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Report No: PAD00096

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A
PROPOSED LOAN

IN THE AMOUNT OF US\$190 MILLION

TO THE

REPUBLIC OF ECUADOR

FOR A

STRENGTHENING THE RESILIENCE OF ECUADORIAN SCHOOLS PROJECT

September 8, 2023

Education Global Practice
Latin America And Caribbean Region

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CURRENCY EQUIVALENTS

Currency Unit = U.S. Dollar

FISCAL YEAR

January 1 - December 31

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ABBREVIATIONS AND ACRONYMS

CERC	Contingent Emergency Response Component
CGAF	General Administrative and Financial Coordination (<i>Coordinación General Administrativa y Financiera</i>)
CONADIS	National Council for Disability Equity (<i>Consejo Nacional para la Igualdad de Discapacidades</i>)
CPF	Country Partnership Framework
DA	Designated Account
E&S	Environmental and Social
ECE	Early Childhood Education
ENSANUT	National Health and Nutrition Survey (<i>Encuesta Nacional de Salud y Nutrición</i>)
ERCE	Regional Comparative and Explanatory Study
ESF	Environmental and Social Framework
FM	Financial Management
FMA	Financial Management Assessment
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GoE	Government of Ecuador
GRS	Grievance Redress Service
GTRM	Working Group for Refugees and Migrants
IRI	Intermediate Results Indicator
IFR	Interim Financial Report
IPAM	Indigenous Peoples, Afro-Ecuadorians, and Montubios
IRR	Internal Rate of Return
MEF	Ministry of Economy and Finance (<i>Ministerio de Economía y Finanzas</i>)
MINEDUC	Ministry of Education (<i>Ministerio de Educación</i>)
MOOC	Massive, Open, Online Course
NBI	Unmet Basic Needs (<i>Necesidades Básicas Insatisfechas</i>)
NDC	Nationally Determined Contribution
NPS	National Planning Secretariat (<i>Secretaría Nacional de Planificación</i>)
PDO	Project Development Objective
PFM	Public Financial Management
PISA	Programme for International Student Assessment
PISA-D	Programme for International Student Assessment for Development
PIU	Project Implementation Unit
POM	Project Operations Manual
PPSD	Project Procurement Strategy for Development
PPVT	Peabody Picture Vocabulary Test
SERCE	Second Regional Comparative and Explanatory Study
STEP	Systematic Tracking and Exchanges in Procurement
TERCE	Third Regional Comparative and Explanatory Study
ToR	Terms of Reference
UNHCR	United Nations High Commissioner on Refugees
WASH	Water, Sanitation, and Hygiene



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**DATASHEET****BASIC INFORMATION**

Project Beneficiary(ies) Ecuador	Operation Name Strengthening the Resilience of Ecuadorian Schools Project		
Operation ID P180688	Financing Instrument Investment Project Financing (IPF)	Environmental and Social Risk Classification Moderate	

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternative Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Expanded Implementation Support (HEIS)

Expected Approval Date 05-Oct-2023	Expected Closing Date 31-Dec-2028
Bank/IFC Collaboration No	

Proposed Development Objective(s)

The objectives of the Project are to: (i) improve the safety, resilience, and quality of physical learning environments and prepare preschool students for learning in selected public schools; and (ii) in case of an Eligible Crisis or Emergency, respond promptly and effectively to it.

Components



Component Name	Cost (US\$)
Component 1: Supporting Resilient, Inclusive, and Learning-Centered School Infrastructure	160,000,000.00
Component 2: Strengthening Fundamental Skills and Equipping Children to Learn	27,300,000.00
Component 3: Strengthening Project Management	2,700,000.00
Component 4: Contingent Emergency Response Component	0.00

Organizations

Borrower: Republic of Ecuador
Implementing Agency: Ministry of Education

PROJECT FINANCING DATA (US\$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)? No
Is this project Private Capital Enabling (PCE)? No

SUMMARY

Total Operation Cost	190.47
Total Financing	190.47
of which IBRD/IDA	190.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	190.00
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Non-World Bank Group Financing

Counterpart Funding	0.47
Borrower/Recipient	0.47

**Expected Disbursements (US\$, Millions)**

WB Fiscal Year	2024	2025	2026	2027	2028	2029
Annual	20.00	34.00	34.00	34.00	34.00	34.00
Cumulative	20.00	54.00	88.00	122.00	156.00	190.00

PRACTICE AREA(S)**Practice Area (Lead)**

Education

Contributing Practice Areas**CLIMATE****Climate Change and Disaster Screening**

Yes, it has been screened and the results are discussed in the Operation Document

SYSTEMATIC OPERATIONS RISK- RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Moderate
7. Environment and Social	● Moderate
8. Stakeholders	● Low
9. Other	
10. Overall	● Moderate



POLICY COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

☐ Yes ☒ No

Does the project require any waivers of Bank policies?

☐ Yes ☒ No

ENVIRONMENTAL AND SOCIAL

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	Relevant
ESS 10: Stakeholder Engagement and Information Disclosure	Relevant
ESS 2: Labor and Working Conditions	Relevant
ESS 3: Resource Efficiency and Pollution Prevention and Management	Relevant
ESS 4: Community Health and Safety	Relevant
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
ESS 8: Cultural Heritage	Relevant
ESS 9: Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

LEGAL

Legal Covenants

Sections and Description



Schedule 2. Section I.A.1: The Borrower, through MINEDUC, shall maintain at all times during implementation of the Project, a project implementation unit (the “PIU”) with functions, responsibilities and resources, and staffed with personnel exclusively dedicated to the Project in number and with terms of reference, qualifications, experience and functions acceptable to the Bank, including, inter alia, (a) a project coordinator, (b) an infrastructure specialist, (c) a financial management specialist, (d) a procurement specialist, (e) an environmental specialist, (f) a social specialist, and (g) a monitoring and evaluation specialist, all as further specified in the Operational Manual.

Section I.A.2(a): The Borrower, through MINEDUC, shall carry out the Project in accordance with an operational manual satisfactory to the Bank (the “Operational Manual”), containing detailed guidelines and procedures for the implementation of the Project, including, inter alia, with respect to: (i) institutional arrangements; (ii) operation of the PIU and involved MINEDUC departments; (iii) roles, responsibilities, and terms of reference of key PIU staff members; (iv) Project planning, monitoring, and evaluation; (v) social and environmental management, reporting, communication, and human resources; (vi) procurement; (vii) administrative processes and financial management arrangements; (viii) grievance procedures; (ix) procedures for amending the Operational Manual; and (x) eligibility and selection criteria for Eligible Investments and Selected Schools.

Conditions

Type	Citation	Description	Financing Source
Effectiveness	Article IV, Section 4.01 (a)	The Operations Manual has been prepared and adopted by the Borrower through MINEDUC all in form and substance satisfactory to the Bank.	IBRD/IDA
Effectiveness	Article IV, Section 4.01 (b)	The PIU has been established within MINEDUC and staffed at least with the following key personnel all in accordance with Section I.A.1 of Schedule 2 to this Agreement: (i) a project coordinator; (ii) an infrastructure specialist; (iii) a financial management specialist; (iv) a procurement specialist; (v) an environmental specialist; (vi) a social specialist; and (vii) a monitoring and evaluation specialist.	IBRD/IDA
Disbursement	Schedule 2, Section II.B (a)	No withdrawal shall be made under Category (1) or	IBRD/IDA



		(2) until the ESMP-ESF has been prepared, consulted, disclosed, and adopted in a manner satisfactory to the Bank.	
Disbursement	Schedule 2, Section II.B (b)(i)(A)	No withdrawal shall be made for Emergency Expenditures under Category (4), unless and until all of the following conditions have been met in respect of said expenditures: (i) (A) the Borrower has determined that an Eligible Crisis or Emergency has occurred, and has furnished to the Bank a request to withdraw Loan under Category (4); and (B) the Bank has agreed with such determination, accepted said request and notified the Borrower thereof; and (ii) the Borrower has adopted the CERC Manual and Emergency Action Plan, in form and substance acceptable to the Bank.	IBRD/IDA



I. STRATEGIC CONTEXT

A. Country Context

1. **Ecuador made strides in social progress prior to the onset of the COVID-19 pandemic.** Between 2010 and 2019, poverty (measured by the national poverty line) fell from 32.8 percent to 25 percent. As a result, Ecuador was among the best performers in poverty reduction in Latin America. As a regional leader in shared prosperity, the income of the poorest 40 percent increased by a total of 8.8 percent (compared with the average 5.8 percent increase in Ecuador's population) over the last 14 years. In those pre-pandemic years, the country identified its greatest challenges and opportunities to consolidate improvements and further reduce poverty and inequality. The same was true for human capital formation, which included the improvement of education quality, initiatives to address skills gaps in the labor market, and enhanced integration of vulnerable groups and ethnic minorities.¹
2. **This social advance was disrupted by the COVID-19 crisis, prompting a need to implement measures for economic and social recovery.** Ecuador was one of the most affected countries in Latin America, experiencing a COVID-19 death rate of 64 percent.² In 2020, the poverty headcount rose to 30 percent, and was coupled with increased wealth concentration.³ Moreover, schools were closed for 40 weeks and partially closed for 51, negatively impacting students' learning and psychological wellbeing.⁴ Since mid-2021, the country began a series of reforms to return to a path of growth and decreased inequality, while improving the efficiency of its public policies to protect the most vulnerable populations.⁵ In addition, the Government of Ecuador (GoE) committed to increasing public spending on security and reconstruction in response to a deteriorating security situation and the earthquake and heavy seasonal rains that have plagued the country recently.
3. **Amid this challenging domestic and external environment, Ecuador has significantly improved its macroeconomic fundamentals.** After rebounding 4.2 percent from the pandemic-led 2020 recession, Gross Domestic Product (GDP) grew by 2.9 percent in 2022. Growth was fueled by the ongoing recovery of consumption but adversely affected by prolonged protests, sporadic disruptions of oil production, and political uncertainty. Following a fiscal deficit of 1.7 percent of GDP in 2021, fiscal accounts nearly balanced in 2022 on the back of the recovery in economic activity, improving oil prices, the 2021 tax reform, public expenditure rationalization, and debt renegotiations with China. More recently, however, the country has faced high levels of social unrest and violence that have led to growing political uncertainty. This increased after an attempt to impeach President Lasso, who in response dissolved the National Assembly and called for early general elections in August 2023. This political uncertainty has subdued growth and increased the need to build the social resilience of vulnerable people.
4. **The GoE is also making efforts to address climate-related disasters that disproportionately affect the most vulnerable population.** Ecuador is exposed to geological and hydrometeorological hazards such as earthquakes, volcanic eruptions, floods and droughts, ranking among the 10 countries with the highest

¹ World Bank, 2018

² Cuellar, et al., 2021

³ World Bank, 2023.

