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IMPLEMENTATION COMPLETION AND RESULTS REPORT
ON A
GLOBAL PARTNERSHIP FOR EDUCATION GRANT (TF-18672 AND TF-18673)
IN THE AMOUNT OF US\$66 MILLION
TO THE
ISLAMIC REPUBLIC OF PAKISTAN
FOR THE
SINDH GLOBAL PARTNERSHIP FOR EDUCATION PROJECT
JUNE 27, 2018

Education Global Practice
South Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 27, 2018)

Currency Unit = Pakistan Rupee

PKR 121.73= US\$1

US\$1.41 SDR 1

FISCAL YEAR

July 1 - June 30

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ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
AGC	Accountant General Controller
B-HRMIS	Basic Human Resource Management Information System
C-HRMIS	Comprehensive Human Resource Management Information System
CMO	Chief Monitoring Officer
CMS	Communication Management System
CPS	Country Partnership Strategy
DEO	District Education Officer
DGME	Directorate General of Monitoring and Evaluation
DLI	Disbursement Linked Indicator
DMO	District Monitoring Officer
EAD	Economic Affairs Division
EEP's	Eligible Expenditure Program
EFA	Education for All
EIRR	Economic Internal Rate of Return
ELD	Education and Literacy Department
FM	Field Monitor
FY	Fiscal Year
GDP	Gross Domestic Product
GER	Gross Enrollment Ratio
GoP	Government of Pakistan
GoS	Government of Sindh
GPI	Gender Parity Index
HRMIS	Human Resource Management Information System
ICR	Implementation Completion Report
KPI	Key Performance Indicator
LSU	Local Support Unit
MDG	Millennium Development Goals
NER	Net Enrollment Ratio
NPV	Net Present Value
PDO	Project Development Objective
PEFA	Public Expenditure and Financial Accountability
PIM	Project Implementation Manual
RROC	Regional Reform Oversight Committee
RSU	Reform Support Unit
SEDPC	Sindh Education Sector Development Policy Credit
SEMIS	Sindh Education Monitoring Information System
SEP	Sindh Education Project
SERP	Sindh Education Reform Project
SESP	Sindh Education Sector Project
S-GPE	Sindh Global Partnership for Education
SMC	School Management Committee
SSMS	Sindh School Monitoring System
ToC	Theory of Change
TTL	Task Team Leader

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DATA SHEET

BASIC INFORMATION

Product Information

Project ID	Project Name
P146451	Sindh Global Partnership for Education Project
Country	Financing Instrument
Pakistan	Investment Project Financing
Original EA Category	Revised EA Category
Not Required (C)	Not Required (C)

Organizations

Borrower	Implementing Agency
Islamic Republic of Pakistan	Education and Literacy Department, Government of Sindh

Project Development Objective (PDO)

Original PDO

The Project supports the implementation of the Sindh Education Sector Support Program (SESP). The Project Development Objective isto strengthen the institutional capacity to generate, disseminate and use information to support the implementation of key reformsunder SESP.

Progress towards the achievement of the PDO will be measured by the following indicators:

- 1.Numberof districts for which monitoring data of at least 70% of schools is collected by DGME.
2. Number of districts forwhich monitoring data is analyzed and disseminated to ELD management and district administrators.
3. Number of Districtswhich submittedHRMIS reports to ELD.



FINANCING

	Original Amount (US\$)	Revised Amount (US\$)	Actual Disbursed (US\$)
World Bank Financing			
TF-18672	22,000,000	21,730,921	21,730,921
TF-18673	44,000,000	44,000,000	44,000,000
Total	66,000,000	65,730,921	65,730,921
Non-World Bank Financing			
Borrower	8,227,400,000	0	0
Total	8,227,400,000	0	0
Total Project Cost	8,293,400,000	65,730,921	65,730,921

KEY DATES

Approval	Effectiveness	MTR Review	Original Closing	Actual Closing
02-Apr-2015	25-Mar-2015		29-Sep-2017	29-Dec-2017

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Amount Disbursed (US\$M)	Key Revisions
21-Sep-2015	0	Change in Loan Closing Date(s)
29-Sep-2017	55.73	Other Change(s)

KEY RATINGS

Outcome	Bank Performance	M&E Quality
Satisfactory	Satisfactory	Substantial



RATINGS OF PROJECT PERFORMANCE IN ISRs

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US\$M)
01	30-Jun-2015	Moderately Satisfactory	Moderately Satisfactory	0
02	03-Jun-2016	Moderately Satisfactory	Moderately Satisfactory	22.00
03	27-Jan-2017	Satisfactory	Satisfactory	28.65
04	30-Aug-2017	Satisfactory	Satisfactory	55.73

SECTORS AND THEMES

Sectors

Major Sector/Sector (%)

Education 100

Public Administration - Education 25

Primary Education 50

Secondary Education 25

Themes

Major Theme/ Theme (Level 2)/ Theme (Level 3) (%)

Public Sector Management 20

Public Administration 20

Transparency, Accountability and Good Governance 20

Human Development and Gender 80

Education 80

Access to Education 40

Education Financing 40

ADM STAFF

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I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

A. CONTEXT AT APPRAISAL

Context

1. At the time of Project appraisal (end of 2014), Pakistan was the world's sixth most populous country with an estimated 179 million people. It was a lower-income country, with a per-capita income of US\$1260 in 2012. Its GDP growth rates had been declining over a fifty-year period, and at appraisal had averaged 3.5% in the previous four years. This decline was due to worsening and more volatile macroeconomic, political and security conditions, as well as recent catastrophic floods. Service delivery performance was hampered by weak public-sector management, governance and capacity. It was not on track to achieve 5 of 8 MDGs for 2015, and many of its social indicators were low relative to neighboring countries and global lower-income country averages.

2. The population of Sindh province was 40 million, of which approximately 50% lived in rural areas. It had the second highest per-capita income among the country's four provinces, and had been experiencing declining economic growth and stagnating household incomes. Several underlying causes explained this decline, including: (1) strong features of a dual (urban/rural) economy; (2) other forms of social and economic segmentation which erode social cohesion and economic integration; (3) poor law-and-order conditions; (4) vested interests associated with the provision of key social services which undermine their cost-effectiveness and quality; and (5) binding constraints on skills and other factors that limit productivity and output. Public service delivery was marred by petty corruption, absenteeism and poor allocation of resources. The Public Expenditure and Financial Accountability (PEFA) assessment of 2013 found that only a third of the indicators scored at a satisfactory level. However, the province had demonstrated strong performance in some areas, including a strengthened regulatory frameworks and institutional structure for public procurement; and improved governance in the education sector through the introduction of merit-based, school-specific teacher recruitment and school rehabilitation under the District Terms of Partnership.

3. The provincial government is responsible for the design, delivery and oversight of primary and secondary education, which it manages through its Education and Literacy Department (ELD). The following paragraphs reviews critical challenges in the primary and secondary education that needed to be addressed, of which the last is amplified as it was most relevant to the operation.

4. Low and inequitable participation in education. School participation rates in Sindh were low relative to other countries in the region and to developing countries at its level of per capita income; its primary GER (79%) and NER (61%) were 12 and 6 percentage points lower than the national average, respectively.¹ Inequities of access and participation were found between rural/urban areas, districts, the poor and non-poor, and between girls and boys; girls in rural areas and children from the lowest income quintiles had the lowest participation rates. There had been improvements in the Gender Parity Index at all levels, particularly at the middle secondary level where the GPI had increased from 0.74 in 2007 to 0.81 in 2011. Access had been negatively impacted by the floods and rains in 2010/11, which had destroyed 14% of all public schools. Private school provision was increasing, and accounted for 30% of enrollments at the primary level in 2011.

5. *The poor quality of education* was a key determinant of low participation rates. Household satisfaction with

¹ PSLM 2014/15.



schools was only 51% in rural areas and 61% in urban areas. The poor quality of services could be seen in uneven student: teacher ratios; large numbers of non-functional schools; and in large numbers of ‘ghost’ teachers as well as a high incidence of teacher absenteeism. In 2011/12, approximately 10% of public primary, middle and elementary schools were found closed for a period of more than six months, had no teacher assigned to them, or had zero enrollments.

6. *Student outcomes* were low and indicated that curricular basics in Mathematics, English and Sindhi were not being mastered at Grades 4-5.

7. *Systemic impediments* to the public-school system included (i) poor incentives and capacity for systematic and strategic planning and effective implementation; ii) minimal monitoring and accountability of service delivery agents; and, (iii) system capture by insider and other special interest groups that prefer the status quo.

8. *Information was not adequately available, disseminated and used.* This constrained education services delivery and reform design, implementation and monitoring, and was particularly relevant to the Project’s design. The main shortcomings identified included: (i) the lack of regularly updated, accurate data on key school-level indicators; (ii) the absence of a mechanism that provided appropriate access to up-to-date and accurate information on the placement and characteristics of teaching (and non-teaching) staff across the province; (iii) the absence of effective communication mechanisms between ELD staff at all administrative levels and schools; (iv) the absence of mechanisms to encourage the effective use of available data; and (v) weak communication and consultation mechanisms with external stakeholders, including civil society.

9. *The Sindh Education Sector Reform Program (SERP) and the Sindh Education Sector Plan (SESP).* To address the issues outlined above, the GoS developed the SERP in FY 2007/8 into which it later integrated the SESP 2014-18. The SESP has four pillars (see adjacent Box and ToC diagram below). The SERP and SESP were aligned with country legislation, including Article 25A of the Constitution that mandates the provision of free and compulsory education to all children aged 5-16 years and the Sindh Right of Children to Free and Compulsory Education Act (2013); as well as with the GoP’s international commitments, particularly the World Declaration on EFA (1990), the Dakar Framework of Action (2000), and the MDGs especially Goal 2 on universal primary education. The Bank provided financial support to SERP between FY2006/7 – FY2011/12 through the Sindh Education Sector Development Policy Credit (SEDPC) approved in June 2007, the Sindh Education Sector Project (SEP) approved in June 2009, and the Additional Financing to the Sindh Education Sector Project (SEP AF) approved in March 2011.

The Sindh Education Sector Plan 2014-2018
 The SESP has four pillars:

1. Strengthened governance and accountability to improve service delivery and achieve desired education outcomes
2. Enhanced equity in education access and participation
3. Improved quality and student learning outcomes
4. Sustainable sector financing

Its targets for 2018 are:

ECE/Katchi:

- GER to increase from 32% to 45% for children aged 3-5 years

Primary and middle school:

- NER to increase from 59% to 77% for primary school
- NER to increase from 34% to 50% for middle school

Secondary school:

- NER to increase from 23% to 35% for lower secondary
- NER to increase from 19% to 30% for higher secondary

Literacy:

- An increase in adult literacy from 59% to 70%



Further, the Bank supports the SESP through the Second Sindh Education Support Project (SEP II), approved in March 2013 and scheduled to close in December 2018.

