct, practical support provided by the coaches. However, the mix of incentives and coaches had a strong combined effect.

242. The DLI focusing on reducing the number of districts with PTR above 80 tells an important and unusual story on the role of RBF. The DLI was reported as not achieved, owing to changes in the organization of districts, which affected the baseline. Our analysis shows that at least in three out of the four provinces with the highest number of districts with high PTRs, effort was induced and important results were achieved. Taking into account the higher baseline (which should have been 16 or 17 districts rather than 12 districts), the reduction from 17 to 9 districts from 2015 to 2017 was an important achievement. It appears that the provincial education departments understood the indicator and target, and the need to narrow inequality between districts, and took action. This did not happen in all provinces, notably not in Cabo Delgado which also had high PTRs. There was no effort on the profound inequality of PTR between provinces, which was not targeted by the indicator, but which could have been a route to addressing district inequalities at a more systemic level, by ensuring more equity in the allocation of teachers between provinces. However, the changes that did take place happened despite the overall budget constraints and stagnating or diminishing number of new teachers being hired each year. There seems to have been a missed opportunity to engage with provincial education departments more systematically, to learn lessons and consider further reform efforts in the future, including any technical support to enable planning at provincial level.

243. Drawing on our analysis, the RBF under assessment was designed around indicators which represented important steps in reform. To achieve the higher-level goals would require sustained effort and engagement over time, and the flexibility to change the focus, once the more immediate or short-term results were achieved. Some of the reforms targeted in this way have received sustained and seemingly deepening engagement. For instance, under the new GPE program, it is proposed to continue to support district supervision as a key component in accountability and school quality. The in-service teacher training, which under the RBF was the focus of a simple metric of number of teachers trained, will receive a more qualitative package of support to school-level coaching. For in-service training to bring about improved learning, it is this kind of effort that will be needed. It is hard to know if RBF has somehow catalyzed this longer-term effort, but it is possible to conclude the incentives and targets were well understood, the effort was made, and lessons have been learned for the next phase of work.

244. On the other hand, for other reforms under the attention of DLIs, it is less certain that this has led to the next phase of change, and to sustained action. The PFM4R reforms were focused on sectoral and subnational PFM and linked to the PFM of the FASE education pooled fund. However, it appears that the reforms have not led to sustainable improvements in sectoral PFM, and a number of weaknesses persist. ADE funds are reported to still arrive at schools on time, but from our research, we have seen that there has been much less discussion on or planning for “the last mile”: ensuring real accountability and effective use of funds once they are in schools, and importantly the next phase of school council strengthening, as part of the envisaged shift in accountability. Budget-reporting, incentivized by the DLI to reform district budget classification, is still weak. We found it extremely difficult to obtain figures on how much was spent on different FASE budget items from year to year – including how much is spent on ADE, textbooks, construction, etc. – a possible indication that PFM reforms have a lot further to go.

245. This review has not been able to assess the challenges in school construction in sufficient detail to draw firm conclusions. However, it appears that the DLIs linked to German (KfW) funding to FASE, even together with technical support, were not sufficient to incentivize the effort needed to speed up construction. Whether this was due to more institutional barriers or to a limited incentive effect is not clear. It seems to have been a logical area for donor support to test the RBF mechanism, with relatively straightforward measures of success that could be achieved with greater effort, assuming the conditions and capacity were in place. Given there is a substantial underspend in FASE, driven by underspending on construction within FASE, it is clear that many difficult or intractable issues persist.

ii. Signposting – RBF focuses effort (and/or resource) to achieve specified results

246. Closely related to the *steroids* theory is the idea that RBF creates the incentive to *focus* effort on the specified results via a *signposting* effect, and that this may prioritize resource allocation to some areas over others, a reflection that any allocation of resource or time has an opportunity cost. It can be assessed by trying to understand whether goals would have been pursued anyway, without DLIs.

247. There is a strong case that the PFM4R, if not bringing new goals, at least clarified the short-term results that would be needed to improve school accountability and governance, and directed effort towards these as a matter of priority. These may have been relatively simple goals or even “low hanging fruit”; however, they were important process changes in terms of the PFM and accountability for service delivery.

248. Districts were identified as playing a crucial role in improving service delivery, and yet oversight and control from the center was seen to be constrained, owing to a lack of transparency in spending. In part, this relates to the parallel lines of accountability to provincial governors or district administrations and the party structure. It may not have been possible to address all of these complex barriers to change, but the DLIs at least brought a clear signal of priorities and showed where national or local effort was needed. This included ensuring ADE payments were transferred to school level before the start of the school year, that a basic system of more frequent school supervision/monitoring was put in place covering a larger share of schools each year, and that some basic steps were taken on improved budget classification and basic functioning of school councils. During

our research, there was some recognition that even with improved transparency, the spending and priorities of districts may not always have aligned with the MINEDH, but equally that there had been some improvements in line with agreed sector priorities. District stakeholders said that insufficient funding (mainly from FASE) was available for the supervision work, but the reporting suggests that the work took place nonetheless.

249. The PFM4R brought resources outside of FASE, and therefore additional financing to the sector that would not have been provided without the program. The World Bank could have selected another line ministry to accompany health, and from this point of view the program brought new resources to the sector. It also brought in a specific team of coaches and facilitators, who worked alongside the key stakeholders in the MINEDH and provincial departments, as well as the existing FASE technical assistance. As a result, there were specific team members hired to focus on achieving the goals or DLIs of the program. In this sense, it is possible to see that the DLI provided an incentive to bring about specific changes, while the team provided practical support and guidance on how to do this. During the research, it was clear that these DLIs were well known within the central MINEDH and provincial departments. Certainly, the MINEDH teams were aware that achieving the DLIs meant a reward to the sector as a whole. Whether or not resources were reallocated to achieve the targets, the program did divert the time and effort of those already working in key roles in the sector, including provincial directorates of education, as well as the SDEJTs.

250. The GPE variable tranche would also have been seen as additional financing to the sector, over and above the GPE fixed tranche allocation, and was paid into FASE. There was some recognition among MINEDH directors and technical staff that the targets had to be met for the sector to benefit from this funding. It formed part of the World Bank's ESSP program of support to the sector, and as such there was notional labeling ("virtual earmarking") of where expenditure should be spent. However, this was part of the broader FASE framework and therefore, in principle, the direction of where money should be spent was flexible within the annual plan of activities. Achieving the DLI targets required FASE funds to be allocated to the training of teachers and school directors at IFPs, under the MINEDH plan of activities. Given the in-service training was part of a new MINEDH strategy, it is likely that this was planned to take place anyway and that the RBF did not prioritize resources. However, it enabled the MINEDH leadership to ensure that within internal discussions and negotiations, this allocation was made and the work was implemented.

251. For these indicators at least, the GPE seems to have been under-ambitious; the targets were set low, and even if important, it is hard to see them as "stretch" indicators using the GPE's terminology. More stretch may have led to higher levels of resourcing and effort to drive training down through the cascade, though this cannot be known. What is clear is that insufficient effort and resourcing was allocated to the delivery of training at the school and possibly ZIP (cluster) levels of the cascade, in order to drive change in classroom practice. This kind of change will likely require more than an indicator, but will need to be accompanied by technical support. The DLI for teacher training did not signpost, or prioritize, this level of effort. The school director training and follow-up evaluation, while seemingly implemented effectively, was not seen to bring about the desired results. Given that the effort and resourcing appear to have been allocated, the implication is that the indicators did not address the real barrier to change; the need for a merit-based selection process and career path for school directors.

252. The district PTR indicator was more ambitious, and was achieved in selected provinces but not acknowledged or rewarded. This seems to indicate that the signposting worked to some extent but did not lead to new resources or reallocation of resources across provinces, as may have been anticipated. It is understood the MINEDH chose the indicator in part to strengthen its negotiation with the MEF to ensure budget for staff recruitment. But the achievement was rather via the reallocation of teachers and the targeting of new teachers *within* these provinces to the districts with high PTRs. This happened during a period in which PTRs had been decreasing. It is likely that the province-level effect happened in response to the RBF and associated target. The reversal in PTRs since almost strengthens the case that there was a signposting effect in this case.

253. The brief extent to which this research has been able to assess how German use of RBF worked, suggests that there was no signposting effect for speeding up school construction. If this, for instance, required changes in resource and effort at province level, then either this did not happen or there were barriers that were not possible to overcome, say in procurement capacity at subnational levels. The fact that technical assistance was provided but the targeted change did not take place suggests institutional barriers or lack of motivation that the incentive alone could not change.

254. It is important to understand how and why indicators were chosen, and whether donors are selecting from a government plan or program, as the ownership of policy goals is likely to play a major role in the success of RBF.¹⁵⁷ In the case of both the PFM4R and GPE, the MINEDH in the early stages had strong ownership of the policy goals and process changes set out. They were seen as MINEDH priorities, while also ensuring that indicators themselves were realistic and achievable. Both programs were seen to have a potential role in strengthening the bargaining position of the MINEDH with respect to the MEF. In practice, this ownership may have waned over time with the change of leadership, and the ability of the MINEDH to effectively use the leverage over the MEF appears to have been limited – the nationwide PTR has risen over time, for example. However, the ownership of these indicators ensured that the activities were included in the annual plans and budgets. Of course, other activities in the ESSP and the ones funded by FASE were included and given attention in the same way, without the use of DLIs. The GPE DLIs, with relatively low and straightforward targets, do not seem to have had a strong signposting effect.

iii. Autonomy and innovation – RBF provides discretion on how to achieve results

255. The third theory of how RBF could improve results is the idea that by paying on results, and allowing the agent to work out the best way to achieve them, the local knowledge of the agent can be maximized, as can the potential for creativity and innovation. This implies that there are a number of ways in which a goal can be achieved, and the DLI rewards this work, incentivizing the agent to seek ways to achieve the goals. It is likely to make more sense as an approach when incentivizing outcomes (for example, learning, completion) or intermediate outcomes (for example, pupil-teacher ratios, or improved teacher classroom practices). To some extent, the Mozambique case provides an interesting natural experiment for this theory of change – the PFM4R program came with a lot of support and very specific indicators at a process level, and in practice this may have limited some of the potential for autonomy or innovation. The GPE variable tranche did not have this type of support, and therefore autonomy was more of a prerequisite.

256. The GPE PTR indicator was the closest to an outcome among all the DLIs in Mozambique, which we would classify as an intermediate outcome, given the complexity of achieving improved equity across the country, as implied in the DLI. It could be achieved through increased national recruitment across the board, recruitment that then targeted deployment to those provinces with highest PTRs, or, within provinces, the allocation of teachers to districts with the highest PTRs; all of which would imply more equitable allocation of existing and new teachers. This indicator comes with a degree of complexity, as it has political economy and resourcing implications – notably, teachers prefer to be based in urban areas, as lack of provision of accommodation and transport can make rural positions unattractive. It is therefore not an indicator which is fully under bureaucratic control. While this research was not able to identify a specific plan of action, it appears that there was achievement in three of the provinces most affected by high PTRs, and that this was achieved without any technical support or broader dialogue. This must have been undertaken by the provinces concerned, within the resources they had. This achievement may imply a degree of autonomy in teacher deployment and allocation at province level.

¹⁵⁷ Note, this goes right back to the findings on conditional aid in the structural adjustment literature – Killick (1997) - “In the event of serious donor–recipient disagreements, domestic politics usually dominates. The use of donor financial leverage is not a substitute for weak domestic institutions or ‘political will’.”

257. To achieve the other GPE indicators, there was autonomy in that the MINEDH could determine how to resource and deliver training for teachers and school directors. This level of detail is not micromanaged in an RBF mechanism of this kind – that is, the length of the course, the course content, the method of selecting teachers for training, etc. However, there is not a great deal of room for autonomy or innovation, given that the number of trainees is specified, and the focus is not on the achievement of a higher-level outcome. In practice the DLI was achieved via top-down targets from the MINEDH to the teacher training institutes (IFPs).

258. Considering the PFM4R, it is not possible to conclude that an autonomy theory of change was at play in Mozambique, given the amount of technical assistance and coaching support that was provided both centrally and at province level. Any innovation that took place (for example, in finding solutions to administrative bottlenecks, or developing manuals for supervision) was seemingly driven by the efforts of these coaches and facilitators, some of whom hired temporarily for the program period and not retained by the MINEDH after the program ended. Innovation also took place as a contribution to the PFM4R results under other donor-supported programs, including from Germany (GIZ) and USAID in their support to the development of tablet-based tools for supervision, albeit outside of RBF programming.

259. The RBF use in Mozambique through the PFM4R was, in practice, therefore very much a *hybrid* RBF mechanism; it provided the incentive as well as a team to achieve the incentive. As such, there was much more co-ownership of the program by the World Bank as an *engaged* principal, than in the case of the GPE financing, which did not come with the same level of technical support. It could be argued that the GPE approach, therefore, lends itself to this kind of autonomy and innovation under RBF. However, in this case, the DLIs were very specific and prescriptive processes or outputs, with little room for innovation.

260. This review has captured some ways in which the accountability and broader planning system in Mozambique is fairly top-down in nature. Significant resources are spent at district level, but within the framework of MINEDH policy and plans, which subnational levels are not sufficiently engaged in developing. As noted by the GPE evaluation, even more broadly under the sector planning and review process, there is limited setting of targets at the subnational levels. There is also insufficient focus on the specific needs of different provinces and regions, given the high levels of inequity in the system.

261. The focus of DLIs under both PFM4R and GPE did not allow significant local adaptation and innovation at province or district level. There is some degree of knowledge gap, particularly on how supervision targets were met when many at SDEJT level claim that the resources provided are too meagre to enable them to supervise more remote schools, and funds are not always timely. The PFM4R did seek to incentivize subnational levels through the performance-based allocations (PBAs), but it appears that no clear design for these was put in place. The fact that DLIs were achieved may imply the approach was successful despite (or even because of) the lack of autonomy and local innovation; however, to address different local circumstances, for example to increase community engagement and trust, may require more local autonomy in the future.

iv. Sharpening minds – RBF improves evidence and evidence-based policy

262. One of the most important claims for RBF is that it can increase the availability and quality of evidence on important indicators of progress and change within the education system. The idea is that more accurate measurement is required to manage the RBF “contract”, and it is generated, potentially including more “linkages to frontline information”, through the evidence on DLI results. The verification mechanism is an important component of this, although the means of verification can vary. Further to this there can be specific indicators that seek to strengthen EMIS. Accurate and timely information can then be part of feedback loops to improve policy and for “course correction”, linking to the results-based planning theory of RBF (see “labeling success” below).

263. In Mozambique, the EMIS system did not play a clear role in the RBF programming, and there was a surprising lack of focus on it in the period of the 2012–19 Education Sector Strategic Plan. As shown in Section

3E, our review of the enrolment data in the country shows major anomalies between population estimates and school enrolment data – this suggests that enrolment numbers in certain provinces are inflated with “ghost” students. Indeed, one SDEJT we interviewed noted they had removed 2,000 “ghost” students from their enrolment numbers (a statistic we were able to corroborate with the district-level data). However, this action appears to have been a one-off, or at least not part of a system-wide approach, and one that might point to the scale of the problem. There are also indications from recent government crack-downs on “ghost” civil servants that there are likely to be a number of “ghost” teachers in the system – however, this issue has not been highlighted in sector reviews for a number of years. The EMIS data are therefore likely to be of poor and potentially declining quality in recent years. As it is the basis of the GPE PTR indicator, inaccuracies in EMIS will also mean that the PTRs are inaccurate. As the population to enrolment anomaly is higher in the northern provinces, where PTRs are highest (particularly Zambezia), it is possible that distortions in EMIS are also distorting considerations of equity in PTRs. As both teacher and pupil numbers may be inflated, it is not possible to say what this might mean for the direction of PTRs. The important point is that there appears to have been no concerted effort to address or understand the issue, and RBF has not helped in this regard.

264. A major area of data linked to the program is the monitoring system (separate to EMIS) of district services. A number of efforts and investments have been made to improve the monitoring and supervision system, including the DLI to increase the amount of supervision, the provision of ESSP funding, technical assistance from other donors including USAID and Germany (GiZ), the provision of tablets, and tools for classroom observation. These developments all have the potential to increase the availability of information in a very information-poor environment in terms of school performance. Despite this, the fruits – in terms of a centralized system to capture and report these monitoring data in a way that could be used by key stakeholders in the sector – are not yet apparent. This is likely to be a focus of the 2020 Strategic Plan, however.

