#### Document of

# The World Bank FOR OFFICIAL USE ONLY

Report No: ICR00004401

# IMPLEMENTATION COMPLETION AND RESULTS REPORT

ON A

CREDIT (IDA-49990)

IN THE AMOUNT OF SDR187.5 MILLION

(US\$300 MILLION EQUIVALENT)

AND AN ADDITIONAL CREDIT (IDA-55520)

IN THE AMOUNT OF SDR269.8 MILLION

(US\$400 MILLION EQUIVALENT)

AND A GLOBAL PARTHERSHIP FOR EDUCATION GRANT (TF-A0977)

IN THE AMOUNT OF US\$100 MILLION

TO THE

PEOPLE'S REPUBLIC OF BANGLADESH

FOR THE

BANGLADESH - PRIMARY EDUCATION DEVELOPMENT PROGRAM III (P113435)

June 21, 2018

Education Global Practice South Asia Region

#### **CURRENCY EQUIVALENTS**

(Exchange Rate Effective as of May 6, 2018)

Currency Unit = Bangladesh Taka

BDT 84.66= US\$1

US\$0.6988 = SDR 1

FISCAL YEAR
July 1 - June 30

#### ABBREVIATIONS AND ACRONYMS

ADB Asian Development Bank
AF Additional financing
AOP Annual operation plan

APSC Annual primary school census ASPR Annual Sector Performance Report

AT Assistant teacher

AUSAID Australia Agency for International Development

BANBEIS Bangladesh Bureau of Educational Information and Statistics

BNFE Bureau of Non-Formal Education
CAS Country Assistance Strategy

CIDA Canadian International Development Agency

CPF Country Partnership Framework

DFID United Kingdom Department of international Development

DLIs Disbursement linked indicators

DPs Development partners

DPE Directorate of Primary Education

DPEd Diploma in education

DPHE Department of Public Health and Engineering

EC European Commission

EMIS Education management information system

FA Financing Agreement
GoB Government of Bangladesh
GPE Global Partnership for Education
GPS Government primary schools

ICR Implementation Completion and Results
ICT Information and communication technology
IDA International Development Association
IfR Interim unaudited financial report

IR Intermediate results
IRR Internal rate of return

ISR Implementation Supervision and Results Report

JARM Joint Annual Review Mission
JCM Joint Consultative Meeting
JFA Joint Financial Agreement

JICA Japan International Cooperation Agency

KPI Key performance indicators

LGED Local Government Engineering Department

M&E Monitoring and evaluation MoF Ministry of Finance

MoPA Ministry of Public Administration
MoPME Ministry of Primary and Mass Education

MTR Mid-term review

NAPE National Academy of Primary Education NCTB National Curriculum and Textbook Board

NEP National Education Policy NER Net enrollment rates

NGO Non-governmental organization

NNGPS Newly nationalized government primary schools

NSA National student assessment

NSAPR-II Second National Strategy for Accelerated Poverty Reduction

ODCB Organization Development and Capacity Building

PAD Project Appraisal Document

PBFD Performance-based financing and disbursement

PDOs Program development objectives
PECE Primary education completion exam

PEDP3 Third Primary Education Development Program

PPE Pre-primary education PSO Program Support Office

PSQL Primary school quality level indicator

PSU Program Surveillance Unit

PTIs Primary Teacher Training Institutes
QLEAP Quality of Learning for All Program

RBM Results-based management

RF Results framework

RNGPS Registered non-government primary schools

SCE Second Chance Education

SIDA Swedish International Development Agency

SLIP School level improvement plan SMC School management committee

SSC Tenth grade certificate SWAp Sector wide approach

UNICEF United Nations Children's Fund UPEP Upazila primary education plan WASH Water and Sanitary Hygiene

WB World Bank
WG Working group

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**Project** 

P150669-AF

Program III

Bangladesh - Primary Education Development

#### **DATA SHEET**

BASIC INFORMATION	
Product Information	
Project ID	Project Name
P113435	Bangladesh - Primary Education Development Program III
Country	Financing Instrument
Bangladesh	Investment Project Financing
Original EA Category	Revised EA Category
Partial Assessment (B)	Partial Assessment (B)
Related Projects	
netated 1. ojesta	

# Organizations

Relationship

**Additional Financing** 

Borrower	Implementing Agency
People's Republic of Bangladesh	Ministry of Primary and Mass Education

**Approval** 

16-Dec-2014

**Product Line** 

IBRD/IDA

### **Project Development Objective (PDO)**

#### Original PDO

Project Development objectives are to (i) increase participation and reduce social disparities in primary education, (ii) increase the number of children completing primary education and improve the quality of the learning environment and measurement of student learning, and (iii) improve effectiveness of resource use for primary education.

		inal Amount (US\$)	Revised Amount (US\$)	Actual Disbursed (US\$
World Bank Fina	ncing			
IDA-49990		300,000,000	291,540,657	269,603,37
IDA-55520		400,000,000	368,165,399	349,515,37
TF-A0977		100,000,000	90,833,333	90,833,33
Total		800,000,000	750,539,389	709,952,07
Non-World Bank	Financing			
Borrower		4,950,600,000	6,200,000,000	5,222,649,15
Asian Developme	ent Bank	320,000,000	440,000,000	411,630,00
AUSTRALIA: Aust Agency for Intern Development	national	28,000,000	28,000,000	33,727,50
CANADA: Canadia International Dev Agency (CIDA) UK: British Depar	velopment	48,000,000	48,000,000	49,920,00
International Dev (DFID)		110,000,000	110,000,000	146,475,00
EC: European Cor	mmission	55,000,000	100,000,000	104,430,00
JAPAN: Japan Into Cooperation Age		24,000,000	24,000,000	22,406,00
SWEDEN: Swedis Cooperation Age		24,000,000	24,000,000	27,743,21
UN Children's Fur	nd	400,000	600,000	600,00
Total		5,560,000,000	6,974,600,000	6,019,580,86
Total Project Cos	t	6,360,000,000	7,725,139,389	6,729,532,93
KEY DATES				
Approval	Effectiveness	MTR Review	Original Closing	<b>Actual Closing</b>
25-Aug-2011	07-Dec-2011	28-May-2014	31-Dec-2015	31-Dec-2017

# **RESTRUCTURING AND/OR ADDITIONAL FINANCING**

Date(s)	Amount Disbursed (US\$M)	Key Revisions
29-Dec-2017	488.68	Cancellation of Financing
		Reallocation between Disbursement Categories
		Other Change(s)

## **KEY RATINGS**

Outcome	Bank Performance	M&E Quality
Satisfactory	Satisfactory	High

# **RATINGS OF PROJECT PERFORMANCE IN ISRs**

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US\$M)
01	03-Mar-2012	Satisfactory	Moderately Satisfactory	44.60
02	12-Oct-2012	Moderately Satisfactory	Moderately Satisfactory	87.49
03	18-May-2013	Moderately Satisfactory	Moderately Satisfactory	95.49
04	01-Jan-2014	Moderately Satisfactory	Moderately Satisfactory	166.98
05	01-Aug-2014	Satisfactory	Satisfactory	183.05
06	02-Mar-2015	Satisfactory	Satisfactory	183.05
07	21-Oct-2015	Satisfactory	Satisfactory	246.20
08	17-Jun-2016	Satisfactory	Satisfactory	316.95
09	31-Dec-2016	Satisfactory	Moderately Satisfactory	348.84
10	22-Jun-2017	Satisfactory	Moderately Satisfactory	348.84
11	28-Dec-2017	Satisfactory	Moderately Satisfactory	488.71

SECTORS AND THEMES			
Sectors			
Major Sector/Sector			(%
Education			10
Primary Education			10
Themes	/Lovel 2)		(0/
Major Theme/ Theme (Level 2)/ Theme Human Development and Gender	(Level 5)		10
Education			100
Access to Education			5
Education Financing	3		5
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#### I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

#### A. CONTEXT AT APPRAISAL

#### Context

- 1. **Background.** At the time of appraisal, Bangladesh, one of the world's most densely populated countries with 152.1 million people (2010), had made striking progress in the past thirty years in terms of economic growth and social transformation, while significantly reducing poverty and curbing population growth. The country, however, still needed to continue: (i) improving the learning environment and student learning outcomes, especially in grades 1 to 5 (primary education), the base of the educational pyramid; (ii) increasing participation and reducing social disparities in primary education; and (iii) improving program planning and management and strengthening education delivery institutions at the central, divisional, upazila and local levels. Addressing these education sector macro issues underpinned the design of the Third Primary Education Development Program (PEDP3).
- 2. In 2010, only 60 percent of primary school children completed their primary cycle (grades 1-5) in 5 years, and of these, only about 44 percent went on to lower secondary school (grades 6 to 8). The primary cycle completion rate varied by geographic locality and family income. As for learning outcomes, although a standardized assessment system was not yet in place to provide reliable and regular monitoring, there was wide recognition that learning levels were low and that excessive emphasis was placed on rote learning. The main quality issues surrounded the need to usher in major reforms towards a competency-based approach (rather than rote learning), in order to be more supportive of each child's learning. Teachers, textbooks and curricula were the main supply-side factors contributing to the poor learning outcomes and weak systems efficiency in the primary sector. There were approximately 340,000 primary teachers in the public sector, and their qualifications were relatively low. There was also an urgent need to strengthen the institutional capacity of the Primary Teacher Training Institutes (PTIs) to improve their institutional capacity for providing timely and effective support to teachers at the school level on an ongoing basis.
- 3. In the space of 30 years, the number of young people completing primary education had more than doubled, and the participation of girls had also accelerated in the past 15 years as more girls than boys completed primary school. For progress in all these areas, it had been critical that, since the 1990s, demand-side interventions including primary school feeding, cash transfer programs, and a gender-targeted school stipend program be continued and strengthened, especially to address the problem of out-of-school children in pockets of rural and urban poor and disadvantaged communities. Overcrowded and dilapidated classrooms, and insufficient availability of sanitary facilities and drinking water still constrained access in parts of the country and for some population groups.
- 4. The range of monitoring and evaluation mechanisms in the primary sector were ad hoc and insufficiently networked, as a system, for early reporting to inform improvements in service delivery, and to fortify the evidence base for policy making and strategic planning. Management of the sector was constrained by institutional capacity limitations, in particular, lack of specialized staff. The regulatory framework for working across the sector with all providers government, non-government and private remained in nascent stages of development. Decentralized planning and management was also one of the aims of the Government of Bangladesh (GoB), but implementation had so far been constrained by lack of funding. In addition, the accountability relationships between levels of government (central, district, and upazila) and between government and schools and communities still required further clarification and reinforcement through regular monitoring for quality assurance.

- 5. **Rationale for World Bank (WB) support.** To address the above sector issues, GoB had been heavily engaged with external development partners (DPs), including the WB, in investing in primary education through two moderately satisfactory operations PEDP1 (1998-2003; US\$150 million International Development Association (IDA) Credit; US\$90 million disbursed) and PEDP2 (2004-2011; US\$150 million IDA Credit; US\$137 million disbursed). The advent of PEDP2 in 2004 was instrumental in ensuring that primary education received even greater importance within the education sector, as reflected in an increasing development budget allocation to this subsector. A great deal of non-salary recurrent spending, such as spending on the production and distribution of free textbooks, occurred on the development side of the budget. With the adoption of a sector wide-approach (SWAp), PEDP2 was also an important step towards better coordination of DP support and the corresponding reduction in transaction costs for GoB.
- 6. PEDP3 was the third in a series of large investments in education in Bangladesh over the past twenty years, supporting a complex system of over 100,000 schools, 450,000 teachers, and 16.5 million students. It was intended to build on the momentum generated in the areas of access and quality, while distinctly promoting accountability through a results-based program approach. PEDP3 was also seen as the opportunity to test a number of concepts, amply discussed but never implemented under PEDP2, such as: (i) focusing on results rather than on the supply of learning inputs (curriculum, textbooks, teacher training, classrooms, water and sanitary hygiene (WASH) block, etc.); (ii) using the Disbursement Linked Indicator (DLI) approach to better align the financial incentives with the critical actions and their outcomes; and (iii) using the SWAp in matters of financial management, donor harmonization, and program scope.

#### Theory of Change (Results Chain)

7. Table 1 below illustrates the proposed PEDP3 Results Chain, as included in the original Project Appraisal Document (PAD) and the revised one at the Additional Financing (AF), linking the interventions (included in the subcomponents grouped by the Program Development Objectives [PDOs] sub-dimensions) to their corresponding DLIs, intermediate results (outputs), and PDO-level indicators (outcomes).