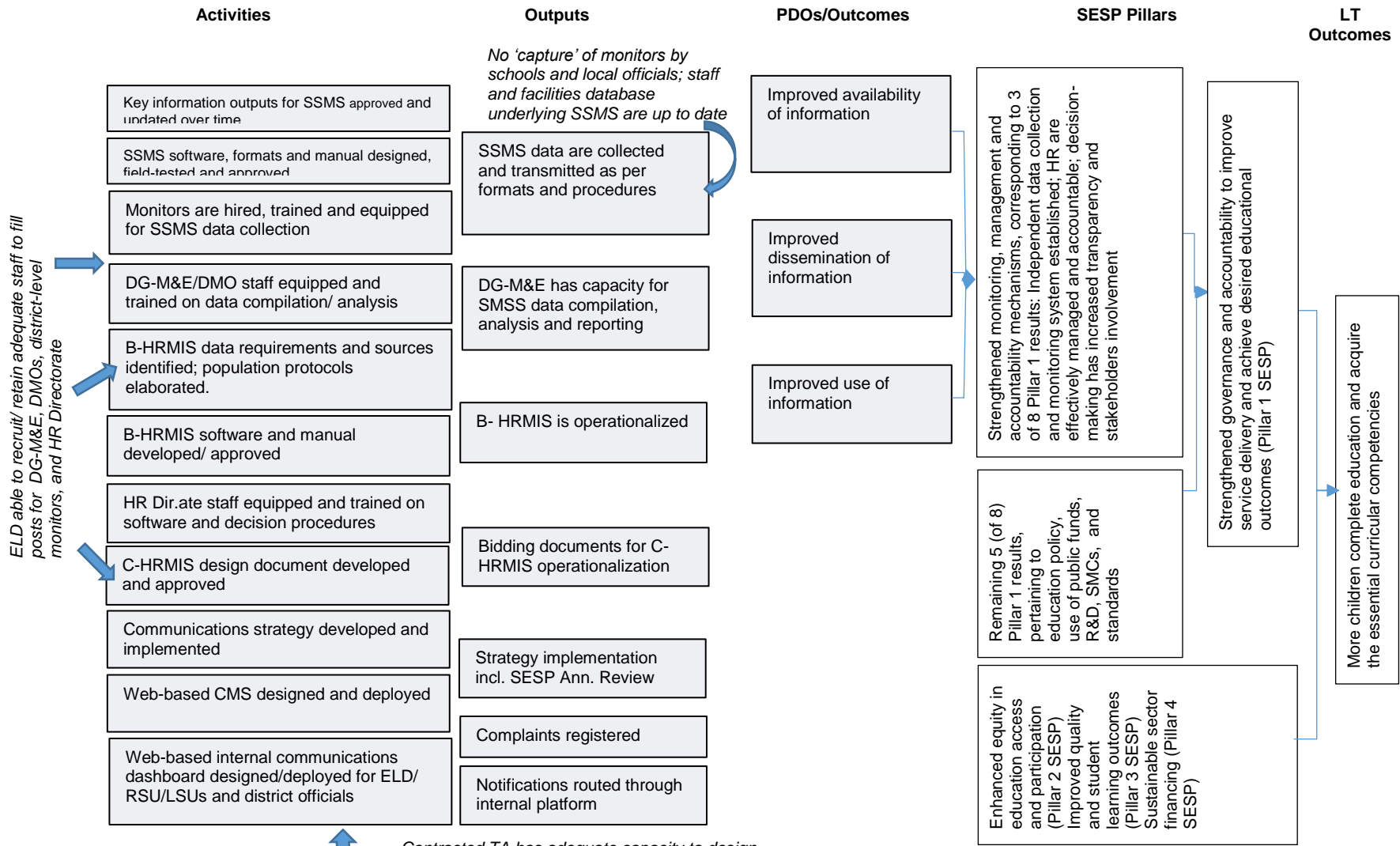
10. The Project was also aligned to the Pakistan Country Partnership Strategy (CPS) 2015-19, and supported its two themes of inclusion and service delivery by supporting governance, accountability and information-related interventions that were designed to have a positive impact on the quality of education service delivery to the poor and marginalized. The SEP II supports Policy Pillars 2-4 of the SESP, while the S-GPE Project supported Pillar 1. That is, the S-GPE and SEP II were considered complementary and mutually reinforcing, and S-GPE interventions were expected to enhance the impact of key reforms supported under SEP II as well as, more generally, the SESP. In brief, the S-GPE was designed to fill a critical gap in an otherwise well-funded SESP by generating, disseminating and using information about the education system to improve the design, implementation and results of activities under Pillars 2-4, and more generally to promote the effective and efficient allocation and use of system resources. Both the S-GPE and SEP II used the same results-based disbursement modality and implementing entity.

Theory of Change (Results Chain)

11. The theory of change has been constructed from the results framework, DLIs and project description and appears below:



Project Theory of Change in Strategic Context





Project Development Objectives (PDOs)

12. The Project Development Objective was to strengthen the institutional capacity to generate, disseminate and use information to support the implementation of key reforms under SESP.

Key Expected Outcomes and Outcome Indicators

13. The PDO was to be achieved through three key expected objectives, each of which had one PDO indicator. That is, institutional capacity was to be strengthened to achieve the following three objectives.

- Objective 1: Strengthened institutional capacity to generate information to support the implementation of key reforms under SESP
 - Indicator: Number of districts for which monitoring data of at least 70% of public schools is collected by the Director General Monitoring and Evaluation (DGM&E) (to be increased from a baseline of 0 to 23)²
- Objective 2: Strengthened institutional capacity to disseminate information to support the implementation of key reforms under SESP
 - Indicator: Number of districts for which monitoring data is analyzed and disseminated to ELD management and Region Reform Oversight Committees (to be increased from a baseline of 0 to 15)
- Objective 3: Strengthened institutional capacity to use information to support the implementation of key reforms under SESP
 - Indicator: Number of Districts which submitted Basic Human Resource Management Information System (B-HRMIS) reports to ELD (to be increased from a baseline of 0 to 23)

Components

14. The components are explained below:

Component 1: Systems Strengthening. A total US\$ 8,208.3 million cost was estimated at appraisal; US\$ 3,694.7 were actually allocated.³ The GPE contribution was estimated at US\$ 59 million at appraisal; US\$ 59 million were actually allocated.⁴

Component 2: SESP Support. A total US\$ 26.1 million cost was estimated at appraisal; US\$ 11.7 million were actually allocated. The GPE contribution was estimated at US\$ 7 million; US\$ 6.73 million were actually allocated.⁵

15. *Component 1* was the performance-based part of the GPE grant disbursing against the achievement of agreed Disbursement-Linked Indicators (DLIs), and it supported three reform areas that were expected to strengthen

² After Appraisal, the number of districts in Sindh Province was increased from 23 to 29 due to reassignment by the Government.

³ The US\$ 8,208.3 million refers to the total estimated cost of overall SESP implementation, but does not include the GPE contribution of US\$ 59 million for the component. The amount actually allocated is based on the fact that all government expenditures during the Project period on all levels of education covered by the SESP were 45% of the estimated cost of SESP implementation; this percentage was applied to US\$ 8,208.3 million to derive the figure above. The same principle is used to calculate the actual allocation for the government contribution in Component 2.

⁴ Disbursements under Component 1 were made upon achievement of DLIs tied to specific program improvements and against expenditures made in agreed Eligible Expenditure Programs (EEPs). There were four DLIs annually over three years (i.e. 12 DLIs total).

⁵ While all GPE funds were expended, exchange rate fluctuations were such that the total final amount allocated appears as US\$ 65.73 million. The discrepancy (of US\$ 0.17 million) is assigned here to Component 2.



the institutional capacity to generate, disseminate and use information to support the implementation of key reforms under SESP.

(i) Establishment and operationalization of a Sindh School Monitoring System (SSMS). There were two DLIs to track progress on: (1) the quantity, quality and flow of information produced by the SSMS; and (2) the use of the SSMS to inform decisions and increase accountability.

(ii) Establishment and operationalization of a Human Resources Management Information System (HRMIS). There was one DLI to track progress on the operationalization and use of the Basic HRMIS, as well as the preparations to enable a subsequent implementation and operationalization of the comprehensive HRMIS.

(iii) Strengthening of communication activities with internal and external stakeholders to promote the design, implementation and monitoring of key SESP reforms. There was one DLI to track progress on: (a) the development and implementation of a communications strategy; (b) the development and functionality of a complaints redressal system; and (c) improvements in communications between internal stakeholders.

16. The key characteristics of the SSMS, HRMIS and Communications are provided in Annex 6 Section A. Each DLI had annual targets, for a total of 12 DLI targets over 3 years; these are provided in Annex 6 Section B.

Component 2 was to fund technical, advisory, and capacity-building support (including goods and services) to develop/design, implement and monitor the activities of Component 1. The support was indicatively identified as follows:

- SSMS: TA to support system design, train users, review implementation; hardware and equipment required to operate system; technical expertise (including additional staffing)
- HRMIS: TA to support system design, train users and review implementation; technical expertise (including additional staffing)
- Communications: Organization of annual stakeholder reviews; technical expertise for Communications Unit; TA to support design and manage web-based internal communications and complaints management system; stakeholder surveys.

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION (IF APPLICABLE)

Revised PDOs and Outcome Targets

17. There were no significant changes

Revised PDO Indicators

18. There were no changes

Revised Components

19. There were no changes

Other Changes

20. A level 2 restructuring was approved on September 21, 2015 to prepone the closing date for one trust fund (TF018672) in line with the Minutes of Negotiations for the project, dated December 22, 2014, which stated that



“the first portion (TF018672) was expected to be used to finance expenditures during the first year of the Project, whereas the second portion (TF018673) is expected to be used to finance expenditures during the second and third year of the Project”. In addition, a Level 2 restructuring was approved on September 29, 2017 for a no-cost extension of the Project by three months, from September to December 2017.

Rationale for Changes and Their Implication on the Original Theory of Change

21. The restructuring was to ensure all procurement and financial activities related to all four DLI areas could be concluded successfully prior to closure. The extension was requested by the Sindh government, endorsed by the Local Education Group, approved by the Economic Affairs Division (EAD), and processed by the WB. The change did not affect the theory of change or the originally expected outcomes and their targets.

II. OUTCOME

A. RELEVANCE OF PDOs

Assessment of Relevance of PDOs and Rating

22. **Relevance of objectives is rated high.** At closing (as at preparation), the PDOs remain relevant to the Country Partnership Strategy (FY 2015-19), as they support two of the four current CPS results areas, which were specifically identified in the PAD, viz. inclusion (Results Area 3) and service delivery (Results Area 4). The PDOs directly support CPS outcome 4.4 (Adoption of Performance and Transparency Mechanisms in Selected Institutions); and indirectly support CPS outcomes 3.2 (Reduced Vulnerability for Groups at Risk) and 4.3 (Increased School Enrollment and Adoption of Education Quality Assessment). These CPS results areas, as well as the Project PDOs, are in turn well aligned with the GoS Sindh Education Sector Plan (SESP) 2014-18. The direct and indirect linkages between the PDOs, the CPS and the SESP are amplified in Annex 6 Section C.

B. ACHIEVEMENT OF PDOs (EFFICACY)

Assessment of Achievement of Each Objective/Outcome

23. Achievement of the PDOs is rated substantial. The assessment is organized around the three key outcomes supporting the GOS’s SESP strategic goal to strengthen governance and accountability to improve service delivery and achieve desired educational outcomes.

24. *With respect to the first outcome* – strengthened institutional capacity to generate information to support the implementation of key reforms under SESP:

- Using the PDO indicator, the number of districts for which monitoring data of at least 70% of public schools is collected by DG M&E increased from 0 at baseline to all 29 districts at the end of project, meeting the end target of all districts.⁶

⁶ Two PDO indicators and one DLI included targets of 23 districts. In all three cases, the targets were exceeded in that 29 districts were covered. However, this is due to the creation of more administrative divisions in Sindh that entailed an increase in the total number of districts from 23 to 29. So, if one interprets the spirit rather than the letter of the indicators, the targets were met rather than exceeded.



