

Teacher with student at Umdebekrat Basic School for Boys, recipient of GPE school grant and textbooks, Nyala South Locality, South Darfur, Sudan.

Credit: GPE/Kelley Lynch



CHAPTER

2

Efficient Education Systems

RESULTS AT A GLANCE

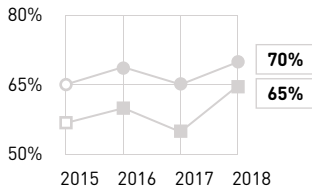
OUTCOME

GOAL 3

Effective and efficient education systems

#10

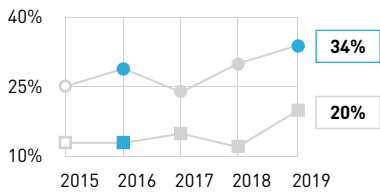
70% of partner countries increased their share of education expenditure or maintained it at 20% or above.



*The latest actual value is 2018.

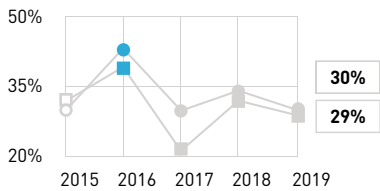
#12

34% of partner countries had fewer than 40 pupils per trained teacher.



#14

30% of partner countries reported at least 10 of 12 key education indicators to UIS.



#11

Equitable allocation of teachers.

-

#13

Repetition and dropout impact on efficiency.

-

*Past actual values for Indicator 10 have been retrospectively updated here. Original values appear in [Appendix A](#).



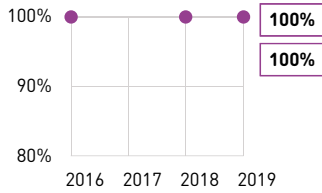
COUNTRY-LEVEL

OBJECTIVE 1

Strengthen education sector planning and policy implementation

#17

100% of partner countries applying for GPE grants published data at national level.



*The 2017 value was not applicable; see Appendix A for details.

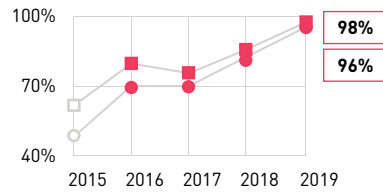
GLOBAL-LEVEL

OBJECTIVE 4

Mobilize more and better financing

#31

96% of country missions addressed domestic financing.



KEY FINDINGS

> **The volume of domestic financing of education in GPE partner countries increased by US\$4.8 billion between 2015 and 2018.**

> **The proportion of countries with an increased share of government expenditure on education went from 65 percent in 2017 to 70 percent in 2018.** The longer-term trend, however, is unsteady.

> **GPE maintains its commitment to support more and better domestic financing:** As an indication, the proportion of GPE’s missions addressing domestic financing issues increased strongly, from 83 percent in 2018 to 96 percent in 2019.

> **Partner countries are achieving progress in teacher training** as demonstrated by the

proportion of countries with a pupil-trained teacher ratio below 40 increasing from 30 percent in 2018 to 34 percent in 2019.

> **The availability of key data to drive evidence-based education policy dialogue is a challenge** and derives from weak statistical capacity in some partner countries, among other factors.

> In addition to the incentives provided through its operational model, **GPE’s grants active in fiscal year 2019 dedicated US\$423.7 million** to support activities aiming at strengthening the education systems (for instance, data-related and capacity-building activities at central and decentralized levels) in partner countries.

Efficient Education Systems

GPE's theory of change suggests that a strong education system is a prerequisite for improved access to education and learning for all.⁴² Building a stronger education system requires the availability of pertinent data to design sound education policies. Key financial and human resources must also be sufficient in both quantity and quality, and efficiently used to implement policies and programs that yield results.

GPE's work to contribute to improving the efficiency and the effectiveness of the education systems in partner countries relies on two sets of instruments: nonfinancial support through various incentives provided by GPE's funding model and direct financial contribution to system-strengthening activities through grants.

GPE monitors the availability of domestic financing (Indicator 10) and trained teachers (Indicator 12) as well as the quality of the data systems (Indicator 14), which are some of the key ingredients for an efficient and effective education system. GPE also monitors how country missions are used as opportunities to engage in the dialogue on domestic financing issues (Indicator 31) and how the funding model contributes to strengthening the data systems in partner countries (Indicator 17).