Table 1. PEDP3 Theory of Change (Results Chain)

Higher-level long-	Contributing to Bangladesh's efforts in ensuring human capital development for sustaining economic growth		
term objectives	and poverty reduction		
		<u> </u>	
PDO Statement	Increase participation and reduce social disparities in primary education	Increase the number of children completing primary education and improve the quality of the learning environment and measurement of student learning	Improve the effectiveness of resource use for primary education
	<b>^</b>	<b>^</b>	<b>^</b>
PDO outcome indicators included in the original Results Framework	Number of children enrolled in primary education as measured by net enrollment rate (NER) (disaggregated by gender)     Decreased disparity in access to schooling as measured by NER ratio of 20 percent poorest to 20 percent richest	Completion rate to grade 5 (end of primary education) disaggregated by gender  Learning levels regularly monitored through learning assessment system as measured by frequency and quality of assessment of learning of primary education completers (those who complete the grade 5 primary education completion exam (PECE))	Expanded coverage of decentralized planning and management at school levels as measured by proportion of schools preparing school learning improvement plans (SLIPs) and receiving funds

	<b>^</b>	<b>^</b>	<b>^</b>
Intermediate results (IR)/outputs	Provision of pre-primary education (PPE) in government primary schools (GPS) (with teachers and PPE material available)  Needs-based infrastructure as measured by the number of additional classrooms built or rehabilitated at the primary level under PEDP3	Percentage of schools receiving textbooks within the first month of the academic year  Classroom environment more conducive to learning percentage of government primary schools meeting at least 3 out of 4 minimum quality standards as measured by the primary school quality level (PSQL) indicators  Teachers recruited or trained (who have completed the Diploma in Primary Education)	Proportion of upazilas preparing Upazila Primary Education Plans (UPEPs) and receiving funds  M&E systems strengthened to improve monitoring and data utilization for program performance and planning as measured by Improved quality timeliness and coverage of the APSC
	<b>^</b>	<b>^</b>	<b>^</b>
DLIs	PPE: expansion in areas of greatest need     Infrastructure: Percentage needs-based plans completed and implemented	Schools receiving textbooks on time and better quality textbooks Diploma in Education (DPEd) — improving teacher training and effectiveness Improving quality of grade 5 completion exams and regular assessment of learning Ensuring quality of new teachers hired and adequate number of teachers: percentage recruitment per the conditions specified in the DLI	Percentage of schools preparing school learning improvement plans (SLIPs) receiving funds  Number of months to administer and disseminate th annual primary school census (APSC)
	<u> </u>	<b>^</b>	<b>1</b>
Key activities under PEDP3 (inputs and processes)	<ul> <li>Pre-primary education</li> <li>School health and nutrition*</li> <li>Targeted stipends*</li> <li>Needs-based infrastructure development</li> <li>Inclusive education</li> <li>Education in emergencies</li> <li>Second chance education programs for disadvantaged and dropouts</li> </ul>	<ul> <li>Curriculum revision</li> <li>Textbooks, teacher guides and other learning material development and distribution,</li> <li>Provision of additional qualified teachers</li> <li>Teacher education and professional development</li> <li>Strengthening exams and assessments: school and classroombased assessment; national student assessment; and grade 5 completion examination (making them more competency-based items)</li> <li>Active learning methods and teacher support</li> <li>Information and communication technology in education (ICT)</li> </ul>	Human resource development by filling vacancies through needs-based and merit-based approaches, providing training to teachers and officials, and enabling merit-based progression along career paths     Capacity building Ministry of Primary and Mass Education (MoPME), Directorate of Primary Education (DPE), National Curriculum and Textbook Board (NCTB), National Academy of Primary Education (NAPE), District and Upazila Education Offices, PTIs and Upazila Resource Centers (URCs)     School Level Improvement Plar (SLIPs), and UPEPs

	Strengthen monitoring
	functions, including primary
	school annual census
	<ul><li>Public Private Partnerships</li></ul>

<sup>\*</sup>Outside the DP's financing support

#### **Project Development Objectives (PDOs)**

- 8. The PEDP3 PDOs as stated in the original Financing Agreement (FA) were to: (a) increase participation and reduce social disparities in primary education; (b) increase the number of children completing primary education and improve the quality of the learning environment and measurement of student learning; and (c) improve effectiveness of resource use for primary education.
- 9. The main direct beneficiaries of PEDP3 included: (i) about 16.5 million students attending pre-primary and primary school in any given school year during the implementation cycle; (ii) 340,000 teachers in government primary schools (GPSs) receiving training; and (iii) about 3 million children in PPE schools likely to enter primary school each year over the course of the PEDP3.

#### **Key Expected Outcomes and Outcome Indicators**

10. Progress towards meeting these objectives were to be assessed by the following outcome indicators and end-of-program targets as compared to a baseline (table 2):

Table 2. Outcome indicators and end-of-Program targets

Table 2: Outcome mulcators and end-of-riogram targets						
PDO	Outcome indicator	Baseline at the	Targets	Targets		
		time of appraisal	2014/15	2016/17		
Increase participation and	1. Primary NER (in %)	84.7 (2010)	98.0	98.0		
reduce social disparities in primary education	2. Decreased disparity in access to schooling between poorest 20% and	0.72 (2005)	0.77	.80		
,	richest 20% *					
Increase the number of	3. Primary cycle completion rate to	52.2 (boys, 2009))		80.0 (overall)		
children completing primary	grade 5 (as % of a cohort)	57.5 (girls, 2009)	62.0 (boys)	78.0 (girls)		
education and improve the			67.0 (girls)	82.0 (girls)		
quality of the learning						
environment and	4. Learning levels regularly monitored	Grade 5 exam	Grade 5 exam	Grade 5 exam with at		
measurement of student	through learning assessment	introduced in	with at least	least 65% items		
learning	system**	2009, testing	25% items	competency-based		
		memory more	competency-			
		than ability to use	based			
		subject knowledge				
Improve the effectiveness of	5. Percentage of schools and school		75.0	75.0		
resource use for primary	management committees (SMCs)	27.0 (2010)				
education	preparing SLIPs and receiving funds					

<sup>\*</sup> Measured by the ratio of NER of poorest 20% and NER of richest 20%.

 $<sup>\</sup>ensuremath{^{**}}$  As measured by the carrying out of a grade 5 completion exam (PECE) every year.

#### **Components**

- 11. PDEP3 used a SWAp to finance recurrent and development expenditures, covering the entire primary education subsector (grades 1 to 5 including one year of PPE) falling under agreed program budget heads accounts. Disbursements by the DPs, including WB/IDA, were conditioned on the achievement of pre-specified results, referred to as DLIs, which were a subset of GoB's results framework (RF) for PEDP3. The GoB financed about 84.5 percent of PEDP3 total recurrent and development expenditures under the agreed program budget heads while nine DPs (mentioned in the Data Sheet), including WB/IDA, financed the remaining 15.5 percent. Stipends and school health and feeding-related activities under PEDP3, activities already fully implemented under PEDP2 by GoB/MoPME/DPE, were financed 100 percent by GoB¹.
- 12. Since a fully DLI-based disbursement approach would be used to finance the PEDP3 SWAp, the project was designed with a single component entitled "Financing of the GoB PEDP3", with a total cost of USD5,800 million and IDA contribution of US\$300 million (as mentioned in the original PAD). In the government's program document, however, all eligible interventions under PEDP3 were grouped under the following three components, which are aligned with the three project development objectives:

Component 1: Improving the Quality of the Learning Environment and the Measurement of Student Learning.

Component 2. Improving Access and Reducing Social Disparities

Component 3. Improving Program Planning and Management, and Strengthening Institutions

- During the implementation cycle: (i) all interventions or sub-components (29 in total) were grouped into the 6 results areas shown in Annex 7a; and (ii) the original Component 3 above was split into two components<sup>2</sup>: (a) "Decentralization and Effectiveness" comprising results areas 4 and 5; and (b) "Planning and Management" comprising results area 6.
- 14. Annex 7b displays the original nine agreed DLIs for PEDP3 at appraisal and the amendments made to them during the AF restructuring. The PEDP3 RF in the PAD included annual DLI targets and protocols for measuring them. The rationale behind the selection of the original DLIs was as follows: (a) the first four DLIs are directly associated with four interventions that have proven worldwide to positively impact the quality of education (textbooks, teachers recruitment, in-service teacher training and summative learning assessment instruments); (b) the next two DLIs are associated with two interventions proven to improve retention and completion rates (early childhood stimulation to improve the social, emotional, physical motor and cognitive skills of children before they begin primary education, and conducive physical classroom environment to reduce overcrowding); and (c) the last three DLIs provide incentives for better and more effective governance of the education system (ensuring timely, reliable and relevant information for decision making, ensuring the availability of required financial resources each year [both revenue and development budgets], and devolving decision making powers downwards, including to schools and parents).

# B. SIGNIFICANT CHANGES DURING IMPLEMENTATION (IF APPLICABLE) Revised PDOs and Outcome Targets

15. **No changes were made to the PDOs.** The AF of an IDA Credit on the amount of SDR 269.8 million (US\$400 million equivalent) and the PEDP3 restructuring approved by the WB Board in December 2014, as well as the Global Partnership

<sup>&</sup>lt;sup>1</sup> Accordingly, the Bank did not support the implementation of these interventions.

<sup>&</sup>lt;sup>2</sup> This was done to better align the components with four DP-GoB joint working groups (WGs) established to support program implementation.

for Education (GPE) Grant<sup>3</sup> of US\$100 million approved in December 2015 *did not change the original PDOs and the Theory of Change.* PDO indicator targets were revised as discussed below.

#### **Revised PDO Indicators**

- The original RF included: (a) the matrix of PDO indicators; and (b) the matrix of 9 DLIs (table 4) with their annual milestones. At the time of the AF, the PDO indicator matrix was modified to: (i) revise end-of-project targets for most of the indicators<sup>4</sup>, given the 24 month extension of the closing date; (ii) clarify the unit of measurement and definition and ensure consistency with GoB's monitoring and evaluation of the education management information system (EMIS) for two intermediate results (IR) indicators (qualified primary teachers and infrastructure facilities); (iii) correct the baseline data for another IR indicator (regarding the annual primary school census [APSC]); (iv) drop the original IR indicator regarding financial support provided to disadvantaged students because GoB changed the basis for targeting stipends after PEDP3 was launched, making it impossible to assess progress in this indicator against the original baseline; and (v) replace the latter indicator with one on PPE. The details of these changes appear in Annex 1 of the ICR.
- 17. The DLI matrix was also modified to align it with the updated matrix of GoB's 2014 Program Document, which is the common DLI matrix for all DPs supporting the SWAp. The modifications involved incorporating changes in the Sector Finance DLI (DLI 8) that has been in effect from Year-1 (amended formally according to World Bank procedures in November 2012); amending Year-3 targets for three DLIs (see Annex 7b), as recommended by the MTR after evaluating implementation experience to date; and adding DLI targets for the extended period.

#### **Revised Components**

18. The PEDP3 activities supported by the AF fell under the original three components<sup>5</sup>. Thus the overall original program description remained unchanged. However, additional interventions within these activity categories were included to: (i) intensify reforms which were initiated on a smaller scale through the original project; (ii) take on more effective measures to reach children in disadvantaged circumstances and ensure their successful learning; (iii) develop mechanisms to work more closely with the private sector; and (iv) extend universal coverage of PEDP3 interventions to the newly nationalized government primary schools (NNGPS), formerly the registered non-government primary schools (RNGPS)<sup>6</sup>. In order to better ensure the education of children from disadvantaged circumstances, a separate division at DPE was assigned to manage the second chance education (SCE) activities, and SCE was implemented on a pilot basis

<sup>&</sup>lt;sup>3</sup> Agreement was reached for the GPE Grant to fully use the existing PEDP3 design and harmonized with all the other 9 DPs. Accordingly, during the implementation cycle of this Grant (2016-17), the GPE and the trust fund administrator minimized additional reporting and support missions other than the PEDP 3's existing arrangements further explained in the ICR.

<sup>&</sup>lt;sup>4</sup> Of the five outcome indicators, targets were increased for three of them to take advantage of the extended time period (see Table 2). The target for NER was not changed as it was already 98% indicating almost universal enrollment, and the expected achievement would be to maintain this enrollment rate. The percentage of schools receiving SLIP funds was also not changed recognizing that the original target of 75% was already quite ambitious given the very low baseline of 27%.

<sup>&</sup>lt;sup>5</sup> As mentioned before, to ensure alignment with the 4 WGs, the original component 3 was split in two, and components 1 and 2 slightly rephrased (keeping the original results areas and sub-components intact). Thus the four PEDP3 components after the MTR were relabeled: C1: Teaching and Learning; C2: Participation and Disparities; C3 Decentralization and Effectiveness; and C4 Planning and Management (see Table 3).

<sup>&</sup>lt;sup>6</sup> The RNGPSs were nationalized in 2013. These were privately established schools, which were being supported by the government primarily through salary subsidies and other essential inputs. However, they were under-resourced, had quality issues, and their teachers were not paid at the same level as government teachers. The nationalization of these schools was undertaken to address these issues and raise the quality of these schools to the level of government primary schools.

based on current approaches used by different NGOs, drawing upon lessons from these approaches. Closer collaboration with the private sector was emphasized especially in the provision of SCE and PPE.

#### **Other Changes**

- 19. **Extension of the closing date and additional financing of DPs.** As a result of the thorough MTR process carried out during 2014-2015: (i) the closing date was extended by 24 months (from 12-31-15 to 12-31-17), thus making PEDP3 a six-year sector-wide operation; and (ii) additional financing was provided by the following DPs apart from the World Bank: ADB (USD120 mil), EC (USD 45 mil), and UNICEF (0.2 mil). The WB approved the level two restructuring on November 26, 2012.
- 20. **Cancellation of funds**. A total of SDR 28.3 mil in IDA funds, and USD 8.3 mil in GPE funds were cancelled as three of the DLI targets for the program remained unmet, and the Bank approved a level 2 restructuring of the program accordingly on December 29, 2017.

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

The rationale provided for the AF was to continue supporting GoB's commitment to bring all primary school age children into school, especially the last estimated five million children of primary school age (6-10 years) who were out of school, provide them with quality learning, retain them to complete their primary cycle. As the government had extended the program by one year to five years, the overall program cost had increased. The cost increase was further compounded by an increase in the civil service pay scale, the nationalization of over 22,600 registered non-government primary schools (which included around 114,500 teachers), and increase in unit cost of infrastructure due to changes in design and increase in input costs. Hence, in the absence of AF, there was a risk that the gains made in the first few years of PEDP3 would not be sustained as most of the budget would be spent on meeting the increased recurrent costs. Building upon the experience gained in PEDP3 and prior projects up to that point, the additional financing and extended implementation time supported uninterrupted implementation to deepen the project's development impact, and helped increase economic returns by scaling up the interventions across more schools, teachers and students. As indicated earlier, these changes did not affect the theory of change.