25. This indicator is a good measure of the outcome in that it is predicated upon a functional SSMS, which has several characteristics indicative of strengthened capacity to generate information supportive of reforms implementation. (See Annex 6 Section A and D which describes the SSMS and B-HRMIS as implemented). The outcome can be directly attributed to the Project's activities, which were well designed to result in the outcome and for which evidence of execution was collected throughout implementation (as part of DLI verification). The main activities planned were all executed: design of the SSMS system, including software and manual with data-collection formats and procedures, as well as reports generator; hiring and training of DGME staff; establishment of 29 District Monitoring Units, and hiring and training of 29 Chief Monitoring Officers (CMOs) and 349 Field Monitors (FMs); data collection and entry; and reports generation. The ICR Team viewed a large set of SSMS-generated reports, which could only have been generated once all the predicate activities leading up to and including school-level data collection had been executed.⁷ As of March 2018, the DGME had monitored 88.4% of all schools in the previous month alone.

26. The Project also made available a full database of ELD employees. This is discussed further below under the third PDO indicator pertaining to information usage.

27. *With respect to the second outcome* – strengthened institutional capacity to disseminate information to support the implementation of key reforms under SESP:

- Using the PDO indicator, the number of districts for which monitoring data is analyzed and disseminated to ELD management and RROCs increased from 0 at baseline to 29 at the end of project, exceeding the end target of 15 districts.

28. That is, reports are provided monthly to all District Education Offices (DEOs) and on a quarterly basis to the RROCs. The reports provide the status of KPIs in four key areas (school status, staff attendance, student enrolment/attendance, and facilities), such as the percentage of schools open/closed, teacher and non-teacher attendance rates, student enrollment and attendance rates (broken down by gender), and percentage of missing facilities; include recommendations for decision and action; and are supplemented with annexes of detailed and disaggregated information. Further, all districts have access to the most highly disaggregated information, enabling them to parse their reports to identify (as the case may be) which sub-districts, schools, or staff member require attention for decision-making. The Bank's final Supervision Mission noted that there was still room to improve the presentation of the information in the disseminated reports; an observation with which the ICR Team concurs. However, the critical achievement is that the data are collected, processed analytically, and disseminated; and there is a substantive basis on which ELD is improving. (Usage is discussed below). The ICR Team explored the 'dashboard' that has been developed by DGME (with technical support financed by the Project), which makes excellent use of the database to present raw data and KPIs at all levels, including trends. Once ELD provides wider access to the dashboard (beyond the DGME) and builds capacity in its use, the education system will have a powerful tool for decision-makers at all levels.

29. Project activities led to an improved dissemination of information beyond what is captured by the PDO indicator, particularly through the establishment of the Information and Communication Unit that fulfils the communications function for ELD and implements the ELD's communications strategy, and the creation of a web-based internal communications platform (see Annex 6 Section E); and the strengthening of 'ILMI', an SMS-based help and

⁷ The reports included school-, sub-district, district- and provincial-level; and included at least 4 different monthly data points over the most recent school year.



complaints redressal service that also disseminates information (analyzed below).

30. *With respect to the third outcome* – strengthened institutional capacity to use information to support the implementation of key reforms under SESP:

- Using the PDO indicator, the number of districts which submitted Basic HRMIS reports to ELD increased from 0 at baseline to 29 at the end of project, meeting the end target of all districts.

31. These reports are predicated upon the database of all ELD employees that was generated as a Project activity. This massive exercise entailed compiling a list of all teaching staff through the SEMIS and all district-level management/administrative staff through the DEOs, totaling approximately 150,000 staff; and reconciling the list with the Accounts General Controller (AGC) payroll database.⁸ Further, all listed employees were re-registered and verified with biometric data. The database is updated on a live basis, as and when employees officially enter, move within, and exit the education system. It is regularly shared with DGME to enable the SSMS field monitors to have access to up-to-date information on school staff.

32. The ELD uses two reports generators, one of which was developed with TA support financed through Component Two. One of these was reviewed in detail by the ICR Team and provides a range of vital HR-related information that ELD was using at closure to better manage human resources; central, RROC and DEO staff were trained in its use. The generators can be used on a computer and, for one of them and in simplified form, on a smart phone using an Android app. For example, the reports enable the ELD to plan for recruitment, to make decisions about deployment and transfers, to identify ‘ghost’ or absconding teachers, and to take disciplinary measures against teachers who have absconded or been absent without leave. (See also Annex 6 Section F).

33. The HRMIS (as well as the SSMS) reports are being used. ELD regularly convoked DEOs and RROC members to review the reports and decide on actions pertaining to absconders, absenteeism, student: teacher ratios, and discrepancies between ELD and AGC data. As a result, for example, according to the ELD approximately 6,000 ‘ghost’ or absconding teachers were removed from the ELD’s payroll, a plethora of ‘show cause’ notices were issued, numerous transfers were effectuated between over-staffed and over-crowded schools, and transfer requests were either approved or denied based on ratios in the school from/to which the request was made. Further, the HRMIS and the DGME’s monthly SSMS reports are being used at district and regional level for similar purposes, as well as to make decisions on closing schools, allocate civil works, rationalize schools, and resolve boundary disputes pertaining to district authority over schools.

34. By Project closure, it was expected that a comprehensive and well-founded design for the establishment of a full-fledged HRMIS would be developed. The Project completed a process engineering that was formally accepted by ELD; the bidding documents for contracting the comprehensive HRMIS have yet to be prepared.

35. The Project promoted the improved use of information in other areas to support key reforms under SESP. For instance, the monthly SSMS-based reports issued by DGME are used by DEOs and RROCs to make decisions pertaining e.g. to absentee teachers, temporary or permanently closed schools, and school boundary disputes.

⁸ Reconciliation is ongoing, with approximately two thirds of discrepant files being resolved thus far.



36. Further, the Project supported the strengthening of a province-wide communications system (entitled 'ILMI') which enabled teachers, parents, community members and district officials to submit queries, complaints and requests for responses, resolution and official processing. The ILMI addresses a broad range of issues, including learning support for parents and students on school work; lesson planning and pedagogical tips for teachers; professional advice for Headteachers; leave requests; and administrative advice for administrators. It also provides stakeholders a platform to submit complaints with clear procedures on resolution. Since its official launch in March 2015, over 587,000 individuals have communicated with the ILMI team, including the lodging of over 45,000 complaints. By Project closure, the target for resolving complaints had been met.

37. As mentioned under Section IV.A, the Project had indicated the possible use of a third-party survey where required; this was not conducted because of the delays in setting up the systems. However, the regular communications by stakeholders through ILMI provided feedback on the various activities undertaken by the department.

38. While the ICR focuses on the extent to which the operation's objectives were achieved, there is evidence that the operation also contributed to higher-level outcomes as laid out in the theory of change.⁹ For instance, data collection and reporting have themselves plausibly resulted in improved teacher attendance rates as for the first time these are being systematically, regularly and independently monitored; and teachers are sensitive to the sanctions that can follow unauthorized absences. Between October 2016 and April 2018, teacher attendance rates improved from 57% to 61% in the fifteen districts for which there is data covering that time period.¹⁰ Further, as noted above, the SSMS/B-HRMIS have provided information that led to the decision to remove or stop the salaries of approximately 6,000 'ghost' or absconding teachers. The project files document numerous instances where ILMI actions contributed to the quality of education.¹¹

Justification of Overall Efficacy Rating

39. Overall Efficacy is rated substantial. The outcome indicators either exceeded or fully achieved their targets. As mentioned above, more and better-quality information was generated, and the outcome indicator target was met. With respect to the improved dissemination of information, the outcome indicator target was surpassed and there were other instances of dissemination attributable to the Project beyond that captured by the indicator. The Project achieved its intermediate result target pertaining to the internal routing of notifications (one aspect of dissemination). The target for the improved use of information was met as per the PDO indicator as well as the intermediate indicator pertaining to complaints redressal, and the Project succeeded in improving information use in areas beyond what is captured by the indicators. However, the planned results pertaining to C-HRMIS (included in the DLI matrix) were not fully achieved. Finally, there is suggestive evidence that by largely achieving its development outcomes the Project may have successfully contributed to the achievement of higher-level outcomes targeted by the government's sectoral plan.

⁹ It will be recalled that the PDOs were designed to achieved three of the eight results for Pillar One of the SESP, which in turn was to facilitate the achievement of the other pillars which together would result in more students acquiring a quality education.

¹⁰ These rates likely understate actual attendance rates, in that the denominator includes teachers whose status was unclear at the time of data collection but were reported by local authorities as being either retired or deceased.

¹¹ See also <http://www.ilmisitarey.com> for publicly accessible case studies.



40. The SSMS/HRMIS data collection and reports generation may have led to an improvement in teacher attendance rates, and approximately 6,000 'ghost' or absconding teachers have been removed from the payroll or replaced; ELD also reports that a substantial number of teachers (perhaps 1,000) have applied for early retirement, to avoid sanctions resulting from absences. The decisions made contributed to efficiency gains system-wide in terms of improved transparency (reduction in ghost teachers) and accountability (improved teacher attendance).

C. EFFICIENCY

Assessment of Efficiency and Rating

41. The overall efficiency of S-GPE is rated substantial. S-GPE had an economic internal rate of return (EIRR) of 12 percent indicating that the project was economically viable (see Annex 4), and efficiency gains were also evident through improvement in the system's governance and accountability.

42. **Economic Internal Rate of Return:** A cost-benefit analysis (CBA) was conducted at the time of the ICR, which calculates a positive rate of return for the project. The analysis uses the same underlying assumptions as at the time of the appraisal focusing on impact of the intervention on school participation which will in turn yield gains in socioeconomic indicators, including labor earnings, measured over the course of a standard working life. The project's Net Present Value (NPV) was PKR 3,925 (2012) per child at 10% discount rate at the time of appraisal while the NPV at the time of the ICR is PKR 5,185 (2018) using the same discount rate. Economic benefits were derived from (a) the number of additional primary school completers in public schools earning higher wages relative to non-completers, and (b) improved quality and relevance of education resulting in a higher productivity premium for all primary school completers, relative to the counterfactual (assuming no Sindh GPE). Costs were measured as public expenditures on education (both non-salary and development) and other household private expenditures on education as well as the opportunity cost of education, in the form of forgone wages. The costs are focused only on the expected incremental cost associated with the project.

43. In terms of implementation efficiency, the project did not have any cost-over runs. There was an extension¹² of 3 months to the closing date for the completion of remaining contractual activities (procurement and financial) to ensure orderly closing. The project did face delays in the first half of implementation cycle due to inefficient procurement management by the team and delays in hiring of a procurement specialist in RSU. However, most of the procurement issues were resolved in the latter half of the project. The Task Team Leader of the project remained the same throughout implementation. The TTL also helped to prepare and supervises the SEP-II, which is complementary in design to the Project. Therefore, the two projects could be supervised in parallel in a synergistic way.

D. JUSTIFICATION OF OVERALL OUTCOME RATING

44. The overall outcome rating is satisfactory because the relevance is rated high, efficacy is rated substantial, and efficiency is rated substantial. This rating corresponds to best judgement based on information reviewed for the ICR, in that:

¹² Although the project had achieved all major milestones identified in the Disbursement Linked Indicator (DLI) table and was on track to achieve the two lagging DLI's before the closing date of September 29, 2017, the Government of Sindh had requested an extension of the closing date by three months to ensure that all contractual activities under the technical assistance could be completed to fully meet objectives of the project.



