



**ASIAN INFRASTRUCTURE
INVESTMENT BANK**

Nov. 30, 2021

**Project Document
of the Asian Infrastructure Investment Bank**

Sovereign-Backed Financing

Republic of India

Gujarat Education Infrastructure and Technology Modernization Program

Currency Equivalents

(As of Nov. 18, 2021)

Currency Unit – Indian Rupee (INR)

INR1.00 = USD0.0136

USD1.00 = INR73.3528

Borrower's Fiscal year

April 1-March 31

Abbreviations

AIIB	Asian Infrastructure Investment Bank
DLI	disbursement-linked indicator
DLR	disbursement-linked result
ECE	early childhood education
EIRR	economic internal rate of return
ES	environmental and social
ESP	Environmental and Social Policy
ESSA	Environmental and Social Systems Assessment
FMP	Financial Management and Procurement
GCSE	Gujarat Council of School Education
GOAL	Gujarat Outcomes for Accelerated Learning
IFSA	Integrated Fiduciary System Assessment
IVA	independent verification agent
PAP	Program Action Plan
PFMS	Public Financial Management System
PforR	Program for Results
PMU	Program Management Unit
PPM	Project-affected People's Mechanism
SEEP	School Education Excellence Project
SSF	Samagra Shiksha Framework
STEM	science, technology, engineering and math
WB	World Bank

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1. Program Summary Sheet

Project No.	000479-IND
Project Name	Gujarat Education Infrastructure and Technology Modernization Program
AIIB Member	Republic of India
Borrower	Republic of India
Program Implementing Entity	Gujarat Council of School Education (GCSE), under the administrative control of the State Education Department
Sector	Education
Sub-sector	Education
Program Objective	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.
Program Description	<p>The program, to be co-financed with the World Bank (WB) (and referred to by WB as the Gujarat Outcomes for Accelerated Learning [GOAL] Program), will implement comprehensive reforms in the education sector based on a decentralized stakeholder-owned planning and management approach.</p> <p>The program will upgrade the physical learning environment as well as digital infrastructure of participating schools. The program investments will also finance soft activities which will ensure the efficiency of the upgraded school infrastructure to bring the intended educational outcomes.</p>
Implementation Period	Start Date: Jan. 1, 2022 End Date: May 31, 2027
Expected Loan Closing Date	Sep. 30, 2027
Cost and Financing Plan	<p>Program Cost: USD1,071.44 million</p> <p><u>Financing Plan:</u></p> <p>AIIB: USD250.00 million WB (Lead Co-financier): USD500.00 million Government of Gujarat: USD321.44 million</p>
Size and Terms of AIIB Loan	<p>USD250 million.</p> <p>Final maturity of 16 years, including a grace period of 6 years, with level repayments at AIIB's standard interest rate for sovereign-backed variable spread loans.</p>
Environmental and Social Category	WB's Category "Moderate", (which is similar to AIIB's Category B if AIIB's Environment and Social Policy (ESP) were applicable).
Risk (Low/Medium/High)	Medium
Conditions of Effectiveness	(i) WB's financing agreement with the client has been executed, and all conditions to its effectiveness have been met; and (ii) co-lenders' agreement between AIIB and WB has been executed.

Key Covenants	<ul style="list-style-type: none"> • Maintain, at all times during the implementation of the program, an independent verification agent (IVA) under terms of reference and qualifications acceptable to AIIB and WB, to verify the evidence supporting the achievement of one or more disbursement-linked results (DLRs) and certify the fulfillment of such DLRs. • Implement the Program Action Plan (PAP) in a manner and substance satisfactory to AIIB and WB. • Carry out the program in accordance with financial management, procurement and environmental and social (ES) management systems acceptable to AIIB and WB, including the recommendations set out in the Environmental and Social Systems Assessment (ESSA) conducted by WB and the Program Action Plan.
Prior Results (Loan % and dates)	Up to USD12.33 million (five percent of the AIIB loan amount) for DLRs achieved not earlier than 12 months before the signing date of the loan agreement.
Policy Waivers Requested	The proposed AIIB co-financing of the WB's Program-for-Results (PforR) will require a derogation from AIIB's Procurement Policy in order to allow for the application of the fiduciary provisions of WB's Policy on PforR (PforR Policy) in lieu of the AIIB Procurement Policy.
Policy Assurance	The Vice President, Policy and Strategy, confirms an overall assurance that the Bank is in compliance with the policies applicable to the project.

President	Jin Liqun
Vice President	D.J. Pandian
Director General	Hun Kim
Team Leader	Pratyush Mishra, Investment Operations Specialist
Back-up Team Leader	Hari Bhaskar, Principal Investment Operations Specialist
Team Members	Christopher Damandl, Senior Counsel Irish Fe Aguilar, Social Development Specialist Mengmeng He, Finance Associate Rabindra Shah, Procurement Associate – Operations Shodi Nazarov, Financial Management Associate Zhaojing Mu, Senior Operations Management Officer

2. Program Description

A. Program Overview

1. **Program Objective.** The program objective is to upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.

2. **Program Description.** The Government of Gujarat has embarked on a state-wide School Education Excellence Project (SEEP) in 2018, with aims to create a strong foundation through a realigned and consolidated school network in the kindergarten to grade 12 segments. SEEP, using a wide programmatic approach that includes support through the Samagra Shiksha Program, the National Teacher Education Program and several other centrally sponsored schemes with convergent financing, will implement critical reforms to enhance instructional processes and remedial measures, improve teacher performance and accountability and strengthen teacher support and learning assessment systems with additional support to the foundational years.

3. The program, which will be co-financed with WB, is designed to support selected components of SEEP and aims to improve education outcomes with special focus on: (i) institutionalizing decentralized planning systems for stakeholder-owned planning, (ii) improving learning environment through strengthening of existing schools with inclusive infrastructure packages, (iii) promoting gender and equity aspects including support to children with special needs, (iv) strengthening foundational learning for improving learning outcomes and reducing learning poverty, (v) strengthening teacher development and school-based assessment for classroom practices and (vii) supporting vocational education program to facilitate schools to work transition.

4. This program will also support the Government of Gujarat 's COVID-19 response strategies by enabling technology support at local levels (villages/hamlets) for students, facilitating remote access to learning, developing home-learning programs with a realigned syllabus and providing a long-term strategy to build resilient education systems for unexpected future school closures.

5. The program will upgrade the physical learning environment as well as digital infrastructure of participating schools. The program investments will also finance soft activities which will enhance the efficiency of the upgraded school infrastructure to bring the intended educational outcomes. WB approved the GOAL program in an amount of USD500 million on March 24, 2021. The Loan Agreement was signed on May 19, 2021. AIIB's financing will expand the scope of GOAL from 6,000 schools to 9,000 schools.

6. Gujarat is susceptible to natural disasters, such as floods, cyclones, earthquakes, storm surges and drought. Many of these risks are expected to be further exacerbated due to climate change. The rehabilitation of schools under the program will consider climate-related vulnerabilities and integrated measures to mitigate such

risks. For instance, the design of schools will be based on the concept of “green schools.”¹

7. **Expected Results.** The program is expected to improve student outcomes in schools in Gujarat through school infrastructure consolidation and rehabilitation, use of information technology, curriculum reforms and professional development of teachers. Since the program uses a Program-for-Results (PforR) modality, disbursement will be conditional on the achievement of specific results (or disbursement-linked results [DLRs]), measured against the following disbursement-linked indicators (DLIs):

- (i) DLI 1: Decentralized planning systems institutionalized.
- (ii) DLI 2: Performance grants to schools to incentivize improved outcomes.
- (iii) DLI 3: Improved foundational learning outcomes at the lower primary level.
- (iv) DLI 4: Strengthened teacher development for classroom performance.
- (v) DLI 5: Improved learning environment in schools and teacher education institutions.
- (vi) DLI 6: Improved learning assessment systems for focused remedial programs.
- (vii) DLI 7: COVID-19 response strategies built-in for systemic resilience.

8. Annex 2 sets forth the detailed DLRs based on which disbursements will be made. AIIB’s financing will be disbursed against all seven DLIs and the disbursement will be on a pro-rata basis in the ratio of 2:1 in line with the respective loan sizes of WB (USD500 million) and AIIB (USD250 million).

9. **Expected Beneficiaries.** Under the program, about 4.5 million students (in about 9,000 schools) will benefit from improvement in the quality of foundational learning, improved teacher development and improved learning environment. With regards to social inclusion, the program will promote gender and equity aspects including support to children with special needs. At least 150 residential schools for girls belonging predominantly to Scheduled Castes, Scheduled Tribes and minority groups in hard-to-reach/rural areas will be supported.

B. Rationale

10. **Strategic Fit for AIIB.** As the first project supported by AIIB in the education sector, the program is consistent with AIIB’s mandate and thematic priorities to promote green infrastructure and technology-enabled infrastructure. About 78 percent

¹ The design of green schools includes aspects such as energy efficiency, water harvesting, conservation, use of local materials for construction, multi-use spaces, kitchen gardens, reducing construction materials, tree plantation, etc.

of the overall program expenditures (85 percent of AIIB's financing) will support investments in school infrastructure and technology.

11. The technology components of the program will cover investments in science, technology, engineering, and math (STEM) labs, computer and internet facilities, technological innovations like creation and hosting of digital learning content, smart classrooms, and remote learning. The investments will also help Gujarat enhance preparedness for unexpected school closures in the post COVID-19 pandemic era.

12. The program also aligns well with AIIB's thematic priority of green infrastructure. The infrastructure component of the program will adopt the concept of green schools in architectural layouts for upgrading schools, and the building designs will incorporate the following principles:

- (i) Green: use of durable, energy saving and environment-friendly construction materials to the extent possible.
- (ii) Resilient: ability to withstand sudden shocks and slow-onset impacts. Water storage tanks, rainwater harvesting and other mechanisms to ensure resilience.
- (iii) Efficient: use of modern, low-energy-consumption lighting systems.

13. **Value Addition by AIIB.** The program is part of the Government of Gujarat's comprehensive education sector reform plans. AIIB's financing will (i) help to expand the coverage of digital technology initiatives (including (a) access to online classes and (b) developing high-quality learning material for virtual sessions and dissemination through digital media); (ii) expand the number of schools under the program (from 6,000 to 9,000) so that more students can benefit from improved quality of education and (iii) mobilize an additional USD107.15 million from the Government of Gujarat. The program also provides timely support to the state government in its response to the COVID-19 shock, so that the education system is "built back better than before" by providing for learning continuity and systemic resilience through capacity building, digital infrastructure, and support for technology integration. This will help the education sector, which is one of the worst-affected due to the current pandemic, to be well prepared to handle similar situations in the future, thereby providing for continuity in education.

14. **Value Addition to AIIB.** As the first education sector operation supported by AIIB, the program provides an excellent opportunity to learn from an established player in the sector like WB. The comprehensive reforms introduced by program provide a solid foundation on which AIIB can build its investments in hard infrastructure so that the synergy between soft reforms and hard infrastructure can be maximized. This type of shared responsibility between multilateral development banks could serve as a model for future operations in the education sector for AIIB especially in school infrastructure. Due to the nature of social sector interventions, future operations have a significant probability of adopting the PforR modality. The learning from this program can contribute significantly to AIIB's capacity for supporting such operations in the future.

15. **Lessons Learned.** AIIB's first PforR was for the Egypt Sustainable Rural Sanitation Services Program, approved in 2018. Key lessons from the program include: (i) early involvement by AIIB in safeguards and fiduciary assessment to understand the client's systems under which the PforR operates and (ii) alignment of the DLRs and DLIs which AIIB finances with those of the lead co-financier for smooth monitoring of implementation.

16. AIIB's subsequent PforR financings (Indonesia Emergency Response to COVID-19 Program, Resilient Kerala Program for Results and Chennai City Partnership: Sustainable Urban Services Program) show the effectiveness of the PforR modality in supporting existing government programs as this modality incentivizes the government to take swift action through disbursements linked to specific results. AIIB's experience with the Government of Gujarat during the Gujarat Rural Roads Project indicated that the implementation capacity of government departments is quite high.

C. Components

17. **Results Area 1: Decentralized Planning Systems Institutionalized.** This results area will support processes for enabling and prioritizing systems and strengthening decentralized district and sub-district level planning. This will be done through processes for concurrent, participatory and bottom-up planning at state, district and sub-district levels, with a view to addressing intra-district diversities in access to quality education.

18. **Results Area 2: Improved Foundational Learning Outcomes at the Lower Primary Level.** This results area will help the Government of Gujarat's efforts toward strengthening foundational learning by improving access to and quality of early childhood education (ECE) and early grade learning. It will support the review and revision of curriculum, learning competencies/standards and teaching-learning material for establishing an appropriate pedagogical continuum between ECE and early grade education.

19. **Results Area 3: Strengthened Teacher Development and School-Based Assessments for Classroom Performance.** This results area will support the enhancement of needs-based continuous professional development, pre-service teacher training and teacher performance management to boost classroom performance.

20. **Results Area 4: Improved Learning Environment in Schools.** This results area will support the strengthening of infrastructure and quality improvements of facilities in 9,000 schools, including at least 150 residential schools for girls belonging predominantly to minority groups in hard-to-reach/rural areas and five teacher education institutes in unserved districts of the state.

21. Technology solutions with a focus on accessibility and scalability will be supported. The systems concentrate on low-cost and low-bandwidth solutions. Availability of digital devices in schools offering upper primary and secondary education will also be improved.

22. **Results Area 5: Resilient Recovery from COVID-19.** This results area will support the development and implementation of a large holistic home-learning program, as part of COVID-19 response strategies, and for meeting similar or unforeseen events that need greater systemic resilience and rapid academic response mechanisms to address such challenges.