#### II. OUTCOME

#### A. RELEVANCE OF PDOs

#### Assessment of Relevance of PDOs and Rating

Relevance of the PDOs at the closing stage is rated high as the program's objectives are fully consistent with GoB's strategies and the Bank's Country Partnership Framework (CPF). At appraisal the PEDP3 objectives were well aligned with the Second National Strategy for Accelerated Poverty Reduction (NSAPR-II) for FY2009- 2013, the Perspective Plan 2014, the 6th Five Year Plan (2011-2015), the National Education Policy (NEP) 2010, and the Bank's Country Assistance Strategy (CAS) for Bangladesh for the period FY11-14 (Report 54615-BD, July 20, 2010). The AF approved in December 2014 was also consistent with the CAS: FY2011-2015, which was extended by one year, to cover FY2015, in order to align the WB Group's strategy with the Seventh Five-Year Plan (2016-2021) GoB was preparing.

23. The relevance of the PEDP3 PDOs at the closing stage **continues to remain high** and fully aligned with the WB Group's CPF for Bangladesh, FY2016–2020, in particular with the CPF Objective 2.1 - "improved equity in access and quality of education". The CPF recognizes that the WB is well placed to tackle second-generation reforms aimed at improving the quality of education, and states that a primary education program will "continue to be the main instrument to bring disadvantaged children into pre-primary and primary education and improve learning quality". The program's use of the SWAp and results-based financing is also consistent with the approaches the CPF proposes to continue in the health and education sectors.

#### **B. ACHIEVEMENT OF PDOs (EFFICACY)**

#### Assessment of Achievement of Each Objective/Outcome

- 24. **Achievement of the PDOs is rated substantial** because, as detailed below, PEDP3 achieved most of its end-of-project outcome targets as well as intermediate indicator targets. The PDO-level or outcome indicators included in the results framework appropriately reflect the three outcomes of the program.
- 25. With respect to the first PDO outcome increase participation and reduce social disparities in primary education whose related interventions were grouped in 9 sub-components (S7 to S15 in table 3 above) under component 2 and results area 2 and 3 participation and disparities respectively:
- a) Outcome indicator 1: The number of children enrolled in primary education as measured by the NER was 97.96 percent in 2016 (last school year included in the 2017 Annual Sector Performance Report [ASPR]) and over 13 percentage points above the 2010 baseline of 84.7 percent. The end-of-project target of 98 percent was practically achieved.
- b) Outcome indicator 2: The NER ratio of the 20 percent poorest to 20 percent richest children was 0.89 in 2016, considerably higher than the 0.72 set as a baseline using data from 2005 and surpassing the end-of-program target ratio of 0.80 by 9 percentage points.
- c) IR indicator4: Needs-based infrastructure, as measured by the number of additional classrooms built or rehabilitated at the primary level under PEDP3, reached a total of 27,500 classrooms, or 89 percent of the end-of-project target of 31,000 classrooms.
- d) IR indicator 5: Provision of PPE in GPS (with teachers and PPE material available) reached 90 percent of the 37,000 GPS **exceeding by 15 percentage points the end-of-project target of 75 percent**. In 2016, there were a total of 3.12 million children enrolled in PPE in GPS, 3 times the baseline enrollment in 2010. Grade 1 students with PPE increased from 50 percent in 2012 to 87 percent in 2016<sup>7</sup>.

<sup>&</sup>lt;sup>7</sup> The original indicator "Providing support to disadvantaged children" as measured by the proportion of beneficiaries belonging to 40% poorest households could not be updated from its baseline, mainly because there were changes in the method for providing GoB targeted stipends since the inception of PEDP3. Accordingly, this indicator was dropped at the MTR when approving the AF and replaced by the IR indicator 4.

- 26. Before the start of the project, plans for PPE expansion and prioritized needs-based infrastructure development were at the preparation stage. Starting from these low baselines, all the yearly targets for the two DLIs associated with this PDO DLI5 (provision of PPE) and DLI6 (infrastructure) were met.
- 27. The satisfactory achievements of the above program outcome and indicator targets were supported by good progress in key activities linked to this outcome in the results chain. In particular, as shown by the PPE IR indicator above, the program made very impressive progress in providing access to pre-primary education to children. Furthermore, 33974 new pre-primary assistant teachers were recruited, over 22,000 of them received two week of training, appropriate teaching learning materials were developed, and all GPSs received funds for purchasing PPE teaching learning materials for the children. Similarly, the program was successful in providing free textbooks to children on time each year, making it easier for the poor to attend school. While not financed by the Bank, activities related to targeted stipends and school feeding (currently covering around 13 million and 3 million children, respectively) also showed good performance. It is likely that the above activities substantially contributed to both enhancing access to primary education as well as reducing disparity in enrollment between rich and poor households.
- 28. Other contributing activities that showed reasonable progress include infrastructure development, and mainstreaming inclusive education. The program reached 89% of the relatively ambitious target for needs-based infrastructure development, making it possible to enroll more students in schools. Furthermore, a decision support software/database for needs-based infrastructure was developed in the second half of the program period to provide a more comprehensive and up-to-date picture of infrastructure needs and infrastructure development. Such a module is expected to be part of the integrated MIS planned under the Bank supported Quality Learning for All Program (QLEAP)—the forthcoming program which will support GoB's follow-on Fourth Primary Education Development Program (PEDP4) expected to be launched in July 2018. While efforts to provide education during emergencies helped many affected children continue their education, many more could have benefitted through timelier implementation of this activity. Another intervention supporting equitable access to education was second chance education for disadvantaged children and dropouts. However, because of very slow progress in undertaking this activity, the implementation entity was changed after the mid-term review (MTR) and some progress was made only in the last year of the program.
- 29. With respect to the second PDO outcome increase the number of children completing primary education and improve the quality of the learning environment and measurement of student learning whose related interventions were grouped in 6 sub-components (S1 to S6 in table 3 above) under component 1 and results area 1:
  - a) Outcome indicator 3: The end-of-project primary cycle completion rate (gender disaggregated) of 80.8 percent slightly surpassed the program target of 80 percent, and was an impressive 26 percentage points above the 2010 baseline. Completion rates for boys improved from a 2010 baseline of 52.4 percent to 77.7 (slightly short of the target of 78 percent). Completion rate for girls went from 57.5 percent to 83.9 percent exceeding the target of 82 percent. Female students performed much better than male students.
  - b) Outcome indicator 4: Systems for learning assessment at the primary level were established, meeting the program target as standardized sample-based National Student Assessments (NSAs) were administered to 3<sup>rd</sup> and 5<sup>th</sup> graders in 2011, 2013, 2015 and 2017, and the PECE have been administered annually with the targeted percentage of competency-based test items. The results of the first three rounds of NSA were available at the time of the ICR (the NSA 2017 data are currently being analyzed).
- c) Outcome indicator 4a: The target for this indicator-- frequency and quality of assessment of learning of primary

education completers as measured annually by the grade 5 primary education completion exam (PECE)—was met with the percentage of competency-based test items in the PECE reaching 65 percent. Although the curriculum was competency based, at the start of PEDP3, the PECE still tested students primarily on how well they could recall and reproduce what was in the textbooks. With the inclusion of competency-based test items, the PECE now increasingly tests students' abilities to use knowledge.

- d) IR indicator 1: The percentage of schools receiving textbooks within the first month of the academic year was a remarkable 99 percent in 2017 as compared to a baseline of 32.7 percent in 2010, exceeding by 9 percentage points the end-of-project target of 90 percent.
- e) IR indicator 2: Teachers recruited or trained that completed the Diploma in Education (DPEd) reached 2,032 (2016), 56.4 percent of the end-of-project target of 3,600. Around 92.7 percent of the teaching force (male 92.4 percent and female 92 percent including head teachers and assistant teachers) received subject-based training by 2016, a significant increase as compared to the baseline of 84.7 percent in 2010. Under PEDP3, the former minimum educational qualification for primary school teachers of a secondary level certificate (SSC equivalent to successful completion of Grade 10) was increased to a successful completion of Grade 12.8
- f) IR indicator 3: The percentage of GPSs meeting at least 3 out of 4 minimum quality standards as measured by the primary school quality level (PSQL) indicators (as listed in the ASPR) increased 15.8 percentage points from a baseline of 17 percent in 2010 to 32.8 percent in 2017, reaching 94 percent of the end-of-program target of 35 percent.
- 30. Four DLIs (DLIs 1-4) were associated with this PDO. All 12 annual targets for DLI 1 (textbooks) and DLI 2 (teacher training) were met. In the case of DLI3 (related to the PECE), though the required percentage of competency based test items was included in the exam papers, the annual targets for years 5 and 6 were considered not met since the PECE was not administered according to the agreed Updated Action Plan/Revised PECE Framework. However, considering that before the start of the project, the PECE was almost entirely focused on testing students' memories, the achievements associated with this DLI are impressive. While five of the six annual targets for DLI 4 (teacher recruitment) were met, the year 3 target could not be met as its achievement was conditioned on the approval of the Teacher Career Path by the Ministry of Public Administration (MoPA), which was outside the control of MoPME. In total, 21 of the 24 annual targets for these DLIs were met. Not meeting the three annual targets did not negatively impact the PDO as (i) the focus of the PECE DLI was the gradual transformation of PECE to a competency based exam (which was accomplished as planned), and (ii) the approval of teacher career path rules was expected to have a more visible impact in the longer run than during the project period.
- 31. The key activities contributing to this outcome also exhibited satisfactory performance. PEDP3 financed the new curriculum (competency-based) for grades 1-5, which was successfully introduced gradually starting in the school year 2012-13, along with the new textbooks and teachers' guides. Another key activity was the annual distribution of textbooks—an essential input to the teaching learning process. The excellent progress made by the program in improving the timeliness of textbook distribution has been noted above. The government has designated January 1 as the "textbooks festival day" when children receive free textbooks, showing the government's strong commitment to ensuring that children have access to textbooks on the first day of the year. In terms of improving the provision of teachers in the

<sup>8</sup> The original indicator was the number of additional qualified primary teachers resulting from project interventions. It was dropped during restructuring (AF) to ensure consistency with the corresponding item in GoB's Monitoring and Evaluation system and replaced with the current IR indicator.

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system, the program was able to meet the teacher recruitment targets though there was some delay in the recruitment of required teachers. PEDP3 financed the recruitment of 95,398 teachers (head, assistant, and PPE teachers) in the period 2011-17. In order to improve the teaching skills of the teachers, the program provided subject based training to over 92 percent of the teachers (head and assistant) in 2016. Furthermore, around 90 percent of teachers received "sub-cluster training" to strengthen their academic supervision, mentoring, and other skills.

- 32. The exams and assessment systems were strengthened under PEDP3, as evidenced by the successful completion of three rounds of national student assessments (NSA) and the progressive conversion of the PECE to a competency based exam (but there was limited progress in strengthening school and classroom based assessments). The implementation of the NSAs was an important step in enhancing the government's interest in learning outcomes. Building on this experience and interest, the follow on program QLEAP explicitly focuses on improving learning levels as measured by the learning assessments. Some progress was made in introducing active leaning methods at the primary level through the piloting of an initiative call "Each Child Learns". However, the impact of this initiative was limited as the expansion of the pilot did not progress as originally envisaged.
- 33. With respect to the third PDO outcome improve effectiveness of resource use for primary education whose related interventions were grouped in 14 sub-components (S16 to S29 in table 3 above) under components 3 and 4 and results areas 4 decentralization -, 5 effectiveness and 6 program planning and management:
- a) Outcome indicator 5: Expanded coverage of decentralized planning and management at the school level measured by the proportion of schools preparing SLIPs and receiving funds significantly increased from a baseline of 27 percent (2010) to 90 percent in 2016, exceeding by 15 percentage points the end-of-project target of 75 percent. The SMCs and PTAs have been an essential community mobilization tool for supporting the preparation and implementation of SLIPs and in exercising school-related social auditing-related tasks (like monitoring teacher and student absenteeism).
- b) IR indicator 6: Strengthening Upazilas for supporting school management measured by the proportion of Upazilas having prepared UPEPs and receiving funds went from a zero baseline to 51 percent in 2017, exceeding the end-of-project target of 50 percent.
- c) IR indicator 7: M&E systems strengthened to improve monitoring and data utilization for program performance and planning as measured by the number of months to administer and disseminate the APSC **significantly decreased** from 17 months in 2010 (baseline) to 11 months in 2017 **exceeding the end-of project target of 12 months.**
- 34. All the yearly targets for the DLIs associated with this PDO outcome—five targets for DLI7 (strengthening SMCs and Upazilas), six for DLI8 (adequate sector financing) and five for DLI9 (APSC)—were met.
- 35. Among the key activities linked to this PDO outcome, good progress was made in strengthening the program's monitoring functions—the M & E system was appropriately designed to track implementation progress in all the subcomponents of the program through a comprehensive set of indicators, PEDP3 outputs and outcomes were regularly monitored, and periodic reports were produced as planned. In particular, the annual primary school census reports and the annual sector progress reports were completed on time. To develop adequate human resources, the program made substantial progress in recruiting teachers and training them as noted earlier. The capacity building efforts in the various implementing units/agencies (MoPME, DPE, NCTB, NAPE, PTIs and field level education offices) focused on providing training to staff, including international training. Around 250 officials received international training in various areas including inclusive education, operations management and ICT. Revised guidelines were prepared and implemented for

SLIPs and UPEPs, and as mentioned earlier, around 90% of the schools were preparing SLIPs and receiving SLIP funds by 2016. Ensuring a predictable budget for program implementation was another important activity contributing to this PDO outcome. This was done successfully --the annual budget allocation to MoPME was consistent with the medium term budgetary framework every year, except for one year. It should also be noted that PEDP program activities benefited substantially from national and international technical assistance provided by different DPs, including the Bank, to support implementation in different areas including monitoring and evaluation, learning assessments and examinations, curriculum and textbooks, teacher professional development, and procurement and financial management.