265. A core part of the theory that RBF leads to better evidence is linked to the verification mechanism – with the independent verification agent (IVA) providing a new means of checking and strengthening evidence systems, as well as new evidence generated from the verification process. Important elements of the success of the IVA include the degree to which it is an integrated part of the accountability system, the terms of reference for the verification exercises, the budget for the exercise, and the willingness of both principal and agent to learn from it. Mozambique had a mixed story with respect to these factors and then improving the evidence base:

- The IVA for PFM4R was selected to be the *Tribunal Administrativo*, the national audit institution. The work was viewed by the *Tribunal* as a *performance audit* as opposed to a *financial* audit (they were also responsible for the latter), and therefore expanded the scope of the work of the institution, which has a formal role in strengthening the value for money of Mozambican government expenditure. Opportunities were lost in this process, including in engaging with the *Tribunal* on the qualitative aspects of their reporting and bringing this into a process of learning for the sector (for example, asking the *Tribunal* to present at annual RAR meetings). In practice, it seems that the stakes were felt to be high, and the capacity of the *Tribunal* was felt to be weak, and as such the reports became a bureaucratic process. In cases where the *Tribunal* found conflicting evidence that the government reported (for example, in 2016 for district supervision visits), their results were not accepted and the World Bank preferred to use government data (the PFM4R monitoring team used basic Excel spreadsheets to collate data which were self-reported from districts). In this sense the verification exercise failed to add and improve information.
- The IVA role for the GPE DLIs was contracted to Ernst & Young (EY); it was therefore outside of the government system. The reports produced by EY were professionally and clearly presented, but the methodology was very limited, and extended at best to phone calls with samples of directors and teachers trained, with very little qualitative follow-up. The reports did not provide extensive analysis of the PTR indicator; however, they did show an understanding that the baseline should change and

they explicitly recommended this in the first report,¹⁵⁸ although, as discussed above, this recommendation was never adopted. Either way, the PTR analysis was insufficient to generate any real learning that could be used for results-based adaptations, for example from new policy recommendations, or deepening the understanding of why PTRs were so much higher in some districts than in others.

- The budgets for both processes are not at all clear. The *Tribunal* had USD 0.8 million allocated, according to the PFM4R completion report,¹⁵⁹ although it is not clear if this was also for the financial audit role, and in addition this would have been split between education and health. There is no clarity on the EY budget for verifying GPE DLIs, although we had indications in interviews that it may have been much less than the above amount for the PFM4R. Given the importance of the role and the limited methodologies (in terms of sample sizes, etc.), it could be argued that insufficient budget was allocated.
- It is notable that the German (KfW) use of RBF in construction was not accompanied by an IVA role. This does not appear to have affected the honesty of reporting, as the quantitative target was not reached for the first payment (losing €5 million in potential disbursements). However, there has also been a lack of clear reporting on what was achieved in construction, including in annual sector reports. This may also be because of a lack of clarity with many indicators and no scaling mechanism – that is, the payment was made on a “discretionary” basis. However, there could be upsides to this arrangement in that it might reduce the risk of gaming.

266. Finally, it is notable that in settings with weak information systems, limited freedom of information, and low transparency, any information-driven payment arrangement may be quite easily compromised.¹⁶⁰ In the Mozambican case, the IVAs both appeared to do their job diligently, and the *Tribunal Administraivo* in particular demonstrated their willingness to question the government’s narrative and to flag various issues, and showed a high degree of integrity in carrying out their role. It was noted in MINEDH interviews that the IVA process was appreciated by some as bringing some rigor, and that those in charge of implementation knew they would be under scrutiny. However, whether for reasons of resources, capacity, or methodology, the whole process has not changed what is quite a weak environment in terms of information, particularly of the in-depth qualitative kind. The sector is fortunate to have active CSOs, including the likes of CESC who have undertaken a series of in-depth qualitative research pieces during the period of RBF (but not linked to any of the RBF) – and this shows what can be done in the context. It could be argued that the perceived high stakes of RBF do not lend themselves to this level of analysis as it is not needed as a minimum criterion to disburse funds, and it can be inconvenient to question narratives of program success. This is an important high-level risk to consider in the design of RBF.

v. Labeling success – RBF improves results-based planning

267. A fifth potential theory of the benefits of RBF is that the presence of DLIs improves the overall approach to results-based planning and management. There are two important ideas here – one is that goals are labeled as a starting point to develop theories of change on how to reach them.¹⁶¹ The second is that (joint) planning is done with a focus on these main goals through a results chain approach, to identify the specific bottlenecks that need addressing to achieve goals, be they educational equity, learning, or access. Improvements to planning could be at the start or design of the program, improving the quality of the overall plan etc., or could be in the process of implementation and how policy and practice are adapted to achieve the goals (adaptive management).

¹⁵⁸ EY (2017a).

¹⁵⁹ World Bank (2019c).

¹⁶⁰ Soucat et al. (2017).

¹⁶¹ “Results First implies envisioning how the future will be different, and working backwards to figure out how to get there”. – World Bank (2017a).

268. In Mozambique, there is a strong case that the PFM4R clearly “labeled success”. The design process, which also involved strong technical support from the World Bank, combined with the willingness and good degree of ownership of the PFM goals at the MEF and MINEDH, helped to identify bottlenecks and the means to address them. The facilitator and coach team, was vital to the eventual achievement of DLI results, although this took time to put in place. The key relationship between the MINEDH and MEF was a difficult one, and multiple sources claim that the MEF did not have strong ownership of the program and this made it difficult to unblock certain PFM constraints. However, there is some consensus that between the DLIs and the use of coaches and facilitators, the program helped improve the planning towards these program-specific goals in quite practical ways.

269. The limitation of this was that the DLIs themselves were not necessarily perfect measures of success, nor did they provide the basis for a continuing set of PFM reforms – despite the fact that the program originated in national-level PFM vision (see Section 3A). In theory, the idea is to move away from traditional donor projects, which may focus overly on inputs and processes, and to agree on the higher-level goals and how to achieve them. In the PFM4R, there may have been some agreement that the higher-level goals were around improved accountability of schools, but the focus was mostly on achieving the specific metrics. Most notably, the effort to achieve the criteria for a functioning school council, while useful and pragmatic, did not give enough attention to the more complex, local work that would be needed to bring about a real shift in accountability over the longer term. A results-based planning approach should be able to focus on the higher level, and as process or outputs are achieved along the way, set new targets to move on to.

270. As already reflected above, to some extent this is happening as MINEDH and partners take forward the improvement of school supervision. There is a need to reflect on the gains made in getting funds to schools and establishing the guidelines for the management of ADE funds, or school council functioning. But stronger, decentralized planning and management is needed.

271. The GPE evaluation¹⁶² found that the program, particularly in using DLIs, had increased the focus on results, or in other terms labeled success effectively. However, on closer inspection, this review finds a mixed picture. There must have been a contribution to results-based planning in those provinces which improved the equity of PTRs across districts, although it is not clear if this has continued or extended to other aspects of teacher recruitment and deployment (for example, within-district PTR equity). The other GPE indicators have had less impact on planning for results; for example, the focus on institutionalizing in-service training for early grades (Portuguese and math) at the IFPs does not appear to have been part of a broader strategy to develop IFP capacity to deliver a range of pre-service training courses, and in-service training for upper primary or secondary grades, or indeed the bilingual curriculum. As the training has not effectively focused on changing classroom practice, and school-based training, it could be argued that the DLI did not bring sufficient focus on the end result of learning. However, looking at the new sector plan, and proposed GPE program, there is increasing focus on this, reflecting that perhaps important lessons are being learned.

vi. Aligning all actors – RBF improves coordination between key institutions

272. The sixth theory of change for RBF considered is its potential ability to bring different stakeholders within the sector together through improved coordination. This relates directly to RBF as an accountability mechanism and to how it fits within the existing system of relationships between institutions. For the relationship between development partners and government, it might be providing a focus for dialogue around results, which, owing to the RBF mechanism, have a greater weight than they would do through a traditional (non-incentivized) results framework.

273. Donor relationships with government are mediated through the Local Education Group and high-level Troika, and the ongoing annual processes of budgeting and reporting, within the principle of a sector-wide

¹⁶² Universalia (2019).

approach. The majority of donor funding use the FASE pooled fund, the main source for “investment”, much of which would more accurately be classified as essential recurrent expenditure – textbooks, school grants, funds for teacher training, etc. Priorities for FASE spending are determined by discussions between partners on the MINEDH annual plan of activities and the three-year Operational Plan. Indeed, the partners have a strong input to the annual plans and therefore the allocation of resources. With or without the RBF, in this way the development partners are not silent partners, but have a stake in the results-based planning.

274. The introduction of RBF as a financing modality by three donors has not fundamentally changed the sector-wide coordination mechanisms. The LEG was involved in the discussions around the GPE indicator selection process. However, there were frustrations in this process, and it seemed the process was dominated by the World Bank, the GPE, and the MINEDH. Annual sector reviews discuss progress towards DLIs and are more focused on results now, though this improvement has not been specifically attributed to the introduction of RBF. The DLIs tended to sit outside the main results framework sections of the annual sector reports (RARs), even for the GPE district PTR indicator, despite it being a natural fit with other indicators within the results framework (national average PTR, and provincial parity PTR).

275. The PFM4R explicitly sought to bring together the MEF and the MINEDH, and the program implementation structure was split across the two ministries. We heard that the relationship was problematic and the MEF was in practice a significant obstacle to progress during the early years of the program. This created delays to the hiring of the important coaches, and the under-utilization (because of bureaucratic delays and a lack of a proactive approach) of the pool of funds available for capacity development, and potentially resulted in delays to the distribution of funds for travel and for training that would take place in the provinces. Despite all of this, some key action was eventually facilitated, and this was important particularly for the reform to the timeliness of ADE payments, in which the Treasury had been a bottleneck.

276. The political economy in Mozambique is effectively very top-down, and in this sense vertical accountability (from school to district, to province, to the MINEDH), was always going to be easier in the context and given greater effort than horizontal accountability (school and school director to parents and the community via the school council). In this sense, there were clearly cases in which the MINEDH set targets for lower levels of government and this was driven or contributed to by the RBF incentive (see *Steroids* above). Again, these interactions were supported by technical assistance of the program, such as coaches and facilitators, as well as the work of other development partners – particularly the training carried out at district level under POEMA, by GiZ, UNICEF, and others. Nevertheless, even without these mechanisms, there was greater coordination, particularly for the ADE payments and for the school supervision targets. This top-down approach only goes so far, however. Behavior change at the school level, in the relationship between schools, school councils, and the communities they serve requires a different kind of coordination and alignment between actors.

277. The GPE indicators were also more focused on top-down direction than on coherence and coordination between actors, with the MINEDH setting targets for the teacher training institutes (IFPs) for both in-service training and school director training. Implementing the new in-service teacher training strategy was part of the workload of the teacher training department (DNFP) within the MINEDH, and involved collaboration with the National Institute for Education Development (INDE) to develop the training curriculum. However, the implementation was insufficiently focused on the coherence and coordination between schools, clusters, districts, and IFPs. DNFP clearly works well with a range of partners in the sector to improve teacher training but the task is huge (and is an area with a number of other donors supporting individual IFPs) and needs to be set within a broader strategy for teacher management and development. The limited focus of the GPE variable tranche did not have a significant impact of this kind but may have contributed to the ongoing dialogue and strategy.

278. Our quantitative analysis also suggests that the PTR indicator may have also had a top-down directive, particularly given the changes that took place in Zambezia, Nampula, and Niassa during the incentivized period from 2014 to 2017. We did not find qualitative triangulation for this from the province-level officials we spoke to,

although this may be because of the time that had elapsed since the change and the degree of staff turnover. There is much less evidence that change in the equity of PTRs was sustained beyond this period, and the period from 2017 to 2020 saw a rise in the national PTR and in the northern provinces that had been the focus of the period of RBF. This challenge is as great as ever.

vii. Sustaining attention -- RBF maintains a focus on results during a period of change

279. The final potential theory of change for RBF considered is the idea that the firm nature of an RBF contract could maintain a “focus on results” over time. In particular, RBF could be useful in maintaining a (contractual) definition of achievement and goals (results) during a period of change; that is, to keep “eyes on the prize despite the political economy”.¹⁶³ The core assumption for this is that the goals set out at the beginning remain the most relevant and pertinent goals to drive policy in the years after the DLI contract was set out.

280. The period covered by RBF in Mozambique to date has been relatively short, mainly within 2014–18, but, as set out in this report, with most changes taking place in the 2015–17 period. Despite this, it has been eventful (see time-line in Annex 3), bracketed by elections in October 2014 and October 2019, and containing the hidden loans scandal in 2015–16 with repercussions for how donors support the country. This included the suspension of general budget support (GBS) during 2015, and knock-on effects for the currency and the resources the government has to support education and other social sectors. Mozambique, along with other countries in the region, experienced a major drought linked to the 2014–16 *el Niño* event; it had two major tropical cyclones in 2019; and conflict continued to escalate in Cabo Delgado province and in other areas of the center and north of the country. These may have significantly increased school drop out, while also damaging the precarious school infrastructure on which the education system depends.

281. The PFM4R program grew out of the government’s PFM Vision (2009) which led to a USD 157 million program of PFM support (2010–14) and virtually every donor in the country in support. The recognition that this did not sufficiently support subnational or sectoral PFM led to the development of the PFM4R program. This has therefore been part of a broad-based, sustained support to sectoral PFM. The crisis of 2015–16 was a severe one for donors, in which some of their perceptions of PFM, which had been perceived to be improving, took a major step back. For the education sector, bringing SDEJTs into e-Sistafe (the government’s financial and accounting system) as budget management units (UGBs), was an extension of downstream PFM reform. As SDEJTs had gained greater responsibilities with fiscal decentralization, and now managed 60 percent of the sector budget, there was a clear need to strengthen them.

282. The focus on PFM and accountability during this period was important. However, despite its long development process (the PFM4R took at least three years to develop) and the success against DLIs, the program does not appear to have become a catalyst for further PFM reform for the sector. The reforms instituted were foundational and important steps, but the progress that was made with this sectoral/subnational PFM reform, in order to improve service delivery, needs sustained attention beyond the achievement of the specific program DLIs.

283. Other reforms of RBF programming were closely aligned to the 2012 Sector Strategic Plan and 2015 Operational Plan, but the window of focus for both GPE variable tranche and the German (KfW) RBF support to construction, was very short, mainly in 2016–17 for GPE, and mainly in 2014–16 for the German RBF. Thus, for both of these experiments with RBF programming, it is hard to argue that they meaningfully “sustained attention” on the key results – in-service teacher training, school director training, district PTRs, and the construction of classrooms. On the contrary, the quantitative analysis for this report (see Annex 4), shows that the incentive for the district-level PTR improvements was short-lived, in part because of lack of national-level funding for new

¹⁶³ World Bank (2017a).

teacher positions, and a lack of focus on provincial inequality. The construction RBF was viewed as a failure and discontinued, and it is clear that the extensive challenges in this area have not been addressed during this period.

Final reflections

284. Using this framework of RBF theories has helped to assess the way in which RBF has been used in the education sector in Mozambique. Some final reflections can be made on the contribution of RBF to improve education system performance. These are set out below.

Foundational vs transformational change

285. This research has indicated broad agreement that selecting DLIs at the output/process level was appropriate and proportionate to the context and that the approach was successful in bringing about at least some of these changes. This was appropriate, given RBF had not been used in the sector before 2014, and given the high level of dependence on donor funding, particularly the FASE. The DLIs can be characterized as foundational reforms, aimed to catalyze, and give momentum and focus to a process of change. In this sense, the DLIs were not ends in themselves, but key steps towards more important changes: shifts in accountability, and qualitative changes in school management, and in the capacity and practice of teachers and school managers. It was expected that achieving the DLIs would contribute to intermediate and higher-level outcomes.

286. Most of the RBF DLIs were achieved in full, and in some cases quite early in the programs. This could indicate that the incentives were effective, but may also indicate that these were “low-hanging fruit”; not “stretch” indicators, to use the GPE terminology. The perception of many stakeholders is that at the time, these indicators targeted significant bottlenecks, or pointed to important changes that needed to take place for strategies in the sector plan to be effective. However, looking at the results, a more complex picture emerges about the success of these programs. Each DLI illustrates that while the foundations for change were being put in place, there were limitations to the depth and quality of this change. All of the DLIs in question would need to be part of theories of change that lead on to higher-level goals, with more complex change needed to bring about improved teaching and learning, or equity in the allocation of resources. While these may have been implicit, in some cases articulated in the MINEDH Operational Plan, for the most part the results being paid for were not in themselves clearly linked to a long-term sequence of reform actions or outcomes. Looked at in this way, some indicators may have lacked ambition.

287. It is important to consider whether the quantitative DLI targets/metrics used acted as *proxy for* or a *step towards* a more important and higher-level goal. For example, improving school supervision was seen as an important component in ensuring better school governance and accountability, and a minimum quantity of supervision happening seems a reasonable and important starting point (that is, this DLI focused on the percentage of schools visited). But in the medium to longer term, the professionalization of this work and the teams conducting it will be essential, developing their understanding of the ultimate purpose and goal of the work that is needed and their capacity to undertake it. In this sense, the quality of supervision becomes more important than the quantity.

288. The GPE indicator focused on reducing high district PTRs aimed at a higher-level change in the system, had a clear equity dimension, and could plausibly have contributed to improved retention and learning. However, for this to contribute to higher-level outcomes it would need to be part of a broader set of teacher policy reforms which might address equitable teacher recruitment and allocation within districts (that is, urban/rural) and between provinces (that is, addressing inequalities between the north and the south). This links also to teacher pre-service training, employment conditions, and motivation. As it is, the indicator was achieved but with no attention to extending or sustaining the change in such a way that further outcomes could be achieved.