- the PDOs remain relevant to the Country Partnership Strategy (FY 2015-19), as they support two of the four current CPS results areas;
- the three PDO indicators were either exceeded or fully achieved. The first PDO outcome was fully achieved particularly through the regular generation of updated SSMS/B-HRMIS information covering all ELD schools and employees. The second PDO outcome was exceeded in its most important dimension (the dissemination of SSMS data to stakeholders in all districts) and entailed the successful dissemination of extensive communications information; the internal communications system was also established and disseminates official and other communications, though its coverage is still limited. The third PDO outcome was also achieved. The information generated by the SSMS and B-HRMIS has been used on a regular basis for decision making, and the ILMI system resulted in extensive communications that are being used including meeting the target pertaining to the redressal of complaints. However, the planned results (included in the DLI matrix) pertaining to C-HRMIS were not fully achieved. There is evidence that the decisions made contributed to efficiency gains system-wide in terms of improved transparency (reduction in ghost teachers) and accountability (improved teacher attendance).
- the operation has an EIRR of 12%.

E. OTHER OUTCOMES AND IMPACTS (IF ANY)

Gender

45. Among ‘other indicators’ in the PAD’s Results and Monitoring Indicators was the number of student beneficiaries, to be disaggregated by gender. The Project aimed both to increase the number of students and to increase the proportion of female students. In the event, the number of female students in public primary, middle and elementary schools increased from 1,595,580 at baseline (2013/14) to 1,652,025 in Year 3 of the Project (2016/17).¹³ The increased enrolment might be plausibly attributed in small part to the Project, given how its interventions were integrated into the SESP as a whole, which has numerous interventions targeting increased enrolment. By improving the availability, dissemination and use of information, the Project increased the capacity of ELD at all levels to make better decisions including resource allocations and to resolve problems identified by stakeholders. The results of these decisions and resolutions – e.g. making teachers available for overcrowded or closed schools, disciplining absentee teachers – would tend to promote enrolment. Further, communications activities included messages targeting students, parents and teachers promoting participation, including female participation; as well as resolving through ILMI issues raised by Head-teachers and teachers pertaining e.g. to teacher and textbooks availability. Again, these might have helped to promote female participation in schools.

Institutional Strengthening

46. By giving implementation responsibility for the SSMS to the newly created DG-M&E, the Project enabled the ELD to build a sustainable capacity in monitoring and evaluation based on the operationalization of a critical function. The department has steadily improved its work and expanded its coverage through the Project, and now displays solid capacities in managing a large-scale and continuous monitoring exercise. Some of the competencies it has mastered include hiring and managing a large workforce of monitoring assistants, IT operations, data quality

¹³ ELD Annual School Census.



control and problems resolution, compiling and analyzing data, and reporting in forms that are useful to decision makers. Further, as noted above, the DHRT was created during Project implementation and took responsibility for HRMIS responsibilities. The B-HRMIS software was handed over to the ELD Data Center, which regularly generates reports for HR decision-making.

Mobilizing Private Sector Financing

47. Not applicable

Poverty Reduction and Shared Prosperity

48. As noted above, the Project was designed to support other high-level outcomes of the SESP including increased enrolment, completion and learning. Starting from a baseline (2013/14) of 3,799,000 students enrolled in public schools (primary, middle and elementary), the number increased to 4,229,128 in Year 3 of the Project (2016/17). Given the link between education and future earnings, one might plausibly infer that the Project contributed to a future reduction in poverty.

Other Unintended Outcomes and Impacts

49. The strengthening of the ILMI broadened the user base (beyond ELD staff) to include students, parents and community members. As such, it created a mechanism that facilitated widespread active citizen engagement

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

50. The preparation phase benefited from several factors.

- The sector was well understood, with precisely articulated sectoral weaknesses identified for the Project to address. This can be attributed to the experience and research that underlay the development of the GoS SESP 2014-18, to which the Project was aligned. Further, the team preparing the Project benefited from the experience derived from the Bank-financed SEP I and II, the latter of which had been recently prepared, and from SESP implementation; and was able to identify gaps in SESP implementation that remained to be filled.
- The Project was well aligned with federal and provincial vision, policy and strategy. In particular, the Project was integrated into the four strategic pillars of the GoS Sindh Education Sector Plan (SESP 2014-18). Pillar One aims to strengthen governance and accountability to improve service delivery and achieve desired education outcomes, through eight strategic results; three of these corresponded to the Project's PDO.
- As a result of this background analysis and understanding, and alignment to policy and strategy, the Project also benefited from:
 - strong political ownership of the Project at a senior level. The Secretary at ELD was a strong advocate of both establishing/strengthening the SSMS, HRMIS and ILMI and developing the structures, processes and capacities to enable their sustainability and use.
 - a focused design with realistic objectives. The Project had three related objectives pertaining to the availability, dissemination and use of information in well-circumscribed domains, viz. school-level inputs and process data, human resource management, and internal and external communications. For each of the objectives, realistic targets were set for a three-year period given the implementation capacities that were either existent at preparation or that one could have reasonably expected to be put in place in a relatively short period.



- The Project also benefited from implementation readiness on the part of the IA.
- One of the designated implementing entities (the RSU) was also responsible for the SEP-I and SEP-II, and thus had substantial experience in sector reforms, DLI-based projects implementation and working with the Bank.
- There was a Project Implementation Manual (PIM), which contained detailed arrangements and procedures pertaining to SSER-II institutional responsibilities for implementation, fiduciary matters, and monitoring, evaluation reporting and communication including DLIs verification protocols. Much of this was applicable to the S-GPE, though the PIM might have usefully been amplified to explicitly reflect S-GPE activities, DLIs and specific implementation responsibilities

B. KEY FACTORS DURING IMPLEMENTATION

i) Factors subject to government and/or implementing entities control

51. There were certain factors that helped the Project to achieve PDO targets and DLIs. First, after some delay, once the RSU was at fuller strength, it drew effectively on its fiduciary and management capacities for procurement and TA management, to ensure that goods arrived on a timely basis as per specifications, and that contractors working on complex tasks (e.g. SSMS, HRMIS) provided deliverables within reasonable timeframes.

52. Second, leadership in the ELD drove the SSMS and communications activities (including ILMI), leading to results that generally exceeded targets. A new M&E structure within ELD (the DGM&E) was created, and the ILMIS was championed while linking it to ELD departments for the resolution of complaints. Third, although DGM&E got off to a delayed start (see below), it then successfully managed the complex logistics required to establish 29 nine DMOs, hire 349 FMs, and plan and oversee the regular monitoring of approximately 18,000 schools. Fourth, once the SSMS/HRMIS began to generate valuable data for decision-making, some incentive was created to ensure the system was scaled up and functioned well.

Timetable of DLIs Scheduling and Achievement			
DLI	Year 1 (June 2015)	Year 2 (June 2016)	Year 3 (Nov 2017)
1. SSMS establishment	On time	Delayed (April 2017)	On time
2. SSMS use	On time	Delayed (April 2017)	On time
3. HRMIS	Delayed (Dec. 2015)	On time	On time
4. Strengthening communication	On time	Partially met on time; remainder delayed (April 2017)	On time

53. As detailed in the Table above, some DLIs were not achieved as per schedule though all were achieved by project closure. This was due in part to delays at ELD to establish certain readiness conditions which had been agreed during preparation. The various delays in staffing and establishing capacity affected the project particularly during the first year of implementation, leading the Bank to downgrade the Project Management rating from satisfactory to moderately satisfactory in June 2016. The rating was satisfactory in all subsequent ISRs. There were also implementation delays at the beginning of the project due to delays in the transfer of funds from the ELD to the relevant units involved in project delivery; once resolved, this issue did not recur.



54. The Project benefited from proactive and relatively stable Bank supervision. The Bank intervened for example as needed to facilitate the work of the SSMS/HRMIS contractors with ELD, to ensure that the contractors understood ELD requirements and kept reasonably well to their deliverables schedule. The TTL at preparation left at the time of negotiations, however the subsequent TTL (who was also part of the preparation team) remained the same throughout implementation. The TTL also helped to prepare and supervises the SEP-II, which is complementary in design to the Project. Therefore, the two projects could be supervised in parallel in a synergistic way. There were five supervision missions throughout the Project's three-year life, and these were regularly supplemented with email and other communications as well as the regular provision of expert support and oversight using local TA. The team providing supervisory support included experts in education monitoring, communications, ICT and data analysis. The reporting through Aide Memoires and ISRs was generally adequate, though the phasing out of formal missions (including Aide Memoires) during the last year of the project resulted in a more dispersed set of supervisory information. The team was forthright in identifying implementation delays and actions needed.

(iii) Factors outside the control of government and/or implementing entities

55. The Project faced certain challenges during implementation:

- The SSMS, B-HRMIS and ILMI all promote transparent access to performance-related and systems efficiency data, and as such face resistance from those who are reluctant to having their performance revealed or who benefit from resource usage inefficiencies. For instance, the SSMS/B-HRMIS identifies absconding and absenteeism by individual teacher, as well as what schools are over- and under-staffed; the former have led to sanctions, while the latter have resulted in unwanted transfers and the refusal of transfer requests. ILMI provides data on the resolution rate of complaints for all relevant departments, allowing senior management to sanction poor performers. As a result, various ELD staff at many levels, from Field Monitors to the Secretary, faced significant opposition.
- Field Monitors had difficulty collecting data in remote and relatively inaccessible areas; and at times and locations when/where the security situation was poor.
- The ELD relies upon the efficient cooperation of other governmental departments to ensure that information is generated and used. For instance, when the SSMS/B-HRMIS data indicated that decisions were required that entailed closing cost centres or creating new statements of expenditures, certain permissions from the Finance Department were needed; these were not always forthcoming on a timely basis. Similarly, the B-HRMIS requires regularly updated data from AGC, but ELD/AGC have yet to agree on a systematic solution that allows for this to occur as a matter of course.

IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

A. QUALITY OF MONITORING AND EVALUATION (M&E)

M&E Design

56. The Results and Monitoring Indicators covered some aspects of the PDOs and the intermediate results, while the DLIs provided for a full and clear picture of essential project results and outcomes; together these constituted an adequate monitoring and evaluation framework. Further, the arrangements for data collection and reporting



were generally well designed, enabling valid, reliable and accurate data to be reported on time. There were minor shortcomings in terms of indicator definitions and data sources.¹⁴

M&E Implementation

57. The M&E framework was generally well implemented. For the most part, data values and DLI evidence were generated on a timely basis, and were analyzed in a methodologically sound manner. However, surveys and third-party verification exercise (included in the PAD) were not used to the full extent originally identified. The delays in setting up the offices for SSMS and HRMIS and making them fully functional limited the use of conducting a third-party survey of the activities. The Grant Agreement did not include reference to third-party verification exercise as this was considered as optional. Since the data generated from the two systems was analyzed regularly to ensure validity of the information, this did not impact the evidence relating achievement of results.

- One of the intermediate results indicators pertaining to communications was not tracked. In the PAD, the indicator was ‘positive change in awareness and understanding of SEP II and SESP reforms.’ The unit of measure was an ‘index value’; the baseline was to be determined prior to July 2014, and then updated twice at 18-month intervals. The baseline survey was carried out in 2016, did not establish an index value, and the survey was not repeated.
- DLI 3 for Years 2 and 3 include RSU implementation of the basic HRMIS in accordance with the HRMIS manual. The verification sources for this include a third-party verification report (included in the PAD), but such a report was not commissioned. The substantial delay in the final government approvals of the HRMIS manual resulted in a delay in the procurement of a third-party monitoring by the TA team of the Government. As mentioned above, the Grant agreement did not include reference to third-party verification as this was considered optional.