D. Cost and Financing Plan

23. As mentioned in para. 5, WB approved the program including the program expenditure framework in March 2021. The program expenditure framework below provides details of the original expenditure framework, the incremental expenditure framework (due to AIIB's participation) and the combined expenditure framework.

24. **Program Expenditure Framework.** The ultimate objective of the program is accelerating learning for improved education outcomes in Gujarat. To achieve this, the physical facilities as well as digital infrastructure of the participating schools need substantial upgrading to provide an enabling learning environment to students.

25. About 78 percent of the overall program expenditures (estimated to reflect 85 percent of AIIB's financing) is expected to cover (i) building infrastructure (standard classrooms, library space, gardens, and playgrounds); (ii) quality education facilities (STEM labs, science labs, environmental labs, sporting facilities and libraries) and (iii) digital infrastructure (computer labs and smart classrooms). The remaining balance of 22 percent of overall program expenditures (estimated to reflect 15 percent of AIIB's financing) will comprise soft components (quality education interventions, vocational education) and program management to ensure the result-orientation of the upgraded school infrastructure.

26. The incremental investments in physical and digital infrastructure amount to USD302 million. AIIB's financing of USD250 million will help expand the coverage of schools benefitted from the combined program of AIIB and WB from 6,000 from 9,000.

Table 1. Program Expenditure Framework Comparison (USD million)

Particular	Original (WB+GoG)		Incremental (AIIB+GoG)		Combined (AIIB+WB+GoG)	
	Amount	%	Amount	%	Amount	%
Building Infrastructure	299.34	41.9	148.86	41.7	448.20	41.8
Digital Infrastructure	135.02	18.9	106.61	29.9	241.63	22.6
Quality Education Facilities	93.68	13.1	46.62	12.0	140.3	12.0
Soft Components	152.47	21.3	55.06	15.4	207.53	24.8
Program Management	33.78	4.7	-	-	33.78	3.2
Total	714.29	100	357.15	100	1071.44	100

GoG = Government of Gujarat.

Table 2. Indicative Program Expenditure Framework (USD million)

Particular	Total	AIIB	WB	GoG
Building Infrastructure	448.20	104.58	209.16	134.46
Digital Infrastructure	241.63	56.38	112.76	72.49
Quality Education Facilities	140.30	32.74	65.47	42.09
Soft Components	207.53	48.42	96.85	62.26

Program Management	33.78	7.88	15.76	10.14
Total	1071.44	250.00	500.00	321.44

GoG = Government of Gujarat.

Note: All program expenditures will be financed inclusive of taxes.

27. **Financing Plan.** This program will support part of SEEP. AIIB will finance USD250 million which will flow mainly into upgrading physical and digital infrastructure (as described in Table 2). WB will finance USD500 million. The component-wise breakdown mentioned in Table 2 is indicative as disbursements will be made against achievement of the DLIs mentioned in Table 4.

Table 3. Indicative Financing Plan (USD million)

	Original (WB)	Incremental (AIIB)	Combined (AIIB + WB)
AIIB	-	250.00	250.00
WB	500	-	500.00
Government of Gujarat	214.29	107.15	321.44
Total	714.29	357.15	1071.44

28. **Disbursement-Linked Indicators.** Since the program uses a PforR instrument, disbursement will be conditional on the achievement of specific DLRs, measured against the DLIs summarized in the table below (and detailed in Annex 2).

Table 4. Disbursement-Linked Indicators (USD million)

Summary of Disbursement-Linked Indicators	AIIB	WB	Total
DLI 1. Decentralized planning systems institutionalized	37.50	75.00	112.50
DLI 2: Performance grants to schools to incentivize improved outcomes	25.00	50.00	75.00
DLI 3. Improved foundational learning outcomes at the lower primary level	37.50	75.00	112.50
DLI 4. Strengthened teacher development for classroom performance	37.50	75.00	112.50
DLI 5. Improved learning environment in schools and teacher education institutions	74.37	148.75	223.13
DLI 6. Improved learning assessment systems for focused remedial programs	25.00	50.00	75.00
DLI 7. COVID-19 response strategies built in for systemic resilience	12.50	25.00	37.50
Front-end fee	0.63	1.25	1.87
Total	250.00	500.00	750.00

E. Implementation Arrangements

29. **Implementation Period.** The program is expected to be implemented from Jan. 1, 2022 to May 31, 2027.

30. **Implementation Management.** The program implementing entity is GCSE, which is under the administrative control of the State Education Department. GCSE has prior experience of implementing large programs like the Sarva Shiksha Abhiyan² and the Rashtriya Madhyamik Shiksha Abhiyan,³ partnering with multilateral and bilateral partners. The agency has a well-established administrative structure at the state, district, and block levels and a well laid out financial management system and delegation of financial powers. However, the additional activities to be executed under the program require strengthening of implementing capacity of GCSE for which a Program Management Unit (PMU) will be set up to provide constant technical and implementation support.

31. **Procurement.** Being a jointly co-financed operation led by WB, WB's PforR Policy provisions relating to procurement will apply. Under the PforR Policy, procurement for the program will be governed by the Government of Gujarat's procurement procedures. The Government of Gujarat will use the Financial Management and Procurement (FMP) Manual issued in August 2018 by the Ministry of Education. The FMP manual covers procurement processes for procurement of goods, works and services. The FMP was prepared in line with General Financial Rules 2017. The manual is comprehensive and provides details of implementation arrangements at various levels.

32. **Financial Management.** AIIB funds would be disbursed against all DLRs and the Government of Gujarat will pre-finance program expenditures using its own budgetary resources. The program funds will be disbursed on the satisfactory achievement of the DLIs/DLRs, as verified by an IVA, following agreed verification protocols. Funds at all levels will follow through the Public Financial Management System (PFMS), a web-based software developed by the central government. The financial management framework of the program will be based on the existing state financial rules, financial rules of GCSE and the FMP manual. Uniform accounting procedures will be followed at all levels using the Tally software and based on a double-entry modified cash-based system of accounting. GCSE will prepare consolidated program financial statements, get them audited annually by a private firm of chartered accountants (acceptable to AIIB and WB) and submit the audited financial statements for each fiscal year (FY) (ending March 31) by December 31 of that year.

33. **Monitoring and Evaluation.** Gujarat's Education Management Information System, the Unified District Information System for Education Plus (UDISE+), and the Gujarat Achievements Survey and the Gujarat School Quality Accreditation Council will be the primary data sources for monitoring program outcomes. Implementation support missions will be undertaken by AIIB and WB at regular intervals.

34. The DLRs will be annually reviewed and verified by an IVA, to be contracted by the Government of Gujarat. The DLRs will be verified through pre-identified disclosed data sources (UDISE+, Gujarat Achievement Survey and desk reviews), and the

² Sarva Shiksha Abhiyan is a Government of India flagship program that aims to achieve the universalization of elementary education.

³ Rashtriya Madhyamik Shiksha Abhiyan is a program of the Government of India, launched in March 2009, to enhance access to and improve the quality of secondary education.

periodic IVA reports will serve as the basis for assessing progress toward the achievement of the DLRs and for disbursement authorization.

35. **AIB's Implementation Support.** As lead co-financier, WB will serve as the focal point for AIB vis-à-vis the Borrower.

36. An experienced in-country WB team will provide regular implementation support to the Government of Gujarat with additional support from staff located internationally. AIB's team will work closely with the WB team and will (i) provide technical and operational inputs to support the implementation of the program, (ii) monitor the use of AIB resources and (iii) periodically join WB's program supervision missions (virtually or otherwise) as necessary. AIB will use the opportunity to learn about the implementation of such a program from WB. The WB and AIB teams may carry out frequent implementation support missions and supervision of the design, construction, and environmental and social management activities in the early stages of program implementation. If travel restrictions continue, AIB will consider hiring a local consultant based in Gujarat to help monitor implementation progress. This may be complemented by remote monitoring using available technologies. This joint WB/AIB collaborative approach has been successfully implemented in the ongoing co-financed projects with WB in India.

3. Program Assessment

A. Technical

37. **Program Design.** The PforR instrument will support institutional capacity to plan, coordinate, fund, monitor and evaluate activities, and adjust them in response to experiences on the ground. WB has assessed PforR as the appropriate instrument for this program as it presents several design and implementation advantages over alternative instruments: (i) it can enable a strategic focus on the interventions through DLIs and DLRs that enhance accountability for results and outcomes (as opposed to inputs) and incentivize Gujarat's ownership and implementation of critical reforms and policies; (ii) it strengthens the use of country systems for program implementation including fiduciary, safeguards and monitoring arrangements and (iii) the PforR instrument provides flexibility and efficiency in supporting a large program with deep results orientation.

38. The design of this program and its components has considered natural disaster-/climate-related vulnerabilities and integrated measures to mitigate/reduce such risks. The program will support intrinsic and extrinsic climate risk mitigation measures through scaling up and extending the concept of green schools to all facilities supported under the program – this includes aspects such as energy efficiency, water harvesting, water conservation/efficiency, use of local materials for construction, use of no/low volatile organic compound paints, multi-use spaces, nurturing kitchen gardens, reducing requirement of construction materials (resource efficiency) through various techniques and greenery/tree plantation in and around the school campus, which bring-in climate co-benefits in addition to promoting environmental sustainability. Climate adaptation measures include: (i) appropriate design of school buildings/infrastructure and associated services/utilities factoring in

locational context and vulnerability to natural disaster faced – this includes higher plinth levels to avoid/minimize damage from flooding/water logging; installation of electrical and IT infrastructure above high flood level, extra bracing and higher specifications for doors-windows in the cyclone-prone coastal belt; (ii) structural safety assessment and seismic retrofitting for older buildings; (iii) earthquake-resilient design of new buildings/blocks to be reconstructed; (iv) installation of lightning arrestors in schools covered under the program; (v) comprehensive vulnerability assessment and considering the findings for school consolidation exercise and infrastructure design; (vi) specific focus on measures required to reduce/mitigate extreme temperatures and increase thermal comfort – this includes roof treatment, well-designed openings (windows, doors and vents), strategic ceiling-level ventilation, use of less heat absorbing paints/colors/materials, positioning of furniture; (vii) providing the Anganwadi⁴ centers for early childhood development with open, clean and safe learning spaces and child-friendly learning environment; (viii) fire and electrical safety measures and (ix) emergency preparedness (for quick evacuation when needed) as part of school development plans. These newly upgraded/strengthened school buildings may even be leveraged as emergency relief shelters during cyclones/floods to increase the adaptation to climate induced calamities.

B. Economic Analysis

39. **Economic Analysis.** A cost–benefit analysis was carried out to assess the economic viability of the program, inclusive of a six-year construction period. Through the course of the program, about 4.5 million students will benefit from improvement in the quality of foundational learning and improved teacher development; and complete their elementary or secondary education up to six years after program completion. More than 50 percent of these students will also benefit from the support toward improving learning environment in select schools.

40. **Economic Benefits.** The values of the economic benefits considered in the economic analysis are the following:

- (i) **Improved Foundational Learning Outcomes.** Valued at a USD35.2 and USD40.3 improvement in annual wages for students joining the workforce after completion of elementary and secondary education, respectively.⁵
- (ii) **Strengthened Teacher Development for Classroom Performance.** Valued at USD44.8 and USD51.3 for students who complete their elementary and secondary education, respectively.

⁴ The word Anganwadi means "courtyard shelter." They were started by the Government of India in 1975 as part of the Integrated Child Development Services program to combat child hunger and malnutrition. They are the focal point for implementation of all the health, nutrition and early-learning initiatives under Integrated Child Development Services program.

⁵ Ministry of Statistics and Programme Implementation, National Sample Survey 68th Round; adjusted for using per capita income data for Gujarat and India from the Annual National Income and Per Capita Income Data (2016-2017) released by the Ministry of Statistics and Programme Implementation.

- (iii) **Improved Learning Environment in Schools.** Valued at USD32.4 for students completing elementary education and USD36.8 for students completing secondary education.

41. **Economic Costs.** The economic costs considered while estimating the economic internal rate of return (EIRR) includes the overall cost of the program (USD1.07 billion spread across the program period of six years). This cost was initially envisioned to be about USD1.32 billion. The difference is being managed through the expenditure efficiency that the program expects to realize from investments toward institutionalization of decentralized planning systems.

42. **Economic Internal Rate of Return.** Based on available data and adopted assumptions, the EIRR for the program in the base case scenario is 24.9 percent. In the absence of these efficiency gains mentioned in the economic costs, the EIRR for the program would have dropped to 22.5 percent.

43. **Sensitivity Analysis.** Given the uncertainties associated with various market and program-specific parameters, a sensitivity study was carried out to assess the economic viability of the project investment. It is highly robust and can withstand large variations in the following scenarios: (i) 50 percent less increase in wage expected from one standard deviation improvement in learning levels, (ii) 20 percent less expected improvement in learning outcomes score and (iii) a worst-case scenario that combines both of the above. The detailed results are in Annex 4.

44. **Financial Analysis.** This program, unlike typical infrastructure projects, does not have any revenue streams. Therefore, traditional financial evaluation (calculating the financial internal rate of return) was not performed. The availability of counterpart funding from the Government of Gujarat and its willingness to commit this funding were assessed as a part of the financial analysis.