⁴ UNESCO, 2022

⁵ World Bank, 2022



Natural Hazard risk in the region and among the top 20 in the 2022 World Risk Index.⁶ Moreover, 96 percent of the country's urban population resides in coastal and mountainous areas, which further increases the country's vulnerability to the El Niño-Southern Oscillation climate pattern, which can trigger floods and landslides (El Niño) and increased droughts (La Niña). Roughly seven million people are exposed to seismic hazards, four million to volcanic hazard, and four million to landslide hazard. In the medium to long term, climate change trends in Ecuador are expected to result in major impacts for the country, including the intensification of extreme climatic events, sea level rise, increased retreat of glaciers, decrease in annual runoff and increased vulnerability of water resources, increased vulnerability to floods, and prolonged droughts.⁷

B. Sectoral and Institutional Context

5. **The GoE has implemented multiple institutional changes over the last years to strengthen the education system.** These include the Ecuadorian Constitution of 2008; the 2011 and 2021 *Ley Orgánica de Educación Intercultural*; and the National Development Plan 2021-2025 (*Plan de creación de oportunidades*). The GoE's expenditure on education had been 4.7 percent of GDP between 2010 and 2019, peaking at 5.26 percent in 2014, reaffirming its decisive and strong political commitment.⁸

6. **As a result of these reforms and investments, Ecuador experienced significant improvements in both coverage and learning outcomes prior to the onset of the COVID-19 pandemic, but challenges remained in education quality.** In particular, school enrollment increased at all levels between 2010 and 2019, with the exception of pre-primary, where enrollment decreased since 2016, reaching 63 percent in 2019. Universal enrollment in primary was virtually achieved (98.53 percent in 2019); net enrollment in lower secondary education increased from 86.28 percent in 2010 to 96.30 percent in 2019, and net enrollment in upper secondary increased from 70.08 percent to 79.01 percent in the same years.⁹ In terms of quality, Ecuador was the country with the highest improvement in the Third Comparative and Explanatory Regional Study (TERCE) 2013 in Latin America when compared to its performance in the Second Comparative and Explanatory Regional Study (SERCE) 2006.^{10;11} In the Programme for International Student Assessment for Development (PISA-D) 2017, Ecuador achieved the highest results among participant countries in the region,¹² and average results when compared with Latin America and the Caribbean in PISA 2015. Nevertheless, from TERCE 2013 to ERCE 2019,¹³ literacy scores stagnated for fourth and seventh grade of basic education, highlighting an area for improvement.¹⁴

7. **Children also enter primary education with low levels of school readiness as result of limited stimulation at home and limited participation in Early Childhood Education (ECE).**¹⁵ According to the *Encuesta Nacional de Salud y Nutrición* (ENSANUT) 2018, 49.7 percent of children below 5 have no children's book at home and more than half plays with less than three toys. Moreover, only 21.5 percent

⁶ https://weltrisikobericht.de/wp-content/uploads/2022/09/WorldRiskReport-2022_Online.pdf

⁷ World Bank, 2021

⁸ World Bank, 2023

⁹ UNESCO, 2023

¹⁰ Third Regional Comparative and Explanatory Study (UNESCO, 2013)

¹¹ Second Regional Comparative and Explanatory Study (UNESCO, 2006)

¹² Guatemala, Honduras, and Paraguay

¹³ Regional Comparative and Explanatory Study (UNESCO, 2019)

¹⁴ UNESCO, 2021

¹⁵ ECE refers to programs for students aged 3 to 5, both in dedicated ECE institutions and in public schools offering ECE services.



of children aged 36-59 months are enrolled in any type of ECE institution (ENSANUT 2018). Once they enter school, students receive instruction from teachers with poor content knowledge and pedagogy.¹⁶ Low teacher quality can be ascribed, among others, to ineffective teacher professional development that lacks a formative approach and instead primarily rewards compliance with administrative tasks. Moreover, the curriculum is implemented using rigid guidelines, with no adaptation to the specific context. Due to these shortcomings, Ecuador stands above the regional average in the Learning Poverty Indicator, with 63 percent of children aged 10 unable to read or understand a simple text.

8. The socioeconomic gradient in education outcomes starts early in life, but additional sources of inequality are of great concern. According to the ENSANUT 2018, the Peabody Picture Vocabulary Test (PPVT) score, which is a proxy for the quality of children's vocabulary, for a child aged between 43 and 59 months in the 5th income quintile is almost double as that for a child in the 1st income quintile (38.3 vs. 21.8). Differences amplify with age. Results from PISA-D show that the language gap between the lowest and the highest income quintile exceeds 87 points, one of the biggest gaps in the region, representing a difference of almost 3 years of education.¹⁷ Evidence on gender differences is less clear. There are no differences in vocabulary for boys and girls below age 5 in the ENSANUT 2018. Results from PISA-D 2018 show large gender gaps in mathematics and sciences: boys scored 20 points higher than girls, which represents a difference of nearly a year of schooling, and of 15 points in sciences.¹⁸ By contrast, in the ERCE, Ecuador did not show differences by gender in math scores, but girls' language scores were higher.¹⁹ There are also significant differences between children with indigenous, migrant, or refugee parents.²⁰ The 2022 Working Group for Refugees and Migrants (GTRM) survey on immigrant population needs showed that only 73 percent of children aged 5 to 17 years old attended school, despite the waiver of formal requirements to register in school for immigrants and refugees in Ecuador. Recently, Ecuadorian schools have also faced alarmingly high levels of violence, which disproportionately affect women. A 2018 study reports that 1 in 5 students aged 11-18 has repeatedly been a victim of a violent act. According to data from the Registry of Cases of Sexual Violence (Redevi), there were 14,000 reports of sexual violence in the education system from 2014 to April 2022.

9. Persistent inequality in education outcomes can be explained by supply and demand side factors. On the supply side, infrastructure displays differences across the country. Ecuador, together with Paraguay, Honduras, Nicaragua, and El Salvador, displays the highest within country inequality of education infrastructure.²¹ Quality of institutional care settings in ECE is also low.²² On the demand side, differences in resources, school readiness, liquidity constraints, and a lack of information can further explain differences in both learning and achievement. Resources are also unequally distributed between boys and girls; within households, for instance, access to age-appropriate books favors girls, whose access is 5.4 percentage points higher than boys.²³ Differences in child vocabulary are strongly associated with available resources: for children with at least one age-appropriate book, the PPVT score is on average 0.4 standard deviations higher than for children with no book available. The 2019 National Survey of

¹⁶ Ser Maestro 2021

¹⁷ Bos, Westh Olsen, Vegas, Viteri, and Zoido, 2019

¹⁸ Bos, Westh Olsen, Vegas, Viteri, and Zoido, 2019

¹⁹ UNESCO, 2021

²⁰ GTRM, 2022. As of February 2022, there were 513,903 refugees and migrants in Ecuador.

²¹ Duarte, Gagiulo, and Moreno, 2011

²² Araujo, Lopez-Boo, Novella, Scholdt and Tome, 2015.

²³ Difference is statistically significant. Indicator takes the value of 1 if children from ages 36 to 59 months have at least 3 books at home. Own calculations based on ENSANUT 2018.



Employment, Unemployment and Underemployment revealed that among Ecuadorians aged between 5 and 17 that were not enrolled in school, 25.82 percent reported a lack of resources as the main reason for not attending school, while 20.03 percent mentioned a lack of interest. The latter is commonly associated with a poor quality of education or, when quality is reasonable, with a lack of information on returns to education.²⁴ The constraints described above are even more binding for refugees and migrants. In particular, the GTRM survey highlights the of lack of economic resources and the scarcity of student places for these populations.

10. **The COVID-19 crisis deeply impacted the learning and psychosocial conditions of school-aged children in Ecuador, with losses proportional to the extended school closures.**²⁵ According to World Bank simulations, the COVID-19 crisis led to the loss of two years of Learning Adjusted Years of Schooling, and an increase of 21.1 and 22.3 percentage points in primary students with “elemental” math and language levels, respectively, in the national *Ser Estudiante* assessment.^{26;27} Moreover, many students did not return to classes after school reopened; in June 2022, school attendance was 2.1 percentage points below the pre-pandemic level.²⁸ The impacts of the crisis on students’ learning were uneven. Lower income students used fewer educational resources and spent less time on educational activities, mainly because most activities were carried out online and most students lacked access to internet services, computers, or tablets, which raises concerns about widening existing inequalities. Additionally, female students spent more time on household chores than males and dedicated more hours to studying, which increased their risk of fatigue from home schooling. Further, women reported higher levels of depression than men.²⁹

11. **The Ministry of Education (*Ministerio de Educación*, MINEDUC) quickly mobilized available, but limited, resources to respond to the COVID-19 crisis more broadly, launching a COVID-19 Educational Plan and the Educational Transformation.** The plan contemplated two phases to (i) provide learning continuity from home while schools were closed, and (ii) prepare students and teachers for a safe and permanent return to schools.³⁰ In 2021, the GoE implemented the national “Learning on time” program to recover learning losses caused by school closures, consisting of the implementation of a prioritized curriculum focused on communication and mathematics skills.³¹ The program included a prioritized curriculum, pedagogical tutors, and socioemotional supports for students.³² To address some of the historic and new challenges in the sector, MINEDUC also launched the Educational Transformation in 2021, seeking to improve the quality of education through significant changes in the teaching-learning process, innovative pedagogical environments, provision of educational resources, use of new technologies, and teacher training and methodologies that consider the student as the center of the educational process.³³ The foundation of the Transformation is a strict focus on foundational skills (reading, math, and socioemotional skills) and a competency-based curriculum for all of basic education.³⁴

²⁴ INEC, 2021

²⁵ Schady, Holla, Sabarwal, Silva, and Yi Chang; 2023.

²⁶ World Bank.2022. Two Years After: Saving a Generation. Washington, D.C.: World Bank Group.
<https://documentsinternal.worldbank.org/search/33849275>

²⁷ INEVAL, 2023. *Ser Estudiante* establishes four levels of competence: (i) insufficient, (ii) elemental, (iii) satisfactory, and (iv) excellent.

²⁸ World Bank, 2023

²⁹ Asanov, Flores, McKenzie, Mensmann, and Schulte; 2021

³⁰ MINEDUC, 2021

³¹ MINEDUC, 2021

³² MINEDUC, 2021

³³ MINEDUC, 2021

³⁴ Basic Education in Ecuador comprises levels I and II of early childhood education and grades 1-10.



12. **Schools are also affected by the unprecedented increases in violence throughout Ecuador.** In the first quarter of 2023, violent deaths increased by 66 percent compared to the same quarter of 2022, which adds to concerning rises in violence since 2021.^{35,36} In basic education, around 58.8 percent of students declared being victims of bullying in 2015, with gender differences in the types of aggression.³⁷ Suicides rates among students increased by 74 percent from 2020 to 2021, with deaths by this cause increasing since 2015. Reports of psychological violence against children and teenagers have consistently increased since 2019, and child labor also increased in 2021 due to the pandemic.³⁸ This context exposes students to critical situations that affect their development and permanency in schools. To respond to this reality, the MINEDUC launched a national plan for the prevention of psychosocial risks to guarantee access to and permanence in educational institutions free of violence.

13. **To overcome physical barriers for learning, the GoE has invested comprehensively in school infrastructure in recent years, but more investments are needed.** The Bank has supported these efforts through projects such as the Supporting Education Reform in Targeted Circuits Project (P152096, Loan 8542-EC), under which 11 new schools were built or rebuilt and 24 schools received comprehensive improvements and were re-opened, reaching 17.24 percent of students attending public schools in circuits that received infrastructure and equipment. However, MINEDUC estimates that an additional US\$240 million are needed by 2025 to repair, rebuild, build, and/or rehabilitate school infrastructure to meet the demand for education services, and has developed a national infrastructure plan to tackle the most damaged infrastructure over the next two years. The GoE has requested support from international organizations, including the Inter-American Development Bank, the *Corporación Andina de Fomento*-Development Bank of Latin America, and the World Bank to meet these financing needs and leverage international expertise to build the resilience and safety of its infrastructure. The proposed Project thus responds to the GoE's request to include an education focus in their response to recent and future climate-induced events. As such, the proposed design reflects strong ownership by the GoE and alignment with where they want the Bank's involvement vis-à-vis other partners. Additionally, it complements the Ecuador: Emergency Resilient Reconstruction Project (P181079, Loan 9555-EC), which was approved by the Bank's Board of Executive Directors in June 2023.

14. **The current status of educational infrastructure is also affecting children's learning.** In a national assessment of the status of public school infrastructure carried out by MINEDUC in 2021, only 17.76 percent of institutions in the country have a "good" general status, while 64.64 percent have a "regular," 16.84 percent a "bad," and 0.76 percent a "deteriorated" status.³⁹ Furthermore, only 28 percent have an adequate electrical system, and only 27 percent have a good sanitary system. The lack of infrastructure maintenance also kept students away from 151 education institutions after schools reopened in 2021, since their status was not acceptable to receive students.⁴⁰

15. **There is a need to ensure physical learning environments are conducive to learning, particularly as Ecuador embarks on the design of a competency-based curriculum.** Physical learning environments

³⁵ <https://www.primicias.ec/noticias/en-exclusiva/policia-incremento-muertes-violencia-juanapata/>

³⁶ <https://www.primicias.ec/noticias/en-exclusiva/ecuador-incremento-muertes-violentas-latinoamerica/#:~:text=Ecuador%20cerr%C3%B3%202022%20con%20su,fue%20de%2082%2C5%25>

³⁷ MINEDUC, 2023. More physical types of aggression are more prevalent among boys.