“Pure” vs Hybrid RBF

289. In theory at least, RBF could be applied in a “pure” form, in which the RBF payment is only made against outcomes, leaving the agent to decide how to reach them. Clearly, given the focus in Mozambique on outputs and processes at an early stage of the results chain, this was not the case. Furthermore, the RBF used in Mozambique was strongly linked to capacity support of various kinds – with a great deal of specific support alongside the PFM4R program, including facilitators and coaches, going to province level. Other donor projects also provided capacity development support for different reforms and sector institutions relevant to the DLIs, including the teacher training institutions (IFPs), district and provincial planning/monitoring. German (KfW) bilateral support provided technical assistance alongside the use of RBF for classroom construction. The RBF in Mozambique was therefore relatively limited, targeted to specific reforms, and supported with *hybrid* elements – that is, technical assistance alongside the RBF incentives.

290. In practice, it is likely that this is a necessity with such complex changes in a low-capacity setting. For district supervision, improvements in quality were made over the period in question alongside the quantitative change incentivized, but with the help of other technical support outside RBF. The POEMA program supported by Germany (GiZ) has also been widely praised for more intensive support in capacity building at district level, although it only covered a portion of the country. In this sense, the financial incentive of RBF is best viewed as part of a “package” of modalities or approaches, and its success may well link to the coherence of the full design of that package.

Risk transfer and fund flow risk

291. An additional theory for justifying RBF (outside of our framework), is that of *risk transfer*; this refers to donors themselves (as principal for the partner government) having principals at home (that is, their taxpayers, board members, funders). RBF enables them to tell the story that they will only pay where results are achieved, to ensure money is well spent, shifting the risk to the recipient government if results are not achieved. In the aftermath of the hidden loans scandal, the suspension of GBS and other sector-level corruption, the FASE mechanism was strengthened, and perhaps in this context, an additional element of risk transfer had some appeal (although all RBF programming discussed in this report was designed prior to the hidden loans scandal). Within FASE, there was a longer history of using what has been termed “virtual earmarking”, or a kind of soft conditionality; funds being nominally linked to specific areas of work, or results, but without DLIs or specific conditions for tranche release. This too can be seen as a means to tell the story to a domestic donor audience.

292. The introduction of this kind of soft conditionality can be contrasted to the “hard conditionality” of the RBF. An important consideration from the findings on financial flow and noted in the risks and unintended consequences sections (see Section 3C and 3G) is that the principle of FASE funding being non-conditional was changed by the GPE and German use of variable tranches. FASE provides the majority of “investment”, or non-salary, expenditure within the education sector, which is essential for the operation of the system (for example, construction, ADE transfers, teacher training, textbooks). There is a clear risk to the planning, budgeting, and expenditure on these items, from both fund flow risk, and the relatively weak PFM. The most important risk is that RBF will exacerbate these issues in a way that could harm service delivery. In practice the amounts of non-disbursed funds (USD 3 million for GPE, USD 6 million for Germany construction funds) was small, particularly given that FASE on a yearly basis has been underspent by higher amounts than this. However, an increase in the value of RBF, as a proportion of donor funding, could very quickly pose a much more severe risk to fund flow and therefore the sector resources available for essential expenditure. The donors using RBF to support education in Mozambique appear to have been cognizant of the need to minimize disruption to the fund flow, and in part this may explain the selection of indicators well within the scope of MINEDH control.

Equity, a missing dimension?

293. Across all of the RBF indicators, it is notable that despite the significant equity challenges facing the country, this was not specifically targeted, apart from to a limited extent through a focus on within-province allocation of teachers. Differences between regions and provinces, or specifically addressing the barriers faced by girls, were not targeted through RBF. A challenge with the PFM4R DLIs is that the incentives target only complete primary schools (*Escolas Primárias Completas*, EPCs), while around a third of primary schools were therefore not included as they only offer lower primary level (EP1) – it is possible these schools did not get the attention, monitoring, and support that they may need. If RBF can have a signposting effect, then indicators which have a stronger equity focus could have been considered.

Government adoption of RBF in education

294. Despite the intention of the World Bank to apply performance-based allocations (PBAs) through the design of the PFM4R, there was no systematic effort by the Government of Mozambique to directly “cascade” incentives, outside of some simple and low-cost prizes. As such RBF in the period was very much a donor to government initiative. The PFM4R’s planned use of PBAs to school level was not implemented but later piloted under the *ADE desempenho* (performance-based ADE /school grants). Although the results of the evaluation of *ADE desempenho* are uncertain, there are plans to increase this downstream RBF to subnational levels in coming years. While there is certainly some interest in this pilot reform among some in the MINEDH, it is not clear that the system is ready for it, given the scale of remaining challenges with local-level PFM (for example, the need for stronger district monitoring capability, school council functioning and the “last mile” for ADE).

295. The potential is clearly that the RBF incentive would be applied to school-level actors to bring about further changes in the way schools are managed for improved learning and retention. However, it is not clear how this can be effective in a low-resource, low-capacity and highly inequitable context, without significant investment and support of other kinds. To move beyond using RBF as an aid mechanism, to one more integrated into the national education system will require significant attention to the broader local accountability relationships and political economy, the real functioning and challenges in PFM, the use of evidence to inform practice, and ensuring effective monitoring and support systems are in place.

RBF programming in education – a few headline suggestions

296. Finally, drawing on this country study and as inputs to the synthesis of three country experiences of which this study forms part, the following few headline suggestions are made:¹⁶⁴

- Pay careful attention to the design of any cascaded or downstream RBF incentive. Unless this is acceptable to government and well-designed, it can cause confusion and even demotivation of the very officials tasked with delivering key changes for the program.
- Ensure that in-depth analysis of the equity of changes incentivized by DLIs is undertaken, and that this includes detailed indicator definitions. By incentivizing one particular aspect of equity (for example, within-province distribution of teachers), broader and more important dimensions of equity may be lost (for example, between-province distribution of teachers, and within-district distribution, or the focus on primary schools not classified as “complete” in the Mozambican context).
- Have a very clear pathway to success. Understand that in the absence of individual bonuses, which are unlikely to be implemented within a government bureaucracy, then incentives operate at the institutional level. This means they will only function if the bureaucracy is motivated to collectively secure funds for the sector. If individuals do not “buy-in” or understand the goals set by the DLIs, then incentives may lead to demotivation.

¹⁶⁴ See Dom et al. (2021b) for the full set of lessons and recommendations from the Final Synthesis Report of this three-country study.

- Ensure that the financial implications of non-payment are clearly understood prior to starting any RBF project, in particular when finance is funding essential expenditures (as in FASE), where the implications may therefore be very severe in terms of potential opportunity costs.
- Where there is an intention to leverage complex behavior change, in the interaction between schools and communities, consider the selection of DLIs carefully and the associated analysis and technical support that will be needed at the local level. Any RBF incentive is likely to weaken as it moves further down the “cascade” towards school level.
- Be clear on the expectations for the verification process, in particular the degree of evaluation and qualitative information that is built into the process. Where the verification lacks this, ensure there are alternative sources of information to provide an assessment of change.
- Seek to ensure clear process of transparency and dialogue on results with a wide range of sector stakeholders, including in discussion of verification findings and presentations at annual sector review meetings.

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Annex 1. Terms of reference

THE WORLD BANK

ANNEX A_ 7191233

EVALUATING RESULTS-BASED FINANCING IN THE EDUCATION SECTOR: COUNTRY LEVEL ANALYSIS

A. PROJECT BACKGROUND AND OBJECTIVES

To support efforts toward more and better education services, especially to those most excluded, the World Bank, with support from the Government of Norway, followed by support from the United States Agency for International Development, and the German Federal Ministry for Economic Cooperation and Development launched the [Results in Education for All Children \(REACH\) program](#). REACH specifically looks to generate evidence and knowledge around results-based financing (RBF) in education and is organized around the following principles:

- Country systems can be strengthened to focus more on results;
- Some approaches are proven to be effective, others are promising;
- Innovation and evaluation are therefore critical to developing the evidence base;
- Results can be broadly defined, including both outcomes and outputs;
- Much can be learned from the RBF experience in health; and
- Efforts must be client-driven to be successful.

To date, it has been difficult to evaluate RBF for a number of reasons, namely due to issues around attribution as the financing instrument is rarely used in isolation, and because there is often no counterfactual to compare against. Most research thus far has shown that RBF has had varying success in helping countries achieve learning outcomes, but that it does help focus attention on specific results and may have some effect depending on the types of interventions used.

REACH is looking to commission a firm to undertake an assessment of RBF in three countries. The aim of the assessments is to assess the design and implementation experience as well as the impacts of RBF in selected countries and to compare this with other approaches to education financing (e.g. traditional input-based funding). The studies will contribute to the global evidence base on results-based financing and are expected to provide lessons on RBF use in the education sector and recommendations for strengthening the link between results and funding.

The assessments will look at the use of RBF by development partners to support government education sector development programs and the use of RBF more generally (e.g. within a country, such as between the national and provincial/regional level) to achieve sector objectives (e.g. civil service performance management systems, performance-based grants to schools etc.).

COUNTRY CONTEXTS

To assess RBF at different stages, three countries with varying levels of experience with RBF have been chosen: **Tanzania; Nepal; and Mozambique.**

In **Tanzania**, there is a well-known and established RBF program called [Big Results Now](#), which has been ongoing since 2013. The \$416m program is financed by the government of Tanzania, and from funding provided by the governments of United Kingdom, Sweden, and the International Development Association (IDA), the World Bank Group's fund for the poorest).

At the time, President Kikwete had launched the program based on an Education Reform Compact that was developed between the government of Tanzania and eight development partners. This pact outlined the government's commitment to moving away from inputs and towards focusing on results through reforms in accountability, incentives, and assessments. For guidance on implementation, the government received assistance from the Government of Malaysia (which implemented a similar series of education reforms) to help develop a clear and practicable implementation plan.

A country where RBF in the education sector is emerging is **Mozambique**. In 2014, the country pioneered the [Mozambique Public Financial Management for Results Program](#) for health and education. This project is unique in that it was designed to tackle governance issues in both sectors. In education, weak school governance, limited community participation, ineffective supervision, high absenteeism, and delays or diversions of school funds contributed to low pupil retention, low completion rates, and poor learning outcomes.

Nepal has had less experience with results-based financing, but is using RBF to achieve targets set by the [School Sector Development Program](#) (SSDP), which builds upon the previous School Sector Reform Program (SSRP). SSDP is a seven-year plan (started in 2017) that was vetted by the Local Education Group (LEG), which has a longstanding history of engagement with the government. Representatives include government officials; international NGOs; development partners; and civil society organizations.

The primary objective of SSDP is to improve equity, quality, efficiency, governance and management of basic and secondary education. The SSDP is ambitious in its scope, and the total program cost is \$6.461 billion, with the government providing 88.8% of the funds and donors funding the remainder.

B. SCOPE OF WORK

The main questions that the assessment is designed to answer include:

1. What have been the expected results of sector development programs?
2. What elements of the programs have been supported by RBF?
3. Why was RBF, rather than other alternatives, seen to be an appropriate mechanism to drive these types of results? How was it envisaged that RBF would support the achievement of these results?
4. What has been the impact of RBF on sector development and results? How do these impacts differ from more traditional financing mechanisms (e.g. traditional donor funded projects and input-based funding)?
5. What are the opinions of key education stakeholders (e.g. government, civil society, development partners) on RBF and its use in the education sector?
6. Has RBF been a cost-effective alternative to traditional financing approaches?
7. What are the main lessons learnt from the use of RBF?

It is expected that the studies will employ both quantitative (e.g. trend analysis, econometric analysis) and qualitative methods (e.g. desk-based review of relevant documents, key informant interviews and focus groups) to answer the main questions on relevance, efficacy and efficiency of RBF. Moreover, it is expected that the underlying theory of change (causal chain) of the RBF programs or interventions will be examined and the underlying assumptions of each step in the causal chain assessed against outcomes.

The firm is expected to apply a similar framework and methodology in each country so that more globally applicable lessons can be identified.

Some examples of such research are: DFID-commissioned [Evaluation of Results Based Aid in Rwandan Education](#) and the [Evaluation of the Pilot Project of Results-Based Aid in the Education Sector in Ethiopia](#).

The proposed study is expected to differ from these examples because it focuses on the experience of the country as a whole and not solely on donor funded activities.

The firm will be responsible for developing a framework and methodology by which to evaluate the three countries.

A final report for each country will cover the following topics/questions:

1. Sector context

- a. Map out all existing education sector RBF schemes in country
- b. How and why was RBF introduced in a particular country context? What was the political economy? The theory of change?
- c. What were the main challenges RBF sought to address (at teacher, school, district/province, national level)?

2. Design of RBF

- a. What was the process that went into designing the RBF activities (e.g. how were priorities set? How were stakeholders consulted?)
- b. How were indicators set and costed?
- c. What incentives were introduced at which level of the education system and what behaviors were expected to change?

3. Implementation of RBF

- a. What was the quality of implementation?
- b. Were targets met? Did indicators change?
- c. Were all funds disbursed? What happened to undisbursed funds?
- d. Were there any gaming or perverse behaviors because of RBF?

4. Impacts of RBF

- a. What have been the greatest changes/impact as a result of RBF? What is the likelihood that these would have existed in the absence of RBF?
- b. What have been the overall trends since the introduction of RBF? Have results been sustained? Are the incentives sustainable?

5. Cost of RBF

- a. What effect have RBF elements had on overall public spending efficiency and how cost effective has RBF been relative to other interventions/reforms?

Proposals should include a clear strategy to ensure the validity of data used, how stakeholders will be identified, and limitations of the approaches taken.

C. DELIVERABLES/SPECIFIC OUTPUTS EXPECTED FROM CONSULTANT

The evaluation team will produce the following deliverables:

1. After the firm has been selected and some scoping work completed, a short report containing initial findings, hypotheses, methodologies, and roadmap of the way forward
2. Mid-term drafts of the assessments of each country
3. A detailed final assessment of each country, with a description of the methodology used
4. A final, synthesis report that compares/contrasts the three country experiences, along with a description of the methodology employed, and with global lessons identified
5. A final presentation in PowerPoint synthesizing the main findings and conclusions, to be presented to REACH and relevant stakeholders

D. SPECIAL TERMS & CONDITIONS / SPECIFIC CRITERIA

The contract will be lump sum, all inclusive. Payment will be performance-based and made in tranches per the deliverables outlined in Section C.

The final deliverables will be due on or before July 1, 2020.

Reporting will be to Samer Al-Samarrai, Program Manager, REACH.

Annex 2. Stakeholders consulted

The table below sets out individuals that were interviewed in either the first phase of research (including the country visit in November/December 2019), or in the second phase of research (via a mixture of telephone calls or Internet calls over the period from April to July 2020). Some stakeholders were interviewed twice or more than twice.