45. **Counterpart Funds.** Education has always been a priority for the Government of Gujarat with about 15 percent of the total budget outlay targeted to the education sector. The average annual budget provision over the past five years for education in the Gujarat State budget is USD3,811 million. This is much larger than the expected peak outlay of the program. Gujarat is committed to providing counterpart funds for the implementation of the program (USD321.44 million). Moreover, the expected annual contribution from the state is less than one percent of its annual fiscal outlay during the years of program implementation. The state budget provisions over the past five years are as follows:

Table 5. State Budget Provisions for Education (USD million)

	2018	2019	2020	2021	2022
Spending on education	3,324	3,729	3,766	3,890	4,346
Total outlay	21,446	24,056	24,941	25,932	30,180
Spending on education as a percentage of total spending	15.50%	15.50%	15.10%	15.00%	14.40%

C. Fiduciary and Governance

46. **Procurement.** In accordance with its PforR Policy, WB has conducted an Integrated Fiduciary System Assessment (IFSA) on financial planning, budgeting, fund flow arrangements, accounting, financial reporting, internal control and auditing arrangements, procurement planning, tendering process, evaluation of tenders, contract award, contract administration arrangements and practices, and concluded that the procurement arrangements proposed by the Government of Gujarat provide reasonable assurance that project funds will be utilized for their intended purpose with due regards to economy and efficiency. The IFSA analyzed past performance data and identified areas of strength and weakness. Mitigation measures have been agreed upon with GCSE to address weaknesses identified in the IFSA. Accordingly, WB has rated project procurement risk as “substantial”. AIIB has reviewed the IFSA and concurs with WB’s findings and risk rating, which is equivalent to “medium” for AIIB.

47. Procurement for the program will comprise procurement of works (like school construction, repairs, and electrical works); goods (like IT and non-IT equipment, sports equipment and lab equipment for STEM labs) and consulting and non-consulting services (transportation, maintenance and housekeeping). GCSE, the implementing entity, will carry out most of the procurement activities. No single contract is expected to exceed USD75 million for civil works and USD50 million for goods and non-consulting works.

48. Procurement of off-the shelf products will be conducted using the government e-market portal, a central government online portal for procurement of goods. For the procurement of works, the implementing entities will use the state government’s e-procurement portal called (n)Procure. Gujarat Informatics Limited has been designated the nodal agency for IT-related procurement and will assist GCSE in IT-related procurement.

49. **Financial Management.** The IFSA, conducted according to WB’s PforR policy, concludes that the program’s fiduciary systems are adequate and provide reasonable assurance that the financing proceeds will be used for the intended purpose. The FM risk of the program is assessed as “Medium” and the following mitigation measures have been agreed upon and will be reflected in the Program Action Plan: (i) all bank accounts to be registered with the PFMS, (ii) existing accounting policy to be modified to treat transfers of funds as advances and not expenditures and (iii) GCSE will conduct the financial management training program for all other implementing entities. In addition to this, GCSE will (i) bring in additional deputed and contracted staff to strengthen the finance function; and (ii) agree on terms of references and selection criteria for both internal and external auditors with AIIB and WB.

50. GCSE, through its PMU, will be responsible for coordination of financial management arrangements. GCSE has prior experience of implementing large programs financed by WB. The entity has an established program implementation structure at the state, district and block levels.

51. **Program Budget.** The Government of Gujarat has a reasonable track record of timely fund releases. A separate budget line for the GOAL Program has been created in the budget document of FY2021.

52. **Fund Flow Arrangements.** The program budget will be allotted by the State Education Department to GCSE, based on which GCSE will draw funds from the government treasury into its bank account. GCSE operates through program-/scheme-specific commercial bank accounts. Program funds will flow from GCSE to 33 District Project Offices manned by a district education officer along with contractual staff of GCSE, block and cluster resource centers, school management and development committees, the Gujarat Council of Education Research and Training along with its district-level outfits (33 District Institutes of Education and Training) and the Gujarat School Quality Accreditation Council. Procurement activities will be carried out by GCSE. Funds flow to all other implementing units will be for operational costs only. Funds at all levels will flow through the PFMS. Most of the aforementioned entities are already registered in the PFMS with some exceptions.

53. **Accounting and Financial Reporting.** Uniform accounting procedures are followed at all levels using the Tally Software and based on a double-entry modified cash-based system of accounting. It is modified to track advances paid to the implementing entities. Each district unit consolidates accounts of all school management and development committees within a district with the respective district unit's accounts. GCSE consolidates its accounts with 33 districts using consolidation function in Tally.

54. **Internal Control Framework.** The Financial Management Framework of the program will be based on the existing State Financial Rules, Financial Rules of GCSE and the financial management arrangements of Samagra Shiksha as documented in the FMP Manual issued in August 2018 by the Ministry of Education (Government of India), to the extent applicable, as this manual has been drafted keeping in mind Government of India requirements for a centrally sponsored scheme.

55. **Internal Audit.** GCSE has a system of half-yearly internal audits. The WB Fiduciary Team reviewed the internal audit reports for FY2017, FY2018 and FY2019 and indicated that there is room for improvement in internal audit procedures. The review indicated that the quality of the internal audit reports is sub-optimal and does not bring out the control weaknesses reported in the statutory audit reports, nor do they provide specific cases of control lapses. As indicated earlier, GCSE will agree on the terms of reference and selection criteria for internal auditors with AIIB and WB.

56. **Statutory/External Audit.** The annual financial statements of Samagra Shiksha are audited annually by a private firm of chartered accountants and the external audit reports are disclosed to the public. The auditors have issued a qualified opinion for the past three years (FY2017 to FY2019), the qualifications in the report are generic in nature. Although no major accountability issues were reported, the auditor has reported certain internal control weaknesses including transfer of funds by district /subdistrict levels being treated as expenditures and multiple bank accounts for the same program. In general, the audit reports were submitted on time and only the audit of FY2020 was delayed due to the COVID-19 pandemic.

57. GCSE will prepare consolidated program financial statements of each FY, covering transactions of all implementing entities and get them audited annually. GCSE will submit the audited consolidated annual program financial statements for each fiscal year ending March 31 to AIIB and WB by December 31 of that year. The audit terms of reference will be agreed with AIIB and WB.

58. **Implementation Capacity of Implementing Agencies.** The annual expenditure of GCSE for FY2020 was about USD230 million. The additionality in expenditure that this program would entail is large compared to the current annual consolidated expenditure of GCSE. This would require strengthening of the implementation capacity of GCSE, including financial management and procurement staffing. GCSE has formed a PMU for technical and administrative support and is expected to bring in additional deputed/contractual staff (if required) to support the program implementation.

59. **Disbursements.** All the DLRs are scalable, with funds being disbursed in proportion to the achievement of the DLR. Where actions are not achieved in any particular year, the allocated amount will be carried over to the subsequent year. Conversely, if targets are reached early, disbursement may be made earlier, after clearance from AIIB and WB. Disbursement of the loan amount will be made after the withdrawal request has been submitted and the results are verified. If the state is unable to use the financing, the funds may be reallocated. WB's loan is already effective and may start disbursing prior to effectiveness of AIIB's loan. Post effectiveness, AIIB's loan will disburse at a higher rate (higher than 2:1 between WB and AIIB) until AIIB catches up with WB. Subsequent disbursements will be in the ratio of the respective loan amounts i.e., 2:1. A disbursement and financial information letter shall detail the authorized signatories, the process of submitting claims and other terms and conditions of disbursements related to the program.

60. **Prior Results.** All DLRs achieved no earlier than 12 months prior to the date of loan agreement, up to an amount of USD12.33 million (five percent of AIIB's loan), may be financed.

61. **Governance and Anti-corruption.** AIIB is committed to preventing fraud and corruption in the projects it finances. For this program, to the extent WB's Anti-Corruption Guidelines are similar to AIIB's Policy on Prohibited Practices (2016) (PPP), they will apply. However, AIIB's PPP will apply in regard to the prohibited practices of "Misuse of Resources" and "Theft", which are not covered under the WB's Anti-Corruption Guidelines. AIIB reserves the right to undertake investigations in regards to the Prohibited Practices of "Misuse of Resources" and "Theft", not covered under the WB's Anti-Corruption Guidelines. Detailed requirements will be specified in the Loan Agreement.

D. Environmental and Social

62. **Categorization.** The program will be co-financed with WB, as lead co-financier, and its environmental and social (ES) risks and impacts have been assessed in accordance with WB's PforR Policy. Under AIIB's Environmental and Social Policy, as revised in May 2021 (2021 ESP), AIIB may apply WB's PforR Policy in lieu of the 2021

ESP to co-financed PforR operations such as this one. Since the 2021 ESP affords Management the discretion to apply the 2021 ESP to operations included in AIIB's investment pipeline prior to October 1, 2021, Management has decided to apply the 2021 ESP and consequently to apply the WB's PforR Policy to this operation in lieu of the 2021 ESP.

63. WB has categorized the program's ES risk rating as "Moderate," which is similar to Category B if AIIB's 2021 ESP were applicable. As required under WB's PforR Policy, the program excludes activities that are likely to have significant adverse ES impacts that are sensitive, irreversible or unprecedented (similar to Category A if AIIB's 2021 ESP were applicable). As required under the WB's PforR Policy, an Environmental and Social Systems Assessment (ESSA) for the GOAL Program has been completed by WB. The findings and recommendations of the ESSA as well as the corresponding program action plan are based on a review of relevant ES management systems of the Samagra Shiksha Program in Gujarat, and further consultations with key stakeholders. The client will be required to implement these recommendations under the program.

64. **Environmental Aspects.** The key environmental risks and impacts of the program are likely to include: (i) cutting of trees/loss of open spaces while expanding school infrastructure/building footprint; (ii) risk of poor building design leading to restricted access to children/people with physical challenges and deficiencies in provision of basic services (sewage/waste water disposal; drainage; solid waste management); (iii) inadequate lighting/ventilation and thermal comfort in buildings; (iv) temporary inconvenience/disruption to school activities during execution of civil works; (v) construction-related impacts on account of dust, noise, stress on water availability and improper management of debris and wastes; (vi) safety risks to students/teachers and occupational health and safety risks to workers during construction; (vii) fire and electrical safety risks; (viii) e-waste generation from disposal of non-functional electrical and IT equipment; (ix) vulnerability and inadequate preparedness to deal with multiple natural hazards like cyclones, high winds, floods and extreme temperatures (owing to state's geophysical setting) and safe evacuation during emergencies and (x) issues related to reopening of schools post-COVID-19 and safe/hygienic operations thereafter.

65. Other key risks/issues associated with the operational phase include: (i) food safety and hygiene in schools with hostels and ECE centers when providing mid-day meals, (ii) waste management from kitchen/mess/laboratories, (iii) maintenance of sanitation standards, (iv) fire and electrical safety risks; and (iv) e-waste generation.

66. WB's assessment of the environmental systems benefited from the Ministry of Education's experience in implementing the environmental management frameworks developed under previous projects in India that have been supported by WB. These environmental management frameworks, which include key environmental, health and safety actions, have been adopted under the Samagra Shiksha Framework (SSF) and broadened to ECE and vocational training, and remain relevant to interventions under GOAL. The SSF requires school buildings/infrastructure to be environment-friendly and provide for clean/hygienic and safe learning environment in the campus. Gujarat has successfully adopted and implemented several environmental interventions with

respect to sanitation, safe water availability, energy efficiency, Building-as-Learning-Aid, eco-clubs, inclusive infrastructure and the concept of green schools, which was introduced for the first time in India under previous WB-supported projects and continues to maintain an overall satisfactory track record under the SSF. The state has also initiated activities to promote 'safe schools' and this includes mitigating risks from seismic events, promoting security, emergency preparedness (in case of fire/events requiring evacuation) and providing safer transport fleets for carrying schoolchildren. The required institutional capacity, including staffing was found to be adequate.

67. The recommendations to strengthen the environmental systems focus on: (i) improving implementation/outreach of existing systems/standards on environmental health and safety to address inter-district variations that exist currently; (ii) scaling up the green school model; and (iii) addressing natural disaster-/climate-related challenges through upstream planning, improving building/infrastructure design and sensitization/preparedness and curriculum delivery. The associated recommended measures include: (i) use of green school model/approach for all schools to be taken up under the program; (ii) promoting 'inclusive infrastructure' particularly for children with special needs; (iii) climate/disaster vulnerability assessment and integration of findings into the planning and design of infrastructure works; (iv) provision of lightning arrestors in schools; (v) strengthening menstrual hygiene management in schools; (vi) strengthening waste management; (vii) sensitization on environment, climate, safety and other associated topics - targeting teachers, students and local coordinators; (viii) strengthening contractual obligations on environmental, health and safety management in construction contracts, including COVID-19 Standard Operating Procedures and (ix) promoting environmental report cards (benchmarking performance) at school/district/state level.

68. **Climate Change Risks and Opportunities.** Gujarat, owing to its geophysical setting, is prone to natural disasters, such as floods, cyclones, storm surge, earthquakes, droughts and extreme temperatures during summer months. Many of these risks are expected to be further accentuated by climate change. The SSF mainstreams disaster mitigation measures and environmental good practices across key program interventions. In addition to considering natural disaster-/climate-related vulnerabilities, the program will also generate significant climate co-benefits with regards to better construction technology, improved energy efficiency, less landfill and reduced civil works impact on the side of the construction subcomponents. Furthermore, the program design has considered climate-related vulnerabilities, and integrated measures to mitigate/reduce such risks. The program will support intrinsic and extrinsic climate risk mitigation measures, as discussed in para. 38 and para. 67. Based on the joint multilateral development bank methodologies for climate finance tracking, USD24 million of AIIB's financing will be considered as climate adaptation finance and mitigation finance.

69. **Social Aspects.** Though resettlement is not anticipated, informal settlers may be present in some locations and additional requirements for land for expansion of existing infrastructure or development of new schools/greenfield schools may be needed. The ESSA recommendations include screening for ES risks/impacts for all civil works. Wherever land acquisition/resettlement is required, the WB core safeguard policy on land acquisition and resettlement will be followed and due processes are to

be instituted in consultation with the WB task team. Furthermore, any land donation would have to be done on a voluntary basis without any coercion and the process of donation be recorded through the process of gift deeds.