36. **Contribution to the higher-level objectives.** PEDP3 has supported Bangladesh's efforts in ensuring human capital development for sustaining economic growth and poverty reduction by enrolling more children in PPE and primary education and improving the grade 5 completion rate. PEDP3 has also provided through textbooks, teacher training and recruitment and learning assessment instruments, an appropriate floor from where to continue developing and strengthening the required conducive environment to achieve improvements in learning outcomes.

#### **Justification of Overall Efficacy Rating**

37. **Overall efficacy of PEDP3 is rated as substantial** because the following achievements: (i) significantly reducing social disparities in primary education; (ii) significantly increasing the primary cycle completion rate; (iii) meeting 60 out of the 63 DLI targets (95.2 percent of the targets) associated with the 9 DLIs in the program<sup>9</sup>; (iv) moving the education system towards a more effective use of resources and information; (v) meeting most of the targets in the result framework and (vi) making substantial progress in the key activities linked to the program outcomes. Apart from three IR indicator targets which were narrowly missed, all the PDO indicator targets and IR targets were either met or exceeded

#### C. EFFICIENCY

#### Assessment of Efficiency and Rating

- 38. The ICR rates PEDP3's efficiency as **substantial**. An assessment of the benefits and costs of the six-year PEDP3 based on the realized data at the end of the program was carried out (annex 4). The program benefits in this analysis come from three sources: (i) increase in basic education completers with higher wages (compared to non-completers); (ii) higher wage-premium as a result of increased quality of education for all basic education completers; and (iii) reduced dropouts and repetitions which reduced wastage of resources, both private and public. Costs include additional program costs (from GoB and DPs sources) for PEDP3, and private costs that include both direct household expenditures as well as opportunity costs of going to school.
- 39. This economic analysis suggests that PEDP3 was, ex-post, a sound investment decision. It shows that the present value of net benefits is positive (US\$1.1 billion), and that the program's ex-post IRR is 16%, which is higher than the discount rate and within the range estimated at appraisal (13 to 21%). This return can actually be considered a lower bound estimate, given that positive externalities associated with enhanced education quality and equity arising from a healthier, better educated and equitable/inclusive society have not been included in the analysis. Furthermore, additional benefits to those basic school graduates who go on to pursue secondary education and beyond and receive higher wage premiums are also not considered in the analysis.

<sup>&</sup>lt;sup>9</sup> All the targets from the different years (0 to 6) for DLIs 1, 2, 5, 6, 7, 8 and 9 were met. Two or of seven targets for DLI 3 (PECE) for years 5 and 6 and one of the seven targets for DLI 4 (teacher recruitment) for year 3 were not achieved, as reviewed and recorded in the March 2018 JCM. IDA funds associated with all the achieved DLI targets have been disbursed.

40. Most of activities envisaged by PEDP3 were carried out within the program period. The average budget execution rate was 92%, and 95% of the revised IDA and GPE financing amount was disbursed by program closing. All the revised PDO indicator targets were met, indicating good use of the of the financing. As described later, the implementation performance of PEDP3 was satisfactory for most of the key interventions contributing to the PDO. The program's partnership with specialized agencies like LGED, DPHE and NCED contributed to the efficiency of implementation. A comprehensive M & E system provided relevant and timely data to inform planning and decision-making. The use of an online textbook monitoring system covering the whole country increased the efficiency of the textbook distribution process. The program also benefitted from increased use of e-procurement for processing civil works and other contracts. Effective harmonization among the nine DPs and between the DPs and GoB reduced transaction costs, minimized duplication of efforts, and increased the effectiveness and efficiency of reviews and consultations. There were issues with frequent staff turnover at DPE (primarily towards the end of the program period), leading to implementation delays in some cases; however as most of the transfers took place within MoPME/DPE, the loss of institutional memory was limited. Nevertheless, PEDP3 efficiency gains could have further improved if this issue had been more effectively addressed by MoPME/DPE.

#### D. JUSTIFICATION OF OVERALL OUTCOME RATING

41. The ICR rates the overall outcome as **satisfactory**, because the **PDO's relevance was rated high** and its **efficacy** and **efficiency were rated substantial.** 

#### **E. OTHER OUTCOMES AND IMPACTS**

#### Gender

42. Impressive performance in terms of gender is one of the great achievements of PEDP3. The Program had a gender and inclusive education action plan, aimed at integrating gender equity and inclusion into the analyses, design, implementation, and monitoring of all program interventions. As indicated in the previous section, PEDP3 continued improving gender equity as well as the NER and primary completion rates for girls, thus sustaining and further advancing on a progressive education policy and strategy initiated by GoB back in the early 1990s when the educational attainment of women in Bangladesh was one of the lowest in the world. Gender parity in enrollment was maintained throughout the program period and the gender parity index in NER was 1.02 in 2016. Women's participation in the primary teaching force has also improved significantly between 2010 and 2016: the percentage of female teachers (head and assistant) increased from 58% to 66% in GPSs, and from 35% to 52% in NNGPSs. Building upon the success of PEDP3, a gender action plan has also been included in QLEAP to ensure that these positive gender-related outcomes are sustained.

#### **Institutional Strengthening**

- 43. Some policy decisions that were difficult to agree upon with GoB under PEDP1 and 2, were implemented under PEDP3, like, for example: (i) third party verification of DLIs; (ii) results-based management (RBM) and disbursement; (iii) textbook delivery monitoring; and (iv) the APSC verification by qualified third party.
- 44. Another important institutional strengthening accomplishment is that 99 percent of primary schools in Bangladesh received textbooks within the first month of the academic years as compared to 32.7 percent in 2010.
- 45. PEDP3 financed the strengthening of an evidence-based decision-making environment by: (i) improving information systems; and (ii) establishing an adequately staffed evaluation unit in the monitoring and evaluation (M&E) Division/Directorate of Primary Education (DPE). One key achievement of this effort is the timely development and dissemination of the APSC report. This installed M&E capacity needs to be adequately utilized to support the improvement of learning outcomes among the primary school population.
- 46. PEDP3 effectively supported school community mobilization and citizen's engagement through the SMCs by ensuring that at the completion of the IDA Credit and GPE Grant, about 90 percent of all the participating primary schools prepared SLIPs and received funds. This is another key accomplishment of PEDP3.

#### **Poverty Reduction and Shared Prosperity**

47. It is a well-known fact that there is a positive correlation between the increased level of schooling of the population and per-capita income as well as poverty reduction. More children, including those from poorer segments of society, were enrolled in PPE and primary education as compared to the 2010 baseline, and primary completion rates improved under PEDP3. Hence, there is a greater likelihood that a significant number of children will continue to lower (grades 6-8) and then to higher secondary education (grades 9-12), which in turn will help increase the human capital and productivity of the workforce, and ultimately contribute to poverty reduction and shared prosperity.

#### **Other Unintended Outcomes and Impacts**

48. None.

#### III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

#### A. KEY FACTORS DURING PREPARATION

#### **Key preparation strengths**

49. Proper utilization of lessons learned: The design utilized the preliminary findings and lessons learned from an assessment of PEDP2. Accordingly, PEDP3's holistic design covering grades 1 to 5 of primary education and gradual inclusion of one year of PPE, emphasizing quality of learning, using government systems and strengthening government engagement and ownership as well as systems' accountability, was an appropriate one. Albeit some consideration was given during the preparation process to also include grades 6 to 8, given that these were (and still are) under the

responsibility of another government entity – the Ministry of Education – a decision against their inclusion was appropriately taken, thus ensuring a more focused targeting of the beneficiary population and avoiding adding more complexity to the design and implementation process.

- 50. Proper articulation of the RF and the results chain (see Table 1): The RF and results chain were well structured, and they clearly captured the links between inputs/processes, corresponding outputs (by results areas), and outcomes (PDOs).
- 51. Monitoring and disbursement. The design led to a flexible RBM and performance-based financing and disbursement (PBFD) monitored through 9 DLIs and Key Performance Indicators (KPIs). The RBM flexibility allowed for adjustments to improve implementation based on the findings on the ground, as it occurred at the completion of a thorough and comprehensive MTR process in 2014. The PBFD entailed that more than 75 percent of the DPs financing was triggered by achieving agreed DLI targets associated with 9 sub-components (table 4). The achievements of DLI targets were to be verified by a qualified third party. The remaining 25 percent of the DP funding referred to as "fixed tranche" was to be released on the basis of satisfactory program performance, including a review of sector progress documented through the KPIs, monitoring reports and safeguards compliance.
- 52. In addition, PEDP3 included a robust monitoring system (explained elsewhere in this ICR) including 4 WGs that met on a regular and consistent basis throughout the entire implementation cycle, in addition to bi-annual JCMs and one exhaustive implementation assessment conducted at the JARM, which was used to determine the fixed tranche.
- 53. Enhanced utilization of government systems. The PEDP3 design made extensive use of GoB's financial management and monitoring systems as well as an agreed combination of GoB and DP systems for procurement and reporting. Under this financing model, DPs placed their contributions into a consolidated fund managed by the Ministry of Finance (MoF) where DP financing was integrated into funds from many sources. Financial processes followed GoB's regular procedures, and PEDP3 was managed as any other GoB funded program. For some tailored technical assistance, the design allowed DPs to provide funds and manage them directly.
- 54. Strong GoB ownership of PEDP3: This was reflected, inter-alia, in the significant GoB share (84.5 percent) of total financing for PEDP3 and by the fact that two important sub-components S12 Stipends and S13 School health and school feeding were fully financed by GoB.
- 55. Effective harmonization among DPs and GoB. Harmonization among DPs and GoB was strengthened around a common results-based financing approach designed to enhance accountability for sustainable development. The close cooperation among the DPs, and between the DPs and GoB, was reflected in a Joint Financing Arrangement (JFA) among the DPs and GoB. It was also agreed that joint forums (the 4 WGs, the bi-yearly JCMs and the annual JARM) would be used to monitor progress and discuss/consult how best to address implementation issues.

#### Key areas that could have further strengthened project preparation.

56. Coordination mechanism within DPE. As PEDP3 was designed as a comprehensive program for the whole primary subsector (rather than as a project), it was complex both in terms of scale and scope. Hence, it was sometimes challenging for MoPME/DPE and other stakeholders to sort out in practice the large number of assumptions, relationships, anticipated results, and risks involved, and to anticipate how the multiple parts of the program could work together to achieve the program's goals. As a consequence, some of the sub-components were implemented without sufficient feedback,

articulation and synergy among them. For example, taking advantage of the strengthened assessment system under PEDP3, the findings of NSA for grades 3 and 5 could have been better utilized by other interventions such as "Each Child Learns" (S1), school and classroom assessment (S2), curriculum development (S3), textbooks (S4) and Teacher Education and Development (S6) to enhance education quality. A stronger coordination mechanism in DPE during preparation could have helped in better articulating the need for and approaches to ensuring adequate feedback and interactions across interventions.

- 57. Preparation of action-plans to address institutional implementation capacity issues. It was recognized during program preparation that the Bureau of Non-Formal Education (BNFE) needed to significantly strengthen its institutional capacity at the onset of the program to effectively implement the second chance education (SCE) intervention assigned to it. However, BNFE was unable to build the necessary capacity and implement SCE even by the end of the second year. This risk may have been partially mitigated if a comprehensive institutional capacity building time-bound action-plan for BNFE had been included in the design. The implementing entity was changed after the completion of the MTR to address this issue, and 100000 children were enrolled in SCE learning centers at the closing of PEDP3.
- 58. Implementation readiness of the infrastructure subcomponent. Only needs-based civil works (reconstruction of schools, additional classrooms, toilets and tube wells) were to be financed under PEDP3. However, as it took time to finalize the methodology for identifying suitable sites for the civil works, there were delays in meeting the annual infrastructure targets for the first two years in particular. Agreement on civil works sites for the first year during the preparation phase might have minimized such delays. The implementation of the infrastructure subcomponent accelerated in the second half of the program, and 89% of the targeted construction was completed by project closing.
- 59. Better institutional arrangements for a smooth transition from PEDP2 to PEDP3 with respect to core positions to be filled at the start of the program could also have helped speed up program implementation, as DPE faced some staffing constraints (unfilled administrative and technical positions) at the start of the program. DPE partially addressed this challenge through the use of consultants where necessary. In addition, early preparation of a sound consolidated communication strategy for changing the input and process oriented bureaucratic behavioral culture of the past would have been helpful in addressing potential resistance to moving towards a results-oriented culture.

#### **B. KEY FACTORS DURING IMPLEMENTATION**

#### **Factors outside government control**

Annual flooding, normally occurring during the monsoon season from June to September, in addition to cyclones and tidal surges as well as the political unrest that occurred prior to the MTR, at times affected the functioning of PEDP3 GPS. Recognizing the possibility of such disruptions, PEDP3 included an Education in Emergencies subcomponent in its design to address these nature-related challenges. More effective and timely implementation of this sub-component would have helped ensure continuity of education of the affected population.