M&E Utilization

58. With the exceptions identified above, the M&E framework was well utilized to track progress and identify implementation issues. The PDO indicators and DLI evidence for the SSMS and HRMIS roll-out as well as the communications activities were regularly discussed, and the project files contain numerous instances when issues were highlighted and activities expedited in response to indicator values and evidence that indicated the Project might not hit upcoming targets on time. Further, now that the SSMS, B-HRMIS, internal notifications system and ILMI are operational, the ELD continues to use the M&E arrangements to monitor that they are generating information regularly on the scale for which they were designed. Indeed, it was the move towards the stable institutionalization of M&E at ELD – still evident to the ICR Team at the time of this writing - that prompted the Bank to upgrade the M&E ISR rating from moderately satisfactory – the rating it had consistently had since the first ISR - to satisfactory in January 2017, where it remained until closure.

¹⁴ With respect to complaints redressal, the data source is ILMI, which only provides data on the redressal of complaints that are escalated for action. However, the vast majority of complaints are addressed immediately at the first level without need for escalation; the indicator in the PAD does not make this distinction. Further, the indicator pertaining to the routing of notifications through the dashboard does not take into account the reach/coverage of the dashboard.



Justification of Overall Rating of Quality of M&E

59. The ICR assigns a substantial rating to the quality of M&E for the following reasons. First, the results indicators identified for the M&E framework (i.e. including the results and monitoring indicators as well as the DLIs) captured the ToC's key results with mechanisms designed for the most part to generate valid, reliable and accurate information on a timely basis; though in some minor cases, the indicators might have been more precisely defined. Second, implementation of the M&E framework improved over time and was generally satisfactory, generating information as needed to monitor implementation progress; though there were moderate shortcomings in terms of conducting planned surveys, generating indicator values, and third-party verifications. Third, the information generated by the M&E framework was the subject of regular discussions, and resulted in course corrections during implementation. Finally, operationalization of the M&E framework particularly for key results has achieved a level of regular use and methodological soundness that are institutionally embedded in ELD, particularly at DG-M&E.

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

60. At preparation, no environmental or social safeguard issues were anticipated; and none appeared during implementation. Therefore, environmental and social risks were rated low in all ISRs, and the safeguards were not monitored or rated.

61. During the first year of implementation, there were delays in bringing the RSU fiduciary team to full strength and capacity, as amplified in Section II.B. In May 2015, the Bank Supervision Team reported that – though designed fiduciary arrangements for the program (S-GPE and SPE-II) were largely in place – there were still vacant positions in the RSU procurement unit leading to negative impacts on procurement compliance and performance. FM team has remained adequately staffed with experienced professionals, and internal control environment was assessed as adequate throughout for project activities. The Bank had advised on strengthening asset management, which was observed as substantially improved during supervision conducted for S-GPE in January 2018. The ISR ratings for FM and procurement were moderately satisfactory throughout. All legal covenants were complied with, including three that pertained to fiduciary matters (compliance with fiduciary guidelines by schools; submission of quarterly Budget Execution Reports, semester Interim Unaudited Financial Reports, and annual Audited Financial Statements; and the maintenance of procurement documentation, including records-keeping, disclosure and complaints mechanism).

C. BANK PERFORMANCE

Quality at Entry

62. The Bank team displayed several strengths when identifying, facilitating the preparation of, and appraising the operation, thus laying a solid foundation for the Project to achieve its planned development outcomes and acting in a manner consistent with the Bank's fiduciary role. The scope of the Project was well integrated into, and defined by, the government's sectoral strategy. The Project was technically well designed. It was tightly focused to address a critical gap in the SESP, and promised to yield benefits in terms of SESP achievements well beyond the cost of its interventions because of the leverage to be gained by improving system governance and accountability. The activities built on national and international good/best practices. The Project was suitably appraised in its



economic and financial dimensions. The fiduciary arrangements were thoroughly appraised, with risks clearly identified and mitigated in design.

63. The implementation arrangements were generally well designed, though arguably the arrangements for HRMIS might have been more critically reviewed at appraisal. Soon after effectiveness, it was decided that it was not legally optimal to implement this activity through the RSU and the ELD notified a new Directorate (for Human Resources and Training). In brief, this now meant that ELD was creating two new Directorates to enable implementation of the Project. This was the right decision, in that ELD needs both these directorates to deliver the SESP's Pillar One to strengthen governance and accountability. However, it did strain ELD's implementation capacities and led to delays particularly for C-HRMIS, and had this been identified at the outset suitable mitigation measures might have been identified.

64. The design of the M&E arrangements was generally satisfactory. The risk assessments were appropriate (and vindicated by experience), as were the mitigation measures. Finally, the proposed Bank inputs and processes were appropriately designed, as they included *inter alia* regular supervision missions and reporting using a team with a broad range of the relevant competencies

Quality of Supervision

65. The Bank's Supervision Team was focused throughout on the three development outcomes of the PDO, as can be seen by the focus of the Aide Memoires on linking implementation performance (of activities) to their impact on the PDO, and the continued dialogue with government to ensure that deadlines were met. The fiduciary aspects were well supervised. The Team identified early on certain shortcomings in fiduciary procedures being used as well as capacity gaps for procurement that were delaying implementation. It supported the implementing agency (IA) to resolve these shortcomings and expedite filling the gaps, such that the issues were cleared up around the start of the second year of the Project; this helped the IA to catch up on implementation, to meet the DLIs with only minor delays thereafter, and to close the Project only three months after the originally scheduled date.

66. The Bank carried out five supervision missions rather than the six that were originally anticipated. Formal missions became unnecessary in that supervision team members were conducting several regular visits (often twice per month) to support technical aspects, giving the Bank a regularly updated picture of implementation. In between the formal missions, the project files reveal extensive communications between the Team and the implementing entities; so that the Team could keep abreast of developments and provide support as and when needed throughout implementation. This was helpful on many different levels, for example facilitating the timely appointment of government officials and productive work relations between the main technical contractors and government departments. The Team responsible for supervision included the necessary range of skills to supervise the Project in terms of technical quality and implementation and fiduciary arrangements. (See Annex 2). Supervision mission findings were communicated clearly to Bank management and to the GoS, both in writing and through meetings with senior GoS officials; and included agreed action points with deadlines that were subsequently monitored and followed up for implementation by the Team. The performance reporting was generally of good quality.



Justification of Overall Rating of Bank Performance

67. The ICR rates the overall Bank performance as satisfactory because at entry the Bank supported the government to achieve a good project design with only minor shortcomings in quality; while during implementation, the Bank provided quality, constant and supportive results-focused supervision with minor shortcomings, contributing to the Project achieving all its PDO targets and disbursing all funds by closure

D. RISK TO DEVELOPMENT OUTCOME

68. The main changes that may put at risk the development outcome have to do with institutional instability and capture, a lack of budgetary resources, and shocks. There is a risk that the ELD, including DGM&E and DHRT, will experience excessive staff turnover, inadequate budgets for MIS operations, and (particularly for DHRT) a lack of senior, stable leadership that is committed to the continued operationalization of the ILMI, SSMS and B-HRMIS. This would prevent the full utility of the ILMI (particularly as a management tool), SSMS or HRMIS from being realized, and further delays would be experienced particularly in stabilizing the use of the B-HRMIS as a rules-based management system, developing and operationalizing a comprehensive HRMIS, and staffing and restructuring the DHRT so that it is fit for purpose. Similarly, there is the risk that the resistance to the ILMI, SSMS and B-HRMIS experienced by ELD (Section III.B.iii) will undermine its commitment to their sustained institutionalization and use. For both risks, the consequences would be felt in such terms as ghost teachers, absentee or absconding teachers, missed opportunities for professional development, overly crowded classrooms, and so forth – with all their attendant negative impacts in terms of education quality and learning, and misallocation of scarce resources.

69. Some of the behaviors that led in part to the creation of the SSMS and HRMIS are at risk of occurring centrally. The pressures that led for example to an irrational distribution of teachers may be felt centrally instead of at district level. If effective, these pressures would undermine some of the higher-level outcomes to which the PDO contributes, but ironically, they would be detected in their effects through the SSMS/HRMIS and thus subject to mitigation or sanction; leadership and professional integrity, including the stabilization of the B-HRMIS using transparent business processes, will be determinative. (See also Annex 6 Section F).

70. More broadly, Pakistan's continued weak economic growth performance and susceptibility to shock threaten to undermine the durability, quality and effectiveness of the new information systems and their executing institutions. Economic lethargy and crises are inevitably felt on a budgetary level, and while the growth in non-salary expenditures under EEPs encouragingly and greatly exceeded Project targets throughout implementation on the other hand the level of salary expenditures was largely stagnant and fell far short. Insofar as future budgetary constraints negatively affect the personnel and other expenditures required continuously to operationalize the information systems, again the full utility of the information systems will not be realized as discussed above. Further, the natural catastrophes and security incidents to which Sindh is prone – aside from their knock-on effect on the economy and hence on budgets – can directly interfere with the SSMS data collection activities and thereby undermine outcome sustainability. These shocks can be severe but they are generally not permanent and so would constitute a punctuated rather than perpetual impact on the operation's development outcome



V. LESSONS AND RECOMMENDATIONS

71. The overall success of the Project was dependent upon client management, ownership and commitment at a senior and central level, underlying which were concerns about *inter alia* teacher absenteeism as a critical factor for student participation and learning, and a conviction that better data were an essential step to finding and implementing solutions. Looking to the future, the pace of consolidating the gains achieved through the Project will similarly be subject to the commitment demonstrated by ELD leadership and senior management. The ELD should commit to the consolidation of the SSMS, B-HRMIS and ILMI, and ensure that the DHRT has stable and strong senior management. Further, considering the resistance created by the MISs and the need for stable and adequate budgets, the ELD should advocate forcefully on their behalf, citing the enormous benefits to be gained in terms of improved efficiencies and more rational resource management from the relatively slight expenditures required for MIS operations.

72. There have been difficulties in fully integrating the SSMS, HRMIS and ILMI databases supported by the Project. These might have been mitigated through an initially designed architecture of ELD data systems detailing how they are to be integrated. The ELD should design this architecture and work further on integration.

73. The SSMS and B-HRMIS databases have yielded information that can be powerfully used for decision-making. While there is already extensive access to much of this information at central and district levels, the work to create dashboards for both systems that make fuller use of the database should be completed. As part of this work, some consideration should be made to widening the range of KPIs, and to identifying certain KPI thresholds or other criteria that must trigger decisions. Finally, the ELD should ensure that suitable and widespread access is granted to decision-makers while building their capacities on dashboard use. A capacity building plan should be formalized and implemented, and may consider the use of personalized coaching and include an articulated training plan on the economics of education, education statistics, education policies, data management, as well as strategic planning, monitoring and evaluation.

74. The enduring success of the SSMS will depend to some extent on the ownership felt by schools. Even though school staff do not actually provide data to the system, they may feel more inclined to cooperate with the FMs if they see benefits from the SSMS. In this regard, decisions that benefit schools and school staff should be communicated in terms that link the decisions to the data that triggered them. Further, enabling public access to SSMS data would enable communities to better understand their schools in a local, district and national context; and this may help to build support for the SSMS.