70. With respect to Indigenous Peoples/Scheduled Tribes, social issues are related to access and inclusion rather than impact on their land and/or livelihood as construction/upgrading will be mostly on government land where schools are already constructed. Samagra Shiksha also focuses on children of Scheduled Castes and Scheduled Tribes, and attempts to provide educational opportunities in an inclusive environment free from discrimination. However, given that 14.8 percent of the population in Gujarat comprises Scheduled Tribes across its 12 eastern districts, there are some challenges due to local geographical terrain, socio-economic conditions and language barriers, requiring special effort to facilitate access and inclusion. Specific recommendation to address these include (i) training of block resource center coordinators and cluster resource center coordinators from tribal areas on dealing with local circumstances and setting up continued consultation with local community for awareness creation; and (ii) special efforts to be made to address language-related issues and teachers' capacity to enhance overall learning outcomes for the tribal population based on a needs assessment study in tribal areas.

71. **Social Inclusion Aspects.** Although Gujarat has made significant improvements in increasing access to school education for girls, and the proportion of girls out of school has declined, gaps persist. Girls, particularly from marginalized communities and rural areas, are vulnerable. Reasons for dropouts among girls include lack of parental/community engagement, community consent, community-specific cases of early marriages, domestic-care responsibilities and related socioeconomic barriers. The capacity of residential schools for girls needs significant strengthening in rural areas to positively impact community perceptions around safety of adolescent girls. The key social risks emerge from concerns related to access and social inclusion for children coming from poor and vulnerable communities and in tribal areas. The program will support strengthening of infrastructure improvements in at least 150 Kasturba Gandhi Balika Vidyalayas which are government-run residential schools at secondary level for girls belonging predominantly to the Scheduled Caste, Scheduled Tribes and minority groups in hard-to-reach/rural areas. Under Results Area 1, gender equity will be promoted in the annual work plan and budgeting. This includes provisions for training on barriers experienced by girls in transitioning from elementary to secondary grades. Targeted monitoring of enrollment, attendance and transition rates of girl students will be integrated in village education plans/school development plants. Under Results Area 2, strengthening of infrastructure will be undertaken in 150 Kasturba Gandhi Balika Vidyalayas, which are residential schools focused on mainstreaming out-of-school girls from marginalized communities. In addition, the ESSA recommendations also include strengthening menstrual hygiene management.

72. **Stakeholder Engagement, Consultations and Disclosure.** Virtual consultations were held by WB with GCSE along with its Civil and Infrastructure

branch and other relevant government agencies.⁶ Officials of the State Education Department across the implementation chain at district, *taluka*/block level, nongovernment organizations working on education/tribal areas and members of communities as part of school management committees, including those from tribal-dominated districts, were consulted through virtual platforms. Discussions and feedback from these consultations have helped in the preparation of the ESSA report and finalization of actions to be implemented under the program action plan. This includes a state-level consultation that was held on Nov. 26, 2020 and attended by participants from a wide spectrum, who actively participated, provided feedback on the program design and supported the recommendations made by the ESSA.

73. The final version of the ESSA has been disclosed on the websites of the client,⁷ WB⁸ and AIIB.⁹

74. **Program Grievance Redress Mechanism.** Under the Right to Education Act 2009, the Government of Gujarat has authorized local authorities¹⁰ to perform the grievance redress mechanism function. The system also specifies the type of grievance, the authority charged responsibility for addressing grievances, maximum time allowed for addressing the grievance, the appellate authority and time allowed for grievance redress by the appellate authority. The type of grievance and related redress authority, time limits and appellate authority varies and is structured in a matrix form. The ESSA recommends building capacity of relevant authorities toward awareness creation on their expected roles and responsibility to enable accountability and redress grievances.

75. **Applicable Independent Accountability Mechanism.** AIIB's Policy on the Project-affected People's Mechanism (PPM) addresses issues raised under AIIB's 2021 ESP, which does not apply to this operation. Submissions to the PPM under the program would, therefore, not be eligible for consideration by the PPM. WB's independent accountability mechanism addresses issues raised by persons adversely affected by a WB-financed operation and allows them to report alleged noncompliance with WB's operational policies and procedures, including its PforR Policy.

⁶Gujarat Council of Educational Research and Training and other departments such as Gujarat State Disaster Management Authority, Tribal Development Department, Social Welfare Department and Department of Women and Child Development of Government of Gujarat

⁷ [GOAL-SEEP-ESSA.pdf \(ssa Gujarat.org\)](#)

⁸ World Bank. 2021. Final Environmental and Social Systems Assessment (ESSA) - Gujarat Outcomes for Accelerated Learning (GOAL) - P173704 (English).
<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/991051614354535449/final-environmental-and-social-systems-assessment-essa-gujarat-outcomes-for-accelerated-learning-goal-p173704>.

⁹ AIIB. India: Gujarat Education Infrastructure and Technology Modernization Program.
<https://www.aiib.org/en/projects/details/2021/proposed/India-Gujarat-Education-Infrastructure-and-Technology-Modernization-Program.html>.

¹⁰ Including Gram Panchayat, cluster resource center, Taluk Panchayat and district project coordinator office in rural areas and similarly ward office, cluster resource center, municipal office and administrative office in urban area.

E. Policy Derogation and Application of World Bank's PforR Policy

76. **Derogation from AIIB's Procurement Policy.** Given that this PforR is being jointly co-financed with WB as lead co-financier, the program is being prepared in accordance with WB's PforR Policy. The procurement provisions of WB's PforR Policy are separate and distinct from WB's procurement policy requirements that govern conventional investment project financing, and with which AIIB's Procurement Policy is materially aligned. Given the differences in approach between the procurement provisions of the PforR Policy and AIIB's Procurement Policy, the PforR Policy cannot be considered to be materially consistent with AIIB's Procurement Policy. Nevertheless, for the reasons noted above in paras. 46 to 48 relating to the approach adopted for procurement, AIIB Management considers the procurement elements of WB's PforR Policy to be appropriate for use in this type of operation. Therefore, the Management requests: (a) a derogation from the application of AIIB's Procurement Policy and (b) the application of WB's PforR Policy to this co-financing in lieu of AIIB's Procurement Policy .

77. **AIIB's 2021 Environment and Social Policy.** The ES elements of WB's PforR Policy are also separate and distinct from the ESP requirements that govern the WB's conventional investment project financing. However, the 2021 ESP provides that when co-financing a PforR such as this one, the co-financier's ESP on such financing may be applied in lieu of the 2021 ESP's requirements. A derogation from the 2021 ESP is therefore not required.

F. Risks and Mitigation Measures

Table 6. Summary of Risks and Mitigating Measures

Risk Description	Assessment (H/M/L)	Mitigation Measures
Macroeconomic Risk: The COVID-19 shock resulting in a deterioration in the macroeconomic position of Gujarat.	Low	There is considerable fiscal space for the state to maintain planned expenditures even in the face of declining revenue flows. While the total cost of the operation is large in absolute value, on a yearly basis it amounts to less than one percent of total state expenditures.
Technical: The program has an ambitious scope of reform agenda, some of which may require relatively complicated management such as enhancing access through school network optimization, teacher management, inter-departmental convergence for	Medium	The risk mitigation will be addressed through support to program management and institutional capacity building with decentralized stakeholder-owned planning, the technical risk will be mitigated through inherent program components. Further, program will have a strong focus

Risk Description	Assessment (H/M/L)	Mitigation Measures
ECE and the enhanced focus on decentralized planning and management.		on technical assistance, careful biannual implementation support missions with debriefings with the highest state authorities.
Implementation: Program management at current level of implementation capacity could be at risk. The additionality in expenditure of the program is large compared to the current level of annual consolidated expenditure of GCSE.	Medium	PMU will be part of the program that will provide constant technical and implementation support. GCSE will bring in additional deputed/ contractual staff to strengthen financial management and procurement functions.
Fiduciary: (i) mis-understanding on the program boundaries, (ii) inadequate program budget, (iii) possible delay in submission of annual financial statements.	Medium	IFSA has been carried out to assess the present systems and its performance with due attention to the principles of economy, efficiency, effectiveness, transparency and accountability. Mitigation measures to address the associated risks will be implemented.
Procurement: Lack of capacity of the program staff in public procurement.	Medium	GCSE shall arrange training of all relevant staff before procurement is commenced.
ES: The potential environmental risks associated to this program is on construction-related impacts. Weak institutional capacity, systems and procedures for ensuring proper ES management during the program implementation.	Medium	Proposed mitigation measures are included in the ESSA recommendations and reflected in the Program Action Plan, which will be part of the loan agreement.

Annex 1: Results Monitoring Framework

Program Objective:		To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.								
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
Program Objective Indicators:										
1. Decentralized planning systems institutionalized		Limited use of Annual Work Plans and Budgets (AWPBs) based on data and process-based discussions with key stakeholders	17 District Planning Teams trained by a National/State Planning Institute on AWPB creation that includes partnerships with nongovernment organizations (NGOs)/non state actors	An additional 16 District Planning Teams trained by a National/State Planning Institute on AWPB creation that includes partnerships with NGOs/non state actors	Five district AWPBs approved, and show at least 75 percent utilization of funds sanctioned against Annual Work Plans and Budgets	NA	An additional five district AWPBs approved, and show at least 75 percent utilization of funds sanctioned against Annual Work Plans and Budgets	An additional five district AWPBs approved, and show at least 75 percent utilization of funds sanctioned against Annual Work Plans and Budgets	Annual (Except Year 4)	Department of Education, Government of Gujarat
2. Improved school quality through performance evaluation and incentives		State proposes to institute a grading system to evaluate and incentivize school performance	30 schools move to Lighthouse status based on agreed selection criteria	30 additional schools move to Lighthouse status based on agreed selection criteria and 30 schools from Year 1 maintain Lighthouse	40 additional schools move to Lighthouse status based on agreed selection criteria and 60 schools from Years 1 and 2 maintain Lighthouse	40 additional schools move to Lighthouse status based on agreed selection criteria and 100 schools from Years 1 to 3 maintain Lighthouse	50 additional schools move to Lighthouse status based on agreed selection criteria and 140 schools of Years 1 to 4 maintain Lighthouse	50 additional schools move to Lighthouse status based on agreed selection criteria and all 190 Lighthouse schools from Years 1 to 5 maintain	Annual	Department of Education, Government of Gujarat

Program Objective:	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.									
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
				status	status	status	status	Lighthouse status		
3. Improved foundational learning outcomes at the lower primary level, gender disaggregated		Baseline assessment for foundational learning to be conducted/ established in Year 2	NA	Baseline learning outcomes assessment for Grade 4 language completed	NA	Up to two-percentage-point improvement in percentage of students achieving minimum proficiency in learning outcomes assessment for Grade 4 language	NA	Up to an additional two-percentage-point improvement in percentage of students achieving minimum proficiency in learning outcomes assessment for Grade 4 language	Biennial starting year 2	Department of Education, Government of Gujarat
4. Strengthened teacher development for classroom performance		State yet to institute teacher training needs assessments for guiding the customized delivery of teacher professional development	First teacher training needs assessment completed, and baseline created	NA	Second teacher training needs assessment completed, and grade-level learning hard spots identified through needs assessment reduced by 5 percent	NA	NA	Third teacher training needs assessment completed, and grade-level learning hard spots identified through needs assessment reduced by an additional 5 percent	Year 1 (to establish baseline); and Years 3 and 6 (to track progress)	Department of Education, Government of Gujarat

Program Objective:	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.									
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
5. Improved learning environment in schools and teacher education institutes		State plans to upgrade the learning environment in 9,000 schools; and complete the construction and operationalization of five District Institutes of Education and Training (DIETs)	(i) Inclusive state strategy for school learning environment development including functional school designs and facilities finalized (ii) Strategy with functional designs and staffing needs finalized to enhance training in five new DIETs	Strengthened child-friendly learning environment in 1,500 schools	Strengthened child-friendly learning environment in an additional 1,500 schools	(i) Strengthened child-friendly learning environment in an additional 1,500 schools (ii) Construction of superstructure of five DIETs complete with at least 75 percent staff in position in each DIET	Strengthened child-friendly learning environment in an additional 2,500 schools; including at least 150 Kasturba Gandhi Balika Vidyalayas (KGBVs)	(i) Strengthened child-friendly learning environment in an additional 2,000 schools (ii) Construction of five new DIETs completed and facilities made operational with 75 percent staff in position in each DIET	Annual	Department of Education, Government of Gujarat
Intermediate Results Indicators:										
Results Area (RA) 1: Decentralized planning systems institutionalized										
1. District-based planning systems enabled through capacity-building support for		Limited capacity for evidence-based planning and appraisal	(i) Stakeholder composition of District Planning Teams created	(i) Assessment of governance and public finance bottlenecks	Prioritized action plan created to address constraints	(i) An additional five District AWPBs analyzed and contextualized	An additional five District AWPBs analyzed and contextualized	(i) State-level unit and all District Planning Teams	Annual	Department of Education, Government of Gujarat

Program Objective:	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.									
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
decentralized education functionaries including school-related gender-based violence (SRGBV) prevention protocols, complaint and referral mechanisms implemented		amongst state and district level education functionaries and no institutional mechanism to identify and address safety/harassment issues experienced by adolescent girls	and notified (ii) A state- level unit created and trained by a National/State Planning Institute for overseeing planning and appraisal process in districts (iii) Guidelines developed on SRGBV prevention for decentralized education functionaries	(with an emphasis on planning and budgeting) for improved service delivery at school level completed (ii) Five District AWPBs analyzed and contextualized action plan created (including SRGBV interventions)	identified in the governance and public finance assessment report	action plan created (including SRGBV interventions) (ii) Training modules developed for refresher training of decentralized education functionaries (iii) Establishment and training on the grievance redress mechanism system for SRGBV to relevant stakeholders (teachers, students, administrators and parents)	action plan created (including SRGBV interventions)	retrained on process based AWPB creation (ii) At least 15 district AWPBs include a functional SRGBV prevention, reference and redressal mechanism		
2. School-level Annual Work Plan and Budgets		Limited capacity of School	Modules developed for training of	20 percent of SMCs trained on	An additional 10 percent of SMCs trained	An additional 10 percent of SMCs trained	An additional 10 percent of SMCs trained	NA	Annual (Except Year 6)	Department of Education, Government of