Institution	Individual	Department / position
Central government		
Ministry of Economy and Finance (MEF), Department of National Treasury (DNT)	Emilia Silvestre	Program Coordinator, DNT
	Amélia Mpfumo	DNT
	Alexandrina Santos	DNT
<i>Tribunal Administrativo</i>	Judith Aly	Chief of Audit Department, <i>Tribunal Administrativo</i>
Ministry of Education and Human Development (MINEDH) DIPLAC	Antuia Soverano	Director of DIPLAC
	Andre Utui	Deputy Director DIPLAC
MINEDH, Finance Department	Belmiro Cruz	Financing Adviser
	Jiten Shah	FASE Financing Controller
	Carlos Muchanga	Técnico – Gestor Financeiro
	Jair Ossene	Chief Accounting
MINEDH Technical Departments: DINEP, DGGC, DNFP, INDE, and General Inspection	Graciano Safo	Chefe de Departamento Gestão da Qualidade
	Luis Nascimento	Director DGGQ - Direcção de gestão e Garantia da Qualidade
	Remane Selimane	Director of DNFP
	Mario Armando	Chief of Department, DNFP
	Argentino Nunes	Adviser to the Minister (ex-Director of Administration and School Management)
	Gina Guibunda	Directora DINEP
	Epifanio Alberto	Chief of Department, Inspection
	Ismael Cassamo Nheze	Director of INDE
	Remigio Rainde	Director of Directorate of School and Teaching Material Management
João Chilaule	Chief of Department, Primary School	
Local level stakeholders (Province / District / School / IFP)		
Provincial Dept of Education, Gaza Province	Raquelija da Glória Jorge	Head of Planning
	Ercílio David Soquiço	Finance and Administration Officer (ADE Coordinator)
	Carmindo Cossa	Planning Officer
	Ernesto Cumber	Finance and Administration Officer
	Jossias Macie	Human Resources Officer
	Atanasio Jaime Cossa	Director Provincial
SDEJT Xai Xai	Marcelino Júlio Biza	District Director- Xai-Xai
	Nelson Eugénio Maphosse	Head of Repartição de Administração e Planificação - [Administration and Planning Division]

IFP Eduardo Mondlane	Custódio António Balate	Director
	Cândida Beatriz Tembe	Pedagogical Director
	Celeste Joaquim Monjane	Deputy Director of Admin
	Rodão Joaquim Govene	Deputy Boarding Director
	Amélia José Siteo	Head of General Office
	Maria da Graça	Head of General Office
SDEJT Manjikase, Gaza Province	Felix Lote Moiane	District Services Officer, Focal Point for Results Based Public Finance
	Titos Alberto Nhoela	District Services Officer, Acting Head of General Education Division
	Virgílio Alexandre Mungoi	District Services Officer, Head of Science, Technical Education and Technology Division
Primary school Mandjakaze	Reginaldo Mattusse	School Director
	Rute Saveca	Deputy School Director
SDEJT Chibuto	Ernesto Mário Macamo	District Director (SDEJT)
SDEJT de Guija	Flávio Custódio Cristiano	District Director (SDEJT)
EPC EDUARDO MONDLANE	Marcelino Júlio Biza	School Director
Escola Primária do 1,2 de Mubangoene	Olino Frazão Jalane	School Director
Escola Primária do 1 e 2 grau de Chaimite Bairro 5	Renato Valente Macuácuca	School Director
Provincial Dept of Education, Sofala Province	Manuel Armindo Zinhambe Chicamisse	Chief of Education Department
CHIBABAVA DISTRICT, Sofala Province	Inoque Alexandre	District Director (SDEJT)
NHAMATANDA DISTRICT, Sofala Province	Sergio Lucas Quembo	District Director (SDEJT)
Beira District, Sofala Province	Nacer de Sousa	District Director (SDEJT)
Inhamítua IFP (em Sofala)	Amado Assique	IFP Director
Director De Escola 1, Sofala	Inoque Alexandre	School Director
Director De Escola 2, Sofala	Julieta Sebastião	School Director
Director De Escola 3, Sofala	Gaspar Charles Antonio	School Director
Direcção Provincial de Educação: Nampula	Mariamo Agostinho	Provincial Director of Education
SDEJT Angoche	Essumaila Selimane	District Director (SDEJT)
SDEJT Mogincual	Gracinda Lurdes Venancio	District Director (SDEJT)
SDEJT de Nampula	Cecilia Tacarindua	District Director (SDEJT)
Marere IFP- NAMPULA	Herculano Micorosse	IFP Director
Escola Primaria Completa de Inguri - Angoche	Manuel Antonio Assane	School Director
Escola Primaria Completa de Mogincual - Mogincual	Ivo Siada	School Director
Escola Primaria Completa Serra da Mesa-Nampula	Castelo Silvano	School Director
Development Partners		
World Bank	Lucia Nhampossa	World Bank Officer
	Ana Menezes	Task Team Leader

	Marina Bassi	Task Team Leader
	Furqan Saleem	Former co-TTL for PFM4R
GPE	Lucinda Ramos	GPE Country Lead
	David Balwanz	Senior Education Specialist
USAID	Antonio Mize Francisco	Education Specialist
	Arturo A. Acosta	Chief of Education
EU	Graca Sousa	Education and Social Protection Officer
Government of Italy	Stefano Marmorato	Program Officer
KfW (Germany)	Amelia Stanzel Ferreira	Project Manager
	Stephanie von Wogau	Education Specialist
Canada	Elise Rafuse	First Secretary
	Manuel Lobo	Education Specialist
Ireland	Lidia Meque	Education Adviser
Finland	Marianne Kujala-Garcia	Counsellor
	Cláudia Ferreira da Costa	Education Coordinator
GiZ (Germany)	Katrin Eisenmann	Teacher Training Adviser
	Helder Monteiro	POEMA Adviser
Civil society / non-government		
MEPT (Education for All Movement)	DA SILVA, Isabel	MEPT HQ Maputo
	Martins A. Lohane	MEPT Niassa
	Henriques V. Henriques	ASADEC P.F Sofala
	Elizabeth Siqueira	Associação Progresso-MEPT
	Filipe Benjamin	MEPT Secretariat
	Farida Gulamo	MEPT ADEMO (Executive Director)
	Jossias Micheu	ADEMO GAMA
	Idite Joaquim	MEPT (Member)
	Mosé Omar Ali	NANA Mocuba Zambézia
	Zaida Cabral	MEPT
ADPP - Ajuda de Desenvolvimento de Povo para Povo	Birgit Holm	Executive Director
CESC - Centro de Aprendizagem e Capacitação da Sociedade Civil (CESC)	Tassiana Tomé	Education and gender specialist, board member of MEPT
Stakeholders formerly working in national agencies or development partners		
Formerly MINEDH	REGO, Manuel	Former Permanent Secretary, previously Director of DIPLAC
Formerly MINEDH / TA	Isabel Soares	Former Coach on PFM4R
	Jeannette Vogelaar	Former adviser - MINEDH
Formerly World Bank	João Morgado	Consultant
	Octavio Medina	Consultant
	Rogério de Sá	Consultant - OPM
Formerly National Directorate of Treasury / PFM4R	Henriques André	PFM4R M&E Specialist

Annex 3. Country time-line

Mozambique, country time-line – developments in political economy; education policy and planning, and RBF in education and major other developments: 2006–20

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Political economy				General Election Guebuza re-elected FRELIMO					General Election – Nyusi President FRELIMO		'Hidden loans' scandal			General Election – Nyusi re- elected FRELIMO		
												Islamist insurgency in north (Cabo Delgado)			Ongoing instability	
Legislation					Deep-water gas discovered		Currency appreciation				Currency depreciation		USD 50 billion investment committed for liquid natural gas exports			
													National Education Law			
National level plans	2005-2009 Plano Quinquenal do Governo (Government Five-Year Plan)				2010-2014 Government Five-Year Plan (PQG)					2015-2019 Government Five-Year Plan (PQG)						
Policy/strategies and plans	Plano Estratégico da Educação (PEE) e Cultura 2006-2010/2011						2012-2016/19 PEE (ESSP-III)								Draft PEE 2020-29	
	Annually updated 3-year education operational plans and PdAs									2015-2018 Education Operational Plan						
RBF									World Bank <i>PFM for Results</i> program (PFM4R)						New World Bank and GPE programs planned	
						KfW DLIs in FASE contribution				GPE Additional Financing for ESSP Variable Tranche with four DLIs						
Other (education)			1 st Fast Track Initiative grant 2008 – 2010		ESSP 2011-2015 with IDA credit and GPE grant											
	Abolish primary school fees (2004/5)	World Bank enter FASE		FASE contribution peaks at USD 140m		Dutch leave FASE		First NLA – Grade 3	Service Delivery indicator - SDI report				World Bank PER		SDI follow- up report	Review FASE MOU
Other	Drought	Zambezi river floods		Food riots over food price hikes in Maputo & Chimoio								El Niño- driven drought			Cyclone Idai and Cyclone Kenneth – 130,000 displaced	Ongoing drought + COVID-19

Annex 4. Quantitative analysis of GPE DLI on pupil-teacher ratio

This annex¹⁶⁵ looks in more depth at changes linked to the GPE DLI on pupil-teacher ratios (PTR) for lower primary schooling (EP1). The DLI was set as the number of districts in the country with a PTR for lower primary greater than 80. This was with a baseline of 12 districts for 2014 (MINEDH 2015, World Bank 2015b), and targets were then set for a reduction to 8 districts by 2016, and down to 2 districts above the ratio by 2017. The DLI was not reached, although as discussed this reflected the baseline changing due to district reorganization. In 2013, the number of districts in Mozambique increased, and this also increased the number of districts in the category above 80, even though the proportions of districts in the different brackets remained largely similar, as shown in Table 1.

Table 1: Number of districts and proportion of districts in different categories for PTR for lower primary (EP1), before and after reorganization of districts taken into account¹⁶⁶

Category	Districts with PTR rates for EP1 in 2014, under old district divisions		Districts with PTR rates for EP1 in 2014, after 2013 reorganization	
	Number	Proportion	Number	Proportion
PTR below 45	24	18.8%	27	16.7%
PTR 45 to 62.5	56	43.8%	73	45.7%
PTR 62.5 to 80	36	28.1%	45	27.8%
PTR 80 or more	12	9.4%	17	9.9%
Total	128	-	162	-

The number of districts with PTR above 80 in the target years of 2016 and 2017 were 10 districts and 9 districts respectively. As the target of 8 districts was only partially met for the first of these years, and the target of 2 districts not met for the second, only USD 1 million of disbursements were made out of the total potential of USD 4 million. However, as set out in the report, if the revised baseline had been taken into account, as the independent verification report of June 2017 had recommended (EY 2017), the disbursement may have been USD 2 million higher.

This annex focuses on the change in the period in more detail, and in particular seeks to address potential mechanisms by which the Government of Mozambique responded to the incentive introduced by the DLI, notably through either or both of the following:

- More equitable distribution of teachers **between** provinces bringing provincial average PTRs down (teachers allocated at a faster rate to provinces with high PTRs).
- More equitable distribution of teachers **within** provinces bringing higher than average PTRs down (teachers allocated at a faster rate to districts with high PTRs).

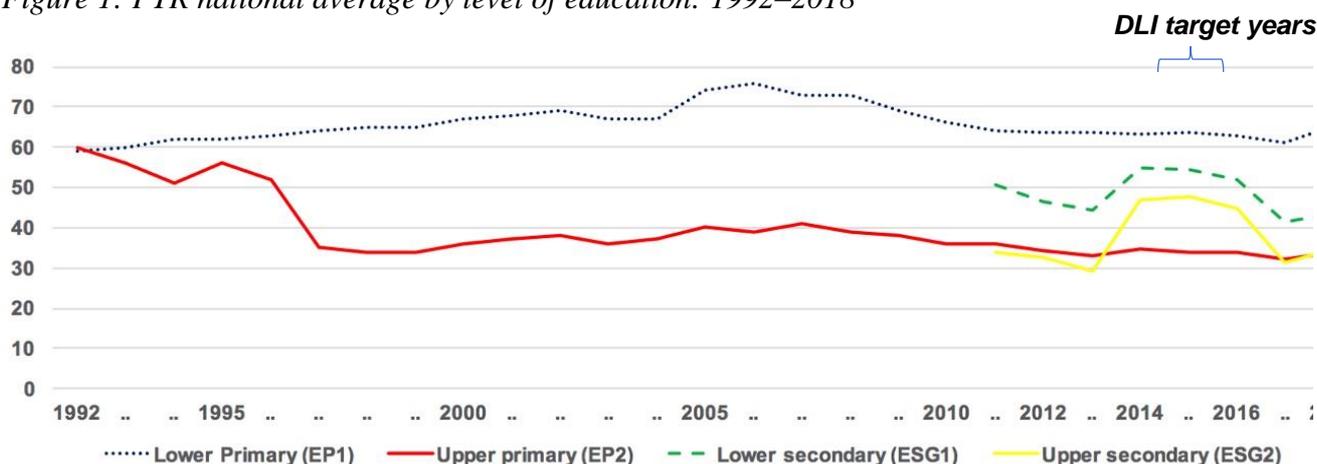
We focus on the analysis of pupil-teacher ratios (PTR) at different administrative levels: national, provincial and district level. District-level information was only provided for EP1 and for the period from 2013 to 2020, with data from the Ministry of Education (MINEDH). This limits the analysis, notably on the question of whether targets

¹⁶⁵ This annex was developed by Lucas Sempé, Univesidad Católica San Pablo; and Paul Clist, University of East Anglia.

¹⁶⁶ Note, there may be a second separate reason for the baseline change – which is whether the baseline and DLI adequately account for the difference of definition between *districts* [*distritos*] and *municipalities* [*municípios*]. Several *districts* were reclassified as *municipalities* in 2013. If this is the case, then the DLI definition may have said *districts* meaning both *districts* and *municipalities*, however the baseline for 2014 would have excluded *municipalities*. The new baseline included both.

may have been partially met by “redistributing” teachers between levels (that is, reclassifying them in the data) – for example, secondary teachers or upper primary teachers being allocated or classified as at lower primary level. However, other high-level data from the MINEDH are available so at least some of the patterns can be assessed. As shown for example in Figure 1, PTR levels for lower primary (EP1) stagnated in terms of the national average in the period from 2011, while lower and upper secondary levels (ESG 1 and ESG 2) saw PTRs increase during the target period of RBF (2014-2017). However, the absence of data means this issue cannot be explored in more depth, except to note that on average in the period from 2011 to 2019, around half of new teachers are allocated to EP1 level (and around 20 percent for upper primary – EP2, while 16 percent each for ESG1 and ESG2).

Figure 1: PTR national average by level of education: 1992–2018



Source: MINEDH data from across several RAR reports.

Assessing the hypothesis of a response to the GPE DLI incentive on PTRs

The analysis is structured in three main sections. The first section performs descriptive statistical analysis of teacher and pupil data from 2013 to 2020 at national, regional and district levels. This allows us to analyze data quality and robustness as well as identify trends, cases and data points that might receive special attention in further analysis. Based on findings on this section, the second part of the document presents inferential analysis focusing on districts (and provinces) which had a higher PTR than 80 in 2013.

We model multilevel mixed-effect regressions allowing for random intercepts and slopes varying for provinces. When data used are aggregated at province level, we estimate OLS linear models. These models are known as conditional growth curves and have the advantage of allowing variance to occur within clusters and over time. The notion is written as:

$$Y_{ij} = \beta_{0j} + \beta_1 x_{ptr_{ij}} + \dots + \beta_n x_{ij} + \delta_{0i} + \delta_{1i} x_j + \epsilon_{ij}$$

where Y_{ij} is the variable of interest of i – th district at j year, β_{0j} and $\beta_1 \dots \beta_n$ are the fixed intercept and slopes respectively, δ_{0i} and δ_{1i} are the random intercept and slopes for i – th Province, and ϵ_{ij} is the residual. Finally, x_{ij} represents a set of predictors, being of our interest $x_{ptr_{ij}}$, a dummy variable identifying districts with a PTR > 80 in 2013.

Outcome variables chosen are: 1) yearly percentage change in number of teachers; and 2) percentage change in PTR. We perform different models using data from 2013–17 as the period of intervention, and also for the longer period of 2013–20, to address sustainability of changes. Values are computed at district level. Additionally, we model ordinary least squares (OLS) at district level to study inequality across time.

Descriptive analysis: National level

Table 2 presents a summary of district averages for numbers of pupils, teachers and the PTR of lower primary (EP1, which means Grades 1-5) over the period 2013-2020. The data have been collected and aggregated from 163 districts. This shows that over the period the average number of pupils (EP1) per district increased from around 28,700 to nearly 37,000 by 2020; with the number of teachers (for EP1) per district increasing from 458 to 549. Thus, a 29 percent increase in pupils has outmatched a 20 percent increase in teachers in the period, leading, by definition, to the rise in the PTR. Notably when considering only the period of the DLI incentive (2013–17), a 10 percent increase in pupil numbers was exceeded by a 15 percent increase in teachers, hence the PTR fell slightly from 2013 to 2017.

Table 2: Summary data characteristics (District averages), lower primary (EPI)

Characteristic	N = 163 ¹
Type – D [District classification]	111 / 163 (68%)
Type – M [Municipality classification]	52 / 163 (32%)
Pupils.2013	28,699 (23,158)
Pupils.2014	29,446 (23,926)
Pupils.2015	30,263 (24,570)
Pupils.2016	30,620 (24,558)
Pupils.2017	31,484 (25,785)
Pupils.2018	33,670 (27,721)
Pupils.2019	35,673 (29,710)
Pupils.2020	36,915 (30,631)
Teachers.2013	458 (317.22)
Teachers.2014	471 (326.10)
Teachers.2015	484 (336.65)
Teachers.2016	498 (339.41)
Teachers.2017	526 (363.17)
Teachers.2018	524 (360.49)
Teachers.2019	539 (365.09)
Teachers.2020	549 (377.97)
PTR.2013	59.7 (17.2)
PTR.2014	59.5 (17.1)
PTR.2015	59.7 (17.1)
PTR.2016	58.2 (14.8)
PTR.2017	56.3 (13.6)
PTR.2018	60.1 (14.8)
PTR.2019	61.4 (15.0)
PTR.2020	63.0 (16.6)

¹Statistics presented: n / N (%); mean (SD)

Table 3 shows a positive evolution of the overall number of students enrolled in lower primary education, from 4.7 million to nearly 6.0 million students, which represents an average yearly growth of 3.7 percent, though the rate of increase in enrolment has been accelerating. Data points of years of interest 2016 and 2017 showed below average growth, and enrolment numbers picked up substantially in 2018 and 2019. It is not clear why this might be the case.

Table 3 Total number of pupils over time, EP1, 2013-20

Year	Pupils (EP1)	Annual increase	Annual growth rate (%)
2013	4,649,243	NA	NA
2014	4,770,322	121,079	2.6
2015	4,902,667	132,345	2.8
2016	4,960,518	57,851	1.2
2017	5,100,394	139,876	2.8
2018	5,454,461	354,067	6.9
2019	5,779,080	324,619	6.0
2020	5,980,168	201,088	3.5

Table 4 shows a similar positive evolution of the number of lower primary (EP1) teachers in the system, from 74,257 to 88,909 teachers, which represents average annual growth of 2.6 percent, where 2017 shows the highest growth of 5.6 percent roughly doubling the previous year's growth. However, 2018 saw negative growth (-0.2 percent) representing an absolute decrease of 194 teachers. This is likely due to a teacher recruitment freeze in the previous year. The clear point to note is that the rate of pupils in EP1 has been rising faster than the number of teachers in the 2013 to 2020 period as a whole, although there were more substantial increases in the RBF period, particularly in 2017.