#### Factors generally subject to government control

61. As per the 11 ISRs filed in the WB system, GoB's satisfactory compliance with the annual provision of its agreed PEDP3 counter funds positively contributed to PEDP3's effective implementation. Although timely release of advances from MoF was initially an issue of concern, it was adequately addressed in the last two years of the program

- 62. Extensive use of GoB's own financial management and monitoring systems avoided parallel procedures, decreased transaction costs, and ensured that there was a single source of information not only for reporting purposes but, more importantly, also for the release of DLI and non-DLI-related funds.
- 63. MoPME/DPE, in collaboration with the DP consortium, was able to ensure proper harmonization among the DPs and all participating implementing entities, providing a common results-based approach to effectively monitor physical and financial implementation progress, and identify ways of addressing implementation issues through the 4 WGs, bi-yearly JCMs and the annual JARM.
- There were also a couple of factors, subject to GoB control, that negatively affected program implementation. First, in May 2013, MoF introduced an earlier operational procedure which required quarterly submissions of statements of expenditures prior to advancing funds from the Treasury. This requirement posed some implementation challenges as the program's results-based design necessitated up-front achievement of results and funding of corresponding activities. In particular, it affected NAPE and NCTB as these entities depended significantly on up-front funding of activities such as PECE reform and DPEd training. This issue was satisfactorily addressed by GoB at the MTR.
- 65. Second, inadequate support from actors outside MoPME affected decisions related to human resources. In particular, there were delays in the approval (by the Ministry of Public Administration's [MoPA]) of the career path proposal for teachers, recruitment rules for filling vacancies for new posts created under PEDP 3, and the transfer of officials from PEDP2 to revenue positions. As a result, it was recognized during the preparation of QLEAP that about 171,000 sanctioned posts under PEDP3 and financed under the development budget have yet to be moved to the revenue budget. Pending court cases related to the recruitment of teachers also delayed the approval of teacher positions by MoPA, impacting the teacher recruitment process. This issue was, however, resolved in the last year of program implementation. GoB successfully met the program's teacher recruitment targets by December 2017.

Factors generally subject to implementing entity (MoPME/DPE) control

- 66. The following key factors under MoPME/DPE control contributed to the successful implementation of PEDP3: (a) enhanced focus on achieving results as a consequence of tying the bulk of DP financing to disbursement linked indicators; (b) strong political will to deliver results; (c) installed institutional capacity acquired through previous programs (PEDP2, PEDP1); and (d) close collaboration and harmonizing among DPs and GoB.
- 67. Most interventions contributing substantially to the PDO displayed significant achievements during the entire implementation cycle. These were often linked to DLIs and thus close attention was paid to their implementation by the corresponding managing entity. Examples include textbook production and distribution, teacher education and development, pre-primary education, strengthening PECE, and strengthening the annual primary school census. Strong political commitment at higher administrative levels played a key role in ensuring successful implementation of the textbooks related interventions (to deliver textbooks to children on time) and the ICT in education subcomponent. Under the ICT subcomponent, one multi-media classroom with the required equipment was provided to all the designated model schools, one in each Upazila. As of March 2016, around 71,900 teachers from both the GPS and NNGPS had received training on ICT, including on the utilization of multimedia classrooms for teaching-learning purposes.
- 68. Another example of MoPME/DPE's ownership, acquired expertise and commitment worth highlighting is the number of WASH blocks built by the Department of Public Health and Engineering (DPHE) under PEDP3. The number of WASH blocks completed totaled 24,509 (13,210 for female students and teachers; 11,299 for male students and teachers)

by December 31, 2017, reaching 91% of the end-of-program target for females and 86% of the overall target. This significant achievement contributed to the attainment of the PDOs by increasing attendance and decreasing dropouts among girls, and improving the health status of students and teachers10.

- 69. While further strengthening of the capacity of MoPME, DPE and other agencies was required under PEDP3, many activities could be initiated taking advantage of existing installed capacity from PEDP2. In particular, the existence of a functioning DPE and prior experience of DPE in working with established partner agencies like the National Curriculum and Textbook Board (NCTB), the National Academy for Primary Education (NAPE), the Local Government and Engineering Department (LGED), and the Department of the Public Health Engineering (DPHE) made it possible to effectively implement activities related to curriculum development, teacher training, WASH facilities and classroom construction once they were initiated.
- 70. As mentioned before, there was close collaboration and harmonization between MoPME/DPE and the DPs around a common results-based approach reflected in a JFA. The JFA included the DPs' contributions and disbursement schedules; the arrangements for joint consultations, reviews and evaluations (JARM, JCMs and WGs) and decision-making processes; and GoB's reporting and monitoring requirements, as well as specifics regarding procurement, audits, financial reports and other matters. This harmonization significantly reduced the transaction costs and improved the targeting of the technical assistance financed by the DPs. There is, nevertheless, room for further improving the effectiveness and efficiency of DP harmonization and reducing transaction costs.
- 71. A few interventions did not perform well because of lack of political support (e.g., public-private partnerships to support the additional delivery of PPE and teacher training), capacity constraints in undertaking the envisaged tasks (e.g., second chance education), or the inclination of DPE to focus primarily on higher priority areas given the large number of tasks they needed to handle (e.g., communication and social mobilization). However, some of these interventions, like communication and social mobilization, and public-private partnerships, were not critical in terms of their contribution to the PDOs.
- 72. Other factors that affected program implementation included coordination issues at DPE, limited on-site monitoring of classroom processes, and limited capacity at DPE to effectively manage technical assistance. horizontal and vertical coordination by DPE, supported by adequate human resources, could have ensured more effective, efficient and timely implementation of PEDP3, and enabled synergistic interactions and feedback across different subcomponents. In particular, such synergistic interactions could have facilitated the incorporation of findings and lessons learned from the NSAs (especially regarding poor learning outcomes in foundational reading and math skills) in curriculum and textbook development as well as in teacher training, and also helped teachers to effectively articulate at the school level the learning inputs received from PEDP3. Furthermore, the inclusion of teachers from 22,600 newly nationalized primary schools, especially in a constrained budget situation faced by GoB after 2013, generated additional budget and managerial challenges for PEDP3. The PEDP3 design had actually made provisions for the establishment of a Program Surveillance Unit (PSU) and a Program Support Office (PSO) within MoPME at the onset of the program implementation cycle to support coordination among all the implementing entities. But since these units could not be put in place even by mid-term, the PSU was abolished. The PSO was established in 2015, and it supported MoPME/DPE in organizing the JARMs and JCMs, and in the preparation of PEDP4. However, its effectiveness in coordinating across the DPE divisions and implementing agencies was limited.

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<sup>&</sup>lt;sup>10</sup> The WASH blocks allowed for post-defecation hand washing practices among students and teachers resulting, as per studies conducted in Bangladesh (International Journal of Environmental Health Research, June 2003), in a 14 to 40 percent reduction in diarrheal-related diseases.

73. Strengthened on-site monitoring to assess the utilization and impact of the various quality-related interventions at the classroom level (curriculum, teacher training, textbooks, etc.) and implement necessary remedial and/or preventive measures could have helped improve the quality of teaching-learning. For example, a new curriculum for grades 1 to 5 was gradually introduced starting in 2012-13 along with the distribution of new textbooks and teachers' guides. Had better on-site monitoring of this intervention taken place during 2013-2017, DPE would have been in a better position to supply teachers' guides and question booklets on time and ensure that teachers were acquainted with the competencies prescribed in the new curriculum. When procuring technical assistance, capacity constraints at DPE often resulted in delays at various stages of the process, from preparing the terms of reference to getting the contracts signed by the DPE Director General. In addition, once the technical assistance was in place, management and oversight by DPE was weak. This challenge was partially addressed through the recruitment of some of the required TA directly by the DPs.

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

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

#### **M&E Design**

- 74. The **PEDP3 M&E** and reporting design was appropriate and comprehensive. It was designed to track implementation progress in all the subcomponents of the program, and closely monitor changes in the different inputs, outputs and outcomes through a comprehensive set of indicators. The design also ensured that, during the entire implementation cycle, parallel information systems were avoided and both GoB—especially MoPME/DPE, MoF and the Planning Commission—and the DPs relied on a *single source* when disseminating monitoring and evaluation information using the same reports.
- 75. The PEDP3 monitoring structure reflected in the RF/monitoring matrix of GoB's original PEDP3 program document (August 2011) as well as of the restructured PEDP3 program document at the time of the approval of the AF (December 2014) included, in addition to the 5 outcome and 7 intermediate indicators discussed above (Annex 1), the following sets of indicators:
- a) 15 overarching KPIs measuring the overall progress of the education system and used to monitor progress at the outcome level of PEDP3. These KPIs were updated before the carrying out each of the bi-annual JCMs and JARMs;
- b) 14 PSQL indicators used as proxies to understand whether minimum standards were being met across the education system, especially at the beneficiary school level. These were published each year in the publicly available ASPR. Progress against the PSQLs informed the distribution of fixed tranche funding from DPs;
- c) 81 sub-component tracking indicators for each one of the four PEDP3 components and 29 sub-components of the PEDP3 to monitor their correspondent physical and financial implementation progress;
- d) 9 DLIs to trigger the disbursement of funds from DPs to GoB against the findings of a qualified third party verification of their achievement as per given agreed protocol. Evidence of achievement of the DLI by a third qualifying party was presented in the assessment in the bi-annual JCMs; and
- e) 11 Non-KPIs to track progress in areas that were not otherwise covered by the M&E matrix

#### **M&E Implementation**

- 76. **The M&E activities were effectively implemented.** The data used to calculate and triangulate the above-mentioned indicators were collected from a range of sources including the: (i) APSC; (ii) NSA; (iii) PECE; (iv) Textbook distribution database; (v) DPE administrative records and the AOP; (vi) Bangladesh National Census; (vii) Household Income and Expenditure Survey; (viii) Household Education Survey; and (ix) data obtained from national agencies including the Bangladesh Bureau of Statistics and the Bangladesh Bureau of Educational Information and Statistics (BANBEIS).
- 77. The reports developed from the above-mentioned information sources included the following: (i) ASPR prepared by the M&E Division of DPE which included an update of the KPIs, non-KPIs and the PSQL indicators; (ii) DLI progress report including supporting verification documents as described in the DLI matrix prepared by the Program Division DPE; (iii) the updated physical and financial sub-component progress reports required for the PEDP3 review missions including an update on the policy matrix also prepared by the Program Division DPE; and (iv) other financial and safeguards related updates by the Finance Division of DPE and the M&E Division of DPE, respectively.
- 78. The MTR benefited from the findings of five independent third party studies: (i) economic analysis (financed by IDA); (ii) financial management analysis (financed by ADB); (iii) governance and institutional analysis (financed by the Australian Department of Foreign Affairs and Trade, formerly AUSAID); (iv) quality of education study (financed by UNICEF); and (v) population projection studies (financed by ADB). In particular, the economic analysis contributed to scenario-building and consultative discussions with government and stakeholders through an iterative process that helped shape decisions about overall program scope and design of PEDP3 AF.
- 79. Effective analysis of available data and timely production of relevant reports were partially a result of having restructured the M&E Division DPE by separating the information technology functions from the EMIS functions, allocating the former to a new entity within DPE the Information Management Division and strengthening these two DPE Divisions with more technical staff.

#### **M&E Utilization**

- 80. **The PEDP3 M&E was appropriately utilized.** PEDP3 implementation and key-decision making processes were largely underpinned by the suitable use of the above information, in particular: (i) third party verification of the attainments of the DLIs for the release of 75 percent of the financial contributions from the DPs; (ii) status of the KPIs and sub-component progress reports for the release of the fixed tranche by the DPs; (iii) internal assessments through tailor-made workshops and meetings; (iv) third party validation of the APSC; (v) the carrying out of a comprehensive MTR process in 2014-2015 leading to the AF detailed before. Important M&E achievements include: (i) timely publication of the APSC reports; and (ii) timely completion of the ASPRs, including analysis of information from external sources; and (iii) the online textbook monitoring system covering the whole country.
- 81. MoPME and DPE regularly monitored PEDP3 outputs and results outcomes. Progress toward the AOP targets was reported monthly in reviews chaired by the MoPME Minister.
- 82. The review, consultation, and RBM and disbursement processes included one annual JARM, usually fielded in May to: (a) assess overall sector performance and program implementation progress; (b) review compliance with the financial

management, procurement and safeguard requirements; (c) review financial progress, and (d) review the evidence that the annual DLIs (and selected KPIs) were met. The outcomes of the 6 JARMs carried out in the period 2012-2017 were recorded in corresponding Aide-Memoires.

- 83. It also included bi-annual JCMs, usually held in March and November of each year to: (a) review program progress to date in line with the AOP; (b) review the financial progress, (c) assess progress towards meeting the DLIs, identify steps to remove obstacles, and review evidence of achievement of DLIs; (d) enhance the integrated planning, implementation and monitoring of PEDP3; (e) review and update the AOP based on implementation progress evidenced on the ground (this occurred usually in the second JCM of the year); (f) support the implementation of PEDP3 by undertaking, at the request of GoB/MoPME, on specific tailored situations, quality and/or impact evaluation studies; and (e) agree on key next steps to be reflected on the corresponding mission's Aide-Memoire, to support program implementation. Following these meetings, GoB forwarded to the DPs the withdrawal applications for DLI-based disbursement.
- 84. The above information was also fed into the 4 PEDP3 DP-GOB joint WGs that were important and appropriate forums convening on a regular basis at least six times per year for: (i) communication and information exchange among the key implementing entities related to the corresponding WGs; (ii) effective policy coordination among government and DPs; (iii) promoting harmonization and alignment with country priorities; and (iv) coordination of technical assistance (TA) supporting sub-components falling under these three WGs.
- 85. PEDP3 could have benefited from a more systematic and stronger grievance redress mechanism, and structured random on-site monitoring of quality-related interventions at the classroom level.