Program Objective:	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.									
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
(AWPBs) enhanced through community participation		Management Committees (SMCs) to participate in development of school plans	SMCs on process and evidence-based School Development Plans and AWPBs	development of evidence-based School Development Plans and AWPBs	on development of evidence-based School Development Plans and AWPBs	on development of evidence-based School Development Plans and AWPBs	on development of evidence-based School Development Plans and AWPBs			Gujarat
3. Performance grants instituted for schools to incentivize improved outcomes		State yet to institute a mechanism for providing performance-based grants to schools	(i)Performance-based grants mechanism with school selection process prepared and cleared with the World Bank. (ii) 300 schools meet minimum performance criteria as per agreed standards	400 additional schools meet minimum performance criteria as per agreed standards	400 additional schools meet minimum performance criteria as per agreed standards	500 additional schools meet minimum performance criteria as per agreed standards	500 additional schools meet minimum performance criteria as per agreed standards	500 additional schools meet minimum performance criteria as per agreed standards	Annual	Department of Education, Government of Gujarat
RA 2: Improved foundational learning outcomes at the lower primary level										
4. Access to Early Childhood Education (ECE) Programs for preschoolers		State is yet to roll out a model of ECE managed by the Department of Education	(i) Package for training of ECE teachers/facilitators notified. (ii) 30 percent of teachers from schools with co-	40 percent of teachers from schools with co-located Aanganwadis trained to provide	One year pre-school program rolled out in 1,000 schools	NA	One year pre-school program rolled out in 1,000 additional schools	NA	Annual (Except Years 4 and 6)	Department of Education, Government of Gujarat

Program Objective:	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.									
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
			located Aanganwadis trained to provide academic support on ECE in each of the five selected districts	academic support in ECE in each of the 10 additional selected districts						
5. Strengthened state-level learning assessment systems		State planning on establishing an Assessment Cell to focus on management of student learning assessments; state has limited exposure to international-level student assessments	(i) Gujarat Assessment Center (GAC) for managing classroom, state and international level student assessments notified (ii) Partnership established with OECD for conducting PISA-Based Test for Schools	Timely completion of baseline Grade 4 learning assessment by the GAC	(i) Review of state examinations with time-bound reform action plan completed and report published highlighting proposed reform agenda. (ii) State Assessment Center managed PISA-Based Test for Schools completed	Timely completion of mid-line Grade 4 learning assessment by the GAC	(i) State examinations aligned with international competency-based learning standards. (ii) Partnership established with OECD for state's participation in PISA 2028	Timely completion of end-line Grade 4 learning assessment by the GAC	Annual	Department of Education, Government of Gujarat

Program Objective:	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.									
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
RA 3: Strengthened teacher development and school-based assessments for classroom performance										
6. Teacher training and management systems strengthened for performance tracking		Teachers have limited access to opportunities for need-based professional development	(i) State-level agency designated for carrying out periodic teacher training needs assessments. (ii) System created for teachers to record their training needs	20 percent of teachers provided with need-based teacher training	NA	An additional 30 percent of teachers provided with need-based teacher training	An additional 30 percent of teachers provided with need-based teacher training	NA	Annual (Except Years 3 and 6)	Department of Education, Government of Gujarat
7. Quality remedial program based on classroom-based assessments		State is yet to roll out a statewide remedial education program for concurrent identification and correction of learning gaps	Completion of digital device mapping to support statewide rollout of ICT-supported Periodic Assessment Tests (PAT) that provide student, subject and school-wise reports on learning gaps and corresponding	20 percent of schools covered under ICT-supported PAT that provide student-, subject- and school-wise reports on learning gaps and corresponding remedial education plans	NA	An additional 40 percent of schools covered under ICT-supported PAT that provide student-, subject- and school-wise reports on learning gaps and corresponding remedial education plans	NA	An additional 20 percent of schools covered under ICT-supported PAT that provide student-, subject- and school-wise reports on learning gaps and corresponding remedial education plans	Annual (Except Years 3 and 5)	Department of Education, Government of Gujarat

Program Objective:	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.									
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
			remedial education plans							
8. Improved technology-enabled infrastructure in educational institutions		State plans to strengthen DIETs to provide teachers with access to opportunities for digitally enabled, remote professional development	Mapping of digital infrastructure requirement at DIETs completed, and package of essential infrastructure defined	Eight DIETs operating with the minimum basic package of digital infrastructure required to support online professional development for teachers	An additional eight DIETs operating with the minimum basic package of digital infrastructure required to support online professional development for teachers	An additional eight DIETs operating with the minimum basic package of digital infrastructure required to support online professional development for teachers	An additional three DIETs operating with the minimum basic package of digital infrastructure required to support online professional development for teachers	An additional three DIETs operating with the minimum basic package of digital infrastructure required to support online professional development for teachers	Annual	Department of Education, Government of Gujarat
RA 4: Improved learning environment in schools										
9. Performance-based selection of schools for learning environment and technology infrastructure improvement		State yet to initiate an enrollment and performance-based, inclusive model for selection of schools for infrastructure and facilities upgradation	Based on enrolment and performance-based criteria, 1,500 schools selected for infrastructure and facilities upgradation	Based on enrolment and performance-based criteria, an additional 1,500 schools selected for infrastructure and facilities upgradation	Based on enrolment and performance-based criteria, an additional 1,500 schools selected for infrastructure and facilities upgradation	Based on enrolment and performance-based criteria, an additional 2,500 schools selected for infrastructure and facilities upgradation	Based on enrolment and performance-based criteria, an additional 2,000 schools selected for infrastructure and facilities upgradation	NA	Annual (Except Year 6)	Department of Education, Government of Gujarat
10. Improved enrollment in residential schools		About 25,000	NA	Enrollment increased by 5,000	Enrollment increased by an additional	Enrollment increased by an additional	Enrollment increased by an additional	Enrollment increased by an additional	Annual (Except Year 1)	Department of Education, Government of

Program Objective:	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.									
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
for out-of-school girls and girls from vulnerable groups					5,000	10,000	10,000	20,000		Gujarat
Results Area 5: Resilient recovery from COVID-19										
11. COVID-19 response strategies built-in for systemic resilience		State has instituted a continuous learning plan as part of its COVID-19 response strategy	(i) At least 60 percent of students provided with home-based learning materials/workbooks designed to provide remedial support for reducing learning deficiencies (ii) Baseline assessment to measure COVID-19-related learning loss completed (iii) Classroom and home-based remedial support provided to address	(i) 20 percent of educators trained in digital competencies (ii) 20 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience	(i) An additional 15 percent of educators trained in digital competencies (ii) An additional 15 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience	(i) An additional 15 percent of educators trained in digital competencies (ii) An additional 15 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience	(i) An additional 15 percent of educators trained in digital competencies (ii) An additional 15 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience	(i) An additional 15 percent of educators trained in digital competencies (ii) An additional 15 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience	Annual	Department of Education, Government of Gujarat

Program Objective:	To upgrade school infrastructure and help create an international-standard learning environment based on green and disaster-resilient architectural designs, while supporting acceleration of learning by strengthening decentralized management for improved education outcomes in Gujarat.									
Indicator Name	Unit of measure	Baseline	Cumulative Target Values					End Target	Frequency	Responsibility
			YR1	YR2	YR3	YR4	YR5			
			learning losses caused by the COVID-19 pandemic							
Corporate Indicators (Education GP)										
12. Students benefiting from direct interventions to enhance learning	CRI, Number	N/A	7,240,000	7,240,000	7,240,000	7,240,000	7,240,000	7,240,000	Annual	Department of Education, Government of Gujarat
12.A. Students benefiting from direct interventions to enhance learning - Female	CRI, Number	N/A	3,530,000	3,530,000	3,530,000	3,530,000	3,530,000	3,530,000	Annual	Department of Education, Government of Gujarat
13. Large-scale primary/secondary learning assessments completed	Number	0		1	1	2	2	3	Every two years	Department of Education, Government of Gujarat

Annex 2: Disbursement-Linked Indicators

The table summarizes the proposed Disbursement-Linked Indicators (DLIs) and Disbursement-Linked Results (DLRs) forming part of this program. Achievements of these DLIs/DLRs will be verified by an independent agency before disbursements will be made. Disbursements against each of these amounts will be in the ratio of 2:1 between World Bank and AIIB.

Disbursement Linked Indicator (DLI)	Financial Allocation	Disbursement Linked Results (DLRs)						
		Prior Results	Target to be Achieved in FY 2022 (April 2021 to March 2022) (Year 1)	Target to be Achieved in FY 2023 (April 2022 to March 2023) (Year 2)	Target to be Achieved in FY 2024 (April 2023 to Mar 2024) (Year 3)	Target to be Achieved in FY 2025 (April 2024 to March 2025) (Year 4)	Target to be Achieved in FY 2026 (April 2025 to March 2026) (Year 5)	Target to be Achieved in FY 2027 (April 2026 to March 2027) (Year 6)
DLI 1: Stakeholder owned planning systems institutionalized	Limited use of Annual Work Plans and Budgets (AWPBs) based on data and process-based discussions with key stakeholders	State Implementation Society trained by a National/State Planning Institute for overseeing the planning and appraisal outcome based AWPB	(i) 17 District Planning Teams trained by a National/State Planning Institute on AWPB creation that includes partnerships with NGOs/non state actors; and (ii) Undertaken an assessment of governance and public finance bottlenecks (with an emphasis on planning and budgeting) for improved service delivery at school level	(i) An additional 16 District Planning Teams trained by a National/State Planning Institute on AWPB creation that includes partnerships with NGOs/non state actors; and (ii) 20 percent of School Management Committees (SMCs) trained on the development of evidence-based School Development Plans (SDPs) and AWPBs; and (iii) Prioritized action plan initiated to address constraints identified in the governance and public finance assessment report	(i) Five district AWPBs approved, and show at least 75 percent utilization of funds sanctioned against AWPBs; and (ii) An additional 10 percent of SMCs trained on the development of evidence-based SDPs and AWPBs	An additional 10 percent of SMCs trained on the development of evidence-based SDPs and AWPBs	(i) An additional five district AWPBs approved, and show at least 75 percent utilization of funds sanctioned against AWPBs; and (ii) An additional 10 percent of SMCs trained on the development of evidence-based SDPs and AWPBs	An additional five district AWPBs approved, and show at least 75 percent utilization of funds sanctioned against AWPBs
	Total Allocated	Amount Allocated:	Amount Allocated:	Amount Allocated:	Amount Allocated:	Amount Allocated:	Amount Allocated:	Amount

Disbursement Linked Indicator (DLI)	Financial Allocation	Disbursement Linked Results (DLRs)						
		Prior Results	Target to be Achieved in FY 2022 (April 2021 to March 2022) (Year 1)	Target to be Achieved in FY 2023 (April 2022 to March 2023) (Year 2)	Target to be Achieved in FY 2024 (April 2023 to March 2024) (Year 3)	Target to be Achieved in FY 2025 (April 2024 to March 2025) (Year 4)	Target to be Achieved in FY 2026 (April 2025 to March 2026) (Year 5)	Target to be Achieved in FY 2027 (April 2026 to March 2027) (Year 6)
	Amount: USD112,500,000	USD5,000,000	USD34,750,000	USD43,000,000	USD11,750,000	USD4,000,000	USD9,000,000	Allocated: USD5,000,000
		Formula: USD5,000,000 on achievement	Formula: USD1,750,000 for each additional district trained (up to USD29,750,000) for (i); and USD5,000,000 on achievement for (ii)	Formula: USD1,750,000 for each additional district trained (up to USD28,000,000) for (i); USD600,000 for each percentage point increase in SMCs trained (up to USD12,000,000) for (ii); and USD3,000,000 on achievement for (iii)	Formula: USD1,150,000 for each additional district AWPB approved with 75 per cent fund utilization (up to USD5,750,000) for (i); and USD600,000 for each percentage point increase in SMCs trained (up to USD6,000,000) for (ii)	Formula: USD400,000 for each percentage point increase in SMCs trained (up to USD4,000,000)	Formula: USD1,000,000 for each additional district AWPB approved with 75 per cent fund utilization (up to USD5,000,000) for (i); and USD400,000 for each percentage point increase in SMCs trained (up to USD4,000,000) for (ii)	Formula: USD1,000,000 for each additional district AWPB approved with 75 per cent fund utilization (up to USD5,000,000)
DLI 2: Performance grants to schools to incentivize improved outcomes	State proposes to have a grading system to grade schools based on identified outcomes	Performance based grants mechanism with school selection process prepared and cleared with the World Bank	(i) 300 schools meeting minimum performance criteria as per agreed standards; and (ii) 30 schools move to Lighthouse status based on agreed selection criteria	(i) 400 additional schools meeting minimum performance criteria as per agreed standards; and (ii) 30 additional schools move to Lighthouse status based on agreed selection criteria and 30 schools of Year 1 maintain Lighthouse status	(i) 400 additional schools meeting minimum performance criteria as per agreed standards; and (ii) 40 additional schools move to Lighthouse status based on agreed selection criteria and 60 schools of Year 1 and Year 2 maintain Lighthouse status	(i) 500 additional schools meeting minimum performance criteria as per agreed standards; and (ii) 40 additional schools move to Lighthouse status based on agreed selection criteria and 100 schools from Years 1 to 3 maintain Lighthouse status	(i) 500 additional schools meeting minimum performance criteria as per agreed standards; and (ii) 50 additional schools move to Lighthouse status based on agreed selection criteria and 140 schools of Years 1 to 4 maintain Lighthouse status	(i) 500 additional schools meeting minimum performance criteria as per agreed standards; and (ii) 50 additional schools move to Lighthouse status based on agreed selection criteria and all 190 Lighthouse schools from Years 1 to 5 maintain Lighthouse status