2.1. Domestic financing for education

(Indicators 10 and 31)

Because of the importance of domestic financing for developing an efficient and effective education system, GPE requires countries applying for implementation grants to commit to maintaining the share of their expenditure on education at 20 percent (or more) or to increase education spending toward the 20 percent benchmark. Indicator 10 monitors the proportion of partner countries dedicating 20 percent of government total expenditure or more to education or increasing their education expenditure toward this benchmark.⁴³

In 2018 (the most recent year for which data are available), 33 out of 47 partner countries (13 out of 20 PCFCs) with available data for Indicator 10 maintained a share of education expenditure at or above 20 percent or increased the share

of their education expenditure from the 2015 baseline. Overall, for 2018 the proportion of partner countries spending at least 20 percent on education or increasing the share of their education expenditure is 15 percentage points (17 percentage points for PCFCs) below the milestone; nonetheless, it is an increase of 5 percentage points since 2015 (Figure 2.1).

The targets and milestones for Indicator 10 were calculated using baseline data collected in 2016 on public education expenditure in 2015. Since then, Indicator 10 data were revised in 2017, 2018 and 2019 as updated information became available. Because the original baseline was higher than the revised baseline, it led to higher target setting for later years. It is therefore not surprising that the targets were not achieved.

Despite the fact that the milestone for Indicator 10 was missed, the total volume of public expenditure increased by US\$4.8 billion between 2015 and 2018 in GPE's 61 partner countries.⁴⁴

42. As per the Strategic Plan 2016-2020 (GPE 2020). The theory of change is available at: <https://www.globalpartnership.org/content/gpe-2020-theory-change>.

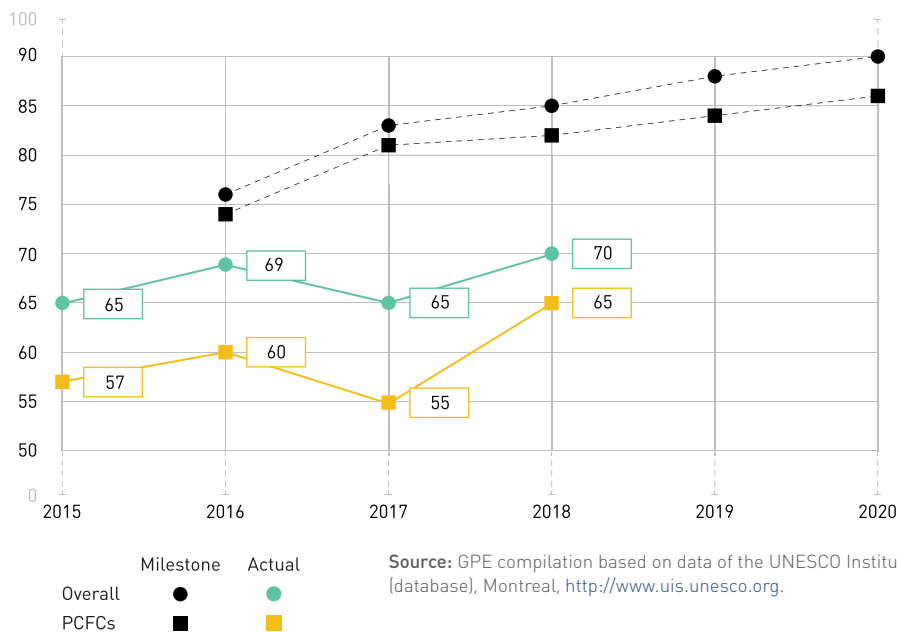
43. For details on any indicator methodology, replace X with the number of the indicator in the following link: <https://www.globalpartnership.org/content/methodology-sheet-gpe-result-indicator-X>.

44. The Secretariat calculated these figures using data from the UNESCO Institute for Statistics (database), Montreal, <http://www.uis.unesco.org>, and World Development Indicators Database, World Bank, Washington, DC, <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

FIGURE 2.1.

MORE COUNTRIES ACHIEVED, OR INCREASED TOWARD, 20 PERCENT DOMESTIC EXPENDITURE ON EDUCATION.