75. There are insufficient Field Monitors in relation to the amount of information being collected. The ELD should review its collection scheduling for each data field to ensure a reasonable frequency (e.g. infrastructural information need not be collected as frequently as attendance), determine the required number of Monitors, and tailor its FM force accordingly.

76. The DGME has made commendable progress in reporting on monitoring data. In time, it should amplify and deepen the analyses of the data, and accordingly build its capacities to conduct studies, assessments and evaluations. Such services would prove useful to ELD (at all levels), and would create incentives for ELD to retain skilled staff (IT specialists, statisticians and education analysts).



77. The monitoring of individual staff attendance has enabled improved human resource management and created incentives to improve staff performance. A next-generation SSMS may consider the introduction of a unique identifier code for students. This would enable ELD and decentralized authorities to better monitor student enrolment/attendance and performance, establish early warning systems for at-risk children, improve the tracking of disadvantaged groups, and provide a powerful tool for system management.

78. The SSMS, B-HRMIS and internal communications databases are vulnerable to damage through power surges, fire and water. Off-site solutions for regular back-up should be found and implemented.

79. Delays in receiving the batch file from AGC prevent the B-HRMIS database from being reconciled and up-to-date on a continuous basis. The ELD and Finance Department should agree on a policy whereby the AGC systematically provides their database to ELD on a timely, automatic basis.

80. ELD has extensive communications activities that aim to increase awareness and change behaviors, but there is no evidence pertaining to effectiveness. ELD should therefore clarify its key targeted awareness areas and behaviors, determine a baseline, and measure the extent to which communications are effective. This should be twinned with the creation of greater central and field-level capacity to identify issues, create content, and target geographic areas or social strata.



ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
District for which SSMS data of at least 70% of schools is collected by DGM&E	Number	0.00 30-Jun-2014	23.00 27-Jan-2015	23.00 29-Sep-2017	29.00 29-Jan-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Districts for which monitoring data is analyzed and disseminated to ELD management and RROCs	Number	0.00 30-Jun-2014	15.00 27-Jan-2015	15.00 30-Jun-2018	29.00 10-Aug-2017

**Comments (achievements against targets):**

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of Districts that have submitted HRMIS reports to ELD	Number	0.00	23.00	23.00	29.00
		30-Jun-2014	27-Jan-2015	30-Jun-2018	10-Aug-2017

Comments (achievements against targets):**A.2 Intermediate Results Indicators****Component: System strengthening**

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Education Sector Salary Expenditure	Number	75654.00	92679.00	92679.00	79482.00
		30-Jun-2014	27-Jan-2015	30-Jun-2018	28-Apr-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Non-Salary Expenditure	Number	267.00	696.00	696.00	1054.00



		30-Jun-2014	27-Jan-2015	30-Jun-2018	28-Apr-2017
Comments (achievements against targets):					

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Official notifications of ELD/RSU routed through Dashboard	Percentage	0.00	60.00	60.00	80.00
		30-Jun-2014	27-Jan-2015	30-Jun-2018	10-Aug-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Complaint redressal	Percentage	0.00	50.00	50.00	100.00
		30-Jun-2014	27-Jan-2015	30-Jun-2018	10-Aug-2017

Comments (achievements against targets):

Unlinked Indicators

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of Students	Percentage	3799.00	4962.00	4962.00	4260.00



		30-Jun-2014	27-Jan-2015	30-Jun-2018	10-Aug-2017
Percentage of Females students	Percentage	42.00	44.00	44.00	42.00
		30-Jun-2014	27-Jan-2015	30-Jun-2018	10-Jan-2017
Comments (achievements against targets): This is in numbers, erroneously indicated as percentage in previous ISR.					

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Awareness and Understanding of Reforms	Text	No stakeholder survey	Two stakeholder surveys	two stakeholder surveys are expected to be completed	One stakeholder survey completed
		30-Jun-2014	27-Jan-2015	30-Jun-2018	10-Aug-2017
Comments (achievements against targets):					



B. KEY OUTPUTS BY COMPONENT

Objective/Outcome 1 Strengthened institutional capacity to generate information	
Outcome Indicators	<ol style="list-style-type: none"> 1. Set up a mechanism to regularly collect and report on key school-level indicators 2. Establish mechanism to compile, analyze, improve and use data to strengthen evidence based human resource management.
Intermediate Results Indicators	<ol style="list-style-type: none"> 1. 1. Districts for which SSMS data of at least 70% of public schools is collected by DGM&E. 2. Number of Districts which submitted HRMIS reports to ELD.
Key Outputs by Component (linked to the achievement of the Objective/Outcome 1)	<ol style="list-style-type: none"> 1. Biometric profiling of all government employees in the Education Department 2. Actions initiated against absentee and absconding teachers 3. Non-functional school identified 4. School infrastructure improvements initiated based on school monitoring data 5. A web-based information sharing and grievance redressal system established
Objective/Outcome 2 Strengthened institutional capacity to disseminate information	
Outcome Indicators	<ol style="list-style-type: none"> 1. Reliable and timely information dissemination system established
Intermediate Results Indicators	<ol style="list-style-type: none"> 1. Regular school level reports produced by the DGME through independent monitors and submitted to district level review committees 2. Employee data base reviewed by HRMIS team for discrepancy and reports shared with the districts for corrections.



	3.Web/SSMS based communication system and grievance redressal system established
Key Outputs by Component (linked to the achievement of the Objective/Outcome 2)	<ol style="list-style-type: none"> 1. School monitoring reports prepared and disseminated to the district 2. A dashboard for reporting school level data established for department’s internal use
Objective/Outcome 2 Strengthened institutional capacity to use information	
Outcome Indicators	1.Improving the effectiveness of communication among internal and external stakeholders to facilitate the design and implementation of reforms
Intermediate Results Indicators	1. Complaints received through web-based complaints management system to be resolved within 90 days
Key Outputs by Component (linked to the achievement of the Objective/Outcome 2)	<ol style="list-style-type: none"> 1. Actions initiated against absentee and absconding teachers 2. Non-functional school identified 3. School infrastructure improvements initiated based on school monitoring data 4. Discrepancies in human resource data removed 5. Stakeholders complaints received through SMS and Web based systems resolved

**ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION****A. TASK TEAM MEMBERS**

Name	Role
Preparation	
Supervision/ICR	
Umbreen Arif	Task Team Leader(s)
Uzma Sadaf	Procurement Specialist(s)
Syed Waseem Abbas Kazmi	Financial Management Specialist
Anwar Ali Bhatti	Team Member
Subooh Fatima	Team Member
Amna W. Mir	Team Member
Salma Omar	Social Safeguards Specialist
Shahzad Sharjeel	Team Member
Haider Raza	Procurement Specialist
Seble Berhanu	Counsel
Juan Carlos Alvarez	Counsel
Rahat Jabeen	Environmental Safeguards Specialist
Umar Nadeem	Consultant
Mirza Omer Baig	Financial Management Specialist
Ali Inam	Consultant

B. STAFF TIME AND COST

Stage of Project Cycle	Staff Time and Cost	
	No. of staff weeks	US\$ (including travel and consultant costs)
Preparation		
FY14	28.775	198,720.09



FY15	0	27,920.41
FY16	0	73,000.04
Total	28.78	299,640.54
Supervision/ICR		
FY15	5.000	44,580.40
FY16	53.675	158,841.29
FY17	44.665	176,140.05
FY18	17.084	118,180.30
Total	120.42	497,742.04



ANNEX 3. PROJECT COST BY COMPONENT

Components	Amount at Approval (US\$M)	Actual at Project Closing (US\$M)	Percentage of Approval (US\$M)
Component 1 - Systems Strengthening Component. The event and amount of project disbursements will be contingent on the satisfactory achievement of Disbursement Linked Indicators (DLIs).	59.00	59.00	100
Component 2 - Program Support Component. This component will fund important technical, advisory, and capacity-building support to develop, implement, and monitor the focus areas under SGPE.	7.00	6.73	96
Total	66.00	65.73	99.6



ANNEX 4. EFFICIENCY ANALYSIS

Economic Analysis

This economic analysis presents a Cost Benefit Analysis of S-GPE using the present discounted value method. Economic costs and benefits are estimated over the life of the project relative to a counterfactual. The net effects of S-GPE are estimated as the incremental benefits accruing to a representative child (private returns to schooling) because of the effects induced by the program. The NPV of expected economic benefits of primary and secondary schooling are derived by estimating average labor earnings for individuals that are 10 years and above.

Costs include ELDs budget expenditure, project disbursements, and private costs which include direct household expenditure and opportunity costs of schooling over the project period. Economic benefits were derived from (a) the number of additional primary school completers in public schools earning higher wages relative to non-completers, and (b) improved quality and relevance of education resulting in a higher productivity premium for all primary school completers, relative to the counterfactual (assuming no Sindh GPE).

The following assumptions and data sources were used to estimate the net present value (NPV) of program benefits, the benefit-to-cost ratio, and the IRR for S-GPE:

- Public school primary¹⁵ enrollment data are from the SEMIS Census data from 2015 through to 2017. The counterfactual scenario assumes that enrollment decreases based on previous year trends over the project period.
- It is assumed that the impact of project interventions began materializing in the second year of the project (as implementation picked up pace and monitoring activities scaled up across the province) and higher-level results based on the systems improvements are expected to be achieved in the medium term. For the counterfactual scenario (without the Sindh GPE intervention), it is assumed that the completion rates for years 2 and 3 of the project would have remained at the same levels as year 1 of the project. Enrollment and completion rates for year 3 of the project had to be extrapolated given that the latest census data was not available. It is assumed that completion rates for year 3 of the project would be the same as year 2 of the project (with the Sindh GPE intervention).
- Costs include non-salary and development public expenditures on primary and secondary. The analysis is based on the incremental benefits associated with the project therefore on the cost side focuses only on the expected incremental cost associated with the project. As a result, it is assumed that recurrent salary costs would have been met regardless of the program intervention, and that non-salary recurrent and development expenditures are part of the additional investments required to support the project.
- Private per child household outlays on education are calculated using PSLM survey data 2014–15, by calculating the average annual expenditure per child on education for primary. On average,

¹⁵ It is assumed that the benefits under the Project were mostly related to increased primary school completion given that the highest share of schools in the province are primary schools and that the issues of absconder teachers and schools were more widespread at the primary level and that the overall focus of SESP was on the primary level of education. Therefore, benefits are expected to materialize mostly at the primary level.



households spend approximately US\$16 per year for children enrolled in primary grades. It is assumed that 4 percent of primary school-age children would have been engaged in paid labor had they not enrolled in school, based on the labor force participation rates (ages 10-12) derived from PSLM survey data (2014–15).

- Lifetime labor earnings are estimated using the PSLM survey data (2014–15) to determine benefits due to increased earnings for both primary completers. Lifetime earnings are calculated for people who have attained education less than primary and those who have completed primary over a period of 23 years and wage premiums are calculated for primary versus non-primary completers. It is assumed that the improvements in the governance and accountability have improved quality of education (through reduced teacher absenteeism) that during the project period will result in a 3 percent productivity premium for primary school completers over the existing wage premium (in the sensitivity analysis, 2 percent is assumed for the low case while 4 percent is assumed for the high case). Labor force participation (LFP) rates are assumed to be 43.6 percent for primary completers in the base case, based on LFP rates calculated using PSLM 2014–15. For the sensitivity analysis, LFP rates are assumed to be 40 percent (for the low case) and 46 percent (for the high case).
- The discount rate assumed for this analysis is 10 percent, while inflation is assumed to be 7 percent per year (based on a three-year average of the consumer price index).