Disbursement Linked Indicator (DLI)	Financial Allocation	Disbursement Linked Results (DLRs)						
		Prior Results	Target to be Achieved in FY 2022 (April 2021 to March 2022) (Year 1)	Target to be Achieved in FY 2023 (April 2022 to March 2023) (Year 2)	Target to be Achieved in FY 2024 (April 2023 to March 2024) (Year 3)	Target to be Achieved in FY 2025 (April 2024 to March 2025) (Year 4)	Target to be Achieved in FY 2026 (April 2025 to March 2026) (Year 5)	Target to be Achieved in FY 2027 (April 2026 to March 2027) (Year 6)
	Total Allocated Amount: USD75,000,000	Amount Allocated: USD3,000,000	Amount Allocated: USD9,315,000	Amount Allocated: USD12,015,000	Amount Allocated: USD12,420,000	Amount Allocated: USD12,500,000	Amount Allocated: USD12,875,000	Amount Allocated: USD12,875,000
		Formula: USD3,000,000 on achievement	Formula: USD27,000 for each additional school meeting minimum performance criteria (up to USD8,100,000) for (i); and USD40,500 for each additional school moving to Lighthouse status (up to USD1,215,000) for (ii)	Formula: USD27,000 for each additional school meeting minimum performance criteria (up to USD10,800,000) for (i); and USD40,500 for each additional school moving to Lighthouse status (up to USD1,215,000) for (ii)	Formula: USD27,000 for each additional school meeting minimum performance criteria (up to USD10,800,000) for (i); and USD40,500 for each additional school moving to Lighthouse status (up to USD1,620,000) for (ii)	Formula: USD22,000 for each additional school meeting minimum performance criteria (up to USD11,000,000) for (i); and USD37,500 for each additional school moving to Lighthouse status (up to USD1,500,000) for (ii)	Formula: USD22,000 for each additional school meeting minimum performance criteria (up to USD11,000,000) for (i); and USD37,500 for each additional school moving to Lighthouse status (up to USD1,875,000) for (ii)	Formula: USD22,000 for each additional school meeting minimum performance criteria (up to USD11,000,000) for (i); and USD37,500 for each additional school moving to Lighthouse status (up to USD1,875,000) for (ii)
DLI 3: Improved foundational learning outcomes at the lower primary level	State is yet to roll out a model of early childhood education (ECE) managed by the Department of Education; Baseline assessment for foundational learning to be conducted/ established in Year 2	Package for training of ECE teachers/facilitators notified by the State Implementation Society	30 percent of teachers from schools with co-located Aanganwadis trained to provide academic support on ECE in each of the 5 selected districts.	(i) 40 percent of teachers from schools with co-located Aanganwadis trained to provide academic support on ECE in each of the 10 additional selected districts; and (ii) Baseline learning outcomes assessment for Grade 4 language completed	One year pre-school program rolled out in 1000 schools	2 percentage point improvement in the percentage of students achieving minimum proficiency in learning outcomes assessment for Grade 4 language	One year pre-school program rolled out in 1000 additional schools	An additional 2 percentage point improvement in the percentage of students achieving minimum proficiency in learning outcomes assessment for Grade 4 language
	Total Allocated Amount: USD112,500,000	Amount Allocated: USD3,000,000	Amount Allocated: USD18,000,000	Amount Allocated: USD53,000,000	Amount Allocated: USD11,000,000	Amount Allocated: USD10,000,000	Amount Allocated: USD7,500,000	Amount Allocated: S\$ 10,000,000

Disbursement Linked Indicator (DLI)	Financial Allocation	Disbursement Linked Results (DLRs)						
		Prior Results	Target to be Achieved in FY 2022 (April 2021 to March 2022) (Year 1)	Target to be Achieved in FY 2023 (April 2022 to March 2023) (Year 2)	Target to be Achieved in FY 2024 (April 2023 to March 2024) (Year 3)	Target to be Achieved in FY 2025 (April 2024 to March 2025) (Year 4)	Target to be Achieved in FY 2026 (April 2025 to March 2026) (Year 5)	Target to be Achieved in FY 2027 (April 2026 to March 2027) (Year 6)
		Formula: USD3,000,000 on achievement	Formula: USD120,000 for each percentage point increase in teachers trained (up to USD3,600,000 per each district; and up to a total of USD18,000,000 for five districts)	Formula: USD120,000 for each percentage point increase in teachers trained (up to USD4,800,000 per each district; and up to a total of USD48,000,000 for ten districts) for (i); and USD5,000,000 on achievement for (ii)	Formula: USD11,000 for each additional school (up to USD11,000,000)	Formula: USD5,000,000 for each percentage point increase in learning outcomes (up to USD10,000,000)	Formula: USD7,500 for each additional school (up to USD7,500,000)	Formula: USD5,000,000 for each percentage point increase in learning outcomes (up to USD10,000,000)
DLI 4: Strengthened teacher development for classroom performance	State yet to institute teacher training needs assessments for guiding the customized delivery of teacher professional development	State level agency designated for carrying out periodic teacher training needs assessments	First teacher training needs assessment completed, and baseline created	20 percent of teachers provided with need-based teacher training	Second teacher training needs assessment completed, and grade level learning hard spots identified through needs assessment reduced by 5 percent	An additional 30 percent of teachers provided with need-based teacher training	An additional 30 percent of teachers provided with need-based teacher training	Third teacher training needs assessment completed, and grade level learning hard spots identified through needs assessment reduced by an additional 5 percent
	Total Allocated Amount: USD112,500,000	Amount Allocated: USD4,000,000	Amount Allocated: USD10,000,000	Amount Allocated: USD28,000,000	Amount Allocated: USD12,500,000	Amount Allocated: USD30,000,000	Amount Allocated: USD24,000,000	Amount Allocated: USD10,000,000
		Formula: USD4,000,000 on achievement	Formula: USD10,000,000 on achievement	Formula: USD1,400,000 for each percentage point increase in teachers trained (up to USD28,000,000)	Formula: USD2,500,000 per percentage point improvement (up to USD12,500,000)	Formula: USD1,000,000 for each percentage point increase in teachers trained (up to USD30,000,000)	Formula: USD600,000 for each percentage point increase in teachers trained (up to USD18,000,000)	Formula: USD2,000,000 per percentage point improvement (up to USD10,000,000)
DLI 5: Improved	State plans to upgrade the learning	Inclusive state strategy for school	Strategy with functional designs	Strengthened child friendly learning	Strengthened child friendly learning	(i) Strengthened child friendly learning	Strengthened child friendly learning	(i) Strengthened child friendly

Disbursement Linked Indicator (DLI)	Financial Allocation	Disbursement Linked Results (DLRs)						
		Prior Results	Target to be Achieved in FY 2022 (April 2021 to March 2022) (Year 1)	Target to be Achieved in FY 2023 (April 2022 to March 2023) (Year 2)	Target to be Achieved in FY 2024 (April 2023 to Mar 2024) (Year 3)	Target to be Achieved in FY 2025 (April 2024 to March 2025) (Year 4)	Target to be Achieved in FY 2026 (April 2025 to March 2026) (Year 5)	Target to be Achieved in FY 2027 (April 2026 to March 2027) (Year 6)
learning environment in schools and teacher education institutions	environment in 9,000 schools; and complete construction of 5 District Institutes of Education and Training (DIETs)	learning environment development including functional school designs and facilities finalized	and staffing needs finalized to enhance training in 5 new DIETs	environment in 1,500 schools	environment in an additional 1,500 schools	environment in an additional 1,500 schools; and (ii) Construction of the superstructure of 5 DIETs complete with at least 75% staff in position in each DIET	environment in an additional 2,500 schools	learning environment in an additional 2,000 schools; and (ii) Construction of 5 new DIETs completed and facilities made operational with 75% staff position in each DIET
	Total Allocated Amount: USD223,127,000	Amount Allocated: USD4,500,000	Amount Allocated: USD8,000,000	Amount Allocated: USD31,500,000	Amount Allocated: USD31,500,000	Amount Allocated: USD42,377,000	Amount Allocated: USD52,500,000	Amount Allocated: USD52,750,000
		Formula: USD4,500,000 on achievement	Formula: USD8,000,000 on achievement	Formula: USD21,000 for each additional school (up to USD31,500,000)	Formula: USD21,000 for each additional school (up to USD31,500,000)	Formula: USD21,000 for each additional school (up to USD31,500,000) for (i); and USD2,175,400 for each DIET (up to USD10,877,000)	Formula: USD21,000 for each additional school (up to USD52,500,000)	Formula: USD21,000 for each additional school (up to USD42,000,000) for (i); and USD2,150,000 for each DIET (up to USD10,750,000)
DLI 6: Improved learning assessment systems for focused remedial programs	State doesn't have an assessment center to manage classroom, state and international assessments; periodic assessment tests with standardized test items and learning descriptors at a pilot stage; and state has	Digital device mapping completed to enable the statewide roll out of ICT-supported Periodic Assessment Tests (PAT) that provide student, subject and school wise reports on learning gaps and corresponding	(i) Gujarat Assessment Center (GAC) for managing classroom, state and international level student assessments, notified; and (ii) Partnership established with OECD for conducting PISA- based Test for	20 percent of schools covered under ICT-supported Periodic Assessment Tests that provide student, subject and school wise reports on learning gaps and corresponding remedial education plans	(i) Review of state examinations with time bound reform action plan completed and report highlighting proposed reform agenda published; and (ii) State Assessment Center managed PISA-based Test for	An additional 40 percent of schools covered under ICT-supported Periodic Assessment Tests that provide student, subject and school wise reports on learning gaps and corresponding remedial education plans	(i) State examinations aligned with international competency-based learning standards; and (ii) Partnership established with OECD for state's participation in PISA 2028	An additional 20 percent of schools covered under ICT-supported Periodic Assessment Tests that provide student, subject and school wise reports on learning gaps and corresponding

Disbursement Linked Indicator (DLI)	Financial Allocation	Disbursement Linked Results (DLRs)						
		Prior Results	Target to be Achieved in FY 2022 (April 2021 to March 2022) (Year 1)	Target to be Achieved in FY 2023 (April 2022 to March 2023) (Year 2)	Target to be Achieved in FY 2024 (April 2023 to Mar 2024) (Year 3)	Target to be Achieved in FY 2025 (April 2024 to March 2025) (Year 4)	Target to be Achieved in FY 2026 (April 2025 to March 2026) (Year 5)	Target to be Achieved in FY 2027 (April 2026 to March 2027) (Year 6)
	limited exposure to international level student assessments	remedial education plans	select Schools		Schools completed			remedial education plans
	Total Allocated Amount: USD75,000,000	Amount Allocated: USD7,500,000	Amount Allocated: USD16,000,000	Amount Allocated: USD12,000,000	Amount Allocated: USD11,000,000	Amount Allocated: USD16,500,000	Amount Allocated: USD3,750,000	Amount Allocated: USD8,250,000
		Formula: USD7,500,000 on achievement	Formula: USD8,000,000 on achievement for (i); and USD8,000,000 on achievement for (ii)	Formula: USD600,000 for each percentage point increase in schools covered (up to USD12,000,000)	Formula: USD5,000,000 on achievement for (i); and USD6,000,000 on achievement for (ii)	Formula: USD412,500 for each percentage point increase in schools covered (up to USD16,500,000)	Formula: USD1,250,000 on achievement for (i); and USD2,500,000 on achievement for (ii)	Formula: USD412,500 for each percentage point increase in schools covered (up to USD8,250,000)
DLI 7: COVID 19 response strategies built in for systemic resilience	State has instituted a continuous learning plan as part of its COVID-19 response strategy	At least 60 percent of students provided with home-based learning materials/workbooks designed to provide remedial support for reducing learning deficiencies	(i) Baseline assessment to measure COVID-19 related learning loss completed; and (ii) Classroom and home-based remedial support provided to address learning losses caused by the COVID-19 pandemic	(i) 20 percent of educators trained in digital competencies; and (ii) 20 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience	(i) An additional 15 percent of educators trained in digital competencies; and (ii) An additional 15 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience	(i) An additional 15 percent of educators trained in digital competencies; and (ii) An additional 15 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience	(i) An additional 15 percent of educators trained in digital competencies; and (ii) An additional 15 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience	(i) An additional 15 percent of educators trained in digital competencies; and (ii) An additional 15 percent of decentralized education functionaries/ personnel trained on emergency response strategies for systemic resilience
	Total Allocated Amount: USD37,500,000	Amount Allocated: USD10,000,000	Amount Allocated: USD10,000,000	Amount Allocated: USD5,500,000	Amount Allocated: USD3,000,000	Amount Allocated: USD3,000,000	Amount Allocated: USD3,000,000	Amount Allocated: USD3,000,000