³⁸ https://www.unicef.org/ecuador/media/5661/file/Ecuador_impacto_covid.pdf

³⁹ Regular: need minor repair requirements (between 10% and 50%). Bad: need major repair requirements (above 50%). Deteriorated: no operational capacity. MINEDUC, 2022

⁴⁰ <https://www.primicias.ec/noticias/sociedad/maria-brown-instituciones-educativas-mantenimiento-costa-ecuador/>



have the potential to positively influence student engagement, teacher productivity, and the learning climate, ultimately affecting learning outcomes,⁴¹ starting from the early years. Ecuador is in the early planning stages of an education transformation that focuses on competencies and changes in the process of instruction. A necessary condition for this transformation is ensuring that physical learning environments are designed to promote this transformation and provide equipment to develop the five prioritized competencies (communication, mathematics, digital, science, and socioemotional). Learning-oriented design for physical learning environments needs to be child-centered and aligned to pedagogical approaches, and to provide adequate teaching and learning materials. This includes, among others, the sufficient provision of instructional spaces, basic services, and Water, Sanitation, and Hygiene (WASH) facilities; the quantity of multiple learning activities; and the presence and quantity of libraries.⁴² The availability of WASH facilities has become even more imperative in the post-COVID context, as they have been shown to minimize disruptions to schooling by guaranteeing conditions that reduce the spread of contagious diseases.

16. The expected impacts of climate change add further complexity and urgency to needed investments in school infrastructure. According to MINEDUC's adverse events registry, about 46 percent of educational institutions were exposed to floodings and landslides in 2015, affecting about 1.6 million students.⁴³ In 2016, an earthquake affected more than 1,000 schools in the Esmeraldas and Manabí regions. Recent meteorological and natural events have further aggravated the infrastructure gap. In the last year alone, 287 schools (2.31 percent of the total number of schools) have been permanently damaged by such events. Acting to mitigate the impact of climate hazards in education is thus imperative in a country where four out of ten students live in areas of medium or high risk of exposure to extreme high temperatures, and around 50 percent live in areas of high or medium level of drought threat.⁴⁴

C. Relevance to Higher Level Objectives

17. The proposed Project is consistent with the World Bank Group's Ecuador Country Partnership Framework (CPF) for the Period FY19-FY23 (Report No. 135374-EC), which was extended to FY25 through the Performance and Learning Review dated May 23, 2023 (Report No. 175329-EC). The CPF includes improving access to basic services and quality education under Results Area II Boosting Human Capital and Protecting the Vulnerable. Results Area II seeks to support improved infrastructure, quality, and coverage of the education system through financial and technical assistance to develop skilled human capital that is adequately equipped for the needs of the labor market and private sector. Under Objective 4: Improve access to demand-driven technical education, the CPF emphasizes the need to optimize educational infrastructure in support of efforts to improve educational attainment, which would ultimately enhance national productivity. Furthermore, the Project's proposed improvements to educational infrastructure align with Objective 7: Improve resilience to disaster risks and climate change, as they will enhance the resilience of educational infrastructure to natural hazards and climate change.

18. The Project is also consistent with Ecuador's Nationally Determined Contribution (NDC). Despite its low per capita Greenhouse Gas (GHG) emissions, Ecuador has committed to reaching carbon neutrality

⁴¹ Peter Barrett and others, 2015.

⁴² Alasino, Enrique, and Rebecca Laberenne. 2022. "The Role of the Physical Learning Environment for Supporting Safe Schools." Safe Schools Practices Series, World Bank, Washington, DC. License: Creative Commons Attribution CC BY 4.0 IGO.

⁴³ UNICEF, 2022

⁴⁴ UNICEF, 2020



by 2050. In its 2019 NDC, Ecuador committed to an unconditional reduction of 9 percent of its GHG emissions, as well as an unconditional target of 20.9 percent reduction in the energy, industrial, waste, and agricultural sectors by promoting voluntary carbon offset programs and improving its institutional capacity to mainstream climate issues economywide. In the NDC, the country prioritizes investments for adaptation to climate change, with a special emphasis on the prevention of natural disasters in vulnerable and high-risk areas and the social impacts of climate change. In terms of mitigation, it promotes the use of non-conventional renewable energy (including wind, solar, and biogas energy from landfills) and rehabilitation of areas vulnerable to flooding, drought, and soil erosion. In line with the targets established in the NDC, the Project's activities would have a negligible impact on GHG emissions and are not likely to have an adverse effect on Ecuador's low-GHG-emissions development pathways. Furthermore, the Project is consistent with the National Adaptation Plan for 2023-2027, which seeks to increase the resilience and adaptive capacity of vulnerable systems in Ecuador; to improve education, awareness, and human and institutional capacity on climate change mitigation and adaptation; and to incorporate measures related to climate change in national policies, strategies, and plans. The Project would focus on improvements for school infrastructure that has been damaged by and is more vulnerable to natural disasters, as well as to ensure that it meets international design standards for climate resilience, seismic resilience, inclusion, and learning.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

19. The objectives of the Project are to: (i) improve the safety, resilience, and quality of physical learning environments and prepare preschool students for learning in selected public schools; and (ii) in case of an Eligible Crisis or Emergency, respond promptly and effectively to it.

PDO Level Indicators

20. The Project will measure achievement of the PDO through the following indicators.
- i. Improve safety, resilience, and quality of physical learning environments:
 - a. Percentage of new infrastructure that meets quality standards.⁴⁵
 - b. Increased enrollment due to interventions in physical learning environments.
 - ii. Prepare preschool students for learning: Vocabulary score for children ages 43 to 59 months enrolled in public ECE institutions, disaggregated by sex.

B. Project Components

21. The proposed Project seeks to strengthen the safety, resilience, and quality of school infrastructure across education levels to address Ecuador's high vulnerability to climate risks, as well as to make it inclusive, climate and seismic resilient, energy-efficient, healthy, and learning-centered. It will also

⁴⁵ Compliance with quality standards will be measured through an index of 5 dimensions for each school receiving works under the Project, as laid out in Section VII. Results Framework and Monitoring.



support activities to boost students' readiness for learning through teacher training on new pedagogical models and new competency-based curricula in ECE and their implementation, as well as improvements of the structural quality, equipment, and resources in ECE classrooms. To further support student readiness, it will support the creation of library networks for basic education in marginalized rural areas, and complementary technical activities to assess and inform the implementation of activities to equip ECE and basic education students to learn. To ensure that these interventions are adequately implemented, the Project will also support project management activities. In line with Ecuador's high vulnerability to climate-induced risks, a Contingent Emergency Response Component (CERC) will also be included to allow for rapid reallocation of project funds in the event of an eligible natural disaster or crisis.

22. Component 1: Supporting Resilient, Inclusive, and Learning-Centered School Infrastructure (US\$160 million). This component will support investments in school infrastructure for basic education in Ecuador to ensure that they are inclusive, climate and seismic resilient, energy-efficient, healthy, and learning-centered, following norms of universal access. It will also include the technical design, construction, and/or purchase of learning adequate equipment to ensure the operationalization of these schools. All sites selected for works were identified through a national plan for school infrastructure, assessing where there is high unmet demand for education services, according to data collected by MINEDUC's *Dirección Nacional de Análisis e Información Educativa*. Out of this universe of school sites, interventions will be selected based on the following criteria: (i) high poverty, measured by an index of unmet basic needs (*Necesidades Básicas Insatisfechas*); (ii) high security risk, based on indicators of violence collected by MINEDUC; and (iii) concentration of migrant populations.⁴⁶

- i. *Subcomponent 1.1: Improving resilience to climate events and other crises* (US\$43.6 million). This Subcomponent will finance improvements to classrooms and WASH facilities in approximately 88 schools that have been damaged by and are more vulnerable to natural disasters (earthquakes, rain and flooding, soil settlements, exposure to ravines and slopes, etc.). Interventions will include, among others, earthquake-resistant designs; adjusting elevation to avoid flooding; relocation of classrooms/buildings within the school domain to reduce risk exposure; and improvements to meet local and international building standards.
- ii. *Subcomponent 1.2: Adaptation, rehabilitation, and construction of schools for safety and quality* (US\$32.3 million). This Subcomponent will include the construction of new WASH facilities, new classrooms, and equipment of classrooms in approximately 147 schools to ensure that they meet national quality standards, including for learning-centered design, in urban and rural areas of low exposure to climate risks.⁴⁷ In addition, one new school will be constructed in the limit of the urban expansion zone to the south of the city of Quito, in the Ciudad Jardín sector, to meet the high unmet demand for quality education services caused by a rapid growth in its population.⁴⁸
- iii. *Subcomponent 1.3: Replacement of damaged infrastructure* (US\$84.1 million). This Subcomponent would support interventions to replace existing *escuelas campamento* (multi-teacher and provisional schools) in approximately 86 schools that have damaged infrastructure in areas of higher insecurity.⁴⁹ These schools would be improved to meet national design standards for the education sector, including sustainable manufacturing, design flexibility, and low cost.

⁴⁶ NBI is a poverty headcount measuring the share of the population deprived of essential assets to wellbeing, including decent housing, enrollment in education, and income dependency. Selection criteria will be further detailed in the POM.

⁴⁷ In compliance with *Normativa Ecuatoriana de Construcción*, which establishes requirements for seismic resistance, climate resilience, and energy efficiency; and guidelines issued by the CONADIS to ensure accessibility for persons with disabilities and/or limited mobility.

⁴⁸ Ciudad Jardín is a series of low-income residential housing complexes located in the El Troje sector of Quito.

⁴⁹ Protocols will be implemented to mitigate risks during civil works, as needed.



23. New and/or improved infrastructure would seek to ensure female health and safety, including through improved design of toilets and bathrooms, with separate and secure spaces for girls and boys. Proper protocols would also be implemented to avoid and reduce risk exposure to Gender-Based Violence and Sexual Exploitation and Abuse/Sexual harassment for children, the community, and workers during civil works. To ensure accessibility for all, works will comply with the guidelines issued by the *Consejo Nacional para la Igualdad de Discapacidades* (CONADIS), which seek to ensure accessibility for persons with disabilities and/or limited mobility.⁵⁰

24. The Project will follow national standards for architectural and engineering projects for basic education schools, and designs will be adapted as needed to address risks posed by climate change and natural hazards. Annex 2 presents a list of climate considerations incorporated in the Project's activities.

25. **Component 2: Strengthening Fundamental Skills and Equipping Children to Learn (US\$27.3 million).** This Component will support activities to boost student readiness for learning by combining investments that can mitigate socioeconomic differences in available resources (e.g. children's books) with those that can lead to improved children-teacher interactions in ECE Institutions, including the adaptation of physical environments and enhancement of teachers' capacity to implement new competency-based curricula. Additionally, this Component will contribute to the creation of reading spaces in rural schools, and carry out complementary technical activities to support readiness to learn.