#### Justification of Overall Rating of Quality of M&E

86. The ICR assigns an overall **high** rating to the quality of PEDP3's M&E because, as stated above: (i) its design was appropriate and comprehensive; (ii) its implementation was effective; and (iii) its utilization was more than sufficient to assess the achievement of the objectives, release disbursements based on performance, make required corrections midway through the implementation cycle and, by and large, disseminate information and findings to inform the direction of the project, strategy development, and future related operations<sup>11</sup>

#### B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

87. Fiduciary compliance. Although the financial management performance was rated Moderately Satisfactory consistently throughout the implementation phase of the project, there are number of fiduciary actions that led to positive lessons including but not limited to: (i) regular Quarterly Fiduciary Reviews; (ii) Annual Fiduciary Reviews and updates on implementation of recommendations; (iii) special Post Procurement Reviews; (iv) an annual audit; (v) a resolution mechanism for audit observations; and (vi) updates on compliance with the implementation of the approved procurement plan. The annual fiduciary reviews and the quarterly fiduciary reviews attest to the incremental improvements in the fiduciary arrangements and compliance with the financial reporting requirements, albeit in some cases, especially at the early stages of implementation, IfRs were delivered with some delay.

<sup>&</sup>lt;sup>11</sup> The M & E system under QLEAP builds upon the system established under PEDP3. For example, it plans to further institutionalize the NSA, integrate the different existing databases into a web-based DPE management information system (MIS) system, develop performance dashboards to inform decision making, synchronize the eMonitoring system with the APSC database, and strengthen the capacity of the M&E Division to enable it to manage evaluations and other critical tasks that will inform planning.

- 88. Annual audit reports were submitted on time. The audit opinion was mostly unqualified except for FY12-13, where the auditors issued a qualified opinion. As a good practice, MoPME established an audit observation resolution committee at the ministry level to deal with the material audit observations. The committee could only convene a few of times, although the ToR required the committee to sit at least once in a quarter. However, there are some material audit observations pending resolution from earlier audit reports. The ICR team was informed that MoPME/DPE would take necessary steps to resolve most of these pending audit observations by July 2018.
- 89. DPE had faced challenges in terms of adjusting program advances provided to the field on a timely manner. During the implementation phase, the program assisted DPE to establish advance-tracking tools. The WB team along with other DPs helped the project maintain the country financial management system by providing feedback through the "Quarterly Fiduciary Reviews".
- 90. The "Finance and Procurement Working Group (PFWG)" including members from GoB and the DP consortium met regularly to discuss financial management and procurement challenges of the project. This group helped the DPE position itself to cope with full compliance with the country financial management system and take actions on the exceptions.
- 91. MoPME/DPE worked collaboratively with MoF in using country financial management systems for PEDP3 budget execution, accounting, internal controls, and financial reports and auditing.
- 92. By and large, procurement was rated between moderately satisfactory to satisfactory throughout the entire PEDP3 implementation cycle. Delays in contract awards by DPE were flagged in several ISRs. On the other hand, a key achievement has been an increased utilization of the e-procurement modality that in FY13-14 already incorporated about 20 percent of PEDP3 civil works procurement contracts.
- 93. On the downside however, the Annual Fiduciary Review and a Post-Procurement review undertaken by the WB/ADB in late 2014 detected irregularities in 21 of 238 FY2011/12 civil work contracts. Accordingly, mis-procurements were declared for these contracts resulting in the cancelation of SDR 177,629 of the original IDA Credit against the original agreement.
- 94. Notwithstanding that textbooks were printed and distributed on time, which is an important achievement under PEDP3, the post-procurement review for 2016 observed responsive bids that were significantly lower than the estimated cost, indicating the possibility of collusion among bidders, who were eventually fined. Learning from this, GoB took the following steps to minimize similar problems in the future: (i) the procurement process for the 2017 textbooks used a revised bid document; and (b) a study was conducted on the quality of textbooks, and the printing and disbursement of textbooks. The study recommended that a more rigorous technical testing of textbook quality be done on the textbooks for 2017 and beyond. These and other corrective and preventive measures have been included in the forthcoming PEDP4/QLEAP.
- 95. Environmental and social safeguard compliance, in particular as they relate to indigenous populations and involuntary resettlements policies, was rated satisfactory during the entire implementation cycle. Of particular importance are the following achievements: (a) textbooks financed under PEDP3 were also developed in five indigenous languages (Tipra, Chakma, Marma, Garo and Sadri); and (b) a gender-action plan was approved by MoPME/DPE and put into action in 2015.

#### C. BANK PERFORMANCE

#### **Quality at Entry**

- 96. The Bank team played a critical role in working with GoB and the DPs to prepare a program that was relevant, comprehensive and grounded on lessons learned from prior projects and programs in the sector. As explained in previous sections, the PDO for the program was highly relevant to the development agenda of the country and priorities of the Bank, and remained so throughout the program lifecycle. A well-articulated results chain was prepared as part of the design to ensure that there was clarity in the how the different activities, inputs and outputs were linked to the achievement of PDO. The M & E system was comprehensive and robust, and provisions were made for close collaboration between GoB and DPs, including the Bank, for regularly reviewing program progress and providing guidance during implementation. Leveraging its expertise in results-based financing, the Bank played a leading role in designing the results-based financing approach for PEDP3, and in mobilizing both the DPs and GoB to support this new financing modality which was being used for the first time in the primary education sector in Bangladesh.
- 97. The Bank supported strengthened harmonization among DPs and GoB, and enhanced utilization of government systems (especially fiduciary systems), which were also key strengths of the design. Furthermore, during the course of program preparation, good use was made of lessons learned from previous projects in Bangladesh (especially PEDP2) and elsewhere to design a sound program. Considering the large scale and scope of the program and multiple actors who would be involved in implementation, the Bank, along with other DPs and GoB, engaged in extensive consultations with a broad range of stakeholders to enhance ownership as well as ensure that the design took into account practical challenges and risks that could be encountered during implementation. Furthermore, the Bank provided substantial technical support in a number of areas including, inter alia, in the design of the results-based financing approach, financial management and procurement, safeguards, and M & E, contributing to the strength of the program design. In retrospect, more could have been done during preparation to ensure that action plans were prepared before the start of the program to address institutional capacity issues in BNFE, and ensure early finalization of the approach to identifying civil works sites for needs-based infrastructure development.
- 98. Based on the above assessment, the quality at entry is rated **satisfactory**.

#### **Quality of Supervision**

99. The WB performance at supervision is rated satisfactory for the following reasons. First, the task team leader (TTL) located in the WB Dhaka office continued in that role until the third quarter of 2015. An acting TTL, also located in Dhaka, was appointed until a new TTL (also located in Dhaka) was assigned at the end of 2015; the two TTLs jointly led the team until the closing of the IDA Credit and the GPE Grant. This arrangement provided continuity to WB supervision, including through participation in the four WGs, the two bi-annual JCMs and the annual JARM. It also made it possible, from the onset of the implementation cycle, to provide consistent and timely overall implementation support, and establish close communication with the key government counterparts and the other DPs on an ongoing basis. This supervision arrangement helped, for example: (i) resolve implementation hurdles on the spot; (ii) conduct a very thorough and in-depth MTR leading to a slight restructuring and AF for PEDP3; and (iii) for some specific areas, like summative learning assessment, textbook monitoring and fiduciary (financial and procurement) compliance, provide the required qualified technical assistance.

- 100. Second, the Bank team and supervision missions included the appropriate skills-mix, including the required expertise in procurement, financial management, social safeguard and education (see Annex 2), to carry out their envisaged terms of reference. The six JARMs carried out annually in the period 2012-2017 included visits to project sites. The findings of each JARM as well as of the 13 JCMs were conveyed to GoB and to WB management in a frank manner including accomplishments and implementation shortcoming, potential risks and implementation flags, although better justification for some ratings could have been given in cases where data were not available (like the satisfactory PDO rating in the ISR 6 of October 2015).
- 101. Third, the WB/IDA implementation support had concrete positive results, like for example: (i) defusing potential future textbook mis-procurements through a defined program of capacity building for the MoPME/DPE and NCTB concerning each step of ICB procedures; (ii) conducting the NSA and analyzing results in time to use as a major substantive backdrop for policy dialogue at the JARM; (iii) developing the textbook monitoring software; (iv) transforming Grade 5 terminal examination (PECE) into competency-based exam; (v) strengthening fiduciary oversight and building capacity of MoPME/DPE on financial management and procurement; (vi) financing procurement training of DPE, MoPME and LGED staff in Turin, Italy; and (vii) playing a stronger role in the primary education sector as the ADB began to gradually expand engagement in post primary education.

#### **Justification of Overall Rating of Bank Performance**

102. The ICR rates the overall Bank performance as satisfactory given a satisfactory quality at entry and satisfactory supervision.

#### D. RISK TO DEVELOPMENT OUTCOME

- 103. **Out-of-school children.** Despite the high NER (98 percent) for 6-10-year old, around 2.5 million 8-14 year old children (boys 18.8 percent and girls 17.5 percent) are out-of-school, posing challenges for sustaining the PEDP3's development outcomes. QLEAP aims at reducing the number of 8-14-year-old children who have either never enrolled in school or have dropped out of school by offering alternative modalities of education up to grade 5 to around one million out-of-school children.
- 104. Poor quality of teaching, insufficient time-on-task and teacher absenteeism are hindering a more effective introduction of the revised curriculum for grades 1 to 5, which remains a risk for sustaining the PEDP3 PDOs. Around 44 percent of the primary teachers do not have a bachelor's degree. Anecdotal evidence suggests that teachers continue to rely heavily on lecturing and repetition, with little room for interactive learning, independent work and problem-solving activities, contrary to the competency-based pillar underpinning the new curriculum. There are also concerns that many teachers themselves do not fully master the material they teach, and that the training they receive is not properly translated to the classroom. In addition, there is insufficient time-on-task, caused mainly by the double-shifts affecting about 77.4 percent of schools, often resulting in fewer lesson hours than prescribed. There is high teacher absenteeism, partly due to training or other official duties, and also due to lateness. QLEAP aims at ensuring that: (a) teachers meet basic professional standards at the beginning of their career; (b) all teachers and teacher-educators have the opportunity to continuously engage in professional development activities; (c) double-shift schools are gradually converted to single shift; and (d) community and school stakeholders, including parents, are further empowered and informed to promote, support and advance the provision of quality primary education to all children.

- 105. **Constraints to decentralization and local capacity.** Further work on promoting decentralization in the primary education system is required to sustain the gains made in this area under PEDP3. The low capacity at Division Education Offices (headed by a Deputy Director with limited staff) and other field offices, combined with high vacancy rates, remains a key constraint for effectively decentralizing administrative and financial powers. While the use of SLIPs and UPEPs under PEDP3 was an important achievement, the SLIP grants were small and uniformly allocated across schools, and were not used for supporting pedagogy-related activities. Furthermore, the school management and social audit committees often lacked the needed capacities. QLEAP plans to continue strengthening the DPE and field education offices to manage and administer the primary education system effectively and efficiently through a decentralized governance and management structure and phased decentralization plan attuned to the recommendations from DPE's updated Organization Development and Capacity Building Guidebook (ODCBG).
- 106. **Deterioration of security conditions and natural disasters.** During the PEDP3 program period, political disturbances sometimes led to strikes and school closures, disrupting the delivery of education. There is a possibility that the security situation in the country might deteriorate and political disturbances might increase, especially at election times. This could have adverse consequences for sustaining the achievements of PEDP3. In additional, potential yearly occurrences of cyclones and floods affecting parts of the country might damage school infrastructure such as WASH facilities put in place by PEDP3. Effective and timely implementation of the Education in Emergencies sub-component under QLEAP is expected to mitigate this risk.

#### V. LESSONS AND RECOMMENDATIONS

- 107. **Results-based financing does help deliver results, especially when there is good harmonization among development partners.** The experience from PEDP3 shows that tying external financing to DLIs can push the system to deliver the desired results even when the external financing is a small part of the total program budget. This approach, coupled with effective harmonization among the DPs and GoB, can help maintain the focus of all major stakeholders on the key activities and the most important outputs and outcomes, and also reduce transaction costs. In PEDP3, all the DPs supporting the SWAp subscribed to a common DLI matrix, which made it possible for them to effectively work together to support the government in achieving the agreed targets for these DLIs.
- 108. Community mobilization efforts encouraging bottom-up citizen's engagement are important for advancing education reforms. An effective communication strategy is an essential approach for ensuring the understanding and eventual buy-in of school stakeholders about the need, importance and benefits of quality of education and thus, of the measures carried out to improve school effectiveness and increase learning outcomes. The school management committees and the wide stakeholder consultation processes established under PEDP3 are prominent ways of engaging citizens/civil society.
- 109. There is a need to enhance focus on ensuring foundational numeracy and literacy, especially in the first 3 grades of primary education, as an essential requirement in the ongoing education reform in Bangladesh. Despite the remarkable progress made by Bangladesh in increasing access to pre-primary and primary education, and improving the primary cycle completion rate, the NSA results indicate that not all primary school children are learning. Low and uneven learning outcomes, especially in math and Bangla in the first three grades of primary education, continue to be a key issue of concern. Improving school quality is a gradual and holistic process and a very lengthy endeavor contingent upon a number of additional interventions that need to strongly, timely and effectively articulate and synergize at the classroom level, like for example: (i) ensuring that teachers are able to teach effectively under the new revised curriculum and articulate the learning inputs provided by PEDP3; (ii) ensuring the adequacy of teacher student contact hours in the

classroom; (iii) carrying out periodic, systematic random on-site monitoring to assess how the different learning-related interventions are being implemented in the classroom and, if warranted, to develop and implement appropriate remedial and preventive measures; and (iv) using findings of the various learning assessments (NSA, PECE, etc.) to design and implement appropriate preventive and corrective measures. The QLEAP design rightly focuses on improving education quality, as measured by learning outcomes in language and mathematics, especially in the first three grades of primary education.