Table 4: Total number of teachers over time, EP1, 2013-20

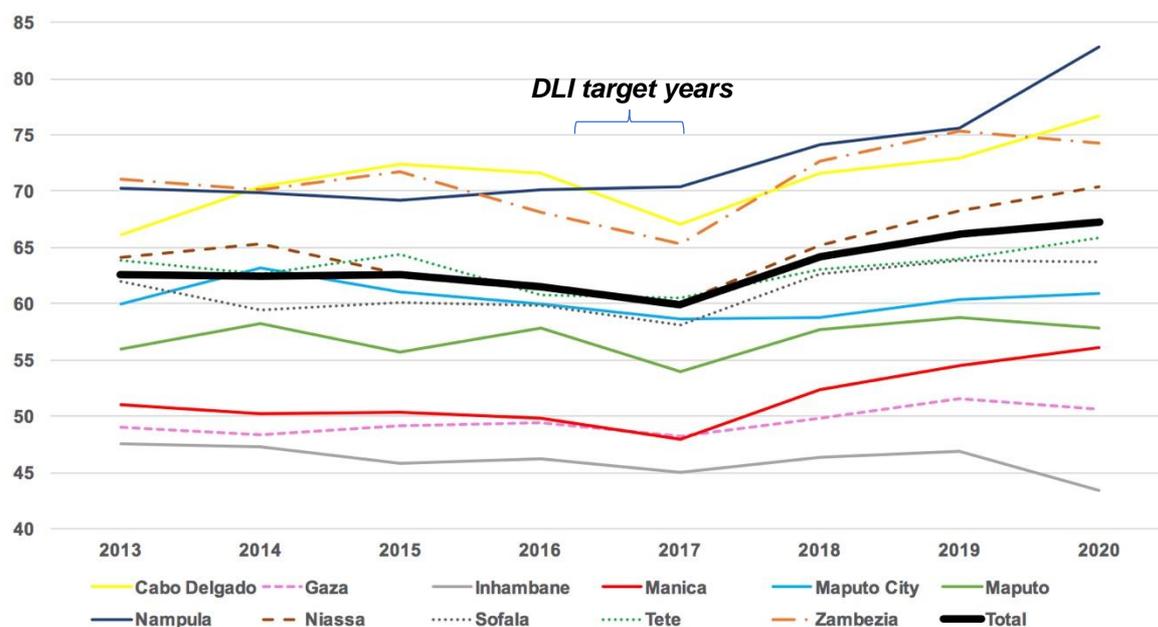
Year	Teachers (EP1)	Annual increase	Annual growth rate (%)
2013	74,257	NA	NA
2014	76,366	2,109	2.8
2015	78,394	2,028	2.7
2016	80,636	2,242	2.9
2017	85,131	4,495	5.6
2018	84,937	-194	-0.2
2019	87,319	2,382	2.8
2020	88,909	1,590	1.8

Provincial level inequality in PTRs

Over the period from 2013 to 2020, provincial level inequality does not appear to have been addressed. Figure 2 presents PTR at province level over 2013 to 2020. Three provinces have consistently had PTR for EP1 level higher than 70, namely Nampula, Cabo Delgado, and Zambezia. There was a clear dip in PTRs across all provinces in the 2015 to 2017 period, with the exception of Nampula. Since the end of the RBF period (2017), all provinces have seen increases in PTR (with the exception of Maputo City), some of them very substantially. This suggests that any progress in reducing PTRs has been reversed.

Assessing the evolution of the number of teachers and pupils separately shows that the rate of increase has varied considerably between provinces (see Figure 3 and Figure 4). Nampula has seen a 40 percent increase in pupil numbers (EP1) in the period and in general there has been a tendency for northern provinces to see much higher increases in pupil numbers than in the south. This has been somewhat off-set by teacher increases in these provinces but not sufficiently. This, by definition, leads to the relative dispersion in PTRs shown above, particularly since 2017.

Figure 2: Average PTRs by province and the national average (EP1)



As shown in Figure 3 and stated above, Nampula had a 40 percent increase in student numbers from 2013 to 2020, with a particularly rapid growth after 2017. The increase, for example from 2017 to 2020, for Nampula particularly, is far higher than population growth. While population growth is at 3 percent, the average growth in EP1 pupils was 8 percent, which would potentially suggest a big decrease in the number of out-of-school children in that period. As set out above (see Box 15 in Section 3E), it could also indicate an issue with “ghost” pupils and therefore question the reliability of EMIS data.

Figure 3: Rate of evolution of number of pupils (EP1) from base year (2013 = 1)

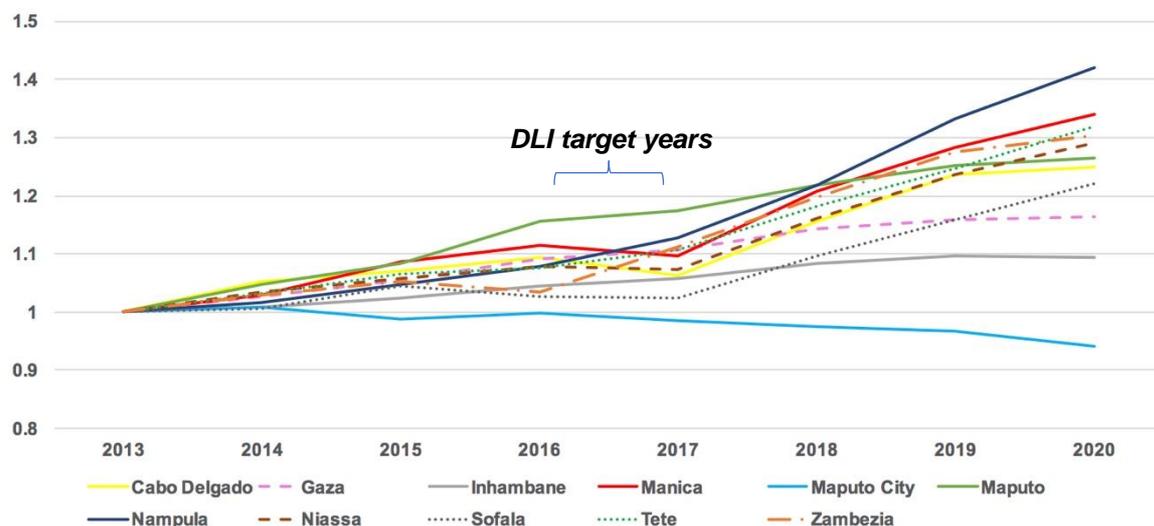
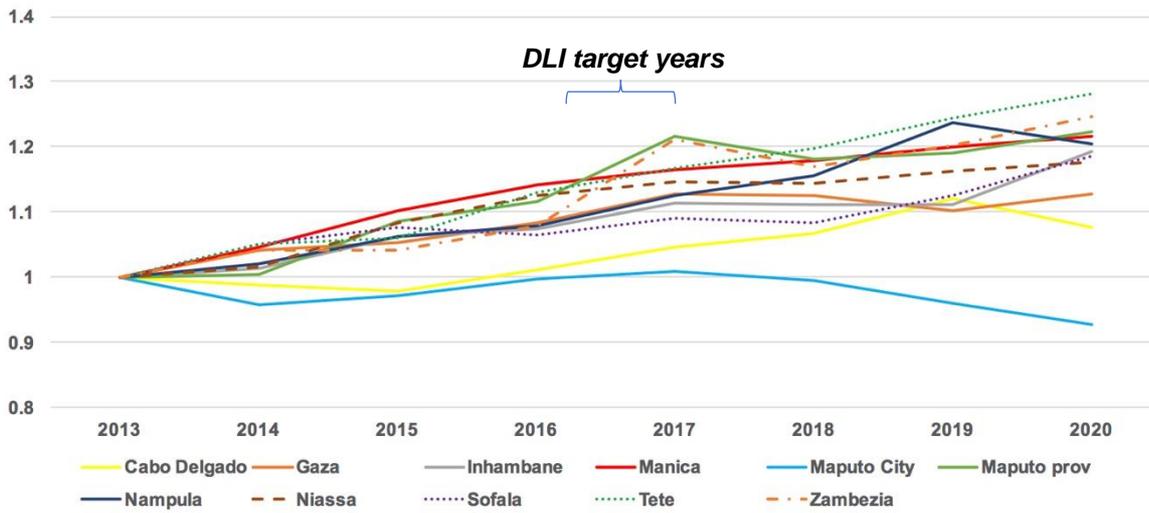


Figure 4 shows teacher numbers to have increased with less deviation between provinces (with the exception of Maputo City, for which we do not have a clear explanation). As before, this is also at a slower rate than for pupil numbers, however broadly speaking there is a relationship between the growth in numbers of pupils and teachers, indicating that there is some teacher distribution according to relative growth rates in pupil numbers.

Figure 4: Rate of evolution of number of teachers (EP1) from base year (2013 = 1)



As shown in Figure 5 taking three years of interest – 2013, prior to the start of RBF, 2017, the final target year of RBF, and 2020, bringing us up to date – the majority of provinces saw a decrease from 2013 to 2017, but an increase to 2020. This is true for all provinces with the exception of Cabo Delgado and Inhambane. However, Inhambane was already at the lowest end of the spectrum for PTRs. Another thing to note, is the figure shows the variation over the period in PTRs to be higher in Nampula, Cabo Delgado, Niassa and Nampula – that is, northern provinces (and Manica, a central province).

Figure 5: Provincial average PTRs for lower primary: 2013-2020

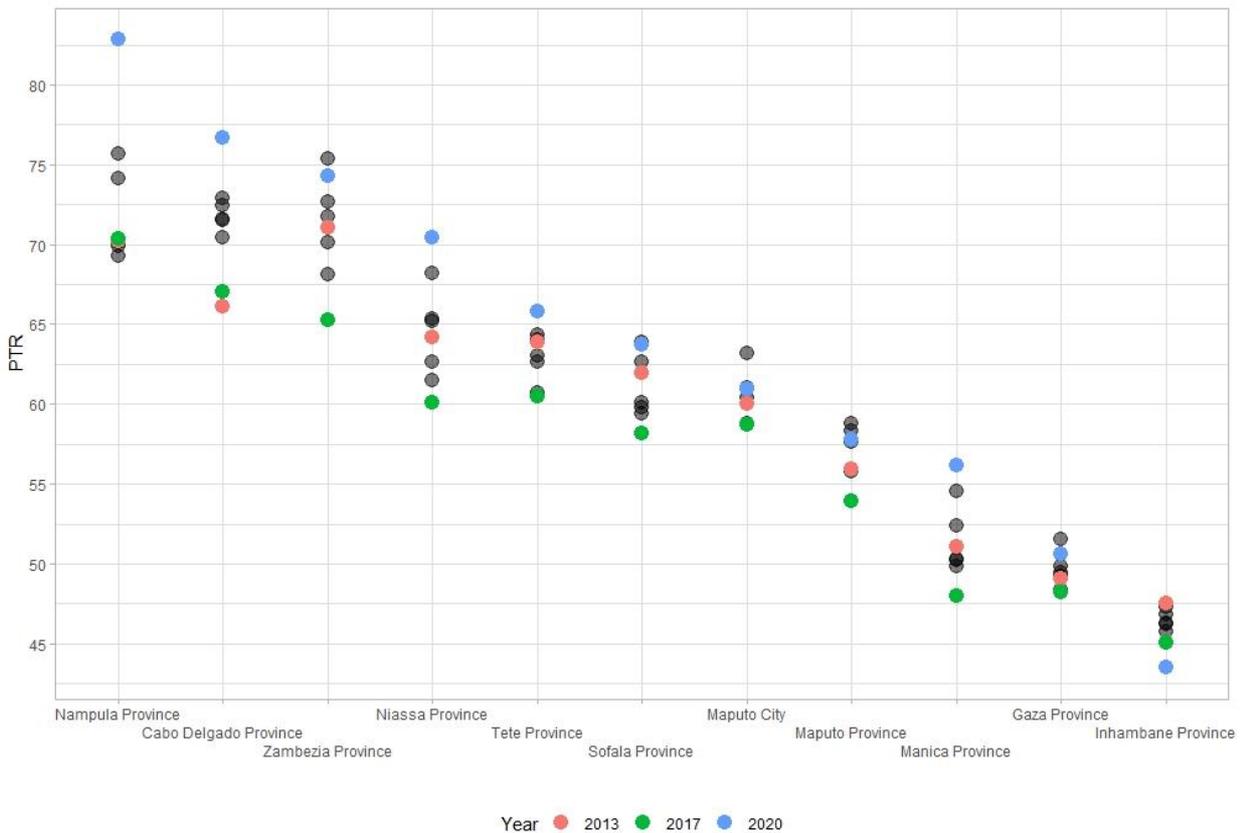
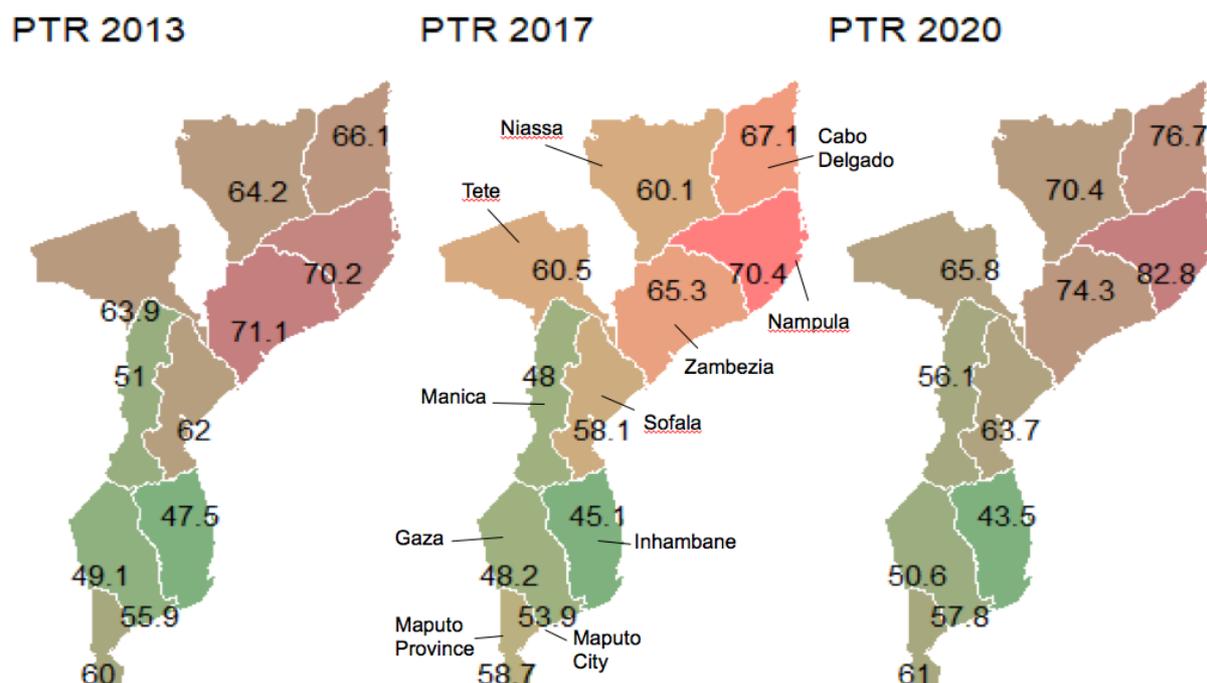


Figure 6 shows a map of Mozambique’s provinces, and the lower primary average PTRs in the years 2013, 2017, and 2020; again, northern provinces consistently show larger average values than southern provinces across time. It also shows that several central and northern provinces saw falling PTRs from 2013 to 2017, and then rising again to 2020 (Niassa, Zambezia, Tete, Sofala, Manica). Other provinces saw consistent high PTRs from 2013 to 2017 (Cabo Delgado, Nampula) which rose significantly from 2017 to 2020. The PTRs in the southern provinces were both lower over the whole period, and less variable.