Proportion of countries that increased the share of education spending from the baseline



Source: GPE compilation based on data of the UNESCO Institute for Statistics (database), Montreal, <http://www.uis.unesco.org>.

Note: The data covers 47 countries and federal entities, including 20 PCFCs. Data for each year were updated using most recent documentation. Data published as part of the *Results Report 2020* have been updated and revised accordingly, as has the baseline. However, 2018 data were only collected in 2019, and 2019 data were not yet available at the time of this report.

The volume of education expenditure experienced a faster growth compared to the school-aged population, leading to a slight increase of the spending per school-age child from US\$102 (US\$82 in PCFCs) in 2015 to US\$104 (US\$90 in PCFCs) in 2018. Between 2002 and 2016, for countries where data are available in both years, partner countries have experienced a stronger growth in education expenditure than low- and middle-income countries in general.

GPE country-level evaluations report that GPE's requirement for domestic financing contributed to the improvement of dialogue between the ministry of education and the ministry of finance during the budget negotiation process in some countries.⁴⁵ For instance, in Liberia and Sierra Leone, evidence from the country-level evaluations suggest that GPE funding model requirements were used as an advocacy tool during budget negotiations. In Somaliland, GPE's requirements were used to obtain a written commitment from the ministry of finance to ensure a growth path toward 13 percent spending on education by 2021. In Malawi, the domestic financing requirement matrix proved useful in negotiations with the

ministry of finance but also with other development partners to advocate for an increase in education spending. However, the country-level evaluations show that GPE's influence on the volume of domestic financing was moderate to minimal. Therefore, the domestic financing requirements can be viewed as a catalyst for initiating discussions on domestic financing, especially with the ministry of finance.

GPE country missions offer the Secretariat the opportunity to tackle domestic financing issues through dialogue with various actors at the country level. Indicator 31 monitors the proportion of the Secretariat's missions that address domestic education financing issues in partner countries. In 2019, the Secretariat undertook 90 missions in 56 countries, with 86 missions addressing domestic financing issues (55 out of 56 missions addressing domestic financing in PCFCs). The proportion of the Secretariat's missions addressing domestic financing issues increased by 13 percentage points from the previous year, showing an increased commitment to address the bottlenecks surrounding domestic financing experienced by partner countries.

45. Country-level evaluations are a key part of GPE's monitoring and evaluation strategy. Find more information here: <https://www.globalpartnership.org/results/monitoring-evaluation>.

2.2. The need for trained teachers

(Indicator 12)

The availability of quality teachers who teach effectively is one of the most important determinants of a strong education system. GPE therefore offers significant support to teacher training in its implementation grants (Box 2.1 provides a brief overview of GPE's efforts in Benin, Ethiopia and Mozambique). Indicator 12 tracks the proportion of partner countries with a ratio of students per trained teacher of 40 and below in primary education. In 2019, 34 percent (14 out of 41 countries) of partner countries with data available had a pupil-trained teacher ratio (PTTR) below 40, up

from 25 percent (14 out of 55) at the baseline in 2015. Overall, the milestone for Indicator 12 set for 2019 was slightly exceeded but was below the milestone in PCFCs (Figure 2.2).⁴⁶

Of the 27 countries with a PTTR above the benchmark, 17 have a PTTR between 41 and 60, and 10 have a PTTR beyond 60. Half of the countries with a PTTR above 60 are categorized as PCFCs. On average, PCFCs register 68 students per trained teacher, compared with 45 for non-PCFCs. Despite the overall progress in partner countries, there is a need for continued work on teacher training, especially in PCFCs.

BOX 2.1.

SUPPORTING TEACHER TRAINING IN BENIN, ETHIOPIA, MOZAMBIQUE AND ZAMBIA

Benin halved its pupil-trained teacher ratio (PTTR) in the past decade, from 110 in 2009 to 56 in 2018. During this period, GPE provided Benin with two implementation grants, totaling US\$117 million. These grants strongly contributed to teacher training. With GPE's support, approximately 63,000 teachers received training to improve pedagogical skills and 8,000 community teachers obtained teacher certification through a three-year training course.