- i. *Subcomponent 2.1: Implementation of new pedagogical models and classroom adaptation in ECE* (US\$24.7 million). This subcomponent will finance: (i) virtual and in-person teacher training on ECE; (ii) the development of guidelines for implementation of competency-based ECE curricula; and (iii) classroom adaptations, equipment, and resources to implement new pedagogical models and new competency-based curricula.⁵¹ A selected number of schools will also receive educational material (e.g. pedagogical games) to help bridge the gap between boys' and girls' access to age-appropriate books to bolster cognitive stimulation prior to primary school.
- ii. *Subcomponent 2.2: Creation of reading environments in rural schools* (US\$1.6 million). This subcomponent will finance the creation of approximately 800 reading environments in rural schools to promote reading and position libraries as spaces for non-formal education in marginalized areas, especially in schools with one or two teachers.⁵² This will include the purchase of mobile solutions such as shelving, as well as the adaptation of permanent meeting or multi-use spaces. Each reading environment will be endowed with approximately 200 books, including reference materials, children's books, youth literature, etc.
- iii. *Subcomponent 2.3: Technical studies and evaluations* (US\$1.0 million). This subcomponent will finance complementary technical work to assess and inform the implementation of activities to equip children to learn. This will include, inter alia, (i) monitoring and evaluation activities for implementation of ECE models, such as classroom observations or impact evaluations; (ii) the development of guidelines to train teachers to prevent and mitigate students' psychosocial risks; (iii) training of teachers, through a massive, open, online course (MOOC) to improve their ability to address children's psychological and socioemotional needs; and (iv) the design of a qualitative

⁵⁰ https://www.consejodiscapacidades.gob.ec/wp-content/uploads/downloads/2014/03/normas_inen_acceso_medio_fisico.pdf

⁵¹ Pedagogical models to be piloted may include, among others, the Reggio Emilia, Waldorf, and Montessori approaches.

⁵² Schools will be selected according to criteria detailed in the Project Operations Manual and in line with a national reading environments network program. The program comprises: (i) creating environments to promote reading, including pedagogical support and loan and exchange of books; (ii) establishing permanent meeting spaces; (iii) training of pedagogical librarians; (iv) training on maintenance of reading spaces for school staff; (v) production of digital material to promote better reading habits; and (vi) providing 200 books for each space (e.g., reference materials, youth literature, etc.).



evaluation for strategies to prevent and address psychosocial risks.

26. **Component 3: Strengthening Project Management (US\$2.7 million).** This component would provide technical assistance and resources for the implementation and monitoring of the Project. This includes (i) the establishment and maintenance of a Project Implementation Unit (PIU);⁵³ (ii) the coordination across technical departments within the MINEDUC; (iii) project implementation, monitoring, and evaluation; (iv) fiduciary activities; (v) environmental and social management; (vi) the financing of independent audits; (vii) operational costs; and (viii) capacity building on internal control processes.

27. **Component 4: Contingent Emergency Response Component (US\$0).** This Component will facilitate the use of critical resources in the event of an eligible national emergency. It will have an initial zero budget allocation but would allow for rapid reallocation of project funds in the event of an eligible natural disaster or crisis that has caused or is likely to imminently cause major adverse economic and/or social impacts. To trigger the use of the CERC, the Government would provide a pre-specified trigger according to national legislation, such as a Declaration of National Emergency. This component could also be used to channel any additional funds that may become available due to the crisis. A specific Emergency Response Operations Manual will be prepared for this component, detailing financial management (FM) and procurement aspects, environmental and social aspects, and any other necessary implementation arrangements. In case of an event triggering the component, a reallocation of funds would be introduced to loan disbursement categories to fund the proposed activities under this component. The implementation agency for this CERC would be determined in accordance with a Contingent Emergency Response Manual to be prepared and adopted by the GoE. Activation of the CERC would involve: (i) a government request submitted by the Ministry of Economy and Finance to the Bank for support of an eligible event through the CERC; and (ii) the preparation of an acceptable Emergency Action Plan for the use of the CERC funds that must be approved by the Bank.

28. **Citizen Engagement.** The Project incorporates a citizen-oriented design that promotes the active engagement of beneficiaries throughout its implementation. Prior to the launch of infrastructure works, educational communities are socialized on the upcoming works, and all contractors are required to establish and maintain grievance redress mechanisms throughout the duration of works, which must be accessible to the community and reported on periodically to MINEDUC. To ensure that teachers are engaged in the training process on new ECE curricula, Intermediate Indicator 8 will also track the percentage of teachers that provide feedback through a satisfaction survey and how their comments and feedback are addressed and incorporated into future trainings.

C. Project Beneficiaries

29. **The Project will directly benefit 790,712 students.** The infrastructure interventions would benefit approximately 178,187 students from ECE to upper secondary across 322 public schools nationwide. These schools are in vulnerable areas, where around 83 percent of the population have unmet basic needs, compared with the national average of 60 percent based on the last national census (2010).⁵⁴ The schools are distributed across the country, with 81.03 percent in the Costa region and 18.97 percent in

⁵³ The PIU will be located in MINEDUC's General Planning Coordination, but will not be a Deconcentrated Operating Entity of MINEDUC.

⁵⁴ INEC and World Bank, 2016

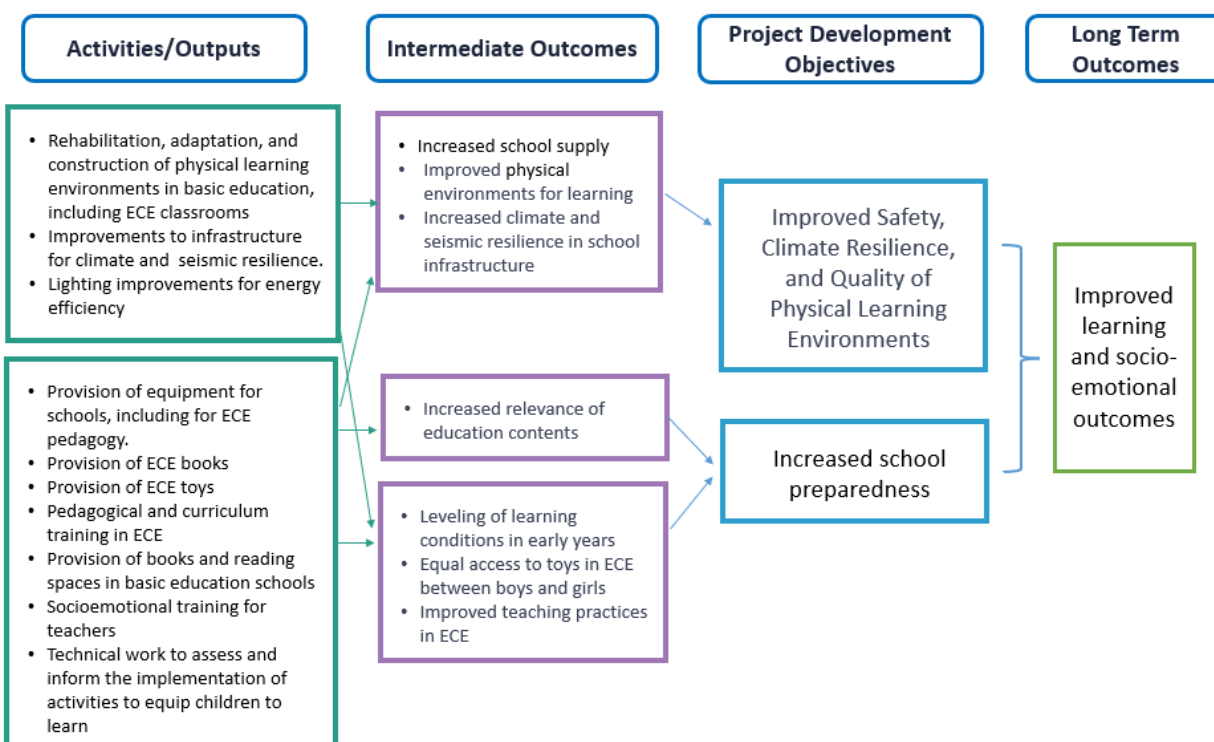


the Sierra region; 53.89 percent are located in rural areas.

30. Interventions to train teachers on the new curricula and pedagogical strategies are expected to positively impact more than 12,000 ECE teachers, with 2,800 benefiting from blended training modalities. These teachers will in turn benefit around 426,710 children. 185,815 students will also benefit from the creation of reading spaces in rural areas nationwide, and the design of psychosocial prevention materials and training will benefit 57,494 teachers from all levels across the country.

D. Results Chain

31. The Project's theory of change relies on the following assumptions:
- School management teams are well prepared to manage the improved learning spaces.
 - The school community promotes enough accountability for an efficient use of the physical spaces.
 - Programs in health and social protection create complementary conditions for children's participation in ECE.
 - Teachers have sufficient incentives to attend the pedagogical and curriculum training.
 - Teachers have enough basic knowledge to fully benefit from the training.
 - Training activities are adequately monitored.



E. Rationale for Bank Involvement and Role of Partners

32. The World Bank has extensive experience in helping governments improve their provision of education services, and a solid engagement working with the Ecuadorian education sector and its



different relevant actors since 2001. These actors include, among others, MINEDUC, the *Secretaría de Educación Superior, Ciencia, Tecnología e Innovación* and the *Instituto Nacional de Evaluación Educativa*. Through lending operations, technical assistance, and hands-on fiduciary support, the Bank has generated extensive knowledge of the sector and built trust with the GoE. This Project will build on previous Bank operations in Ecuador, drawing on lessons learned particularly on procurement processes, contributing to a more agile approach. Among others, this includes the integration of minor interventions in larger works packages to promote the most appropriate market response and ensure successful bidding output. By building on the experience of close implementation support of procurement mechanisms and the capacities built within MINEDUC under previous operations, the Bank is well poised to support the core activities for the minor and major works described in Component 1.

33. The Project not only follows previous engagements in the education sector in Ecuador, but also builds on the Bank's vast experience with school infrastructure projects. The Bank has experience in supporting governments with infrastructure investments in the education sector in contexts with similar exposure to climate risks, particularly in Latin America and the Caribbean, that informed Project design. This will help ensure that school infrastructure in Ecuador is able to withstand its current climate outlook, and that the knowledge accumulated will be leveraged to inform infrastructure design to make it inclusive to meet the different needs of its users, climate and seismic resilient, energy-efficient, healthy, and learning-centered. Based on the experience with the Supporting Education Reform in Targeted Circuits Project (P152096), an additional benefit in the specific context of Ecuador's education sector is that the Bank's presence and the transparency of its procurement norms and procedures have been a main determinant for high quality international construction firms to participate in the bidding processes, thus ensuring that school infrastructure is built with the most advanced and efficient construction techniques.

34. Previous experience in the education sector also shows that planning processes that imply inter-institutional coordination (involving MINEDUC, the Ministry of Economy and Finance, and the Secretaría Nacional de Planificación) are enhanced by the Bank's fiduciary processes, and particularly promote MINEDUC's capacities to design and follow up on appropriate timelines. Ensuring timely communication to prepare, circulate, and approve investment projects at the national administrative level is critical for service delivery, avoiding delays, cost overruns, and poor outcomes. To this end, capacity building within MINEDUC would include, as needed, training and technical assistance.

35. The Bank and MINEDUC have also established strategic dialogue with the United Nations High Commissioner on Refugees (UNHCR). While UNHCR will not participate directly in the Project's implementation, dialogue and partnership will be maintained throughout to ensure that efforts are properly targeted and consider the needs of migrant and refugee populations in the education sector.

F. Lessons Learned and Reflected in the Project Design

36. The Project will draw on the lessons learned from the recently closed Supporting Education Reform in Targeted Circuits Project (P152096). Dealing with multiple executing agencies in the Ecuadorian context was particularly challenging, especially in carrying out infrastructure interventions. Under this Project, MINEDUC will have the sole responsibility for execution of civil works to reduce the delays and complications experienced under the previous project.

37. This Project will also incorporate lessons learned on the procurement of infrastructure and



equipment from the Supporting Education Reform in Targeted Circuits Project. The project financed a large number of contracts for construction and rehabilitation of school infrastructure, as well as for the purchase of furniture. A resulting lesson was that using unit price contracts for works, instead of lump sum contracts, results in significant efficiency gains, especially when using standardized infrastructure designs. Under this Project, MINEDUC will adopt standardized designs and prioritize unit price contracts whenever possible. MINEDUC will also use its own works supervision unit, which was created under the previous project, instead of contracting external firms to carry out works supervision. This resulted in efficiency gains, as it reduced the scope for judicial litigations during the uneven process of execution.