Figure 6: Provincial average PTRs for lower primary: 2013, 2017 and 2020



District level inequality in PTRs

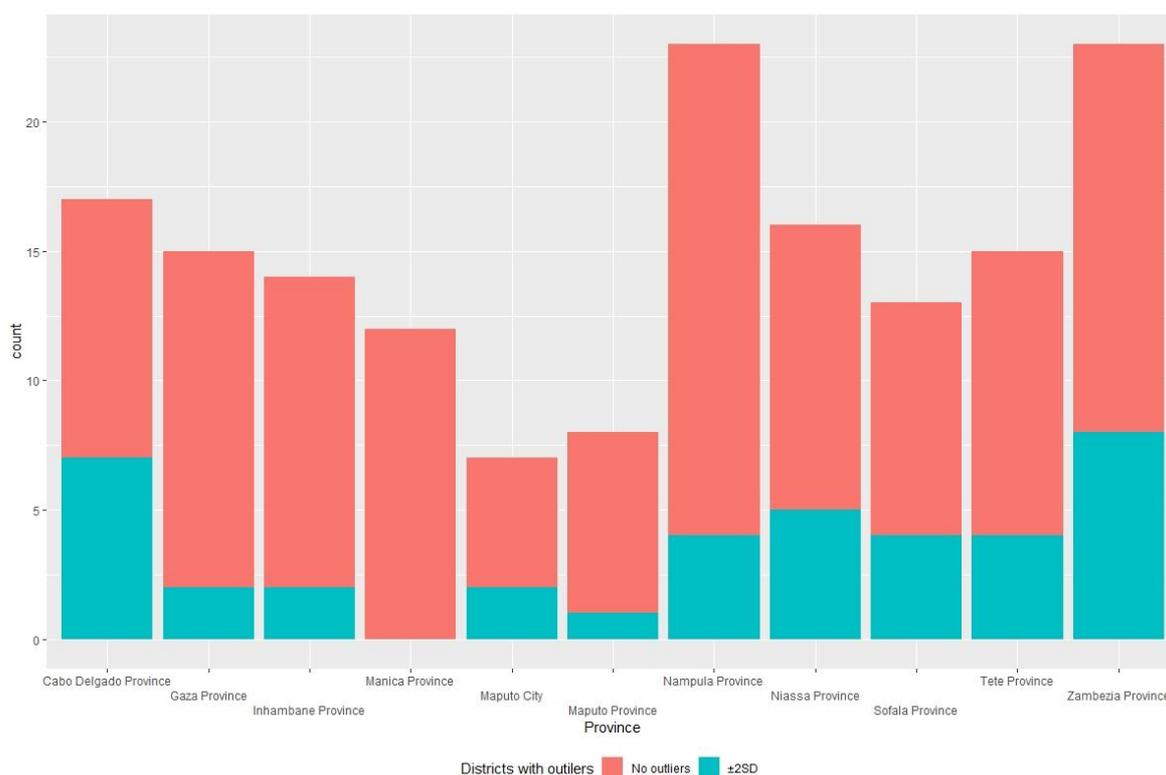
Outliers analysis

The DLI itself did not focus on provincial inequality, but specifically targeted districts, and those districts with the highest PTRs, namely those with a PTR over 80 for lower primary, as compared to a national average PTR of 62.5 in 2013. In this sense, we are looking at the more extreme cases and studying their evolution over time. However, at least two caveats should be raised prior to the analysis. Firstly, there was an administrative reorganization that affected 16.5 percent of districts (27 out of 163), mainly in 2013, but with some additional change in 2016. This could have affected data reliability as well as the reliability of causal inferences (that is, teachers may have been redistributed to newly created districts.) Secondly, there is also a latent possibility of measurement error due to administrative, data or financial causes; the likelihood of this occurring may differ in newly created districts.

Looking at district level, we find that 39 of 163 districts present averages for pupils, teachers or PTR presenting plus/minus 2 standard deviations from their own means over time (Figure 7). Those values are usually considered as outliers and expected in smaller proportions. However, if each data point is assumed to be independent, we find 39 values over 1,304 observations. This corresponds to 2.5 percent of cases, which could be expected with a normal probability distribution. Only four cases of districts with administrative changes show outliers, while 35

cases correspond to districts without administrative changes over the period. Cabo Delgado and Zambezia show the largest proportion of outliers while Manica does not show any district with outlier values.

Figure 7: District outliers identification



Districts with administrative changes

We now look at the administrative changes in more detail, specifically looking at those districts of interest for the DLI, that is, that had PTR > 80 in 2013. We then cross check this with whether they also had seen administrative changes in 2013 – this includes newly created districts and districts that were split (that is, a portion of the district was taken to form a new district). In total, there were 17 districts with PTR > 80 in 2013 for lower primary level. Of these districts, 8 districts had been part of the administrative reforms, while 9 were not.

Figure 8 shows the districts with PTR > 80 that did not see any administrative change to district boundaries or the creation of a new district. This looks at the pupil and teacher trends for these districts. Most of the districts without administrative changes in the period show parallel trends between teachers and pupil changes. *Mavagoago* District (in Niassa province) appears to be a special case. It saw a halving of the number of pupils while the number of teachers remained stable. Checking the census data in 2017 suggests a growth in population for the area. As such, it is not possible to explain what happened in this particular district.

Figure 8: Districts with PTR > 80 in 2013 and no administrative changes (pupils – yellow line; teachers – green line) over 2013-2020 period

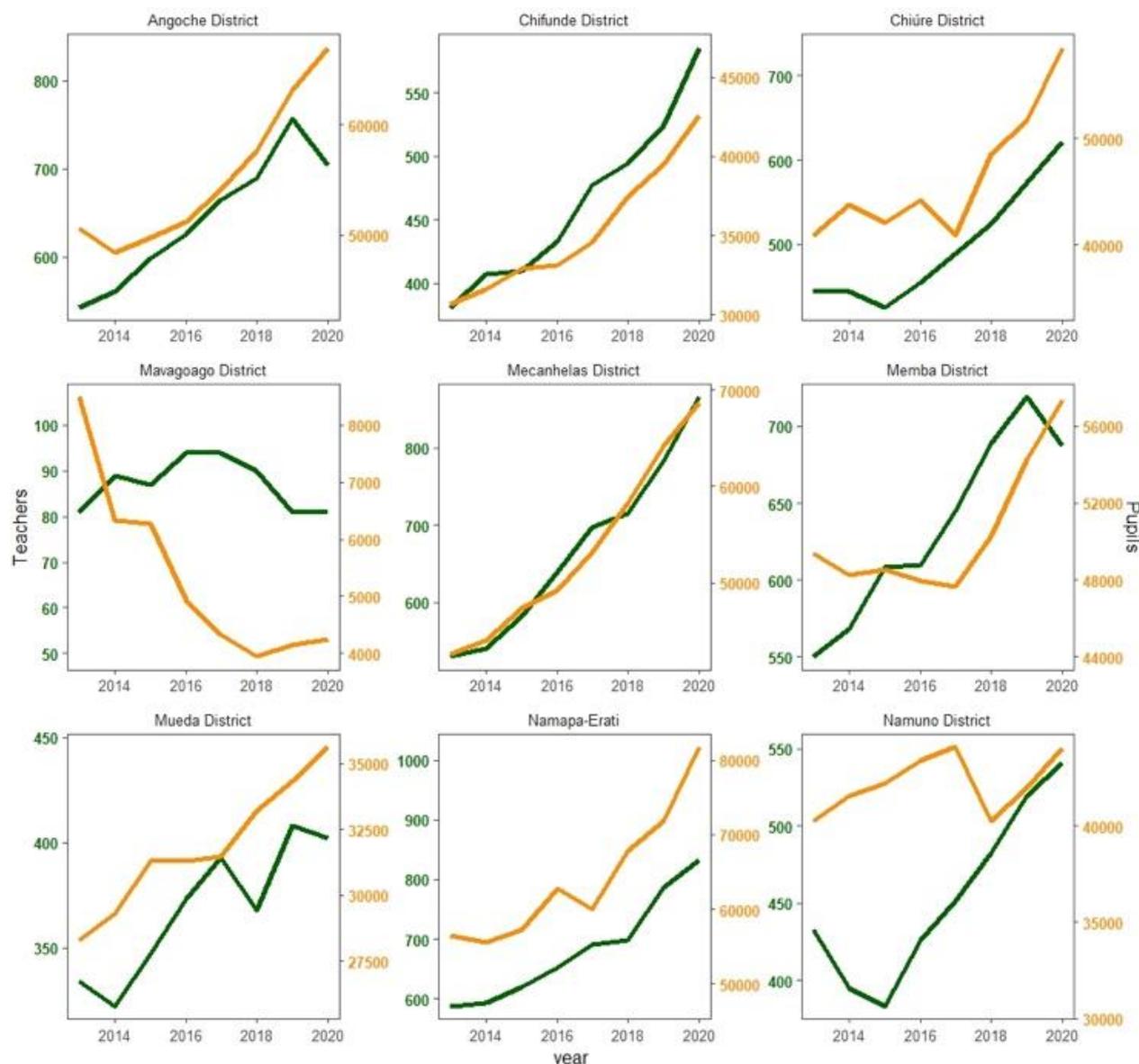


Figure 9 shows those Districts with PTR > 80 in 2013 that also experienced administrative changes. It is notable that the data show more unexpected behavior and more erratic changes from year to year in teacher numbers. *Mulevala* (a district created in 2013 in Zambezia province) saw a 67 percent increase in teacher numbers in the 2013 to 2017 period; *Mocubela* district saw a 79 percent increase (another district created in 2013 in Zambezia province); and *Molumbo* (another district created in 2013 in Zambezia province) saw a doubling of teacher numbers between 2013 to 2017. These figures compare to the Zambezia average growth of teachers in that period of 21 percent, in both these cases higher than any pupil increase in that period. *Molumbo* in particular is a very special case in that it had the highest PTR of any district in the country, by some way, in 2013 at 133, more than double national average, and brought this down to 76 by 2017. Thus, in such districts it appears that a concerted effort may have gone into to increase teacher numbers, however it is less clear whether this was because PTRs were high or due to administrative changes and them being new districts.

Figure 9: Districts with PTR > 80 in 2013 and with administrative changes (pupils – yellow line; teachers – green line) over 2013-2020 period

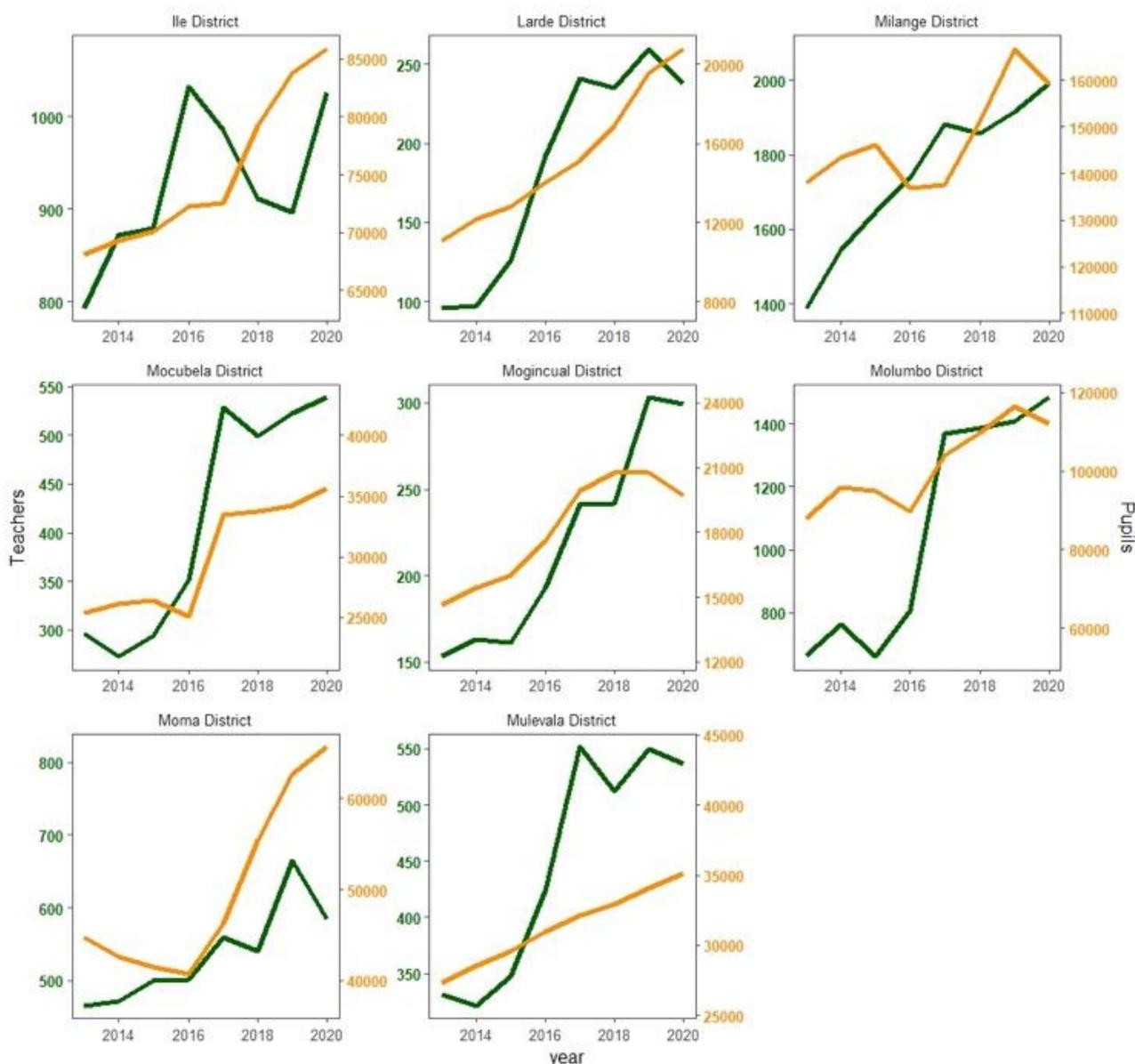


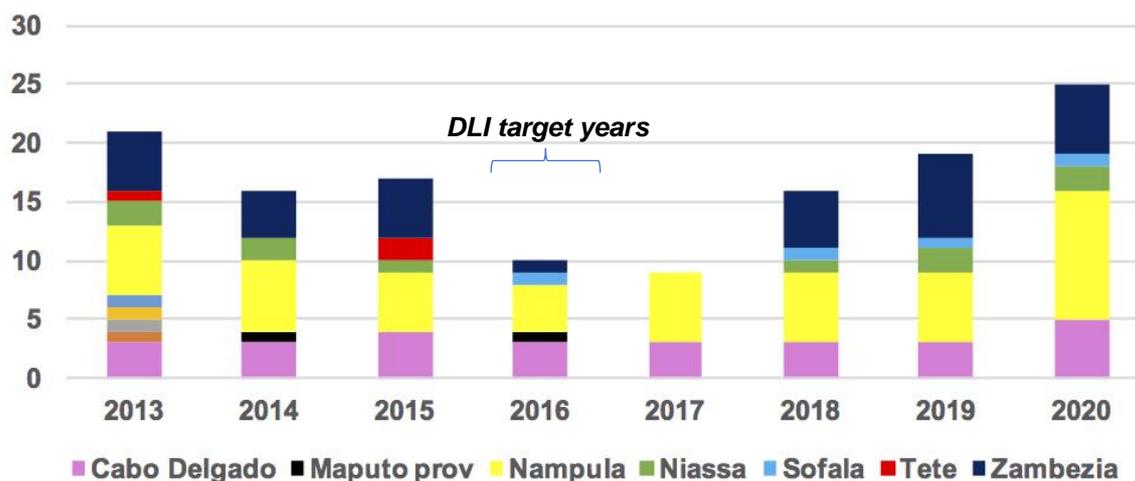
Table 5 shows summary data of districts' PTR in the year 2013 in relation to the DLI (districts with a PTR for lower primary above 80) and in relation to other high PTR districts (with a PTR for lower primary above 70). While 36 districts had a PTR above 70, 17 districts had a PTR above 80. Cabo Delgado, Nampula, Niassa, Tete and Zambezia were the only provinces presenting any districts with PTRs over 80 in 2013. The same provinces predominate for other high PTR districts. By 2017, only 9 districts had a PTR over 80 and only within two provinces: Cabo Delgado and Nampula. Widening the range of analysis to districts over 70, we find 29 districts across 7 provinces in that category in 2017. The biggest changes appear to be in Zambezia, with no progress in Nampula.

Table 5: Districts/Province with PTR over 70 and 80 in 2013 and in 2017

Province	Number of districts in 2013		Number of districts in 2017	
	Districts with PTR > 70	Districts with PTR > 80	Districts with PTR > 70	Districts with PTR > 80
Cabo Delgado	4	3	4	3
Gaza	0	0	0	0
Inhambane	0	0	0	0
Manica	0	0	0	0
Maputo City	1	0	0	0
Maputo Province	1	0	1	0
Nampula	11	6	12	6
Niassa	4	2	2	0
Sofala	2	0	2	0
Tete	4	1	3	0
Zambezia	9	5	5	0
Total	36	17	29	9

This follows a clear pattern with respect to the DLI, in that the number of districts with a PTR above 80 fell in the years of interest which the DLI target sought to incentivize. As shown in Figure 10, this reversed from 2018 to 2020 when the number of districts with PTR above 80 rose to 25 by the year 2020, higher than it had been back in 2013. The pattern suggests the potential for a temporary effect correlated with the period of the GPE DLI. This is explored further in the regression analysis below.