Ethiopia faces a significant shortage of trained teachers. In 2006, only 3 percent of lower primary (grades 1-4) teachers were qualified. GPE contributed to a pooled fund that financed teacher training to upgrade their qualifications. In 2013, the proportion of qualified teachers in lower primary had increased to 44 percent. For upper primary (grades 5-8), the proportion of qualified teachers rose from 53 percent in 2006 to 92 percent in 2013. More recent GPE grants (2014-2019) continued to finance teacher training, with 165,000 in-service teachers completing their upgrading programs. GPE is also involved in financing activities, such as learning assessment system strengthening and the provision of learning materials, that help to ensure that teachers' qualifications are translated into learning.

Mozambique experienced an improvement of its PTTR from 86 in 2009 to 57 in 2018. In collaboration with other partners' financing, the GPE grant has been supporting the government's efforts to improve the supply of quality teachers for over a decade. Overall, 44,734 primary teachers were newly trained from 2011 to 2018.

Zambia successfully reduced the number of districts with a PTTR above 60 by almost 50 percent from 2011 to 2017. From 2013 to 2018, GPE contributed to a sector budget support program that supported the government's effort to increase the number of qualified teachers.

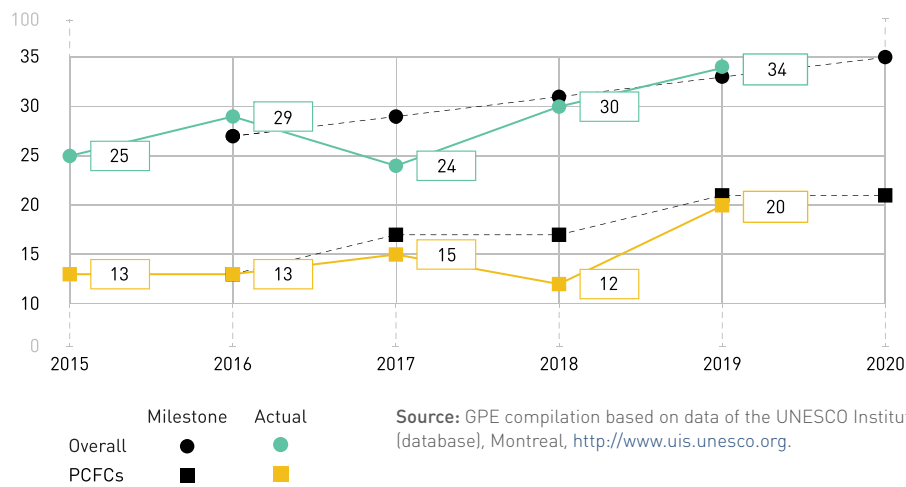
Sources: UNESCO Institute for Statistics (database), Montreal, <http://uis.unesco.org>; in the References, see the Department for International Development's program completion report for Zambia, GPE's *GPE in Action* report, and the World Bank's implementation completion and results reports for Benin, Ethiopia, and Mozambique, and implementation status and results reports for Ethiopia and Mozambique.

46. PCFCs registered an improvement in the proportion of countries with a PTTR below 40 between 2018 and 2019 because of some improvement from above to below 40 in one country (Liberia) and changes in the sample of countries included in the indicator's calculations. One drawback facing Indicator 12 is the fact that the sample of countries is not consistent over time. Thirty-nine countries have data available in both 2015 and 2019, of which 10 registered a PTTR below 40 in 2015 and 13 registered a PTTR below 40 in 2019. In other words, the proportion of these 39 countries with a PTTR below 40 increased from 25.6 percent in 2015 to 33.3 percent in 2019.

FIGURE 2.2.

THERE WERE SOME IMPROVEMENTS IN THE PUPIL-TRAINED TEACHER RATIOS IN 2019.