Based on the assumptions above, the Net Present Value and Internal Rate of Return for the Sindh GPE were calculated as PKR 5,185 and 12% respectively. The sensitivity analysis below shows NPV and IRR under the base, low, and high case scenarios. The NPV ranges from PKR 1,411 to 8,524 and the IRR ranges from 12 percent to 14 percent.

Table 1: Sensitivity Analysis

	NPV (USD Million)			Internal Rate of Return		
	LFP Base Case	LFP Low Case	LFP High Case	LFP Base Case	LFP Low Case	LFP High Case
Quality Premium base case	5,185	3,116	6,564	12%	12%	13%
Quality premium low case	3,326	1,411	4,603	12%	11%	12%
Quality premium high case	7,043	4,821	8,524	13%	12%	14%

Implementation Efficiency

In terms of implementation efficiency, the project did not have any cost-over runs. There was an extension¹⁶ of 3 months to the closing date for the completion of remaining contractual activities (procurement and financial) to ensure orderly closing. The project did face delays in the first half of implementation cycle due to inefficient procurement management by the team and delays in hiring of a procurement specialist in RSU. However, most of the procurement issues were resolved in the latter half of the project.

¹⁶ Although the project had achieved all major milestones identified in the Disbursement Linked Indicator (DLI) table and was on track to achieve the two lagging DLI's before the closing date of September 29, 2017, the Government of Sindh had requested an extension of the closing date by three months to ensure that all contractual activities under the technical assistance could be completed to fully meet objectives of the project.



Financial Analysis

As discussed in the PAD, the findings of the ICR endorse that the project will have a positive fiscal impact beyond the implementation period. The mechanisms established through the project – SSMS, HRMIS, and internal and external communications mechanisms - continue to function effectively based on the findings of the ICR mission. A large proportion of the activities under the project were financed through public funds. As the project had a very small share in the overall implementation these mechanism, these expenditures continue to be funded through the government budget. Project costs and related future government expenditure comprise a small fraction of the savings generated through improved internal efficiency because of the implementation of these activities. The results of the initial benefits of one key intervention – Sindh School Monitoring System. The GPE grant funds were less than 1% of the total costs required for implementation of Sindh Education Sector Plan.

Public Education Expenditure Trends, GoSindh (PKR, millions)

	2014-15	2015-16	2016-17	2017-18*
ELD Salary Expenditure	80,099,448,123	88,336,141,013	94,480,402,790	87,870,218,952
ELD Non-salary + Development Expenditure	7,507,416,989	11,325,642,092	1,268,876,290	872,812,147
Total ELD Expenditure	87,606,865,112	99,661,783,105	95,749,279,080	88,743,031,099
Overall ELD Budget Execution Rate	92%	95%	93%	75%

*data up to April 2018



ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

Summary of Comments received from the Borrower: Project objectives and design are assessed to be aligned with Pakistan’s key education objectives, including the implementation of Article 25A of the Constitution that mandates the provision of free and compulsory education to all children the age of five to sixteen years. The project is fully aligned with the SESP, as well as with key pillars of the World Bank Country Partnership Strategy 2015-2019.

Positive externalities associated with the provision of basic education justify its public provision, particularly as the poor and marginalized are the largest users of the public education system. The proposed project objectives and interventions are justified, as they aim to achieve a maximum, positive impact on overall SESP implementation and on contributing to S-GPE objectives, considering the relatively modest amount of S-GPE funding in relation to the overall education sector budget of Sindh.

The technical review of S-GPE indicates that the design principles used and selection of reforms appear to be sound and in line with the sectoral context. The interventions under S-GPE are expected to strengthen the institutional capacity that will enhance the impact of reform activities supported by SEP II and planned reforms under the SESP. The use of enhanced technology to implement reforms supported by the Project – both related to data generation and their dissemination to a broad range of stakeholders including civil society - is considered an appropriate and cost-efficient approach to create a more conducive environment for improved governance and both internal and external (social) accountability. The activities supported by S-GPE will, on the medium term, structurally and positively affect school participation and quality by improving the efficient use of education sector expenditures through strengthening governance and accountability. The Project particularly targets teachers as they are widely accepted to be the most critical inputs to the education system and because employee-related expenditures absorb around 85 percent of total public expenditures on primary and secondary education. The technical content of the Project has the endorsement of the Local Education Group and is in line the Bank’s Country Partnership Framework 2015-2019 (currently under development).

Availability and use of reliable, relevant information. Two interventions under the S-GPE, i.e. the establishment of the SSMS and HRMIS, aim to address system weaknesses related to the lack of regularly updated, accurate data on key-school level indicators to inform evidence-based interventions and policy-reforms, as well as the absence of a mechanism to provide accurate and timely information on human resources in the education sector. To promote governance and accountability in the sector, data will be collected by independent monitors under the SSMS. The key elements of the HRMIS are to address the substantial weaknesses constraining effective management of teaching and non-teaching staff.

Use of information and improved communications. To promote the design, implementation, and monitoring of key reforms under SESP, the Project includes a string of activities related to information and communications. This reform area is intended to promote the use of available data for decision-making, generate awareness regarding the SESP, and assist in its monitoring. It also includes the establishment of a web-based complaints redressal system and the streamlining of internal communications within the ELD.



The project's primary implementing agency was the Reform Support Unit, working in close consultation with local education offices. Implementation progress remained satisfactory throughout the project period. For Component 1 the SELD met all the DLIs with some minor delays. The following main factors positively affected the implementation of SGPE.

Periodic meetings between the Bank and SELD/RSU and stakeholders at the district level facilitated steady implementation progress in most aspects of SGPE. Most of actions regarding the core components were taken up in quarterly meetings. In case of troubleshooting focal persons from the World Bank were reached out effectively.

The Project's development objectives were to support the Government of Sindh in System strengthening at multiple levels. Achievement of these objectives was to be measured using four PDO level indicators. These indicators included: Improved availability of information, Improved dissemination of information, Improved use of information through the effective use of data collected by Sindh School Monitoring System (SSMS), HRMIS, the key reform sub-program under SGPE and their associated DLIs, linking results to disbursements, were closely connected with the intermediate output indicator. There was a significant decrease in teacher absenteeism due to the bio-metric system, provision of real time accurate data on school level indicators over the project period. At project completion, PDO level results indicators were met.



ANNEX 6. SUPPORTING DOCUMENTS (IF ANY)

Section A- Key characteristics of SSMS, HRMIS and Communications as explained in the PAD

i) Sindh School Monitoring System (SSMS):

- Monthly data collection directly from primary, secondary and high schools by independent monitors contracted by, and under the responsibility of, the DGM&E.
- Timely generation, analysis and dissemination of data including key indicators (e.g. student enrolment and student/teacher attendance), to allow monitoring of trends and ‘real-time’ response by stakeholders, both internal (e.g. ELD management, RROCs and schools) and external (e.g. the public and participants of annual SESP review meetings).

(ii) Human Resources Management Information System (HRMIS):

- Initial focus on operationalizing a basic HRMIS that would compile and reconcile available teacher-related data (including the SSMS, once operational) to improve data quality and compliance with HR policies, to be used for evidence-based decision-making pertaining to *inter alia* teacher recruitment, placement and transfers.
- Development of first stages of a comprehensive, web-based and fully automated HRMIS for all ELD staff. This was to culminate in the development of bidding documents for HRMIS design implementation and operationalization.

(iii) Communications:

- Design and implementation of communications strategy with time-bound plan
- Annual SESP implementation reviews
- Roll-out of web-based dashboard for ELD/RSU and districts/LSU
- Establishment of web-based complaints management and redressal system.

Section B - Disbursement Linked Indicators

DLI Reform Area	FY 14/15	FY 15/16	FY 16/17
1: SSMS establishment	The DG M&E has produced at least one monthly report, as set forth in the SMS Manual, for each of the 5 districts agreed with the WB	(i) The DG M&E has produced at least four monthly reports, as set forth in the SMS Manual, for each of the 15 districts agreed with the WB; and transmitted all monthly reports produced to the relevant RROCs; and (ii) DG M&E has prepared an annual report, as set forth in the SMS Manual, demonstrating the key district	(i) The DG M&E has produced at least four monthly reports, as set forth in the SMS Manual, for each of the 23 districts agreed with the WB; and transmitted all monthly reports produced to the relevant RROCs; and (ii) DG M&E has prepared an annual report, as set forth in the SMS Manual, demonstrating the key district



DLI Reform Area	FY 14/15	FY 15/16	FY 16/17
		trends and challenges over the previous 12 months (based on the data from the 5 selected districts); and ELD has convened a meeting with district and provincial officials (specified in the SMS Manual) to review such report; and (iii) ELD has published the aforementioned annual report following the review thereof.	trends and challenges over the previous 12 months (based on the data from the 15 selected districts), as well as corrective actions taken to address challenges identified in the annual report for FY 15/16; and ELD has convened a meeting with district and provincial officials (specified in the SMS Manual) to review such report; and (iii) ELD has published the aforementioned annual report following the review thereof.
2: SSMS use	Sindh/ELD has revised the ToRs of the RROCs to include actions/responsibilities related to the use of the Sindh’s school monitoring system data	Each RROC has held at least three meetings to discuss the monthly reports transmitted by DG M&E and determined/monitored corrective actions taken to address the challenges identified by said reports; and has informed ELD of these meetings, accordingly.	Each RROC has held at least three meetings to discuss the monthly reports transmitted by DG M&E and determined/monitored corrective actions taken to address the challenges identified by said reports; and has informed ELD of these meetings, accordingly.
3: HRMIS	ELD has approved the HRMIS Manual; and operationalized the basic HRMIS with the appropriate software, dashboards, input of existing data and the provision of training to the relevant staff.	RSU has implemented the basic HRMIS in accordance with the HRMIS manual.	(i) RSU has implemented the basic HRMIS in accordance with the HRMIS manual; and (ii) RSU has prepared the bidding document(s) for the procurement of the comprehensive HRMIS.
4: Strengthening Communication	(i) ELD has approved a communications strategy and a time-bound plan for its implementation; and (ii) ELD has organized an annual review of the implementation of SESP with internal and external stakeholders; and	(i) ELD has completed all activities for the implementation of the communications strategy under the time-bound plan, including an annual review of implementation of SESP with internal and external stakeholders; and (ii) As of May 2016, at least 40% of the official annual notifications of ELD/RSU/LSU	(i) ELD has completed all activities for the implementation of the communications strategy under the time-bound plan, including an annual review of implementation of SESP with internal and external stakeholders; and (ii) As of May 2016, at least 60% of the official annual notifications of ELD/RSU/LSU



DLI Reform Area	FY 14/15	FY 15/16	FY 16/17
	(iii) ELD has deployed a web-based internal communication platform with an integrated complaints management system.	are routed through the internal communication platform; and (iii) ELD has implemented a pilot expansion of its management system, for the purpose of receiving, managing, validating and redressing complaints from selected communities in 3 districts agree with the World Bank.	are routed through the internal communication platform; and (iii) ELD has responded to at least 50% of all the complaints received from internal stakeholders within FY 2016/17 through the web-based complaints redressal system within ninety (90) days from the date of receipt.

Section C - Relevance of PDOs to CPS and SESP

This section amplifies the linkages between the PDOs, the CPS and the SESP.