- 110. A comprehensive intervention like PEDP3 requires more effective horizontal articulation among its key activities and timely vertical coordination across all the implementing entities at all levels of decision-making. The key interventions/subcomponents of PEDP3 contributing to the PDO performed well on their own. But there was little interaction and feedback across these interventions, limiting their synergetic impact on teaching-learning practices, teacher training, and improving learning outcome. During the implementation of QLEAP, DPE needs to further strengthen this needed horizontal and vertical integration, ensuring in the process more timely on-site monitoring of the various interventions to provide feedback for identifying corrective and preventive measures.
- 111. Capacity building is critical for successful program implementation. Advancing and sustaining the ongoing education reforms will require strengthened horizontal and vertical institutional linkages among the key actors and greater clarification of their roles, responsibilities and accountability mechanisms. When limited institutional capacity is detected for implementing sany intervention, as was the case with BNFE for addressing the out-of-school children issue, it is important to prepare an appropriate institutional capacity development time-bound action plan at the very beginning and ensure that that it is implemented in an effective and timely fashion.
- 112. **Technical assistance needs to be more effectively planned, recruited and managed.** As noted earlier, PEDP 3 activities benefited substantially from national and international technical assistance provided by different DPs. However, this technical assistance could have been even more effective in contributing to the program's achievements if it had been planned more systematically and better coordinated with technical assistance procured by the government. QLEAP proposes to have a dedicated Program Support Team (PST) consisting of experts responsible for supporting DPE to manage/implement all aspects of TA support (including both DP funded and government funded TA). The PST will, inter alia, work to ensure that: (a) each line division of DPE and executing entity timely proposes the required TA financial resources to be included in the AOP; (b) appropriate terms of reference are drafted by qualified staff familiar with the nature of the consultancy; (c) suitable reviewing and selection committees are timely appointed; (d) identified qualified TA is timely recruited and contracted; and (e) the TA in place is effectively managed, and the services delivered by the TA are in sync with contract specifications.

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# **ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS**

### **A. RESULTS INDICATORS**

## **A.1 PDO Indicators**

Objective/Outcome: Increase participation and reduce social disparities in primary education

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Increase in the number of children enrolled in primary education	Percentage	84.70 30-Jun-2010	98.00 31-Dec-2017		97.96 31-Dec-2017

Comments (achievements against targets): Target achieved.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Decreased disparity in access to schooling measured by family income levels: ratio of NER of 20% poorest to NER of 20% richest	Number	0.72 02-Jun-2005	0.77 31-Dec-2015	0.80 31-Dec-2017	0.89 30-Nov-2016

Comments (achievements against targets): Targets exceeded by 0.09 percent points.

**Objective/Outcome:** Increase the number of children completing primary education and improve the quality of the learning environment and measurement of student learning

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Primary Cycle Completion Percentage Rate (gender disaggregated)	54.85	64.50	80.00	80.80	
		30-Jun-2010	31-Dec-2015	31-Dec-2017	31-Jul-2017

Comments (achievements against targets): Targets exceeded as follows: (i) the overall rate exceeded by 0.8 percent points; (ii) for boys narrowly missed target by 0.3 percent points (target: 77; actual: 77.7) and (iii) for girls exceed by 1.9 percentage points (target: 82; actual: 83.9).

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
System for learning assessment at the primary level	Yes/No	Y 31-Dec-2010	Y 29-May-2014		Y 31-Dec-2017
Utility of the learning assessment system	Number	3.00 31-Dec-2010	4.00 29-May-2014		3.00 31-Dec-2017
Frequency and quality of assessment of learning of primary education completers (Grade 5 completion exam)	Text	Grade 5 completion exam implemented for first time in 2009 to all students: testing memory more than ability to use subject knowledge	Grade 5 completion exam implemented, with at least 25% of items competency-based and an additional 25% of competency-based items piloted		65 % of the 2016 PEC test items were competency-based (testing students' ability to use knowledge).

	31-Dec-2010		31-Dec-2017

Comments (achievements against targets): Target achieved. NSAs for 2011, 2013 and 2015 were successfully implemented, and the PECE have been administered annually with the targeted percentage of competency-based test items. In addition, NSA 2017 has also been administered (data are currently being analysed).

Objective/Outcome: Improve effectiveness of resource use for primary education

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Expanded coverage of decentralized planning and management at school levels: proportion of schools preparing School Level Improvement Plans and receiving funds	Percentage	27.00 30-Jun-2010	75.00 31-Dec-2016		90.00 30-Nov-2016

Comments (achievements against targets): Target exceeded by 15 percent points.

#### A.2 Intermediate Results Indicators

**Component:** 1. Improving the Quality of the Learning Environment and the Measurement of Student Learning.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Adequate learning resources:	Percentage	32.70	90.00		99.00

percentage of schools receiving textbooks within first month of academic year (Percentage, Core)	01-Feb-2010	29-May-2015	30-Nov-2017
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Comments (achievements against targets): Target exceeded by 9 percent points.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Teachers recruited or trained	Number	0.00	3600.00	3600.00	2032.00
		11-Jun-2011	31-Dec-2015	31-Dec-2017	30-Nov-2016

Comments (achievements against targets): This indicator only refers to DPEd, and does not take into account other types of training. 56.4% of the target for this indicator was achieved. However, around 92.7 percent of the teaching force (male 92.4 percent and female 92 percent including head teachers and assistant teachers) received subject-based training under PEDP3, a significant increase as compared to the baseline of 84.7 percent in 2010.

# **Component:** 2. Improving Access and Reducing Social Disparities

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Classroom environment more conducive to learning: percentage of schools meeting minimum quality standards per Primary School Quality Level Indicators (PSQL) (Percentage, Custom)	Percentage	17.00 30-Jun-2010	50.00 31-Dec-2015	35.00 31-Dec-2017	32.80 31-May-2017

Comments (achievements against targets): The percentage of GPSs meeting at least 3 out of 4 minimum quality standards as measured by the primary schools quality level (PSQL) indicators increased 15.8 percentage points from a baseline of 17 percent in 2010 to 32.8 percent in 2017, reaching 94 percent of the end- of-program target of 35 percent

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of additional classrooms built or rehabilitated at the primary level resulting from project interventions.	Number	0.00 11-Jun-2011	30400.00 31-Dec-2015	31000.00 31-Dec-2017	27500.00 31-May-2017

Comments (achievements against targets): The achievement was 89 percent of end-of-project target.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Provision of Pre-Primary Education (PPE) in Government Primary Schools	Text	0.00	75.00	In at least 75% of the 37,000 GPS	90.00
(GPS) (GPS providing PPE [trained teachers and PPE material availability])		31-Dec-2005	31-Dec-2015	31-Dec-2017	30-Nov-2017

Comments (achievements against targets): Target exceeded by 15 percent points.

Component: 3. Improving Program Planning and Management, and Strengthening Institutions

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Strengthening Upazilas for supporting school management: proportion of Upazilas having prepared Upazila Education Plans and receiving funds (Percentage, Custom)	Percentage	0.00 30-Jun-2011	25.00 31-Dec-2015	50.00 31-Dec-2017	51.00 31-May-2017

Comments (achievements against targets): Target exceeded by 2% (note: the revised target was double the original target).

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Monitoring & Evaluation (M&E) systems strengthened to improve monitoring and data utilization for program performance and planning:number of months to administer & disseminate Annual School Census	Number	17.00 11-Jun-2011	8.00 31-Dec-2015	12.00 31-Dec-2017	11.00 31-Jul-2017

Comments (achievements against targets): Achievement exceeded the target: number of months was reduced to 11 while the target was 12.

Note: The original target was applicable for 6 types of schools while the revised target and actual achievement were applicable for all types of schools.

## **B. KEY OUTPUTS BY COMPONENT**

Objective/Outcome 1: Increase participation and reduce social	disparities in primary education
Outcome Indicators	OI1. Number of children enrolled in primary education as measured by the NER
	OI2. The NER ratio of the 20 percent poorest to 20 percent richest children
Intermediate Results Indicators	IR4. Needs-based infrastructure as measured by the number of additional classrooms built or rehabilitated at the primary level under PEDP3 teachers
	IR5. Provision of PPE in GPS (with teachers and PPE material available)
	1. Children enrolled in PPE (satisfactory under PEDP3)
	2. Out-of-school children enrolled (poor performance under PEDP3)
	<b>3.</b> Children with special needs enrolled (mixed performance under PEDP3)
Key Outroute by Common and	<b>4.</b> Classrooms constructed and/or rehabilitated (felt slightly short of end-of-project target)
Key Outputs by Component (Linked to the achievement of the Objective/Outcome 1)	5. WASH blocks constructed (end-of-project targets exceeded)
(Linked to the achievement of the Objective/Outcome 1)	<b>6.</b> School health and nutrition programs delivered (fully financed by GoB; satisfactory performance)
	<ol><li>Stipends to poor students provided (fully financed by GoB; satisfactory performance)</li></ol>
	8. Education in emergencies implemented
	9. Communication and social mobilization campaigns implemented

Objective/Outcome 2 Increase the number of children completing primary education and improve the quality of the learning environment and measurement of student learning			
	OI3. Primary completion rate (gender disaggregated)		
Outcome Indicators	OI4. Systems for learning assessment at the primary level  a. Frequency and quality of assessment of learning of primary		
	education completers b. Utility of the learning assessment system		
	IR1. Percentage of schools receiving textbooks within the first month of the academic year		
Intermediate Results Indicators	IR2. Teachers recruited or trained that completed DPEd		
	IR3. The percentage of GPSs that met a "minimum (3 out of 4)" needs-based environment more conducive to learning as measured by the primary school quality level (PSQL) indicators (as listed in the ASPR)		
	1. New textbooks including teacher guides developed, printed and timely distributed to all schools		
	2. Revised curriculum for grades 1 -5 including one grade of PPE installed		
Koy Outputs by Component	3. Additional qualified teachers fully positioned		
Key Outputs by Component	<ul><li>4. DPEd training provided to assistant teachers</li><li>5. Provision of teacher support to sustain active learning in the</li></ul>		
(Linked to the achievement of the Objective/Outcome 2)	classroom mainly through ICT		
	6.School and classroom-based assessment including instruments and procedures implemented		
	7. National assessment administered, data analyzed and disseminated and policy/strategy decision-making processes based on findings		

	8.Grade 5 terminal examination strengthened – PECE with more competency-based items				
Objective/Outcome 3 Improve effectiveness of resource use for primary education					
Outcome Indicators OI5. Proportion of schools preparing SLIPs and receiving					
Intermediate Results Indicators	IR6. Proportion of Upazilas preparing UEPS and receiving funds IR7. Number of months to administer and disseminate the APSC				
Key Outputs by Component (Linked to the achievement of the Objective/Outcome 2)	<ol> <li>Teacher recruitment, deployment and promotion policies enacted and implemented, including the professional career path</li> <li>SLIPS being developed and implemented with the active participation of the SMCs (satisfactory performance)</li> <li>UPEPs being developed and implemented by the Upazila Education Offices</li> <li>Timely preparation and dissemination of the APSC report</li> <li>Timely preparation and dissemination of the ASPR report</li> <li>Monitoring functions within DPE strengthened</li> <li>Ongoing capacity building of the MoPME, DPE, NCTB, NAPE, District and Upazila Education Offices, PTIs and Upazila Resource Centers</li> <li>More managerial decision functions devolved to the District, Upazila and school level</li> <li>Public Private Partnerships fostered to support, for example, the delivery of PPE, Second Chance Education and teacher training</li> </ol>				

# ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS	
Name	Role
Preparation	
Supervision/ICR	
Saurav Dev Bhatta, Syed Rashed Al-Zayed	Task Team Leader(s)
Zafrul Islam	Procurement Specialist(s)
Mohammad Reaz Uddin Chowdhury	Financial Management Specialist
Nazma Sultana	Team Member
Mahtab Alam	Team Member
Sandra X. Alborta	Team Member
Golam Faruque Khan	Team Member
Rocio Mariela Malpica Valera	Team Member
Karthika Radhakrishnan	Team Member
Shinsaku Nomura	Team Member
Sabah Moyeen	Social Safeguards Specialist
Nadia Sharmin	Environmental Safeguards Specialist
Uttam Sharma	Team Member
T. M. Asaduzzaman	Team Member
Masum Sajjad	Team Member
Md Naibur Rahman	Team Member

# **B. STAFF TIME AND COST**

Stage of Project Cycle	Staff Time and Cost				
Stage of Project Cycle	No. of staff weeks	US\$ (including travel and consultant costs)			
Preparation					
FY10	43.045	303,366.65			
FY11	124.600	838,621.77			
FY12	28.052	215,752.65			
FY13	0	64,692.78			
Total	195.70	1,422,433.85			
Supervision/ICR					
FY11	.200	1,724.19			
FY12	39.274	375,586.19			
FY13	41.699	271,892.10			
FY14	48.794	180,208.74			
FY15	52.192	219,545.58			
FY16	22.349	239,365.54			
FY17	50.388	308,125.85			
FY18	58.041	237,522.61			
Total	312.94	1,833,970.80			

### **ANNEX 3. PROJECT COST BY COMPONENT**

As discussed in the components subsection, the PEDP3 design used a single component "Financing of the GoB PEDP3 totaling US\$5,800 million with IDA contributing US\$300 million". Hence, costs by component are not applicable to this program.