Disbursement Linked Indicator (DLI)	Financial Allocation	Disbursement Linked Results (DLRs)						
		Prior Results	Target to be Achieved in FY 2022 (April 2021 to March 2022) (Year 1)	Target to be Achieved in FY 2023 (April 2022 to March 2023) (Year 2)	Target to be Achieved in FY 2024 (April 2023 to Mar 2024) (Year 3)	Target to be Achieved in FY 2025 (April 2024 to March 2025) (Year 4)	Target to be Achieved in FY 2026 (April 2025 to March 2026) (Year 5)	Target to be Achieved in FY 2027 (April 2026 to March 2027) (Year 6)
		<p>Formula: USD10,000,000 on achievement</p>	<p>Formula: USD5,000,000 on achievement for (i); and USD5,000,000 on achievement for (ii)</p>	<p>Formula: USD137,500 for each percentage point increase in educators trained (up to USD2,750,000) for (i); and USD137,500 for each percentage point increase in decentralized education functionaries/ personnel trained (up to USD2,750,000) for (ii)</p>	<p>Formula: USD100,000 for each percentage point increase in educators trained (up to USD1,500,000) for (i); and USD100,000 for each percentage point increase in decentralized education functionaries/ personnel trained (up to USD1,500,000) for (ii)</p>	<p>Formula: USD100,000 for each percentage point increase in educators trained (up to USD1,500,000) for (i); and USD100,000 for each percentage point increase in decentralized education functionaries/ personnel trained (up to USD1,500,000) for (ii)</p>	<p>Formula: USD100,000 for each percentage point increase in educators trained (up to USD1,500,000) for (i); and USD100,000 for each percentage point increase in decentralized education functionaries/ personnel trained (up to USD1,500,000) for (ii)</p>	<p>Formula: USD100,000 for each percentage point increase in educators trained (up to USD1,500,000) for (i); and USD100,000 for each percentage point increase in decentralized education functionaries/ personnel trained (up to USD1,500,000) for (ii)</p>

Annex 3: Detailed Program Description

1. The program has five result areas:
2. **Decentralized Planning Systems Institutionalized.** Support for enabling and prioritizing systems and processes for strengthening decentralized district- and sub-district-level planning, through planning and *processes* for concurrent, participatory and bottom-up planning at state, district and sub-district levels, with a view to addressing intra-district diversities in access to quality education, and through:
 - (i) Institutionalizing stakeholder-owned planning systems.
 - (ii) Enabling district-based planning systems through capacity building support for decentralized education functionaries, including through implementation of school-related gender-based violence (SRGBV) prevention protocols, complaint and referral mechanisms.
 - (iii) Enhancing school-level Annual Work Plan and Budgets through community participation.
 - (iv) Instituting performance grants for schools to incentivize improved outcomes.
3. **Improved Foundational Learning Outcomes at the Lower Primary Level.** Support for the Program Implementing Entity's efforts toward strengthening foundational learning by improving access to and quality of early childhood education (ECE) and early grade learning, and by strengthening the preschool to primary grade **transition**, through the carrying out of the following activities:
 - (i) Supporting the rollout of a pre-school education model to enable access to ECE programs for preschoolers.
 - (ii) Strengthening state-level learning assessment system.
4. **Strengthened Teacher Development and School-Based Assessments for Classroom Performance.** Support for the enhancement of needs-based continuous

professional development, pre-service teacher training and teacher performance management to boost classroom performance through:

- (i) Strengthening teacher training and management systems for performance tracking, including the system of teacher training needs assessments and teacher performance management systems.
- (ii) Developing and rollout of quality remedial programs based on classroom-based assessments.
- (iii) Strengthening teacher education institutions for teacher development, including supporting the construction and operationalization of five District Institutes of Education and Training (DIETs) in unserved districts of the State of Gujarat, and establishing a state assessment center for managing classroom-, state- and international-level student assessment.

5. **Improved Learning Environments in Schools.** Support for the strategic development and rehabilitation of the school network in the State of Gujarat with the aim of reducing learning poverty and addressing the pressing infrastructure needs in the state, through the carrying out of the following activities:

- (i) Supporting performance-based selection of schools for learning environment and technology infrastructure improvement, and developing an inclusive state strategy for school learning environment development.
- (ii) Strengthening infrastructure and upgrading facilities for creating child-friendly learning environments in schools.

6. This Results Area will support the strengthening of infrastructure and quality improvements of facilities in 9,000 schools, including at least 150 residential schools for girls belonging predominantly to minority groups in hard-to-reach/rural areas and five teacher education institutes in unserved districts of the state.

7. Technology solutions with a focus on accessibility and scalability will be supported. The systems **concentrate** on low-cost and low-bandwidth solutions. Availability of digital devices in schools offering upper primary and secondary education will also be improved.

8. **Resilient Recovery from COVID-19.** Support for development and implementation of a large holistic home-learning program, as part of COVID-19 response strategies, and for meeting similar or unforeseen events that need greater systemic resilience and rapid academic response mechanisms to address such challenges, through the carrying out of the following activities:

- (i) Enabling technology support at local levels for students.
- (ii) Facilitating home and blended-learning programs.
- (iii) Strengthening remedial programs to address the pandemic-related learning losses
- (iv) Providing a long-term strategic plan to ensure the system is built back better with rapid academic response mechanisms.

Annex 4: Economic Analysis

1. **Economic Analysis.** A cost–benefit analysis was carried out to assess the economic viability of the program, inclusive of a six-year construction period. Through the course of the program, about 4.5 million students will benefit from improvement in the quality of foundational learning and improved teacher development; and complete their elementary or secondary education up to six years after program completion. More than 50 percent of these students will also benefit from the support toward improving learning environment in select schools.

2. **Economic Benefits.** The values of the economic benefits considered in the economic analysis are the following:

- (i) **Improved Foundational Learning Outcomes.** A standard deviation¹ improvement in learning levels is expected to lead to an 18-percentage-point increase in wage earnings for elementary and secondary school completers upon joining the workforce.² The program aims to realize a four-percentage-point improvement in Grade 4 learning levels. It intends to sustain these through a focus on provision of individualized remedial support. This would translate into a USD35.2 and USD40.3 improvement in annual wages for students joining the workforce post completion of elementary and secondary education, respectively.³ These gains would

¹ Ministry of Education National Achievement Survey 2017-2018.

² Aslam, M., A. De, G. Kingdon and R. Kumar. 2010. Economic Returns to Schooling and Skills – An analysis of India and Pakistan, Mimeo, RECOUP Project, Faculty of Education, University of Cambridge.

³ Ministry of Statistics and Programme Implementation, National Sample Survey 68th Round; adjusted for using per capita income data for Gujarat and India from the Annual National Income and Per Capita Income Data (2016-2017) released by the Ministry of Statistics and Programme Implementation

need to be adjusted for, after factoring in labor force participation⁴ (42.4 percent) and unemployment rates⁵ (3.4 percent) of the state.

- (ii) **Strengthened teacher development for classroom performance.** The program seeks to improve teachers' content knowledge by reducing the number of grade-level learning competencies identified for critical teacher training. This is expected to improve learning levels by about 5.1 percentage points,⁶ and in turn after adjusting for workforce participation rate and unemployment rate, positively impact the income that students can expect to earn upon joining the workforce. This is expected to translate into USD44.8 and USD51.3 for students who complete their elementary and secondary education, respectively.
- (iii) **Improved learning environment in schools.** Improvement in learning environment can explain up to 16 percent of the variance in student learning levels.⁷ After adjusting for workforce participation rate and unemployment rate, this is expected to positively impact the income that students can expect to earn upon joining the workforce. Students completing elementary education could earn up to USD32.4 in additional income and the corresponding figure for students completing secondary education is USD36.8.

3. **Economic Costs.** The economic costs considered while estimating the economic internal rate of return (EIRR) includes the overall cost of the program (USD1.07 billion spread across the program period of six years). This cost was initially envisioned to be about

⁴ Ministry of Statistics and Programme Implementation, Periodic Labor Force Survey (July 2017 to June 2018).

⁵ Ministry of Statistics and Programme Implementation, Periodic Labor Force Survey (July 2018 to June 2019).

⁶ Teaching Quality Counts: How Student Outcomes Relate to Quality of Teaching in Private and Public Schools in India, Renu Singh and Sudipa Sarker.

⁷ Barrett, P. S., F. Davies, Y. Zhang, and L. Barrett. 2015. The Impact of Classroom Design on Pupils' Learning: Fin school-related gender-based violence al Results of a Holistic, Multi-Level Analysis. *Building and Environment* 89: 118–33

USD1.32 billion. The difference is being managed through the expenditure efficiency that the program expects to realize from investments towards institutionalization of decentralized planning systems.

4. **Economic Internal Rate of Return.** Based on available data and adopted assumptions, the EIRR for the program in the base case scenario is 24.9 percent. In the absence of these efficiency gains mentioned in the economic costs, the EIRR for the program would have dropped to 22.5 percent.

Table 1. Economic Internal Rate of Return

Year	Economic Benefits			Economic Costs	Net Economic Cash Flow
	Income gain upon elementary school completion	Increase in additional income (over elementary school completion) upon Secondary School Completion		Investments	
		Government	Private Aided		
2021	-	-	-	-	-
2022	-	-	-	179	(179)
2023	-	-	-	179	(179)
2024	-	-	-	179	(179)
2025	-	-	-	179	(179)
2026	53	-	-	179	(126)
2027	111	-	-	179	(67)
2028	176	1	7	54	130
2029	249	1	15	54	211
2030	329	2	24	54	301
2031	417	3	34	54	400
2032	515	5	45	54	511
2033	554	5	49	54	553
2034	595	5	52	54	599
2035	640	6	56	54	648
2036	688	6	61	-	754
2037	739	7	65	-	811
2038	795	7	70	-	872
2039	854	8	75	-	937
2040	919	8	81	-	1,008
2041	987	9	87	-	1,083
2042	1,062	9	93	-	1,164
2043	1,141	10	100	-	1,252
2044	1,227	11	108	-	1,346
2045	1,319	12	116	-	1,446
2046	1,418	13	125	-	1,555
2047	1,524	14	134	-	1,672
2048	1,638	15	144	-	1,797
2049	1,761	16	155	-	1,932
2050	1,893	17	167	-	2,077
2051	2,035	18	179	-	2,232
2052	2,188	19	193	-	2,400
2053	2,352	21	207	-	2,580
2054	2,528	22	222	-	2,773
2055	2,718	24	239	-	2,981
2056	2,922	26	257	-	3,205

Year	Economic Benefits		Economic Costs	Net Economic Cash Flow	
	Income gain upon elementary school completion	Increase in additional income (over elementary school completion) upon Secondary School Completion			Investments
		Government	Private Aided		
2057	3,141	28	276	-	3,445
2058	3,376	30	297	-	3,703
2059	3,630	32	319	-	3,981
2060	3,902	35	343	-	4,280
2061	4,195	37	369	-	4,601
2062	4,509	40	397	-	4,946
2063	4,847	43	427	-	5,317
2064	5,211	46	458	-	5,716
2065	5,602	50	493	-	6,144
2066	6,022	53	530	-	6,605
2067	6,473	57	570	-	7,100
2068	4,801	62	612	-	5,475
2069	4,059	66	658	-	4,783
2070	3,217	43	422	-	3,681
2071	2,266	30	302	-	2,599
2072	1,198	16	162	-	1,377
				EIRR (real):	24.9%
				ENPV:	14,671

5. **Sensitivity Analysis.** The sensitivity analysis (Table 2) demonstrates that the program's expected economic performance is robust.

Table 2. Sensitivity Analysis

Sensitivity Parameter	Variation	EIRR	ENPV (USD million)
Base case		24.9%	14,671
Unfavorable changes			
1 Increase in wage expected from one standard deviation improvement in learning levels	- 50%	17.6%	6,778
2 Expected improvement in learning outcomes score	- 50%	22.5%	11,785
Both combined		16.0%	5,335

Note: In case the wage escalation factor is reduced by 50%, the EIRR under the base case works out to 17.5 percent and the expected net present value (ENPV) is USD4,042 million.

Annex 5: Member and Sector Context

A. Country Context

1. The Indian economy grew at a healthy rate of 7.4 percent per annum on average between FY2014 and FY2018, but growth has been steadily slowing down in recent years. Disruptions due to the demonetization initiative in November 2016 and teething implementation issues related to the rollout of goods and services tax in July 2017, resulted in growth dropping to 7.0 percent in FY2017 and 6.1 percent in FY2018. Weak economic growth in the rural sector, sluggish external demand and stresses in corporate and financial sector balance sheet further dented growth to 4.2 percent in FY2019. The COVID-19 pandemic and the associated social distancing measures have significantly impacted growth in FY2020, with the economy contracting by 15.7 percent in the first half. Although economic activity is expected to recover in the second half of the fiscal year, the economy is expected to shrink between 7 to 10 percent in FY2020.

2. The contraction in the economy is expected to impact significantly some of the most vulnerable sections of the economy and reverse many of the impressive socioeconomic gains made by India over the last two decades. Between 2004-2005 and 2011-2012, India is estimated to have pulled 170 million people out of poverty as poverty rates declined from 39.9 percent of population in 2004-2005 to 22.5 percent in 2011-2012. Poverty rates are estimated to have further fallen to values ranging between 8.1 to 11.3 percent between 2012 and 2017.⁸ More recent household data by the Centre for Monitoring Indian Economy indicate that the job losses due to COVID-19 pandemic is likely to have pushed up poverty rates to levels witnessed in 2016.

3. Gujarat, one of the country's leading industrialized states, had grown at a healthy average rate of greater than eight percent from FY2013 to FY2020. The economy is expected to avoid recession amid the pandemic and grow by 0.6 percent in 2020-2021 as the state faced negative impact due the nationwide lockdown and other restrictions. Similarly, the pandemic also led to the increase of the state's debt from 16.2 percent of gross state

⁸ World Bank. South Asia Economic Focus. Fall 2020: Beaten or Broken? Informality and COVID-19.

domestic product in March 2020 to the estimated 18.1 percent in March 2021. Public debt is expected to moderate in FY2021 with the fiscal account expected to remain in surplus. In order to improve educational outcomes, the government has continued with healthy outlay to the education sector (about 15 percent of the total outlay).

4. Education has been long considered a medium to reduce poverty and boosting prosperity in India and has been credited for India's economic transformation. As India has a young population (as about half of its population is less than 25), education provisioning is expected to continue to play a crucial role for human development and India achieving demographic dividend.