The PDOs directly support CPS outcome 4.4 (Adoption of Performance and Transparency Mechanisms in Selected Institutions) of Results Area 4 (Service Delivery). The information systems (pertaining to school operations, human resources and complaints processing) developed by the Project to generate, disseminate and use information are institutional mechanisms of performance and transparency. The PDOs also directly supported the SESP Pillar 1, which aims to strengthen governance and accountability to improve service delivery and achieve desired educational outcomes;¹⁷ and is directly aligned to CPS outcome 4.4. In particular, the Project’s PDOs constitute three of the eight strategic results for SESP Pillar 1: to develop/establish an independent data collection and monitoring system; to effectively manage and hold accountable HR; and to increase transparency and involvement of stakeholders in decision-making.

The PDOs indirectly support CPS outcome 4.3 (Increased School Enrollment and Adoption of Education Quality Assessment) and, under CPS Results Area 3 (Inclusion), outcome 3.2 (Reduced Vulnerability for Groups at Risk). The PDOs support these CPS outcomes in an indirect manner because of how the PDOs are embedded within the SESP. The SESP is an integrated strategy with four pillars with an overall objective to increase education coverage, completion and mastery. By directly supporting one of these pillars (Pillar 1), the PDOs also help to enable the success of the other pillars.¹⁸ The other pillars relevant to the CPS and that are particularly enabled by Pillar 1 are Pillar 2 (Enhanced Equity in Education Access and Participation) and Pillar 3 (Improved Quality and Student Learning Outcomes). These pillars focus on measures to improve access/participation, quality and learning outcomes at primary and secondary levels in Sindh; and include specific attention on the need to address disparities at all levels, including gender. The former are the explicit focus of CPS outcome 4.3, while the latter is aligned to CPS outcome 3.2, which highlights interventions to ensure women and girls have increased access to services including education.

¹⁷ SESP, p. 60.

¹⁸ The others are Pillar 2 (Enhanced Equity in Education Access and Participation), Pillar 3 (Improved Quality and Student Learning Outcomes) and Pillar 4 (Sustainable Sector Financing).



Section D - Characteristics of SSMS

During implementation, the SSMS and B-HRMIS adhered to the characteristics provided in the PAD (Section C), and are described more fully here.

SSMS

The SSMS has two main elements: data collection, and reports generation/dissemination. The data is collected regularly directly from schools, generally on a monthly basis for each school. The data is collected by independent Field Monitors (FMs) who visit a number of schools each day which are selected that morning by the system on a random basis (so that schools do not know in advance when they will be visited). The FMs collect data on four main elements: school status, staff (teaching and non-teaching), students, and facilities. For school status, the FM records whether the school is operational or closed (whether on a temporary or permanent basis). For staff, their presence is recorded biometrically (using a fingerprint scanner) against the official register of staff posted to the school. For students, the attendance is recorded based on a headcount (done by the FM) against the school enrolment register; enrolment is also recorded. (Students are not identified individually by the FM, nor is there an electronic database available to the FM of enrolled students individually identified). For facilities, the FMs record (and photograph) their observations pertaining to the availability and status of certain infrastructure, furniture, utilities and facilities, i.e. the boundary wall, furniture, electricity, washroom and drinking water. The data are entered on electronic tablets, and immediately uploaded to the SSMS database. The FMs report to the Chief Monitoring Officer of the District Monitoring Office, which in turn reports directly to DGME.

The DGME generates monthly district-wise print reports that are disseminated to the Secretary (ELD), RROCs and all District Education Offices. The reports include the value of the indicators pertaining to the four elements identified above, e.g. percentage of schools open/closed, teacher and non-teacher attendance rates (identifying also rates for absconding, leave and other situations), student enrollment and attendance rates (broken down by gender), and percentage of missing facilities; and are supplemented with annexes of detailed and disaggregated information. The reports also include supplementary information, such as the number of schools with a single-teacher; as well as recommendations for action. All districts have access to the most highly disaggregated information, enabling them to parse their reports in order to identify (as the case may be) which sub-districts, schools, or staff member require attention for decision-making. As noted in Section II.B, DGME has developed a dashboard that enables access to all data and indicators at any level of disaggregation; once made accessible to users, the dashboard will be a powerful tool for decision-makers at all levels.

In accordance with the PDO indicator for the first outcome, the SSMS is indicative of strengthened capacity to generate information supportive of reforms implementation, in that:

- It generates data monthly that prior to the project either became available only annually (e.g. enrollment, status of infrastructure) or was not available at all (e.g. student/teacher attendance).
- The data are more reliable and revealing, in that they are collected by independent monitors (rather than being self-reported, as is the case of the annual census conducted for SEMIS) and include pictorial evidence (particularly useful for infrastructure).
- Each school is visited for data collection at least once every two months, and the data are uploaded immediately.



- The data covers a range of school-level inputs and process data that are needed to improve sector management and reforms implementation, e.g. essential facilities, student enrolment and attendance, and teacher attendance (biometrically validated).
- The data are made available in an informative format. Indicators and time series can be generated, and information can be aggregated and disaggregated (including to the school) in ways that enable decision-makers at different levels to act. Detailed data records can also be generated, as needed; this can be useful e.g. for human resources management.

B-HRMIS

The B-HRMIS has two elements: a rolling (i.e. continuously brought up-to-date) database of all staff (teaching and non-teaching) at district and sub-district level; and the generation of reports for the purpose of human resources management. The database was generated by the re-registration of all teaching and non-teaching staff, including all key characteristics of the staff member (e.g. position and grade, years of service, identification number, and so forth); as well as the recording of biometric data (photograph and fingerprints). New entrants are registered when they enter the system, and the records of those leaving (e.g. retirees) are adjusted as and when they leave. The database is regularly reconciled with the payroll database held by the AGC.

The reports generated are typical of an HRMIS, and include such reports as superannuation, dismissal, transfers, recruitment and vacancies. The full list can be found in Section –

Section E- Other instances of Information Dissemination

The Project resulted in the dissemination of information beyond what is captured by the PDO indicator, including:

- Information pertaining to a range of SESP issues, e.g.: the SESP itself (for the public), biometrics (for sectoral staff), school consolidation (for affected communities), the importance of literacy (for teachers and public), girls education and the availability of girls' stipends (for parents), the results of standardized achievement tests, disaster readiness for schools, and early childhood education. The range of informational issues reflects the scope of the SESP, and indicates the extent to which the Project was an integral part of the SESP. The dissemination was done through a wide range of channels, including the ELD website, Facebook (38,000 followers), YouTube, Twitter, radio, press releases, and quarterly reports. Information was disseminated in print, audio and audiovisual formats.
- Three Annual Reviews of SESP implementation, involving both internal and external stakeholders.
- The creation and operation of a web-based internal communications platform. The platform was piloted and deployed and by closure was able to route all ELD/RSU/LSU official notifications through its Dashboard, as well as provide users with other forms of communication (e.g. email, web-based chats and fora, and common-use calendars). The ELD plans to register approximately 20,000 users (all ELD managerial and administrative staff at central and local levels, as well as all Headteachers).



- The creation and operation of a SMS-based help and complaints redressal service ('ILMI') that also disseminates information for use. (See also third PDO, Section II.B)
- Detailed information pertaining to human resources disseminated for management purposes. (See also third PDO, Section II.B)

Section F- Consolidating B-HRMIS at ELD

The DHRT and the Data Centre at ELD use two reports generators, one of which was developed with TA support (Sapphire) financed through Component Two and the other by Data Centre staff. The list of reports generated by the two generators are provided below. The Sapphire software was used to generate the list of discrepant files (between the ELD and AGC staff databases), and both software have been used by ELD to identify absconders, manage transfers and so forth (see Section II.B). However, the Sapphire software seems to have more elaborate protocols for business processes (including a hierarchy of access permissions and an audit trail), to be properly documented, and to be more user-friendly for decision-makers. Going forward, it would be useful for DHRT to clarify the different usages of both software, to ensure that the updated database is operational within the Sapphire software, and to ensure that both have the requisite protocols and proper documentation. Further, greater access to a consolidated and user-friendly software should be granted to decision-makers at local levels, providing them with capacity in usage as needed.

Sapphire reports

S. No.	Report Name	Title
1	Superannuation	Retired
2		Retiring
3		HM Superannuation
4		DEO Superannuation
5		ELD Secretariat superannuation
6		Workforce planning: superannuation
7	Dismissal	Districts: Overall
8		Districts: School staff
9		Districts: Non-school staff
10		Districts: School staff - Teachers
11		Districts: School staff - Non-teachers
12		ELD Secretariat dismissals
13	Expiry	Expiry
14	Promotions	Promotions
15		Upcoming Promotions
16	Transfers	Transfers
17	Recruitment	Districts: Hiring
18		ELD Secretariat: Hiring
19		Recruitment Source
20		Timeline



S. No.	Report Name	Title
21	Vacant vs filled seats	UC level
22		Taluqa level
23		District level
24		BPS level
25		Vacant for more than 6 months
26	Absent	>60%
27	Absconders	Districts
28	Attendance	Calendar
29	Leaves	Districts
30		Leave Types
31	Actions Taken	Absentee staff
32		Absconders
33	Information Reports	Gender
34		BPS level
35		Time scale
36		Agewise Summary
37		Qualification Based Report
38		District totals
39		ELD Secretariat
40		School / Non-school totals
41		Teaching / Non-teaching totals
42		Teachers by Medium
43		Teachers by BPS
44		Teachers by Time scale
44	Payroll Reports	Salary bands
45		Salary increments
46		Budget
47		Absentee staff
48		Absconders
49	Discrepancy Report	DO Discrepancy Report

In-house reports generator (follows on next pages)



Home

- Create User
- Change Password
- User List
- Exit

Date Entry

- Student Registration Form
- School Teacher Entry Form
- DEO Staff Entry Form
- Teacher Transfer
- College Student Registration Form

Teaching Cadre

- School Employee Search
- Employee Search By SEMIS Code
- Employee Search By CNIC & Personnel Id
- Employee Search By Name
- NTS Joining Database
- NTS Joining Database PDF Report
- Employee Transfer Report
- Schools Monitoring Report
- HM Recruited(Round-I)



School

- School Census Form
- School Search Report
- School Consolidation Report

Attendance

- Biometric Users Attendance
- Biometric Users Attendance (Date Wise)
- ETS Attendance
- Attendance Report (Monitoring & Evaluation)

Graph

- Student CBRC Graph
- School Teachers Graph (Bar Chart)
- School Teachers Graph (Pie Chart)
- Student Enrollment (Schools Wise)
- Student Enrollment By Taluka (Line Chart)
- Student Enrollment Provincial Graph (Schools)
- Student Enrollment District Graph (Schools)
- Student No Teachers Graph
- School Without SemisCode Graph
- Total District Wise School Graph
- NTS Teachers Graph (Salary Released)
- NTS Teachers Graph (Appointment Orders Issued)
- College Graph
- District Wise Lecturers Graph
- Province Wise Lecturers Subject Graph
- Province Wise Lecturers Designation Graph
- Payroll (AG) vs Biometrics (ELD) (Schools)
- Payroll (AG) vs Biometrics (ELD) (College)
- Schools/Colleges Biometrics Graph
- Attendance Graph



Progress Report

- Absentee Teachers Report
- Closed School Report
- Schools Without Teaching Staff
- School Inspection Report
- Biometrics Inspection Report
- File Uploads SEMIS Code Wise
- Student Teacher Ratio (STR)

Payroll

- Payroll Graph (School Side)
- Payroll Graph (College Side)
- School Payroll Report (Cost Center)
- Payroll Search Report

Enrollment

- Student Enrollment District Wise
- Student Enrollment By SEMIS
- Entry Report

Admin Pannel

- Attachment (STR Process)