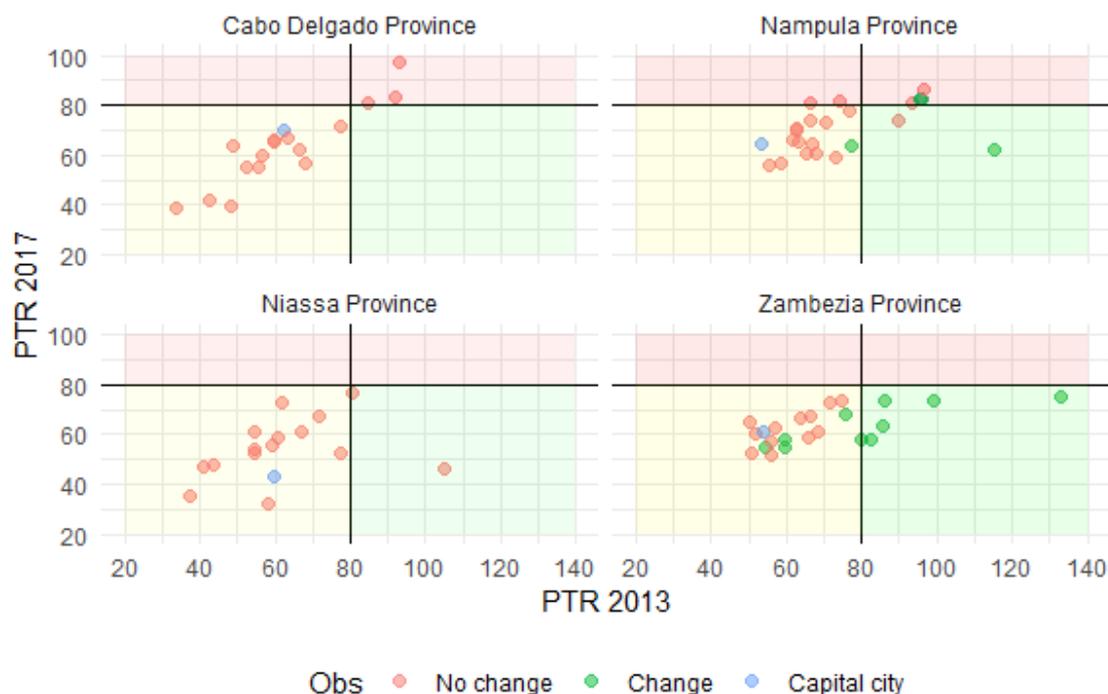
Figure 10: Number of districts with PTR above 80 (EP1) by province: 2013–20



As set out above and in the report, the number of districts in Mozambique shifted substantially with a reorganization carried out in 2013. We further explored the possibility that changes in DLIs were due to there being new districts – that is, that new districts may have started with high PTRs but had teachers redistributed to them to ensure greater equality. Figure 11 shows an analysis of PTR evolution over time. Data points falling into the lower right box (green) represent districts that improved from a situation of PTR over 80 in 2013 towards an average below the value in 2017. Districts falling in the upper left box (red) are those with a poor performance in 2013 and 2017. All districts showing improvement were in Zambezia with one from Nampula, and as indicated

by the green dots, these also present cases where there were administrative changes over the period. Niassa presents two districts which did not have any administrative changes shifting to PTR below 80 in 2017.

Figure 11: District PTRs for selected provinces: 2013 and 2017, with and without administrative changes



In terms of pupil growth over time, there are 30 districts showing negative growth, only one corresponding to a district with administrative reorganization. This contradicts population growth captured both in the national census as well national and province-level school enrolments, which have a yearly growth of between 3 percent and 6 percent in the past few years. This suggests that the new districts are potentially facing challenges with data accuracy, compared to other districts.

Looking at the evolution of PTRs across provinces, focusing on the provinces with the highest PTRs and which had districts with a PTR above 80 for EP1 at the start of the period, there does appear to be a narrowing of the range of PTRs for both Zambezia (see Figure 12), and Nampula (see Figure 13). There is less of a clear narrowing for Niassa (Figure 14), or Cabo Delgado (Figure 15). Again, districts that stand out include *Molumbo* district in Zambezia with the highest PTR in 2013 being brought down over time; *Larde* district in Nampula – which was another district created in 2013 (the green line starting with a PTR of 115 in 2013); as well as *Mavagoago* district in Niassa (PTR of 105 in 2013). Cabo Delgado bucks the trend in that it has districts seeing increasing PTRs in the 2013 to 2017 period.

Figure 12: Evolution of PTR for lower primary (EP1) for all districts in Zambezia: 2013–20

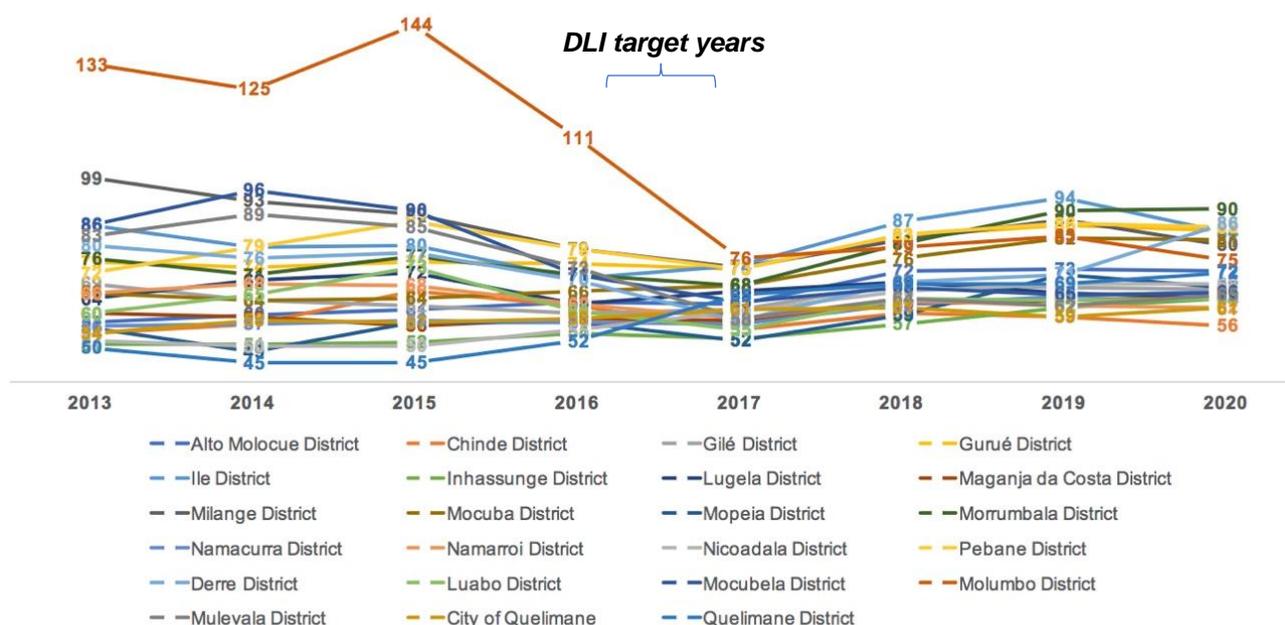


Figure 13: Evolution of PTR for lower primary (EP1) for all districts in Nampula: 2013–20

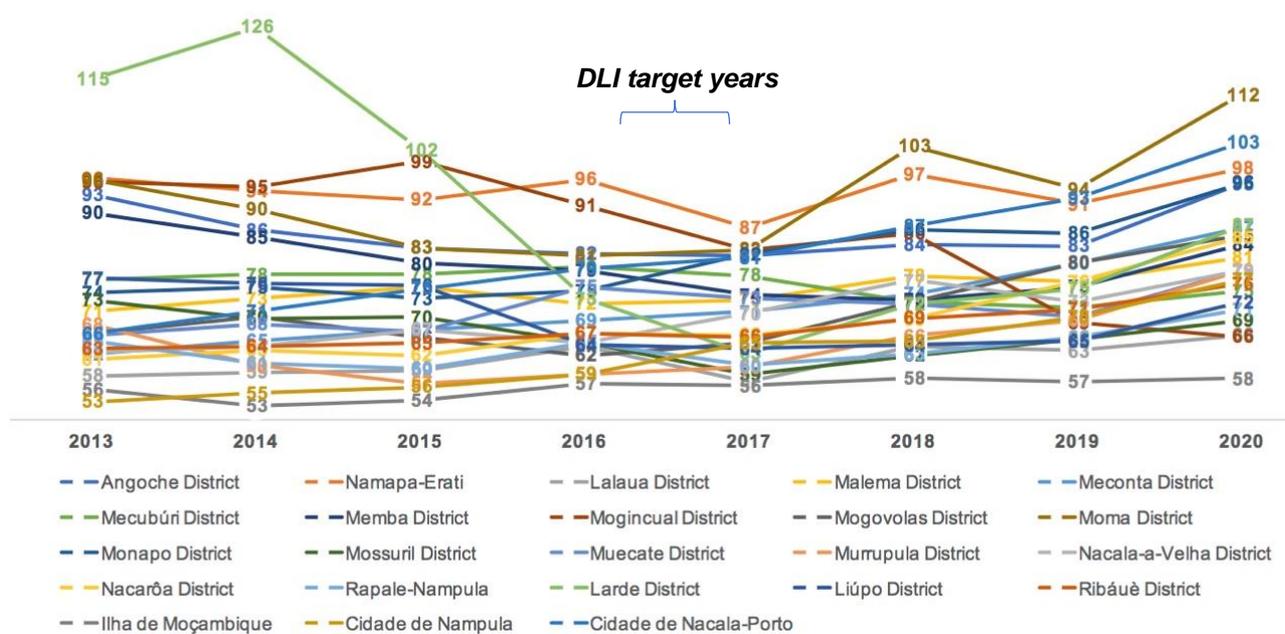


Figure 14: Evolution of PTR for lower primary (EP1) for all districts in Niassa: 2013–20

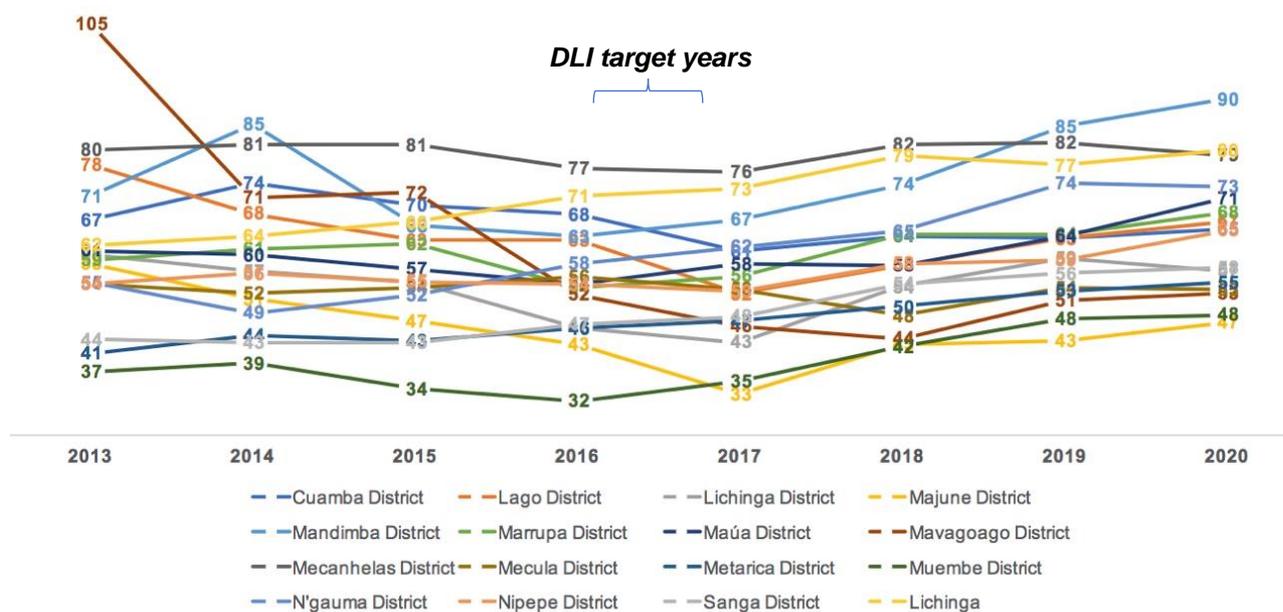
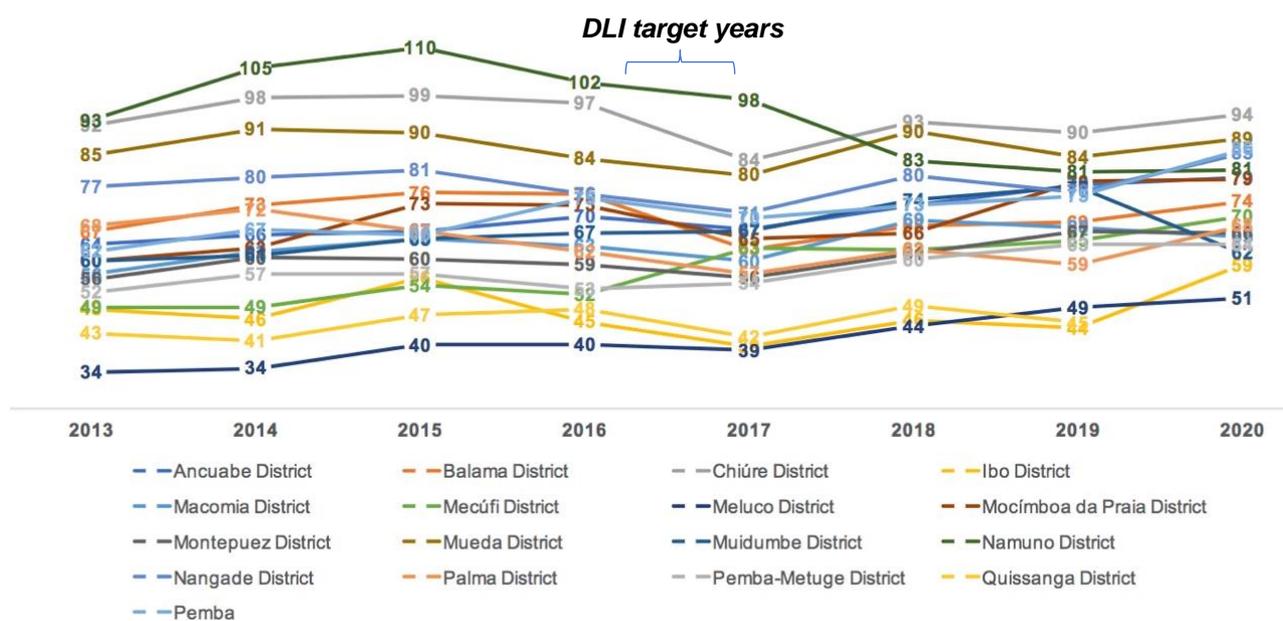


Figure 15: Evolution of PTR for lower primary (EP1) for all districts in Cabo Delgado: 2013–20



Inferential analysis

1. Was there an effect in the DLI period (2013–17)?

Table 6 presents models examining the association between districts with lower primary PTR over 80 in 2013 and two outcomes of interest, growth in numbers of teachers, and growth of PTR. We control for diverse factors such as growth of pupils and teachers, the PTR, type of district (rural district or municipality), administrative changes in districts (dummy variable) and students' population. Based on previous analysis, we run models including all observations and also outlier districts showing a negative pupil number growth and those with a growth in teacher numbers above 30 percent.

We find a positive, statistically significant association between districts with PTR over 80 and the outcome variable as the percentage growth of teachers using both datasets ($p < .001$). We also find a negative significant association between districts with PTR > 80 and the percentage growth of PTR reflected for both datasets ($p < .001$). Belonging to districts with higher PTR in 2013 is associated with a 4 percent reduction of PTR growth in the period. However, it is worth noticing that the PTR in those districts is still higher than others on average by 10.2 pupils per teacher. This implies that teachers were distributed within provinces towards those districts with high PTRs, even after controlling for whether the district was newly created in the 2013 reorganization of districts.

Table 6: Regression models for changes in the 2013–17 period

Predictors	Growth teachers 2013-2017 (%)		Growth teachers 2013-2017 (%)		Growth PTR 2013-2017 (%)		Growth PTR 2013-2017 (%)	
	Estimates	std. Error	Estimates	std. Error	Estimates	std. Error	Estimates	std. Error
Dist PTR>80	7.49 ***	1.32	8.12 ***	1.30	-3.49 ***	0.77	-3.97 ***	0.71
Growth pupils (%)	0.42 ***	0.04	0.16 ***	0.02	0.07 ***	0.02	0.10 ***	0.01
PTR	0.13 **	0.05	0.19 ***	0.04	0.05 *	0.02	0.05 *	0.02
Type District	1.83 **	0.70	0.34	0.74	-0.07	0.39	0.31	0.39
Pupils	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Population LP	-0.00 *	0.00	-0.00 ***	0.00	0.00	0.00	0.00	0.00
Teachers	-0.00	0.00	0.00	0.00	-0.00	0.00	-0.00	0.00
Year	0.01	0.19	0.05	0.20	-0.34 *	0.14	-0.42 **	0.14
Administrative change	1.19	0.92	2.08 *	1.02	-0.70	0.51	-0.73	0.53
Intercept	-15.44	374.47	-104.24	394.98	676.38 *	289.23	837.47 **	281.82
Observations	600		755		480		604	
Marginal R ² / Conditional R ²	0.241 / 0.518		0.214 / 0.432		0.099 / NA		0.192 / NA	
Note:	Without outliers		Including outliers		Without outliers		Including outliers	

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

2. Was there an effect in the DLI period 2013-2020?

Table 7 presents results for the same analysis extending the period from 2013 to 2020. We still find the same positive statistically significant association between districts with PTR over 80 at the outset and the outcome variable as the percentage growth of teachers using both datasets ($p < .001$). We also find a negative significant association between districts with PTR > 80 and the percentage growth of PTR reflected for both datasets ($p < .001$). Belonging to districts with higher PTR in 2013 is associated with a 4 percent reduction of PTR in the period. However, it is worth noting that PTR in these districts is still higher than others on average by 8 pupils per teacher. This suggests there has been a certain degree of sustainability in growth of teacher numbers and PTR reduction over the longer period of time.