38. Component 2 builds on and complements ECE investments in the Supporting Education Reform in Targeted Circuits Project (P152096), which had an exclusive focus on infrastructure. By complementing infrastructure investments with investments in training and classroom adaptation, the Project will contribute to increasing quality and relevance of ECE services in Ecuador.

39. The Project will also incorporate lessons learned on monitoring and evaluation, by defining most indicators in alignment with the information routinely produced by MINEDUC. For those that require additional technical support for collection, the Bank has committed to providing technical assistance to ensure a smooth and correct implementation.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

40. The Project would be implemented by a PIU reporting directly to MINEDUC's *Coordinación General de Planificación*. Establishment of this PIU will be included as a condition of effectiveness. The PIU would be responsible for carrying out all activities related to FM, procurement, and environmental and social management. It would also be responsible for all external linkages needed to carry out Project activities. The PIU would be comprised of at least a Project Coordinator, Infrastructure Specialist, Financial Management Specialist, Procurement Specialist, Environmental Specialist, Social Specialist, and Monitoring and Evaluation Specialist, with additional staff to be included as needed. The structure of the PIU will be further detailed in the Project Operations Manual (POM), the adoption of which will be a condition of effectiveness, and which may be modified as needed to respond to needs arising during Project implementation.

B. Results Monitoring and Evaluation Arrangements

41. The PIU established within MINEDUC will be responsible for monitoring the Project's results. The PIU would submit semi-annual progress reports to the Bank, including progress toward targets laid out in the Results Framework. The monitoring and evaluation capacity of the PIU will be strengthened through training financed by the Project, as necessary. The PIU will collect data on Project activities in accordance with the Results Framework, and will monitor beneficiary feedback to assess how to incorporate it into activities during Project implementation, as appropriate. Indicators will be largely tracked through administrative data collected by MINEDUC (e.g., works completion reports, teachers participating in training) and surveys.



C. Sustainability

42. **This Project supports key actions and objectives under MINEDUC's Institutional Strategic Plan 2021-2025, ensuring the proposed activities' continued relevance and prioritization.** Investments in infrastructure, equipment, and well-being, as well as preparedness for learning, are expected to positively impact retention rates, in line with Institutional Objectives 1 "Increase reintegration with school leveling, which promotes permanence, promotion, and completion of studies, with an intercultural and intercultural bilingual approach, inclusion, gender equity, and territorial relevance" and 2 "Increase access, permanence, and completion of studies at all levels, with emphasis on vulnerable groups for priority attention, as well as rural communities, towns, and nationalities." This alignment ensures that the combination of activities proposed under the Project will have continued support and financing in the long term. In addition, the proposed interventions in infrastructure have been prioritized as part of the GoE's investment planning and in engagement with international development partners.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

43. Improvements in school infrastructure in Ecuador such as those that will be financed under Component 1 of the Project are currently benefitting 178,187 children in the age group 3-18 at the national level annually. Over a period of 25 years – the time span used for depreciation – it is estimated that more than 528,270 students will benefit from the improved school infrastructure. This implies a cost per child of US\$302.88 at current values. The substantial economic benefits are illustrated by the results of the economic analysis of the Project's infrastructure component, which yields an internal rate of return (IRR) of 7.48 percent. The economic analysis assumes that the main economic benefits derive from an increase in the number of years of education, driven by the increased availability and quality of school infrastructure. While the Project will contribute to meeting unmet demand for school seats, which particularly affects enrollment in early education, the learning-centered design of new and refurbished schools will contribute to increase the perceived quality of education.

44. The analysis assumes that the infrastructure will lead to an increase of 0.12 years of education.⁵⁵ Since the income premium for an additional year of education for Ecuador is estimated at 6.5 percent, the wage increase due to the improved infrastructure is equal to 0.78 percent.⁵⁶ The analysis assumes that every child will start to work at the age of 20 and will retire at 65. The reference average monthly labor income is equal to US\$745.⁵⁷ It is assumed that every child will earn a certain fixed income every year throughout their professional career. The wage has been assumed to increase by 6 percent due to inflation and economic growth, and the discount rate is set at 5 percent. The benefits have been computed by considering that children who have benefitted or will benefit from the infrastructural improvements will earn a certain extra amount during their working life for their entire working life. Additional individual benefits (e.g., improved health) and social benefits (e.g. reduced crime rates) of increased schooling have not been considered.

⁵⁵ Duflo, 2001.

⁵⁶ Psacharopoulos and Patrinos, 2018.

⁵⁷ INEC



45. Under Component 2, the Project will finance measures of structural quality of childcare centers, namely toys and children's books, which have been found to be positively associated with measures of child development, such as child vocabulary. Improved training, especially when focused on best practices to achieve child development, has also been found to positively affect children's outcomes.⁵⁸ Given the well-established cost effectiveness of early years interventions,⁵⁹ interventions under Component 2 will likely increase the overall cost-effectiveness of the Project. Therefore, the IRR presented in this section has to be considered as a lower bound estimate of the overall benefits of the Project.

36. **Paris Alignment.** The Project is aligned with the goals of the Paris Agreement on both Adaption and Mitigation.

37. **Assessment and reduction of adaptation risks.** The main climate and disaster risks likely to affect the Project are earthquakes, floods, and droughts. The Project's design considers the expected and potential climate impacts that may affect its intended outcomes and includes various adaptation measures. In particular, the Project will finance specific activities to minimize climate-related risks, enhance climate resilience, and limit the exposure to an acceptable level of residual risk. Component 1 will support investments in school infrastructure to ensure that they are climate and seismic resilient, energy-efficient, and provide adequate WASH facilities to minimize disruptions to learning. Subcomponent 1.1 will particularly target schools in areas that are at greater risk of climate and natural disasters to increase their resilience. Subcomponent 1.2 will focus on improving the quality standards of classrooms and WASH facilities in urban areas, and construct one new school that meets these standards for a low-income area of high population growth in Quito. Subcomponent 1.3 will rehabilitate damaged infrastructure in areas of limited accessibility and high security risk with national design standards, including for climate resilience and seismic resistance, to reduce their vulnerability while using sustainable manufacturing. All civil works will comply with the *Normativa Ecuatoriana de Construcción*, which establishes quality standards for school infrastructure and requirements for seismic resistance and climate resilience. The new construction in Quito will follow standards established with the Millennium Corporation Challenge (FOMILENIO II) for school infrastructure. Physical investments under Component 2 will also include climate resilient measures in their design. The remaining activities under Components 2 and 3 will benefit from the increased resilience of school infrastructure financed under Component 1 and are therefore unlikely to be materially impacted by climate hazards.

38. **Assessment and reduction of mitigation risks.** The Project has a low risk of preventing Ecuador's transition to low-carbon development pathways, given its support to activities that have a negligible impact on GHG emissions and/or are universally aligned. Activities under Components 2 and 3 can be considered universally aligned interventions for basic education from the mitigation perspective, according to current Paris Alignment methodologies. Low mitigation risks are associated with infrastructure works under Component 1, which seek to create safer, more inclusive, green, and climate-resilient learning environments. In addition, the transition risks associated with these interventions are low, as buildings are fully electrified and incorporate measures to improve energy performance. Risks will be reduced through the following measures to increase energy efficiency:

- i. Use of a bioclimatic design strategy that aims to increase access to ventilation and natural lighting in school buildings. Designs for windows and hot air vents will adapt to the specific conditions of the site: (a) in hot areas, windows will be located against the path of the sun and windows will be

⁵⁸ Andrew et al., 2023

⁵⁹ Garcia et al., 2020.



placed on both sides of classrooms to enable cross ventilation; and (b) in cold areas, windows will be located in line with the path of the sun to retain heat and optimize natural lighting inside classrooms.

- ii. Use of LED lighting in all buildings to reduce energy consumption.
- iii. Use of fans and natural ventilation instead of air conditioning, whenever possible, and the inclusion of hot air outlets in the upper parts of school buildings.
- iv. Following national building codes laid out in the *Normativa Ecuatoriana de Construcción*.
- v. Use of materials that are manufactured locally and sustainably, whenever possible.

39. The Project has thus incorporated technically feasible and economically viable low GHG emissions measures in its design given the Project context and, as such, it has a low likelihood of locking in carbon. Therefore, the Project can be considered aligned on mitigation.

B. Fiduciary

(i) Financial Management

40. The Financial Management Assessment (FMA) was conducted to evaluate the adequacy of the proposed FM arrangements in MINEDUC for implementation of the Project.⁶⁰ The Project's arrangements for oversight and accountability have been agreed upon. The Project will leverage MINEDUC's experience implementing World Bank-financed projects, and MINEDUC will also be supported by an experienced FM Specialist to absorb the Project's operational functions and the potential increased workload. The Project will use existing country systems, including the Single Treasury Account and the e-Sigef financial information system, which have proven to operate effectively. However, budgeting weaknesses might affect Project implementation. Therefore, MINEDUC, the Ministry of Economy and Finance, and the Bank will engage in dialogue to monitor these challenges and identify potential solutions or the need for technical assistance. The POM will describe detailed mechanisms and controls to ensure the efficient use of loan proceeds under the Project. Additionally, the following actions are required to ensure readiness for implementation:

- i. **By Effectiveness:**
 - a. Hire experienced FM Specialist in MINEDUC, under Terms of Reference agreed with the Bank.
 - b. The Project Operations Manual must reflect a section with all FM arrangements.
- ii. **Included as Covenants:**
 - a. The POM must include a CERC Annex (once an emergency activates), which reflects institutional arrangements, FM roles and responsibilities, and eligible expenditures.

41. The Project's annual program and budget will adhere to local rules, with MINEDUC overseeing timely budget allocation.⁶¹ Project accounting will use the Governmental Integrated Financial Information System e-Sigef, following government accounting policies,⁶² including the accrual basis for transactions. Project financial statements, including Interim Financial Reports (IFRs), will be prepared using cash basis. Audited annual financial statements will follow Terms of Reference acceptable to the Bank and will be submitted to the Bank within six months after the end of each fiscal year or any other period agreed with

⁶⁰ In accordance with the Financial Management Practice Manual Sector Board on March 1, 2010.

⁶¹ Código de Planificación y Finanzas Públicas.

⁶² International Public Sector Accounting Standards – IPSAS applied by the public sector in Ecuador.



the Bank.

42. A segregated Designated Account (DA) will be held by the Ministry of Economy and Finance in coordination with MINEDUC in the Central Bank of Ecuador following procedures described in the Disbursement and Financial Information Letter. The Project's DA will have a variable ceiling, and expenditures funded by the loan will be documented using standard Statements of Expenditure. Detailed information on these arrangements is provided in Annex 1.

(ii) Procurement

43. Procurement will be conducted using the World Bank's "Procurement Regulations for IPF Borrowers," dated November 2020, for the supply of works, goods, and non-consulting and consulting services. The World Bank's Standard Procurement Documents will govern the procurement of World Bank-financed Open International Competitive Procurement. Mandatory Procurement Prior Review Thresholds detailed in Annex I of the Bank's Procurement Procedure will be observed. For bidding processes with a national market approach, the practice of bidding and the request of quotations documents will use standard procurement documents acceptable to the World Bank. These will be included in the POM.

44. The Project Procurement Strategy for Development (PPSD) has been prepared by MINEDUC, and describes how procurement in this Project will support the attainment of the PDOs and deliver value for money under a risk-based approach. It also provides adequate supporting market analysis for the selection methods detailed in the Procurement Plan.

45. Additionally, considering the volume of the proposed procurement processes, MINEDUC will strengthen their capacity with the inclusion in the PIU of a Procurement Specialist and four Procurement Analysts. This Procurement team structure will allow MINEDUC to implement the number of procurement processes required in a simultaneous manner, ensure compliance with procurement principles, aim to obtain value for money, and mainly focus on optimizing time periods for each step in procurement processes.