#### **ANNEX 4. EFFICIENCY ANALYSIS**

This economic analysis for the six-year PEDP3 assesses ex-post costs and benefits associated with the program. The methodology outlined below explains how the ex-post estimation of benefits and costs accrued from PEDP3 should be viewed against a counterfactual 'business-as-usual' scenario where the government of Bangladesh would continue with PEDP2, the preceding program.

The analysis assesses realized benefits and costs related to the program using a "counterfactual" identification approach where the additional cost is compared with the additional benefits that accrued from PEDP3. The benefits from PEDP3 come from three sources: (i) increase in basic education completers with higher wages (compared to noncompleters); (ii) higher wage-premium as a result of increased quality of education for all basic education completers; and (iii) reduced dropouts and repetitions which reduced wastage of resources, both private and public. Costs include additional program costs (from GOB and Development Partner sources) for PEDP3, and private costs that include both direct household expenditures as well as opportunity costs of going to school.

#### **Assumptions**

#### **Benefits**

As indicated above, there are three types of benefits from PEDP3: quantity benefits, quality benefits and efficiency gains.

a. Quantity benefits—In order to calculate benefits for all additional children who completed grade 5 due to PEDP3, we look at the additional number of students who have completed grade 5 due to PEDP3 each year starting year 2 (2012/13). The total number of grade five completers is obtained from Annual Primary School Censuses for each of the program years. In the absence of PEDP3, we assume grade five completion figures would have been three percent below the observed completion figures for that year. The additional number of students is the difference between total children completing grade 5 with PEDP3 and total students that would have completed grade 5 without PEDP3.

For each year, the annual wage premium for each student who completes grade 5 is the difference between the average wage of those who have completed grade 5 and the average wage of those who have not completed grade 5. The average figures are calculated using data from the nationally representative 2010 and 2016 Household Income and Expenditure Surveys (HIES), and we are assuming that wages for both groups increased at the same rate between 2011/12 and 2016/17, the years the program was in operation.

#### b. Quality benefits

Quality benefits refer to the additional benefits for all children due to quality increase, and not just for additional children completing grade 5 due to PEDP3. We assume that the quality premium on wage was 3% per year, which is half of the 6% assumed for proposed PEDP4. That is, given that the quality of education children exposed to PEDP3 is enhanced, it is expected that the labor market had taken into account the skill improvement of PEDP3 graduates and the wage rate increased as a result. The quality related benefits for each year are therefore the quality wage premium times the number of children completing grade five. Comparing wage rates for 2010 and 2016 also shows that wage rates for primary completers have increased significantly more than if wages had only kept pace with inflation rate.

c. Efficiency benefits: There are benefits from reduced repetition which reduces delays in completion of grade 5. The approach taken is the reconstructed cohort analysis where the end result is the number of years in school required to

produce a primary school completer. Given the increase in promotion and decrease in repetition and dropout with PEDP3, the number of years taken to produce a primary school completer is lower with PEDP3 than in the absence of it.

The cost saving is the cost per child incurred by the government plus opportunity cost of going to school and household expenditure on education. Since this gain is for the program period only (6 years), it can be argued that this as a lower bound gain since the efficiency gains might be maintained to some extent (for some time) in the primary education system even after the program ended.

### Costs

There are three costs to consider: public investments, private investments and opportunity costs to households.

*Public Investments*: We include additional program related cost of the different activities in PEDP3 (compared to cost without PEDP3). The estimates for PEDP2 in current price are subtracted from the estimates for PEDP3 cost to calculate additional public investments under PEDP3.

*Private investments*: Private investments for additional enrollment are the direct costs borne by households as a result of increased enrollment. The private cost per student per year is calculated from 2010 and 2016 HIES, which includes educational expenses incurred by households with children enrolled in primary schools. Private cost per primary student is the average cost incurred by the household.

Opportunity cost to households: We assume that the children currently in school would have worked for wages had they not gone to school. The opportunity cost of educating a child for a year is assumed to be 50% of annual wage rate for adults with less than primary education. The wage figures are calculated from HIES 2010 and 2016.

A discount rate of 12% is used in this analysis to find the present value of future costs and benefits. This is consistent with the findings of World Bank (2016)<sup>12</sup>, which suggests that many researchers recommend discount rates between 8 to 12% for developing countries.

#### **Economic rate of return**

Using the above assumptions, the cost-benefit analysis shows that the present value of net benefits is positive (US\$1.1 bil), and that the program's internal rate of return (IRR) is 16.6%, which is significantly higher than the discount rate (12%). This return can actually be considered a lower bound estimate, given that positive externalities associated with enhanced education quality and equity arising from a healthier, better educated and equitable/ inclusive society have not been included in the analysis.

## Robustness/Sensitivity analysis

The quality premium we are assuming also directly affects the magnitude of the internal rate of return. If the quality premium is 2%, instead of 3%, the IRR decreases to 12%. If the unemployment rate is 30% instead of the 10% we are assuming, the IRR is 16.1%, which is not very different from the baseline IRR. A similar situation arises if the wage premium is reduced by half. This is partly because based on population projection of Bangladesh by the Bangladesh Bureau of Statistics, the population growth in Bangladesh gradually declined as a result of decrease in birth rate (BBS, 2015). This also had implications on the additional enrollments in primary education.

However, if both quality premium is reduced to 2% and the unemployment rate is 30%, then the IRR would decrease to 11.4%, which is lower than the discount rates we are using (12%), but is still within the 8 to 12 % rate used for

<sup>&</sup>lt;sup>12</sup> World Bank (2016). Discounting Costs and Benefits in Economic Analysis of World Bank Projects. OPSPQ.

<sup>&</sup>lt;sup>13</sup> "The data used for the projections include actual population figures from the 2011 census by age and sex. Assumptions on mortality, fertility, and migration are made largely based on the UN Population Division's database.

developing countries. In the latter case, it could be argued that the resources were not used in the most efficient manner.

#### Conclusion

The economic analysis suggests that PEDP3 was, ex post, a sound investment decision. The cost-benefit analysis shows that the present value of net benefits is positive (US\$1.1 bil), and that the program's internal rate of return is 16%, which is higher than the discount rate. The major driving force for the internal rate of return of 16% is the quality premium we assumed for PEDP3.

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

#### **ANNEX 6. SUPPORTING DOCUMENTS (IF ANY)**

## Bank preparation documents for the original IDA Credit

World Bank. People's Republic of Bangladesh. Country Assistance Strategy (CAS) for FY2011-2014, Report 54615-BD, July 30, 2010.

World Bank. Statements of mission objectives, Aide-Memoires and Back-to-Office Reports from the preidentification mission carried out in November 2009 up to the appraisal mission carried out in January 2011.

World Bank, Minutes of PEDP3 Project Concept Note (PCN) Review Meeting June 3, 2010.

World Bank. Project Appraisal Document (PAD) for the People's Republic of Bangladesh: Third Primary Education Development Project (PEDP3) Report No. 60321-BD, June 11, 2011.

World Bank. Agreed Minutes of Negotiations May 26, 2011.

World Bank (IDA). Financing Agreement between the Peoples Republic of Bangladesh and the International Development Association for the Third Primary Education Development Project (PEDP3) Credit 4999-BD October 13, 2011.

Government of the People's Republic of Bangladesh, Ministry of Primary and Mass Education (MoPME). Third Primary Education Development Program. (PEDP3) Program Document, June 2011.

#### Bank preparation documents for the second IDA Credit (Additional Financing)

IDA, International Finance Corporation. *Country Assistance Strategy Progress Report for the People's Republic of Bangladesh for the Period FY11-15.* Report No. 73983-BD, November 20, 2013. World Bank. *Agreed Minutes of Negotiations for the Additional Financing of PEDP3* October 28, 2014.

World Bank. Project Paper for the People's Republic of Bangladesh: Additional Financing for the Third Primary Education Development Project (PEDP3) Report No. 90812-BD, November 21, 2014.

World Bank (IDA). Financing Agreement between the Peoples Republic of Bangladesh and the International Development Association for the Additional Financing and Amendment of the Original Financing Agreement of the Third Primary Education Development Project (PEDP3) Credit 5552-BD January 25, 2015.

Global Partnership for Education (GPE). Education Grant Agreement between the Peoples Republic of Bangladesh and the International Development Association for the Additional Financing of the Third Primary Education Development Project (PEDP3) TF0A0977-BD January 5, 2016.

## Bank and Borrower project implementation documents

Aide-Memoires of all 6 Joint Annual Review Missions (JARMs) from 2012 to 2017

Aide Memoires of all 13 Joint Consultation Meetings (JCMs) from 2012 to 2018.

World Bank. *Implementation Status and Results Reports (ISRs)* archived in the World Bank PEDP3's electronic files from February 12, 2011 (ISR 1) to December 20, 2017 (ISR 11).

World Bank, Annual Fiduciary Reviews carried out from 2012 to 2017

Directorate of Primary Education (DPE) of the Ministry of Primary and Mass Education (MoPME) of the Government of Bangladesh, Monitoring and Evaluation Division. All the Annual Sector Performance

Reports (ASPR) published in the period 2011-2017.

DPE, MoPME, Monitoring and Evaluation Division. *Annual Primary School Census (APSC) for 2013, 2014, 2015 and 2016.* 

DPE, MoPME, Monitoring and Evaluation Division. *National Student Assessment (NSA) Reports for 2013 and 2015.* 

World Bank. Annual Fiduciary Reviews carried out in the period 2012 to 2017.

DPE, MoPME. PEDP3 Quarterly Interim Financial Reports (IfRs) submitted in the period 2012-2017.

Annual Audit Reports for the period 2012-2016.

DPE, MoPME of the Government of Bangladesh. PEDP3 Mid-Term Review Report. July 2015.

Bernard Anne. PEDP3 Joint Rapid Assessment Report, September 23, 2016.

### Bank and Borrower other project implementation and post-implementation-related documents

World Bank. *People's Republic of Bangladesh. Country Partnership Framework (CPF) for FY2016-2020* (Report 103723-BD, March 6, 2016.

World Bank. *People's Republic of Bangladesh. Implementation Completion and Results Report of the Second Primary Education Development Project (PEDP2) – IDA Credit 38570.* Report ICR2036, December 23, 2012.

# **ANNEX 7. Supporting Tables**

# a. PEDP3 Components, sub-components and results area

Component 2	Component 1		Component 3		
Results Area 1	Results Area 2	Results Area 3	Results Area 4	Results Area 5	Results Area 6
Learning outcomes	Participation	Disparities	Decentralization	Effectiveness	Planning and Management
S1 Each child learns	S7 Alternative	S12 Stipends*	S16 Field level	S20 Grade V	S24 PEDP3 management and
	and second		offices	terminal	governance
	chance		strengthened	examination	
				strengthened	
S2 School and	S8 Pre-primary	S13 School health	S17 Decentralized	S21 Teacher	S25 PEDP3 Financial
classroom assessment	education	and school feeding*	school	recruitment,	Management
			management and	promotion and	
			governance	deployment	
S3 Curriculum	S9 Inclusive	S14 Needs-based	S18 School level	S22 Annual	S26 Sector Finance
development	education	school environment	leadership	School Census	
		improvement	development		
S4 Textbook	S10 Education in	S15 Needs-based	S19 Organizational	S23 National	S27 Strengthen monitoring
distribution	emergencies	infrastructure	review and	Student	functions
		development	strengthening	Assessment	
S5 ICT in education	S11				S28 Human resource
	Communication				development
	and social				
	mobilization				
S6 Teacher education					S29 Public private
and development					partnerships

<sup>\*</sup> Not financed by the DP, and thus its corresponding assessment not included in this Implementation and Completion Results (ICR) report.

# b. Agreed DLIs at the time of appraisal and amendments during AF restructuring

Component	DLI	Amendments to year 3 DLI targets at AF
C2: Improving the Quality of the Learning Environment and the Measurement of Student Learning	distribution and quality of textbook content	DLI2: DPEd offered in 29 PTIs with number of instructors according to the plan.
	DLI 4: Ensuring quality of new teachers hired	DLI4: (i) all teachers and head teachers positions (vacancies and new position) filled according to agreed recruitment procedures and on needs basis; (ii) at least 90% of new teacher and head teacher posts identified by the needs based plan to be filled for the year filled; and (iii) recruitment rules with career paths for teachers and head teachers and, career paths, recruitment and promotion rules for DPE officers (field and Head Quarter) approved by GoB.
C1. Improving Access and Reducing Social Disparities	DLI 5: Strengthening children's readiness for learning DLI 6: Reducing classroom overcrowding and improving school environment	DLI6: (i) at least 35% of planned need-based infrastructure development completed according to criteria and technical standards; and (ii) third party validation of infrastructure development according to criteria and technical standards

C3: Improving Program	DLI 7: Strengthening SMCs and Upazilas for	
Planning and	supporting school management	
Management, and	DLI 8: Ensuring adequate financing of	
Strengthening	primary education program and	
Institutions	improving medium-term budgeting	
	DLI 9: Improving the quality of the APSC data	
	and the effectiveness of the	
	monitoring and evaluation (M&E)	
	unit	