Proportion of countries with pupil-trained teacher ratio below 40:1



2.3. Data for education systems

(Indicators 14 and 17)

Strengthening education systems requires evidence-based policies that use accurate, timely and comprehensive data. GPE tracks the availability of key data necessary to drive policy dialogue in partner countries. Indicator 14 monitors the proportion of partner countries that report at least 10 out of 12 key education-related outcomes, service delivery and financing indicators to the UIS.⁴⁷

In 2019, 30 percent (18 out of 61) of partner countries reported at least 10 out of 12 key indicators to the UIS, which corresponds to a 4 percentage point decrease from last year (Figure 2.3). Five partner countries (Albania, Benin, Burkina Faso, Kenya and Togo) that reported key data in 2018 did not report in 2019. In contrast, two partner countries (Uzbekistan and Vietnam) did not report key data in 2018 but did in 2019. As a result, the number of partner countries reporting key data to the UIS

decreased by three countries in 2019, driving down the value of Indicator 14. The milestones of Indicator 14 were missed for a third consecutive year and there has not been a steady improvement since the baseline. However, of the 43 countries reporting fewer than ten indicators to UIS in 2019, 19 are close to the benchmark, reporting eight or nine indicators to the UIS.

Overall, reporting on education finance and service delivery indicators, especially by level of education, seems to be a particular challenge facing most partner countries. The ability of the education system to collect and disseminate key education data appears to be a broader issue related to the capacity of the countries' statistical systems in general (see Box 2.2). Strengthening the education data systems in partner countries would require some coordinated actions aimed at addressing the bottlenecks facing countries' overall statistical capacity.⁴⁸ There is a need for GPE to continue its work with key partners, such as the UIS, to better understand the data challenges and to provide proper support to partner countries.

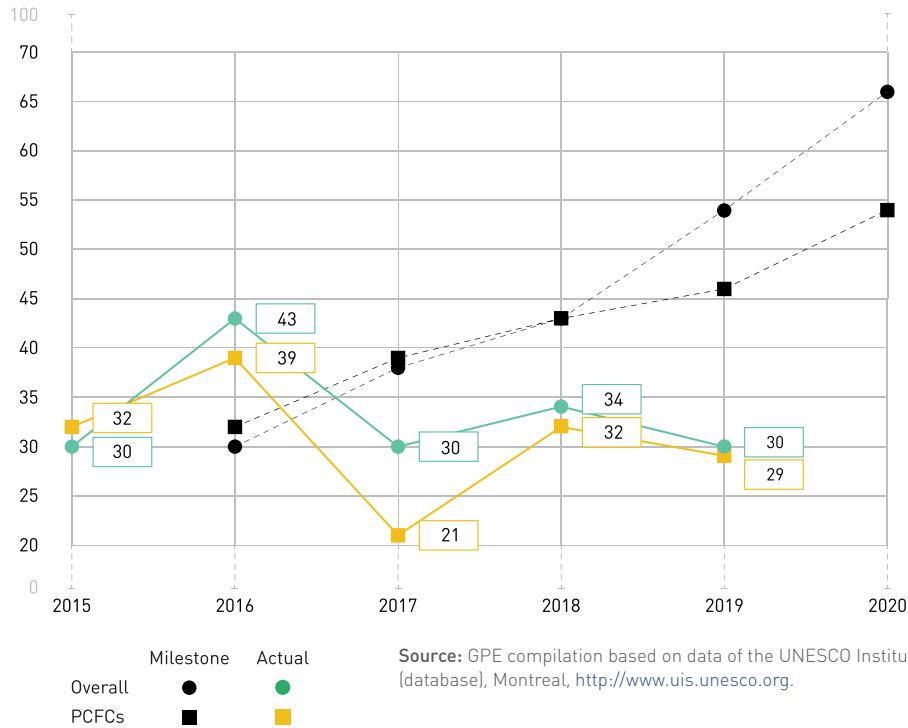
47. Note that GPE uses UIS data from 2016-2017 to generate 2019 values for the results framework because of the standard two-year lag in UIS data publication.

48. There is a significant correlation between the number of indicators reported to the UIS and the World Bank's statistical capacity index. However, it is worth noting that consultations with EMIS units in some countries show that there could be a lack of coherence between the overall statistical strategy and the capacity within the ministry of education.

FIGURE 2.3.

THE AVAILABILITY OF DATA REMAINS A CHALLENGE.