5. India has initiated many programs to achieve universalization of elementary education. More recent central government-introduced schemes, such as Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Sikshya Abhiyan (RMSA), have helped improved access to elementary and secondary education. These two initiatives were merged with the centrally sponsored scheme on Teacher Education to form National Education Mission in 2018. The major features of this program include holistic approach to education, administrative reform, focus on quality of education, focus on digital education, strengthening of schools, focus on girl education, focus on inclusion, focus on skill development, focus on sports and physical education and focus on regional balance.

6. India has made great progress in education in the recent past, particularly in terms of universalization of education. Net enrollment ratio for primary education for boys and girls has reached 100 percent, while youth literacy rate has reached 94 percent and 92 percent for males and females, respectively. Similarly, female dropout rate (at age 11 to 14) declined by less than half in 2018 when compared to that of 2006. However, the gross enrollment in higher education is still at 26 percent and a third of children with special needs are out of school. Similarly, adoption of information and communications technology (ICT) has been strikingly low.

7. Despite tremendous progress in enrollment, educational outcomes remain low, particularly in rural areas. According to the 2018 Annual Survey of Education Report (ASER), more than one-fourth of the children in Standard 3 are at Standard 2 reading level and more than a third of the same grade cannot read words.

8. The pandemic has exacerbated problems that India has been facing in terms of education in terms of educational outcome as well as disparities. During the pandemic, about 250 million students in the public schooling system have had limited or no access to education more than 1 million of the nation's schools and training centers have remained closed for almost a year. While some schools have adopted digital technologies and introduced virtual classrooms, teleconferencing and digital exams and assessments, these opportunities have only been able to the households who have access to the internet. In India, only a quarter of households have access to internet and the number is even lower for rural India. Hence, extended school closures are likely to lead to a loss in human capital and could affect growth in the long run.

B. Sector and Institutional Context

9. India's education landscape is guided by its National Education Policy 2020 that was approved by the Union Cabinet on 29 July 2020.⁹ This new policy envisages an India-centric education system that would transform India into an equitable and vibrant knowledge society by providing high-quality education to her citizens. Compared with its preceding policy, the 2020 document calls for numerous changes in language learning policy, the school staging structure, standards for teacher enrolment, and a strong emphasis on quality of foundational learning accompanied by three major shifts:

- a. From adding more subjects and vertical content to the existing curriculum to making it more interdisciplinary.
- b. From exam-oriented to more holistic assessments, including information on students' other skills.
- c. From national and centrally sponsored schemes toward more impact-oriented, state-based programs – catalytic change state ownership and community involvement.

10. As India's fifth-largest state, Gujarat's schools provide education to about 11.48 million students, of which 5.42 million are in public schools, 1.98 million are in private/semi-aided schools and 4.24 million are in private unaided schools. Government and semi-aided

⁹ Wikipedia. National Education Policy 2020.

schools comprise over 60 percent of school enrolment and teachers. It is home to 400,000 teachers assigned to 54,000 schools.¹⁰

11. India's National Achievement Survey among states ranks Gujarat's School Grades 3 and 5 as close to the national average. But at Grade 10, its achievement is far from the national average. Against the backdrop of elementary school pupil-teacher ratio of 27, and an average school enrolment of about 165, some of Gujarat's schools have low enrollment. Twenty-five percent of primary, upper primary and elementary schools have less than two teachers, while 21 percent have less than two classrooms. The reduction of school sizes has rendered them economically unviable. A 2019 survey further revealed that 12,000 schools are run by just one or two teachers and over 15,000 schools, have less than 100 students. Hence, pupil-teacher ratio in these schools is 6.7 students per teacher, while the mean teacher salary cost per pupil is INR7,156 per month. Economic inefficiencies from these trends leave only four percent of the state's annual school education budget for quality investment. Many schools are in urgent need of funds to refurbish and reinvest in infrastructure that would be conducive for quality teaching and learning.

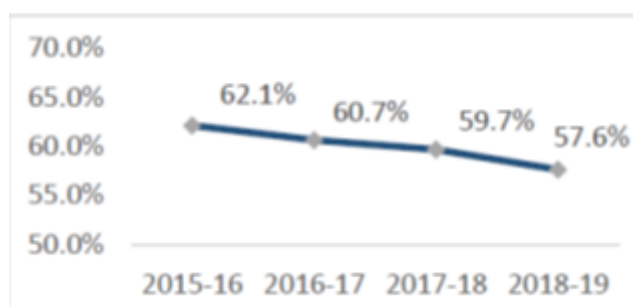
12. Gujarat faces a twin challenge of low school transition and workforce participation rates impacting girls from vulnerable households. The gross enrollment ratio in Gujarat at secondary level for girls is 66 percent compared with 80 percent for boys. Transition rates from elementary to secondary grades is also lower for girls at 79 percent, compared with 88 percent for boys. It is reported that girls are more susceptible to drop out due to lack of parental engagement, community consent, early marriages, domestic care jobs and other socioeconomic barriers. Moreover, residential schools for girls are in poor state in rural areas, further cementing a negative community perception on safety of teenage girls in these settings. Given the prevailing pandemic, school closures have further exacerbated girls' access to learning, increased time spent on housework and disrupted future career plans.

13. In terms of classroom teaching delivery, Gujarat has identified, before the pandemic, 2.1 million students who were below Grade 3 proficiency for reading and writing and arithmetic. These learning gaps continue to worsen and are amplified as the child progresses through the grades. The need for remedial classes is huge. From 2015-2019, the

¹⁰ World Bank. 2020. Gujarat Outcomes for Accelerated Learning (GOAL) - P173704.

perceived downtrend in student learning levels is attributable to a dearth of quality pre-school education. Evidence suggests there is a pivot by parents toward private schools over public institutions; hence between 2015–2016 and 2018–2019, public schools' share in Grade 1 enrollment throughout India has dropped from 62 percent to 57 percent (Figure 1).

Figure 1. Public schools' share in Grade 1 enrollment



14. The National Achievement Survey further revealed disparities among the districts in Gujarat in terms of school grade/subject performances. For example, in 2017, Gujarat's scores between the lowest- and highest-performing districts have a range difference of 15-20 percentage points. Hence, there is a need to address district specific educational needs rather than adopting a one-size-fits-all model for the state.

15. In addressing COVID-19, Gujarat noted that 25-30 percent of its students had limited access to remote-learning devices. Hence, the state issued detailed guidelines to ensure no student remains deprived of public education. In addition, the state proactively designed a comprehensive logistics framework comprising:

- a. Technology support at local levels, e.g., villages, hamlets and habitats.
- b. Mapping medium of access to remote education, e.g., television, smartphones, normal phones, table and radio.
- c. Customized syllabus broken into chapter and subject-oriented weekly schedules to support holistic home-learning programs.
- d. Remedial programs, i.e., weekly tests to gauge students' learning levels post-COVID – for remedial learning programs.

- e. Disabled-friendly learning content for special needs students.
- f. A long-term plan to address post-COVID-era challenges, e.g., better resilience and faster response procedures to disasters and extreme events.

Annex 6: Sovereign Credit Fact Sheet

A. Recent Economic Development

1. India is a lower middle-income country, with a GDP per capita at USD1900.7 and a population of 1.38 billion in 2020.¹¹ It is the world's third-largest economy by purchasing power parity. India's economy grew at an average annual rate of 7.4 percent between FY2014 and FY2018 but has slowed down in recent years following disruptions due to the demonetization initiative in November 2016 and the teething issues associated with the rollout of goods and services tax in July 2017.¹²¹³ Growth slowed down to four percent in FY2019 due to weakness in private consumption, investment and exports, owing to rural distress, stress in the financial sector and sluggish global demand. The Indian economy contracted by 7.3 percent in FY2020 as a result of the COVID-19 pandemic and resulting

¹¹ The income group classification for fiscal year 2019 is based on World Bank criteria.

¹² Data are based on fiscal years. Fiscal year 2020 (FY2020) begins on 1 April 2020 and ends on 31 March 2021.

¹³ On Nov. 8, 2016, India's government announced withdrawal of the legal tender of INR500 and INR1,000 notes, which accounted for 86 percent of the value of currency in circulation, and introduction of new INR500 and INR2,000 notes.

lockdown.¹⁴ The economy showed signs of revival in the last two quarters of FY2020 as the lockdown measures were gradually eased. Growth in the first quarter of FY2021 surged to over 20.0 percent, mainly due to base effects.

2. Inflation averaged 6.2 percent in FY2020, above the target band of two to six percent, primarily driven by food inflation due to supply-side disruptions. The central bank reduced the repo and reverse repo rates by 115 and 155 basis points to 4.0 and 3.35 percent, respectively, to stimulate aggregate demand, which had declined due to the lockdown. The central bank introduced several measures to reduce the borrowing cost, bolster liquidity and improve credit flow to the productive sectors. Inflation moderated slightly to average 5.5 percent in the first half of FY2021 due to decline in food inflation even as core inflation remained sticky. Key policy rates were left unchanged in with the central bank maintaining an accommodative stance.

3. General government fiscal deficit is estimated to have risen to 12.8 percent of GDP in FY2020. A downturn in revenue due to economic slowdown and higher spending on the stimulus package resulted in the fiscal deficit widening significantly. Buoyant revenue collection by the central government have constrained the fiscal deficit during April to August to 31.1 percent of the budgeted deficit, well below the pre-pandemic average during FY2016 to FY2019. Capital expenditure has grown by 27.8 percent during this period in line with budget estimates. The sharp increase in fiscal deficit and a contraction in GDP in FY2020 resulted in the public debt rising to close to 90 percent of GDP in FY2020.

4. The current account posted a surplus in FY2020, for the first time since 2002, due to a greater decline in imports as compared to exports. The current account remained in surplus in the first quarter of FY2021 on account of contraction in the trade deficit and an increase in net services receipts. Remittances experienced a strong increase as economic prospects improved globally. The trend of robust foreign direct investment inflows continued with net inflow of USD11.9 billion.

¹⁴ On March 24, the government announced a nationwide lockdown till April 14, subsequently extended to May 30. Lockdown was eased beginning June 1.

5. In June 2020, Moody's downgraded India's rating to Baa3 with a negative outlook but revised the outlook to stable in its October 2021 update while retaining the Baa3 rating. In April 2021, Fitch revised India's outlook to negative, due to slow reform momentum and challenging economic environment, limited fiscal space and stress in the financial sector.

B. Economic Indicators

Table 1: Selected Macroeconomic Indicators (2018-2022)

Economic Indicators	FY2018	FY2019	FY2020	FY2021*	FY2022*
Real GDP growth	6.5	4.0	-7.3	9.5	8.5
CPI Inflation (average, % change)	3.4	4.8	6.2	4.9	4.1
Current account balance (% of GDP)	-2.1	-0.9	1.0	-1.2	-1.6
General government overall balance (% of GDP)	-6.3	-7.4	-12.8	-11.3	-9.1
General government gross debt (% of GDP)	70.2	73.9	89.4	90.1	86.3
Public gross financing needs (% of GDP)	10.5	11.4	16.7	14.2	13.2
External debt (% of GDP)	20.1	19.8	20.6		
Gross external financing need (% of GDP) ¹	10.4	10	8.9	11.0	11.2
Gross international reserves (USD billions) ²	415.8	481.3	581.1	637.4	
Exchange rate (INR/USD, EOP) ²	69.6	71.4	73.0	74.3	

Note: FY2020 ran from April 1, 2020 to March 31, 2021

* Denotes projected figures

¹ Data for 2021-22 are AIIB Staff Projections based on IMF

² Reserves and exchange rate for FY2021 are sourced from RBI and pertain to October 2021.

Source: IMF World Economic Outlook July 2021, April 2021; Reserve Bank of India and IMF Country Report 19/385.

C. Economic Outlook and Risks

6. India is expected to grow at 9.5 percent in FY2021 aided by low base and the effects of the fiscal stimulus kicking in. Growth projections for FY2021 were revised downward by the IMF from April due to the severe second COVID wave from April to May and associated localized lockdown impacting economic activity. High-frequency indicators like purchasing managers index, electronic waybills and freight traffic indicate a dissipating impact from the second wave and a return to normal economic activity. Going forward, government expenditure is expected to be a major pillar for recovery. The National Monetization Plan for brownfield assets is expected to free resources worth USD81 billion over the next three years to finance infrastructure. Private consumption is expected to inch up although it may be constrained by rising household debt levels in the pandemic. Similarly, private investment

is expected to pick up amid improving business sentiment and credit conditions. Exports are likely to bolster growth as global demand picks up.

7. Overall inflation is expected to decrease to 4.9 percent in FY2021, as supply chains recover and agriculture output increases. However, an increase in oil prices could lead to resurgence of inflationary pressures. The central bank is likely to continue its accommodative stance till the end of 2021 and support the economy through liquidity pressures.

8. Fiscal deficit in FY2021 is expected to moderate to a bit 11.3 percent of GDP as tax revenue increases on the back of improved economic activity. However, the pace of fiscal consolidation will be slower than originally outlined in the Fiscal Responsibility and Budget Management Review Committee. The federal government proposes to invest heavily in infrastructure in FY2021 with capital expenditure scheduled to increase by more than 26.0 percent focusing on housing, roads, railways and telecom.

9. Public debt, which was estimated to rise sharply to 89.4 percent of GDP in FY2020, levels last witnessed in early 2000s, is expected to inch up to 90.1 percent in FY2021. Despite being high, India's public debt remains sustainable given favorable debt dynamics and the projected increasing economic growth trend in the medium term. Furthermore, with public debt having a long and medium maturity, being denominated in domestic currency, and primarily held by residents, the debt profile is favorable. India's external debt is expected to remain stable.

10. The current account balance is projected return to deficit as import growth is expected to outpace export growth. Increase in oil prices is expected to exacerbate the trade deficit. Remittances are also expected to pick up as Middle East economies recover and spread of the COVID-19 pandemic in advanced economies is contained.