Table 7: Regression models for changes in the 2013–20 period

Predictors	Growth teachers 2013-2020 (%)		Growth teachers 2013-2020 (%)		Growth PTR 2013-2020 (%)		Growth PTR 2013-2020 (%)	
	Estimates	std. Error	Estimates	std. Error	Estimates	std. Error	Estimates	std. Error
Dist PTR>80	11.64 ***	1.20	17.31 ***	1.16	-3.90 ***	0.60	-4.15 ***	0.55
Growth pupils(%)	0.47 ***	0.03	0.37 ***	0.02	0.05 **	0.01	0.04 ***	0.01
PTR	0.20 ***	0.04	0.16 ***	0.04	0.08 ***	0.02	0.07 ***	0.02
Type District	-0.62	0.66	-0.95	0.69	0.32	0.31	0.46	0.31
Pupils	-0.00	0.00	-0.00	0.00	0.00 *	0.00	0.00 **	0.00
Population LP	-0.00 ***	0.00	-0.00 ***	0.00	-0.00	0.00	-0.00	0.00
Teachers	0.01	0.00	0.01 *	0.00	-0.01 **	0.00	-0.01 ***	0.00
Year	-0.17	0.12	-0.11	0.12	0.33 ***	0.07	0.35 ***	0.06
Administrative change	4.17 ***	0.91	3.01 **	0.95	-0.34	0.43	-0.46	0.43
Intercept	336.41	236.78	218.14	233.46	-672.51 ***	133.56	-716.06 ***	130.48
Observations	1047		1207		923		1056	
Marginal R ² / Conditional R ²	0.428 / NA		0.358 / 0.589		0.162 / 0.166		0.167 / NA	
Note:	Without outliers		Including outliers		Without outliers		Including outliers	

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

3. Was this driven by changes *between* provinces, or *within* provinces?

Similar analysis was performed aggregating values at a Provincial level to assess significant changes that could have occurred in terms of the distribution of teachers *between* provinces for both periods of time (2013-2017 and 2013-2020). However, no evidence of associations between Provinces with PTR > 80 and the outcomes of interest has been found. It is worth considering that sample sizes are extremely small, which affects significance testing, and would mean that it would take a large redistribution of teachers to pick up as a statistically significant effect. The results are set out in Table 8 and Table 9 below.

Table 8: Regression models for the 2013–17 period: Province level

Predictors	Growth teachers 2013–17 (%)		Growth teachers 2013–17 (%)		Growth PTR 2013–17 (%)		Growth PTR 2013–17 (%)	
	Estimates	std. Error	Estimates	std. Error	Estimates	std. Error	Estimates	std. Error
Prov PTR>80	-2.75	1.51	-1.62	1.54	-0.70	1.21	-1.59	1.21
Growth pupils (%)	0.63 ***	0.14	0.58 ***	0.09	0.04	0.11	0.08	0.07
PTR	0.70 ***	0.11	0.52 ***	0.09	-0.02	0.09	-0.02	0.07
Pupils	-0.00 ***	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Population LP	-0.00 ***	0.00	-0.00 ***	0.00	0.00	0.00	0.00	0.00
Teachers	0.07 ***	0.01	0.01	0.01	-0.01	0.01	-0.02	0.01
Year	-0.16	0.28	0.29	0.35	-0.65 *	0.26	-1.32 ***	0.31
Administrative change	-0.79	1.40	-2.83	1.84	0.45	1.12	-0.11	1.42
Intercept	286.73	571.20	-611.11	696.82	1314.54 *	524.60	2660.54 ***	630.13
Observations	80		80		69		69	
R ² / R ² adjusted	0.626 / 0.584		0.789 / 0.765		0.158 / 0.045		0.352 / 0.266	

* p<0.05 ** p<0.01 *** p<0.001

Table 9: Regression models for the 2013–20 period: Province level

Predictors	Growth teachers 2013–20 (%)		Growth teachers 2013–20 (%)		Growth PTR 2013–20 (%)		Growth PTR 2013–20 (%)	
	Estimates	std. Error	Estimates	std. Error	Estimates	std. Error	Estimates	std. Error
Prov PTR>80	-2.26	1.18	-0.94	1.25	-0.43	1.29	-1.22	1.16
Growth pupils (%)	0.59 ***	0.11	0.58 ***	0.08	0.08	0.12	0.01	0.07
PTR	0.61 ***	0.09	0.53 ***	0.08	-0.01	0.09	-0.01	0.07
Pupils	-0.00 ***	0.00	-0.00	0.00	0.00	0.00	0.00	0.00
Population LP	-0.00 ***	0.00	-0.00 ***	0.00	-0.00	0.00	-0.00	0.00
Teachers	0.06 ***	0.01	0.02	0.01	-0.01	0.01	-0.02	0.01
Year	-0.26	0.15	-0.27	0.17	0.68 ***	0.17	0.77 ***	0.18
Administrative change	-0.26	1.10	-2.28	1.47	-0.99	1.20	-1.01	1.36
Intercept	496.16	293.80	524.45	352.93	-1363.58 ***	347.74	-1547.58 ***	356.02
Observations	128		128		117		117	
R ² / R ² adjusted	0.602 / 0.575		0.766 / 0.750		0.213 / 0.154		0.215 / 0.156	

* p<0.05 ** p<0.01 *** p<0.001

Conclusions

In the absence of an experimental or quasi-experimental counterfactual, we are limited to study associations between districts with higher PTRs and the desired improvements incentivized by the GPE DLI. The analysis suggests some positive associations between districts with high PTRs (PTR > 80 for lower primary in 2013, the focus of the DLI) and the growth of teacher numbers and the related reduction of PTR in the incentivized period. Descriptive and inferential analysis show positive relative changes over time in certain districts both after the incentive scheme (year 2017) and to the present time (year 2020).

Some caveats have also to be raised. First, our analysis shows an important number of districts and data points that can be treated as outliers. This is partially explained by administrative changes in a significant number of districts. We find several cases of negative growth of pupils, when national and provincial averages as well as census data suggest growth in population and students' enrolment. Additionally, we find some cases of a higher growth rate of teachers, doubling figures in few years. This potentially links to the discussion of "ghost" teachers and "ghost" pupils provided in the main report (see Box 15).

As above, the regressions show that there did seem to be an allocation of teachers towards the districts with highest PTRs, and the descriptive analysis shows that this was mainly led by Zambezia province, which saw a falling PTR in the 2013 to 2017 period. Niassa province also saw a reduction in the districts with high PTRs, and to a lesser extent this was the case in Nampula as well. However, in both Nampula and Cabo Delgado provinces, the overall average PTR for lower primary remained steady or even increased over the period, making it harder for these provinces to achieve the target even if effort was applied. The coincidence of the DLI period with the period of district administrative changes, including the creation of a number of new districts in 2013, some of which had very high PTRs, does cloud the ability to be certain on causation. That is, it is possible new districts were created, they had high PTRs, and this was addressed; as opposed to an incentive effect from the DLI being passed down by central government to provincial government. However, the regression analysis shows there was an effect in the incentivized period, and it is likely to have been significant even in light of the administrative changes.

In terms of the sustainability of change, PTRs rose across the board from 2017 to 2020, with the national average PTR for EP1 rising from a low of 60 in 2017 up to 67 in 2020. Provincial averages also increased and at a much higher rate in northern provinces. In 2020, the average PTR for Nampula for lower primary level rose to 82.8. This would make it literally impossible for it to not have at least some districts above a PTR of 80. This has been driven by increases in pupil numbers, at a faster rate than other provinces, and it also cannot be discounted as a possibility that this is driven by challenges in the accuracy of the EMIS data.

Annex 5. Detailed DLI achievements – PFM4R and GPE

The following tables set out the detailed results and disbursements made by indicator for the PFM4R program (2014-2018), and the GPE variable tranche DLIs (2015–17), based on available documentation.

Public Financial Management for Results Program (PFM4R) program, 2014-18 experience

DLI 3 Proportion of complete primary schools that comply with standards for transparency and accountability, as defined, agreed and distributed in 2014

YEAR	Year 1 (date of the agreement – 31 March 2015)	Year 2 (April 2015 – 31 March 2016)	Year 3 (April 2016 – 31 March 2017)	Year 4 extension (Apr 2017 – Mar 2018) + Year 5 (Apr 2018 – Mar 2019, closing)
TARGET (Baseline = 0)	School councils' manual revised, approved and distributed to all complete primary schools	50% of schools meet standards for all three dimensions of transparency and accountability	60% of schools meet standards for all three dimensions of transparency and accountability	60% of schools meet standards for all three dimensions of transparency and accountability
VALUE (USD)	USD 3 million	USD 3 million	USD 3 million	
RESULTS	Manual was reported as approved in October 2014 and "being distributed"		76% reported by SDEJTs	Reported as 76%
RESULTS (TA validation)	Manual approved 29 Oct 2014 – but not distributed to schools – therefore not validated	Visits to 66 schools in 11 provinces, school manual was distributed, school councils are functional - verified	179 schools – 100%, 2 issues listed	76% of 83 schools = 63 schools – conditions: - elected – school development plan approved by council – all school council members participate in planning and execution of ADE fund – this is displayed in the display case (Vitrina). Number of issues listed. MINEDH response within IVA report.
DISBURSE	Full, disbursement made in Jan 2017 (following disbursement letter Nov 2016)	Full. Disbursement only made in Nov 2017 – Feb 2018	Full. Disbursement only made in Nov 2017 – Feb 2018	No payment allocated for the two extension years

Source: World Bank PFM4R ISRRs. *Tribunal Administrativo* (2015, 2016, 2017, 2019) - IVA reports. World Bank (2019c).

DLI 7 – Proportion of complete primary schools which receive direct school grant funds on or before February 28 each year

YEAR	Year 1 (date of the agreement – 31 March 2015)	Year 2 (April 2015 – 31 March 2016)	Year 3 (April 2016 – 31 March 2017)	Year 4 extension (Apr 2017 – Mar 2018) + Year 5 (Apr 2018 – Mar 2019, closing)
TARGET (Baseline = 0)	50%	70%	90%	90%

YEAR	Year 1 (date of the agreement – 31 March 2015)	Year 2 (April 2015 – 31 March 2016)	Year 3 (April 2016 – 31 March 2017)	Year 4 extension (Apr 2017 – Mar 2018) + Year 5 (Apr 2018 – Mar 2019, closing)
VALUE (USD)	USD 2 million	USD 2 million	USD 2 million	
RESULTS		98%	99%	100%
RESULTS (TA validation)	17% received funds by 28 Feb 2015 (55/66 schools visited)		100% received funds by 28 Feb 2017 (179/179 schools visited)	82 schools (EPCs) visited – 100% achievement – validated Inhambane and Manica – checks to private individuals – MINEDH response – this is allowed / various modalities including check to teacher or functionary of administration
DISBURSE	Full. Disbursement only made in Nov 2017 – Feb 2018	Full. Disbursement only made in Nov 2017 – Feb 2018	Full. Disbursement only made in Nov 2017 – Feb 2018	No payment allocated for the two extension years

Source: World Bank PFM4R ISRRs. *Tribunal Administrativo* (2015, 2016, 2017, 2019) - IVA reports. World Bank (2019c).

DLI 8 - Revised district-level budget classification by subsector, configured, and applied

YEAR	Year 1 (date of the agreement– 31 March 2015)	Year 2 (April 2015 – 31 March 2016)	Year 3 (April 2016 – 31 March 2017)	Year 4 extension
TARGET (Baseline = 0)	(a) System configured to classify expenditures by subsectors at district level; (b) Budget prepared by subsector classification	Budget prepared in previous year executed by subsector classification		
VALUE (USD)	USD 4 million	USD 2 million		
RESULTS	Achieved	Achieved		
RESULTS (TA validation)	Transformation of SDEJTs into UGBs – Unidades Gestoras Beneficiárias – achieved and validated	Transformation of SDEJTs into UGBs – Unidades Gestoras Beneficiárias – budget units - achieved and validated Indication that IVA initially misunderstood indicator and after clarification, noted “From the audit performed it was found that the 2015 budget was executed by sectoral classifier, so we validate this indicator”	Budget classification – Not part of TOR from 2017	
DISBURSE	Full, disbursement made in May 2016 (following disbursement letter March 2016)	Full, disbursement made in Jan 2017 (following disbursement letter Nov 2016)	No payment allocated for the third year	No payment allocated

Source: World Bank PFM4R ISRRs. *Tribunal Administrativo* (2015, 2016, 2017, 2019) - IVA reports. World Bank (2019c).

DLI 9 - Proportion of complete primary schools visited for supervision by SDEJTs

YEAR	Year 1 (date of the agreement – 31 March 2015)	Year 2 (April 2015 – 31 March 2016)	Year 3 (April 2016 – 31 March 2017)	Year 4 extension (Apr 2017 – Mar 2018) + Year 5 (Apr 2018 –Mar 2019, closing)
TARGET (Baseline = 0)	School supervision manual revised and distributed to all SDEJTs	25% visited and 40% follow-up visits	50% of Complete Primary Schools (EPCs) visited 60% follow-up visits	50% of Complete Primary Schools visited 60% follow-up visits
VALUE (USD)	USD 1 million	USD 1.5 million	USD 1.5 million	
RESULTS	Manual was approved and distributed	0	75% of EPCs visited with 63% follow-up	
RESULTS (TA validation)	The indicator has been met. Although the manual has been prepared, approved and tested, it has not been distributed to SDEJT, so we validate this indicator	School Supervision manual revised and distributed to all SDEJTs	School Supervision manual revised and distributed to all SDEJTs 47.7% visited + 16.3% follow-up visits - therefore was found to not be validated Dispute between results and IVA. Ultimately decision taken to use MINEDH reported results, as the IVA visits were considered too early to pick up on second visits – therefore target was said to be achieved.	Across 32 SDEJTs found 63% first visits with 20% follow-up visits. A number of issues listed including districts in which no schools were visited and inaccuracies in systems of reporting.
DISBURSE	Full. Disbursement only made in Nov 2017 – Feb 2018	Full. Disbursement only made in Nov 2017 – Feb 2018	Full. Disbursement only made in Nov 2017 – Feb 2018	No payment allocated for the two extension years

Source: World Bank PFM4R ISRRs. *Tribunal Administrativo* (2015, 2016, 2017, 2019) - IVA reports. World Bank (2019c).

GPE additional financing RBF programming, 2015-17 experience*DLI 1 - Number of teachers (1st and 2nd grade) with in-service training*

YEAR	Year 1 (calendar year 2015)	Year 2 (calendar year 2016)	Year 3 (calendar year 2017)
TARGET (Baseline = 0)	DLR 1.1: Program elaborated, tested and adjusted	DLR 1.2: Increased number from 0 to 1,650	DLR 1.3: Increased number from 1,650 to 8,250 (cumulative target)
VALUE (USD)	USD 2 million	USD 3 million	USD 3.37 million
RESULTS		4,170	12,791 (16,961 cumulatively)
DISBURSE	Full (August 2017)	Full (August 2017)	Full (Feb 2019)

Source: World Bank ESSP ISRRs. IVA verification reports – EY (2017a, 2018a)

DLI 2 - Number of districts with a pupil-teacher ratio over 80

YEAR	Baseline	Year 1 (calendar year 2015)	Year 2 (calendar year 2016)	Year 3 (calendar year 2017)
TARGET	12 districts with PTR above 80	-	DLR 2.1: Decreased number of districts from 12 to 8	DLR 2.2: Decreased number of districts from 8 to 2
VALUE (USD)		-	USD 2 million	USD 2 million
RESULTS	N/A		10 Districts with PTR > 80	9 Districts with PTR > 80
DISBURSE			Partial (USD 1 million) (August 2017)	Not achieved (0 disbursed)

Source: World Bank ESSP ISRRs. IVA verification reports – EY (2017a, 2018a).

DLI 3 - Number of primary school directors having participated in directors training + DLI 4 - % of the trained school directors having their performance evaluated

YEAR	Year 1 (calendar year 2015)	Year 2 (calendar year 2016)	Year 3 (calendar year 2017)
TARGET (Baseline = 0)	-	DLR 3.1: Increased number from 0 to 800 DLR 4.1: Increased percentage from 0 to 10%	DLR 3.2: Increased number from 800 to 1,800 (cumulative target) DLR 4.2: Increased percentage from 10 to 20%
VALUE (USD)	-	DLR 3: USD 1 million DLR 4: USD 1.5 million	DLR 3: USD 1 million DLR 4: USD 1.5 million
RESULTS		DLR 3: 939 DLR 4: 11.1% evaluated	DLR 3: 1,031 (1,970 cumulatively) DLR 4: 23.1% evaluated
DISBURSE		Full (August 2017)	Full (Feb 2019)

Source: World Bank ESSP ISRRs. IVA verification reports – EY (2017a, 2018a)