Proportion of countries reporting at least 10 of 12 key education indicators to UIS



GPE is committed to leveraging its funding model to help fill the data gaps in partner countries (see Box 2.3 for some examples). Indicator 17 is designed to monitor the data strategies in countries with approved implementation grants that neither report key data to the UIS nor collect and disseminate key education and finance data at the country level. In fiscal year 2019, 18 implementation grants were approved for 17 partner countries. Key data were not fully reported to the UIS in 10 of these countries. Of these, three applied for accelerated funding and were exempted from the data requirements, while data were available at the country level in three other countries. Overall, four partner countries (Afghanistan, Papua New Guinea, Somalia and South Sudan), of which three are categorized as PCFCs, were identified as countries with some data gaps as per the funding model requirements, and all developed strategies to address their data issues.

At the international level, GPE partners with other organizations to strengthen data systems. In 2018 and 2019, the Secretariat convened the multi-stakeholder Education Data Solutions Roundtable to leverage government, civil society, and private and development partners' expertise to improve the availability and use of accurate and timely data for education planning both in developing countries and at the global level. In particular, this initiative recognized the potential of the business community to co-create innovative solutions and provide new technologies to drive improvements in education data. In response to the bottlenecks identified by developing countries affecting their education data systems, the roundtable developed recommendations for sustainable solutions and capacity-building strategies.⁴⁹

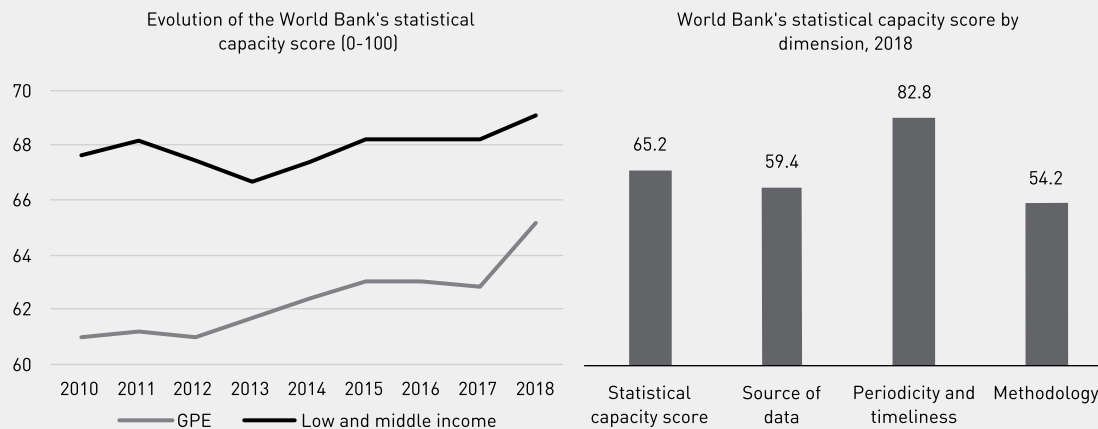
49. GPE, *Outcomes of the Education Data Solutions Roundtable (DRT)* (Washington, DC: Global Partnership for Education, 2019), <https://www.globalpartnership.org/content/outcomes-education-data-solutions-roundtable>.

BOX 2.2.**PARTNER COUNTRIES ARE MAKING PROGRESS IN STRENGTHENING THE CAPACITY OF THEIR STATISTICAL SYSTEMS**

The ability of the education sector to collect and disseminate quality education and finance data depends on the capacity of the countries' statistical systems in general. The World Bank's statistical capacity index is a composite indicator that measures the overall strength of a country's statistical systems. It is based on a diagnostic framework assessing three key dimensions of national statistical systems: methodology, data sources, and periodicity and timeliness.

GPE partner countries are making progress in the strength of their statistical systems. On average, the statistical capacity index value increased by 4.2 points between 2010 and 2018 in partner countries, compared with an increase of 1.5 points in low- and middle-income countries. The remarkable progress of partner countries between 2017 and 2018, in particular, is driven by some important improvements (at least 10 points' increase in the statistical capacity score) in some low-performing countries, such as Haiti, the Lao People's Democratic Republic, Lesotho, Papua New Guinea and Zambia.

Of the three components of this index, the methodology and the source of data dimensions seem to be associated with the lowest achievements. This implies that providing support to partner countries to adhere to internationally recommended standards and methods and building the capacity of the administrative systems to conduct data collection activities in line with internationally recommended periodicity are key to improving their statistical systems.



Source: GPE compilation based on data of the World Development Indicators Database, World Bank, Washington, DC, <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

Note: The "methodology" indicator measures a country's ability to adhere to internationally recommended standards and methods. The "source of data" indicator reflects whether a country conducts data collection activity in line with internationally recommended periodicity, and whether data from administrative systems are available. The "periodicity and timeliness" indicator assesses the availability and periodicity of key socioeconomic indicators. Sixty-seven partner countries are included in this analysis.

BOX 2.3.**SUPPORTING DATA SYSTEMS IN AFGHANISTAN, MALI AND KENYA**

Despite significant progress in developing and operationalizing an EMIS in recent years, **Afghanistan** still faces challenges related to the coverage and the accuracy of the education data. The EMIS does not cover community-based education, and data verification is a significant challenge. The current GPE grant (2019-2023) is supporting the government to improve the data collection and quality assurance systems through phone surveys and field visits and to expand the EMIS coverage to community-based education.

In **Mali**, the publication of annual statistics was delayed mainly because of some difficulties associated with data transmission between the local and central entities of the Ministry of Education. To help address this challenge, the GPE-supported project (2013-2017) implemented a virtual private network (VPN) mechanism that helped the government collect and share timely education data with central entities. The VPN system was proven especially appropriate given the country's large territory.

Despite the existence of a data system in **Kenya**, the quality and the timeliness of the data production seem to be a challenge. The GPE-funded project (2015-2019) aimed at strengthening capacity for evidence-based policy development at the national level. In 2016, only 60 percent of primary schools were involved in the EMIS data collection; by 2018, 95 percent of the schools were involved.

Sources: In the References, see Afghanistan's education sector analysis; and the World Bank's project appraisal documents for Afghanistan and Kenya, emergency project paper for Mali, implementation completion and results report for Mali, and implementation status and results report for Kenya.

2.4. GPE financial support to education systems strengthening

Of the 38 ESPIGs active at the end of fiscal year 2019, 37 included a component supporting systems strengthening. This corresponds to a total US\$423.7 million commitment, or 33 percent of the active grants' total allocation. An important portion of these grants is supporting activities at the central level (US\$161 million to activities such as technical assistance to the ministry of education), followed by activities at the school level (US\$133.3 million to activities such as school grants or school-based management programs) and at the decentral-ized level (US\$78.1 million to activities such as technical assistance to the education systems in regions or provinces), as well as activities targeting data systems (US\$51.2 million for EMIS-related activities). An additional US\$36.9 million is dedicated to developing learning assessments and to strengthening the systems to assess learning, while US\$144.4 million and US\$59.8 million were allocated, respectively, to teacher training and to activities aiming at strengthening teachers' management systems (**Funding Focus: Systems**).

TOWARD MORE AND BETTER DOMESTIC FINANCING AND STRONGER DATA SYSTEMS

Of the five indicators discussed in this section, the milestones were met overall in three cases (Indicators 12, 17 and 31) and missed in two cases (Indicators 10 and 14). Building a stronger education system requires sound policies for more and better domestic education financing. GPE's evaluations find that many complex domestic factors strongly affected domestic financing trends, with variations across countries. They show that GPE contributed to the dialogue and continued focus on the importance of domestic financing. However, stronger engagement by the education stakeholders at the country level is needed to ensure that education is better prioritized in the government's budget and that resources are efficiently used to deliver equitable access to quality education to all children.⁵⁰ Despite the incentives provided by the funding model requirements, data gaps seem to persist in partner countries, signaling the need for more effective strategies to strengthen the data systems. In addition to the indirect incentives provided through GPE's operational model for stronger education systems, GPE grants directly support activities aimed at strengthening the education systems in partner countries.

50. E. W. Miningou, "Quality Education and the Efficiency of Public Expenditure: A Cross-Country Comparative Analysis" (Policy Research Working Paper Series 9077, World Bank, Washington, DC, 2019), <https://ideas.repec.org/p/wbk/wbrwps/9077.html>.

FUNDING FOCUS: SYSTEMS

GPE FUNDING SUPPORT TO STRENGTHEN SYSTEMS, 2019

Allocations to activities to strengthen systems, from ESPIGs active as of June 2019:

US\$423.7 million