C. Legal Operational Policies

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No

D. Environmental and Social

46. Moderate environmental risks and impacts are anticipated in relation to the execution of activities under Component 1, such as improvements to classrooms and WASH facilities; the replacement of damaged infrastructure; and the construction of new WASH facilities, classrooms, and one new school in



Quito's outskirts. Overall, due to the nature of the proposed activities, the associated impacts are expected to be predictable, temporary, reversible, low in magnitude, site-specific, and with low probability of major adverse effects to human health or the environment. In addition, such potential risks and impacts can be easily mitigated in a predictable manner. Some of the key potential environmental impacts may include: (i) nuisance related to dust generation, vibration, noise, and odors; (ii) generation, management, and disposal of non-hazardous and hazardous solid waste, residual construction materials waste, and potential hazardous materials from demolitions; (iii) generation and discharge of wastewater from civil works; (iv) disposal from water and sanitation connections; (v) health and safety risks to the project workforce and local communities in the areas surrounding project activities; and (vii) direct and indirect impacts from natural hazards that may occur in the selected lots and surrounding areas. Such impacts will be addressed through proper screening and assessment of the educational facilities that are eligible for intervention, in observance of factors of Environmental and Social (E&S) sensitivity for the construction work to be undertaken.

47. Moderate social risks will require specific management instruments oriented toward social impact mitigation and risk management, labor management, community health and safety, land management (but solely in terms of follow-through on the transfer of lands to MINEDUC's control), and attention to vulnerable groups (indigenous peoples, Afro-Ecuadorians and Montubios—collectively known as "IPAM"—disabled people, and migrants). Under Component 2, the IPAM are expected to be affected by, and involved in, the equipping of schools and the implementation of new pedagogical models, teacher training, and guidelines development and appropriate measures will be taken to address their impact on IPAM. In terms of community health and safety, considering that the Project will also involve works in urban and peri-urban areas and that Ecuador has been undergoing a period of economic and political distress, the machinery and equipment needed is at risk of theft or damage, which may require the contracting of private security personnel to guard it. For all project components (as technical assistance activities are also included as part of Component 2), there is a need to adequately manage communication flows and consultation dynamics involving different sets of stakeholders, requiring the implementation of the Stakeholder Engagement Plan. The Project's Environmental and Social Commitment Plan and Stakeholder Engagement Plan were disclosed on the Bank's website on August 20, 2023.

48. The Borrower is expected to make extensive use of the existing E&S management plan, risk screening matrices, and other tools developed for projects that MINEDUC has recently implemented, which greatly reduces the overall level of risk. Required complementary measures will be specified in an enhanced Environmental and Social Management Plan (ESMP, or an "ESF ESMP") that complies with the relevant Environmental and Social Framework (ESF) requirements, which the Borrower will prepare, consult on, adopt, and disclose as a condition of disbursement for any activities under Components 1 or 2. This approach is deemed possible due to the Project's scope and characteristics, together with the experience of MINEDUC's E&S team implementing infrastructure projects with other Development Finance Institutions and aligning to its practices to sustainability policies. MINEDUC's in-house E&S team, working at the central level, will enhance its existing ESMP considering the Bank's ESF, with guidance from the Bank. The team will also develop an Exclusion List to screen out any Substantial or High risk activities with the potential to generate high risks/impacts, such as physical and/or economic displacement, environmentally harmful land-use changes like deforestation, or significant adverse impacts on any type of natural habitats or cultural resources. The Bank will support MINEDUC during the early stages of implementation to ensure that the PIU achieves adequate ESF-related knowledge and E&S management performance, in accordance with the requirements of the relevant Environmental and Social Standards.



V. GRIEVANCE REDRESS SERVICES

49. **Grievance Redress.** Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's Grievance Redress Service (GRS), visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the Bank's Accountability Mechanism, visit <https://accountability.worldbank.org>.

VI. KEY RISKS

50. **The Project's overall risk is assessed as Moderate, with Political and Governance and Institutional Capacity for Implementation and Sustainability risks assessed as Substantial.**

51. **Political and Governance risk is Substantial due to country's ongoing political uncertainty, with the election's runoff of the August 2023 extraordinary presidential elections slated for October 2023.** The regular election cycle would resume with another round of presidential elections in 2025. Increasing political violence also poses a governance risk. These factors could lead to delays in implementation of Project activities during transition periods in cases of changes in administration. To mitigate this risk, the Bank will provide capacity building and technical support throughout implementation to ensure that the PIU is able to continue carrying out Project activities even during transitions. Furthermore, the proposed Project interventions, with a heavy focus on infrastructure, have shown political buy-in even during changes in administration, and are already included in national budget prioritizations for the next two calendar years. The proposed Project also supports the GoE's request to include an education focus in their response to recent and future climate-induced events. As such, the proposed design reflects strong ownership by the GoE and alignment with where they want the Bank's involvement vis-à-vis other partners. Its focus also reduces the risk generated by political uncertainty and potential reversal, as the Project will take a conservative approach to maintain open dialogue with the GoE.

52. **Institutional Capacity for Implementation and Sustainability risk is assessed as Substantial given that a PIU would only be established following signing of the Loan Agreement and only for the duration of the Project, in accordance with the country's guidelines for projects with external financing.** To ensure that the PIU has the needed capacity to carry out Project implementation, the Ministry of Finance has already prioritized the establishment of a PIU following signing, and laid out its structure, which will be comprised of at least 7 specialists (not analysts or assistants as in other external financing projects) to ensure the capacity to comply with World Bank guidelines. The PIU will be established under MINEDUC's Planning Unit to ensure that it can be supported by the existing staff that worked on Project preparation and with experience implementing previous Bank-financed projects, and that knowledge is exchanged



and generated within the MINEDUC for sustainability beyond the Project's lifespan. Furthermore, the Project has built in technical assistance and capacity building under Component 3 to further ensure support for the PIU.



VII. RESULTS FRAMEWORK AND MONITORING

PDO Indicators by PDO Outcomes

Baseline	Period 1	Period 2	Period 3	Period 4	Closing Period
Improve the Safety, Resilience, and Quality of Physical Learning Environments					
PDO 1: Percentage of new infrastructure that meets quality standards (Percentage)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	43.48	68.94	80.75	91.61	100
PDO 2: Increased enrollment in selected grades due to interventions in physical learning environments. (Number)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	6450	11275	13250	15000	16525
Prepare Preschool Students for Learning					
PDO 3: Vocabulary score for children ages 43 to 59 months enrolled in public ECE institutions (Number)					
Dec/2018	Dec/2026				Dec/2028
28.99	30.50				31.50
➤Vocabulary score for girls ages 43 to 59 months enrolled in public ECE institutions (Number)					
Dec/2018	Dec/2026				Dec/2028
29.21	30.50				31.50
➤Vocabulary score for boys ages 43 to 59 months enrolled in public ECE institutions (Number)					
Dec/2018	Dec/2026				Dec/2028
28.77	30.50				31.50

Intermediate Indicators by Components

Baseline	Period 1	Period 2	Period 3	Period 4	Closing Period
Component 1: Supporting Resilient, Inclusive, and Learning-Centered School Infrastructure					
Students benefiting from direct interventions to enhance learning (Number) ^{CRI}					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	72967	123999	144916	165556	178187
➤Students benefiting from direct interventions to enhance learning - Female (Number) ^{CRI}					



0	35753	60759	71008	81122	87311
IRI 2: Number of schools that receive infrastructure works under the Project (Number)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	144	222	260	295	322
IRI 3: Percentage of schools progressing out of “Deteriorated” status (Percentage)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	43.61	68.85	80.69	91.59	100
Component 2: Strengthening Fundamental Skills and Equipping Children to Learn					
IRI 4: Number of schools equipped and receiving pedagogical material for implementation of new curricula (Number)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	160	610	1060	1279	1279
IRI 5: Gender Gap. Percentage of boys that have access to at least 3 children’s books (Percentage)					
Aug/2023	Dec/2026				Dec/2028
35.75	37.8				38.13
➤IRI 5: Gender Gap. Percentage of girls that have access to at least 3 children’s books (Percentage)					
Aug/2023	Dec/2026				Dec/2028
41.17	41.88				42.36
IRI 6: Number of students with access to reading spaces (Number)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	108788	185815	185815	185815	185815
Teachers recruited or trained (Number) ^{CRI}					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	8000	9000	10000	11000	12500
➤Number of teachers recruited (Number) ^{CRI}					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	0	0	0	0	0
➤Teachers recruited or trained - Female (RMS requirement) (Number) ^{CRI}					
0	7800	8800	9800	10800	11800
➤Number of teachers trained (Number) ^{CRI}					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	8000	9000	10000	11000	12500
IRI 8: Citizen Engagement. Percentage of ECE teachers who provide feedback on training received (Percentage)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	50	65	75	75	75



IRI 9: Number of public school students sensitized on how to prevent and address psychosocial risks (Number)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0	709218	1418436	1418436	1418436	1418436
IRI 10: Study of ECE teaching practices (Text)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
No study exists	Study instruments designed and validated (Methodological report)	Study implemented (Preliminary findings report)	Study implemented (Preliminary findings report)	Final report of the study	Final report of the study
IRI 11: Study of ECE students' learning process (Text)					
Aug/2023	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
No study exists	Study instruments designed and validated (Methodological report)	Study implemented (Preliminary findings report)	Study implemented (Preliminary findings report)	Final report of the study	Final report of the study
Component 3: Strengthening Project Management					
Component 4: Contingent Emergency Response Component					



Monitoring & Evaluation Plan: PDO Indicators by PDO Outcomes

Objective 1: Improve the Safety, Resilience, and Quality of Physical Learning Environments	
PDO 1: Percentage of new infrastructure that meets quality standards	
Description	For each school with at least one new classroom and/or WASH facility built under the Project, the indicator will measure compliance with the following relevant dimensions of schools' quality, physical safety, and climate resilience: (i) access to learning for all students, (ii) mitigation of water flood risk, (iii) earthquake resistance, (iv) availability of water and sanitation, and (v) energy efficiency. These dimensions and the associated quality standards will be explained in detail in the POM. The indicator is measured at the school level and is calculated as 1 when the new infrastructure (i.e., classroom or WASH facility) meets the 5 dimensions. The indicator will be measured in the universe of 322 schools receiving infrastructure improvements and/or being constructed under Component 1. Targets are cumulative.
Frequency	Annual
Data source	Works Completion Reports for each new infrastructure
Methodology for Data Collection	PIU will collect data from works completion reports elaborated during final inspection of the sites.
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Infraestructura Física, Subsecretaría de Administración Escolar</i>)
PDO 2: Increased enrollment in selected grades due to interventions in physical learning environments.	
Description	For each school where additional seats for levels I and II of ECE will be created under Component 1 of the Project, the indicator will measure the variation in total enrollment between the pre- and post-construction period. Targets are cumulative and based on a simulation of expected increases, based on available information of grade-specific enrollment.
Frequency	Annual
Data source	MINEDUC administrative records and AMIE
Methodology for Data Collection	PIU will identify pre- and post-completion periods based on the works completion reports elaborated during final inspection of the sites.
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Infraestructura Física, Subsecretaría de Administración Escolar</i>)
Objective 2: Prepare Preschool Students for Learning	
PDO 3: Vocabulary score for children ages 43 to 59 months enrolled in public ECE institutions	
Description	The indicator will be calculated using the Spanish adaptation of the Peabody Picture Vocabulary Test (PPVT), which measures the level of vocabulary of a child through a direct assessment of the child. The survey enumerator (who could be a properly trained ECE teacher) shows cards with 4 images and asks the child to point to the card's image that corresponds to the word being mentioned. The assessment is based on the country-specific version of the PPVT used in the 2018 ENSANUT, which is the latest available measure of this indicator given delays in its administration during the COVID-19 pandemic.
Frequency	Twice: 2026 and 2028
Data source	Survey of a representative sample
Methodology for Data Collection	Two stage sampling: (i) Among all the ECE centers that benefit from Subcomponent 2.1 of the Project, a representative sample will be drawn; (i) Within each ECE center a representative sample of boys and girls age 43-59 months will be drawn. Sample sizes will depend on the expected improvement. All potential sources of attrition will be considered and accounted for.



Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Educación Inicial y Básica</i>), with World Bank technical assistance
PDO 3a: Vocabulary score for boys ages 43 to 59 months enrolled in public ECE institutions	
Description	The indicator will be calculated using the Spanish adaptation of the Peabody Picture Vocabulary Test (PPVT), which measures the level of vocabulary of a child through a direct assessment of the child. The survey enumerator (who could be a properly trained ECE teacher) shows cards with 4 images and asks the child to point to the card's image that corresponds to the word being mentioned. The assessment is based on the country-specific version of the PPVT used in the 2018 ENSANUT, which is the latest available measure of this indicator given delays in its administration during the COVID-19 pandemic.
Frequency	Twice: 2026 and 2028
Data source	Survey of a representative sample
Methodology for Data Collection	Two stage sampling: (i) Among all the ECE centers that benefit from Component 2.1 of the Project, a representative sample will be drawn; 2) Within each ECE center a representative sample of boys and girls age 43-59 months will be drawn. Sample sizes will depend on the expected improvement. All potential sources of attrition will be considered and accounted for.
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Educación Inicial y Básica</i>), with World Bank technical assistance
PDO 3b: Vocabulary score for girls ages 43 to 59 months enrolled in public ECE institutions	
Description	The indicator will be calculated using the Spanish adaptation of the Peabody Picture Vocabulary Test (PPVT), which measures the level of vocabulary of a child through a direct assessment of the child. The survey enumerator (who could be a properly trained ECE teacher) shows cards with 4 images and asks the child to point to the card's image that corresponds to the word being mentioned. The assessment is based on the country-specific version of the PPVT used in the 2018 ENSANUT, which is the latest available measure of this indicator given that its administration was postponed to 2023 due to the COVID-19 pandemic.
Frequency	Twice: 2026 and 2028
Data source	Survey of a representative sample
Methodology for Data Collection	Two stage sampling: (i) Among all the ECE centers that benefit from Component 2.1 of the Project, a representative sample will be drawn; 2) Within each ECE center a representative sample of boys and girls age 43-59 months will be drawn. Sample sizes will depend on the expected improvement. All potential sources of attrition will be considered and accounted for.
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Educación Inicial y Básica</i>), with World Bank technical assistance

Monitoring & Evaluation Plan: Intermediate Results Indicators by Components

Component 1: Supporting Resilient, Inclusive, and Learning-Centered School Infrastructure	
IRI 1: Students benefiting from direct interventions to enhance learning	
Description	This indicator will track the total number of students enrolled in the 321 public schools that will receive interventions to improve school infrastructure and equipment across the country, as well as in one newly-constructed school. Targets are cumulative.
Frequency	Annual
Data source	Archivo Maestro de Instituciones Educativas (AMIE)
Methodology for Data Collection	Data will be collected from the works completion reports and from administrative data from the <i>Subsecretaría de Administración Escolar</i> , <i>Subsecretaría de Educación Especializada e Inclusiva</i> , and <i>Subsecretaría de Innovación Educativa y Buen Vivir</i> .



Responsibility for Data Collection	Ministry of Education (<i>Servicio de Administración Escolar, Subsecretaría de Educación Especializada e Inclusiva, Subsecretaría de Innovación Educativa y Buen Vivir</i>)
IRI 1a: Students benefiting from direct interventions to enhance learning - Female	
Description	This indicator will track the total number of female students benefiting from interventions to improve school infrastructure and equipment in 321 public schools across the country, as well as from the construction of one new school.
Frequency	Annual
Data source	Archivo Maestro de Instituciones Educativas (AMIE)
Methodology for Data Collection	Data will be collected from the works completion reports and from administrative data from the <i>Subsecretaría de Administración Escolar, Subsecretaría de Educación Especializada e Inclusiva, and Subsecretaría de Innovación Educativa y Buen Vivir</i> .
Responsibility for Data Collection	Ministry of Education (<i>Servicio de Administración Escolar, Subsecretaría de Educación Especializada e Inclusiva, Subsecretaría de Innovación Educativa y Buen Vivir</i>)
IRI 2: Number of schools that receive infrastructure works under the Project	
Description	<p>This indicator will track the number of schools with at least one new classroom and/or WASH facility built under the Project, as well as the construction of one new school. Targets are cumulative.</p> <p>All works will consider enhanced safety and security measures, among others, the use of gender-separated, open bathroom designs and the hiring of private security services. Further detail on these measures can be found in Annex 3.</p>
Frequency	Annual
Data source	Works completion reports
Methodology for Data Collection	Data will be collected by the PIU using works completion reports
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Infraestructura Física – Subsecretaría de Administración Escolar</i>)
IRI 3: Percentage of schools progressing out of “Deteriorated” status	
Description	Percentage of schools that move out of “Deteriorated” status, out of the total universe of 321 schools that will receive infrastructure improvements under Component 1. The status is based on the <i>Ficha Técnica de Evaluación de Infraestructura</i> prepared by MINEDUC’s Infrastructure Unit, which categorizes existing school infrastructure on a scale of “Good,” “Regular,” “Bad,” and “Deteriorated.” Targets are cumulative. The total universe of schools is the 321 schools that will receive works under Component 1 (excluding the new school construction), which are all currently categorized as “Deteriorated.”
Frequency	Annual
Data source	Evaluation of the schools
Methodology for Data Collection	Collected from administrative data from MINEDUC/AMIE.
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Infraestructura Física – Subsecretaría de Administración Escolar</i>)
Component 2: Strengthening Fundamental Skills and Equipping Children to Learn	
IRI 4: Number of schools equipped and receiving pedagogical material for implementation of new curricula	



Description	Indicator will measure improvements to ECE classrooms through the provision of furniture, pedagogical material, outdoor equipment, and other classroom adaptations to foster the development of STEAM-H, Communications, and socioemotional skills using new competency-based ECE curricula. Targets are cumulative.
Frequency	Annual
Data source	MINEDUC administrative records and AMIE
Methodology for Data Collection	Sum of public schools equipped under the Project that receive at least pedagogical material or outdoor furniture or games.
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Educación Inicial y Básica – Subsecretaría de Educación Especializada e Inclusiva</i>)
IRI 5: Gender Gap. Percentage of boys that have access to at least 3 children's books	
Description	<p>The indicator measures ECE boys' access to at least 3 children's books at home or in school in a sample of schools that benefit from the interventions under Subcomponent 2.1 and that are part of the Network of Reading Environments. The baseline is taken from the question: "How many children's books, stories, magazines or books with pictures do you have (...) at home? (do not include school textbooks and electronic books)" (Question 215 of form 5. "Child development") of the 2018 ENSANUT, which is the latest available data as the ENSANUT was not administered in 2020 as planned due to the pandemic, and has been delayed to late 2023. As part of the survey to measure vocabulary under PDO Indicator 3: (ODP3), a question similar to the one previously included in the ENSANUT would be applied to ask about access to books at home or at school.</p> <p>This indicator tracks the gap between boys and girls in ECE that have access to age-appropriate books, which is associated with improved vocabulary.</p>
Frequency	Twice: 2026 and 2028
Data source	Survey of a representative sample of children age 43-59 months
Methodology for Data Collection	Register of the answers to the relevant question in the survey
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Educación Inicial y Básica - Subsecretaría de Educación Especializada e Inclusiva</i>)
IRI 5a: Percentage of girls that have access to at least 3 children's books	
Description	<p>The indicator measures ECE girls' access to at least 3 children's books at home or in school in a sample of schools that benefit from the interventions under Subcomponent 2.1 and that are part of the Network of Reading Environments. The baseline is taken from the question: "How many children's books, stories, magazines or books with pictures do you have (...) at home? (do not include school textbooks and electronic books)" (Question 215 of form 5. "Child development") of the 2018 ENSANUT, which is the latest available data as the ENSANUT was not administered in 2020 as planned due to the pandemic, and has been delayed to late 2023. As part of the survey to measure vocabulary under PDO Indicator 3: (ODP3), a question similar to the one previously included in the ENSANUT would be applied to ask about access to books at home or at school.</p> <p>This indicator tracks the gap between boys and girls in ECE that have access to age-appropriate books, which is associated with improved vocabulary.</p>
Frequency	Twice: 2026 and 2028
Data source	Survey of a representative sample of children aged 43-59 months
Methodology for Data Collection	Register of the answers to the relevant question in the survey
Responsibility for	Ministry of Education (<i>Dirección Nacional de Educación Inicial y Básica - Subsecretaría de Educación Especializada e Inclusiva</i>)



Data Collection	
IRI 6: Number of students with access to reading spaces	
Description	Indicator will track the number of students enrolled in public schools where a reading space is created through either a bookshelf with age-appropriate books or establishment of a library with age-appropriate books. It will include students from ECE to <i>bachillerato</i> . Targets consider students that will benefit from the creation of reading spaces from 2023-2025, as the program is currently only slated for implementation until 2025. Targets are cumulative.
Frequency	Twice
Data source	AMIE and Administrative Registers of the <i>Dirección Nacional de Mejoramiento Pedagógico</i> (Delivery reports)
Methodology for Data Collection	Data will be collected in 2025 (cut off date in December 2024) and 2026 (cut off date in December 2025). Data will be a sum of students from ECE to <i>bachillerato</i> in public schools where reading spaces have been created and implemented, in line with delivery/receipt reports for furniture, reading fund, etc.
Responsibility for Data Collection	Ministry of Education (<i>Subsecretaría de Innovación Educativa y Buen Vivir, Dirección Nacional de Mejoramiento Pedagógico</i>)
IRI 7: Teachers recruited/trained (CRI)	
Description	Indicator will measure the total number of teachers completing at least 1 course on new ECE curricula in virtual, blended, and/or face-to-face modalities. Targets are cumulative. The Project will not recruit teachers.
Frequency	Annual
Data source	Administrative data on teacher training
Methodology for Data Collection	Targets will be reported by the PIU based on administrative data provided on teacher training.
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Formación Continua- Subsecretaría de Desarrollo Profesional</i>)
IRI 7a: Number of teachers recruited	
Description	This indicator will remain at 0 and will not be monitored, as the Project does not include interventions to recruit teachers.
Frequency	
Data source	
Methodology for Data Collection	
Responsibility for Data Collection	
IRI 7b: Teachers recruited or trained - Female	
Description	Indicator will measure the total number of female teachers completing at least 1 course on new ECE curricula in virtual, blended, and/or face-to-face modalities. Targets are cumulative. The Project will not recruit teachers.
Frequency	Annual
Data source	Administrative data on teacher training
Methodology for Data Collection	Targets will be reported by the PIU based on administrative data provided on teacher training.



Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Formación Continua- Subsecretaría de Desarrollo Profesional</i>)
IRI 7c: Number of teachers trained	
Description	Indicator will measure the total number of teachers completing at least 1 course on new ECE curricula in virtual, blended, and/or face-to-face modalities. Targets are cumulative.
Frequency	Annual
Data source	Administrative data on teacher training
Methodology for Data Collection	Targets will be reported by the PIU based on administrative data provided on teacher training.
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Formación Continua- Subsecretaría de Desarrollo Profesional</i>)
IRI 8: Citizen Engagement. Percentage of ECE teachers who provide feedback on training received	
Description	<p>The indicator will measure the level of satisfaction of teachers with the blended and in-person training courses, as their perception of the usefulness of the training for the application of new competency-based ECE curricula. At the end of each blended or in-person training, the training entity will administer a satisfaction survey to teachers and present teachers' feedback on satisfaction and how to improve training to MINEDUC, as well as proposed responses and feedback that will be incorporated into future trainings. Feedback will be analyzed and responses, when required, will be answered within a maximum period of 10 business days prior to the finalization of the implementation of each training course.</p> <p>The mechanisms to systematize collected information and MINEDUC's role in incorporating the feedback into future trainings will be detailed in the POM.</p>
Frequency	Annual
Data source	Reports prepared by the training entity.
Methodology for Data Collection	Responses recorded in training entity's reports will be reviewed and addressed as needed by the Ministry of Education.
Responsibility for Data Collection	<i>Dirección Nacional de Formación Continua</i>
IRI 9: Number of public school students sensitized on how to prevent and address psychosocial risks	
Description	<p>Indicator will measure the total number of public school students sensitized on the prevention and addressing of psychosocial risks, using the toolkits ("baúl") for prevention and protection, which include 3 instruments: (i) Protocols and roadmaps on drug use, suicide and self-harm, child labor, and disappearances (including protocols on human trafficking, including of migrants); (ii) informative guides on psychosocial risks; and (iii) Manual on the participatory methodology of prevention and protection pairs for psychosocial risks.</p> <p>The methodology considered under (iii) uses games such as rainbow-word flashcards themed around the prevention of psychosocial risks; myths and truths on psychosocial risks, and a parcheesi game to visualize psychosocial risk factors and help recognize actors and protective actions.</p> <p>Targets are cumulative and consider students from ECE to <i>bachillerato</i> and special and inclusive education that will benefit from programs to prevent and address psychosocial risks.</p>



Frequency	Annual
Data source	AMIE and Administrative Data from the <i>Dirección Nacional de Educación para la Democracia y el Buen Vivir</i>
Methodology for Data Collection	Data will be collected from monitoring and completion reports prepared by the <i>Dirección Nacional de Educación para la Democracia y el Buen Vivir</i>
Responsibility for Data Collection	<i>Subsecretaría de Innovación Educativa y Buen Vivir, Dirección Nacional de Educación para la Democracia y el Buen Vivir, MINEDUC</i>
IRI 10: Study of ECE teaching practices	
Description	This indicator reflects the design and implementation of a nationally representative study of ECE teaching practices in public schools. The study design will include a mix of qualitative and quantitative methods, which will be determined during implementation.
Frequency	Three measurements
Data source	Reports prepared by the Ministry of Education (<i>Dirección Nacional de Investigación Educativa, Subsecretaría de Fundamentos Educativos</i>)
Methodology for Data Collection	Progress will be reported by the PIU based on the publication of instruments, fieldwork and final analysis of outcome reports
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Investigación Educativa, Subsecretaría de Fundamentos Educativos</i>)
IRI 11: Study of ECE students' learning process	
Description	This indicator will track the the design and implementation of a nationally representative study of ECE students' learning process. The study design will include a mix of qualitative and quantitative methods, which will be determined during implementation.
Frequency	Three measurements
Data source	Reports prepared by the Ministry of Education (<i>Dirección Nacional de Investigación Educativa, Subsecretaría de Fundamentos Educativos</i>)
Methodology for Data Collection	Progress will be reported by the PIU based on the publication of instruments, fieldwork and final analysis of outcome reports
Responsibility for Data Collection	Ministry of Education (<i>Dirección Nacional de Investigación Educativa, Subsecretaría de Fundamentos Educativos</i>)



ANNEX 1: Implementation Arrangements and Support Plan

A. Financial Management

1. **The FM residual risk is Moderate considering the following aspects.** (i) MINEDUC has experience implementing similar projects financed by the World Bank, however, staff turnover may impact implementation of FM arrangements. (ii) Project components are linked to diverse programs of MINEDUC and require confirming viability approval from National Planning Secretariat (NPS) to ensure budget allocation.⁶³ (iii) The Project involves straightforward activities, and budgeting, accounting, and disbursements will have a centralized management at MINEDUC headquarters; yet some processes like funds flow, financial reporting, etc. require to be complemented to Project features. (iv) A recent Public Financial Management (PFM) Assessment revealed some budgeting and internal control weaknesses, being tackled through reforms boosted by the Bank;⁶⁴ however, there are still some weaknesses that may cause delays in budget approvals and processing of payments of expenditures. (v) CERC still needs well-defined internal processes to efficiently use loan proceeds during emergencies.

2. **Risks will be mitigated through the following actions:** (i) MINEDUC's PIU will include an experienced FM Specialist to absorb the Project's operational aspects, and should implement better mechanisms to retain staff and avoid turnover. (ii) MINEDUC is addressing with the NPS to ensure viability of programs and budget allocation, and committed to keeping the Bank informed of progress. (iii) The Project will leverage existing country systems like the Single Treasury Account (STA) and the FM system e-Sigef, which have proven to operate well. Complementary processes will be considered to ensure roles and responsibilities, funds flow and financial reporting, all outlined in the POM. (iv) MINEDUC will engage in discussions to monitor and follow up on potential delays on budget allocation and payment processing, and communicate them to relevant authorities and the Bank to find measures or a need for technical assistance. (v) For the CERC (once activated), the POM will include an annex with detailed institutional arrangements, eligible expenses, and FM procedures.

Staffing and organization structure

3. **MINEDUC, a central governmental entity, will take on project implementation responsibility with the Planning Unit, leading and working closely with the General Administrative and Financial Coordination (CGAF).** The CGAF is composed by an Administrative and Finance Coordinator and Finance Directorate, and has capable professionals responsible for budgeting, accounting, and treasury operations, and will be responsible for overall FM aspects of the project. The current team will be supported with a FM Specialist THAT shall be recruited based on agreed ToR with the Bank and in accordance with the Bank's procurement guidelines and could be financed from the loan proceeds. This specialist will monitor the Project's budget, manage funds flow and payments, conduct ex-ante review of expense-related documentation, prepare disbursement requests, compile comprehensive financial reports for the Project, and handle audit-related matters.

⁶³ *Dictamen de prioridad*, by its name in Spanish

⁶⁴ PEFA report 2019



Budgeting

4. **The Project's annual program and budget will adhere to local rules.**⁶⁵ Project components are linked to diverse MINEDUC programs, requiring either an updated viability approval or a first-time approval from the NPS and the Ministry of Economy and Finance (MEF) to ensure budget allocation.⁶⁶ The Project's annual program requires Bank approval before each year. Timely budget recording will use e-Sigef.⁶⁷ A recent PFM assessment⁶⁸ identified budgeting deficiencies that are being tackled through reforms, such as a medium-term fiscal framework and better integration of public investment.⁶⁹ Despite some progress, challenges remain in budget execution, potentially impacting the Project's pace. Given these challenges, at the beginning of each year, MINEDUC will inform the Bank of potential delays in budget allocation. The Bank, MINEDUC, and MEF will engage in discussion to monitor and follow up on these challenges to identify potential solutions or the need for technical assistance.

Accounting, Information system and Financial Reporting

5. **To manage project accounting records, MINEDUC will use the Governmental Integrated Financial Information System e-Sigef.** The e-Sigef includes budgeting, accounting, and treasury modules. MINEDUC must comply with the government accounting policies, including the accrual basis for transactions recording; however, financial statements required by the Bank will be prepared in cash basis.⁷⁰ The FM Specialist and CGAF will prepare Interim Financial Reports (IFRs) based on the e-Sigef information and complementary excel spread sheets to record and obtain detailed information on the Project by components-categories. MINEDUC will submit IFRs to the Bank no later than forty-five (45 days) after the end of each semester. Annual project financial statements will be subject to external audit.

Internal controls and Internal Audit

6. **MINEDUC has an internal control system that complies with local standards, and some processes will be complemented for Project purposes.**⁷¹ MINEDUC has experience in executing infrastructure contracts and will adhere to national budget laws and regulations to ensure proper use of funds, control, and integration into its accounting and budgeting systems. Even though adequate internal controls are in place, including segregation of duties and approval processes and expenditure ex-ante review, the Project may experience delays in payments due to a lack of integration between commitment scheduling and cash forecasts, as noted by the PFM.⁷² In this regard, MEF has been prioritizing projects' payments to prevent delays, and direct payments will also be an option. For project purposes, complementary processes will ensure accurate recording, control, and reporting of Bank-financed resources, and FM Specialist conducting expenditure ex-ante reviews. The POM will detail these

⁶⁵ *Código de Planificación y Finanzas Públicas*.

⁶⁶ *Dictamen de prioridad*, by its name in Spanish

⁶⁷ Country Integrated Financial Management Information System

⁶⁸ PEFA report 2019

⁶⁹ In July 2020, the National Assembly approved a COPLAFIP reform, which introduced key adjustments to the normative framework. Some of these reforms were supported through previous DPF operations: First Inclusive and Sustainable Growth DPF (P169822), Second Inclusive and Sustainable Growth (P171190), and the Third Inclusive and Sustainable Growth Development Policy Loan (P174115).

⁷⁰ International Public Sector Accounting Standards – IPSAS applied by the public sector in Ecuador.

⁷¹ Internal Control Regulations issued by the Contraloría General del Estado.

⁷² PEFA ID 21 (iii)



arrangements and internal controls for effective FM implementation.

7. **MINEDUC's Internal Audit Unit play a key role in assessing and advising on the internal control system.** The Project can be subject to this internal audit's reviews. In such case, this audit will assess the alignment of operations and ensure compliance of eligible expenditures with the Loan Agreement and the POM, and these results will be available for external auditors. The last PFM report emphasized the need to enhance the country's internal audit function and internal control to evaluate internal control. During Project implementation, there is a potential collaboration with MINEDUC for capacity building activities to strengthen its internal control processes through skills transfer and expertise building.

External Audit

8. **Annual project financial statements will be audited based on ToR acceptable to the Bank.** MINEDUC will be responsible for appointing an external audit firm acceptable to the Bank, under ToR subject to no objection. The audit report shall be submitted to the Bank within six months after the end of each fiscal year or any other period agreed with the Bank. The auditor's scope will include a review of the expenditures' eligibility and verifying that they have adequate supporting documentation. MINEDUC will ensure project audited financial statements are posted on its website following the Bank's Access to Information policy. The public sector in Ecuador is subject to the oversight of the General Comptroller of the State (CGE), who has the legal authority to conduct audits as it sees fit. Audit costs will be financed out of the loan proceeds.

Flow of funds and Disbursement arrangements

9. **A segregated Designated Account (DA) will be held by MEF in coordination with MINEDUC, in the Central Bank of Ecuador (BCE).** In Ecuador, the DA consists of the External Credit Account -CX account- and a virtual account within the Single Treasury Account (STA).⁷³ Advances to the CX Account will be immediately transferred to the Project sub-account within the STA, which identifies loan proceeds by financier and loan.⁷⁴ Initially, the Project does not involve a local counterpart. All payments under the Project will be withdrawn from the project DA, requested by MINEDUC to MEF, and processed through the Interbank Payment System.

10. **MINEDUC shall keep all Project records for ex-post reviews.** MINEDUC is responsible for retaining all contracts, orders, invoices, bills, receipts, and other documents, evidencing expenditures under the Project until at least the later of: (i) one year after the Bank has received the audited Financial Statements; and (ii) two years after the Closing Date.

11. **The Disbursement procedures are described in the Disbursement and Financial Information Letter (DFIL).** The Bank will disburse loan proceeds through three methods: (i) advances to the DA, (ii) reimbursement, and (iii) direct payment. The Project's DA will have a variable ceiling, which means that MINEDUC, through MEF, will submit a request of funds based on a three-month forecast of cash flow subject to the Bank's approval and according to POA. For reimbursement purposes, the Project will require opening a different account from the DA to receive reimbursed amounts. Expenditures financed by the

⁷³ Cuenta de Crédito Externo - CX, by its name in Spanish

⁷⁴ The report Código de Organismo y Correlativo, by its name in Spanish, provides information on the transactions of the loan proceeds.



loan will be documented using standard Statement of Expenditure (SOEs).

Table A1.1: Funds Flow Diagram

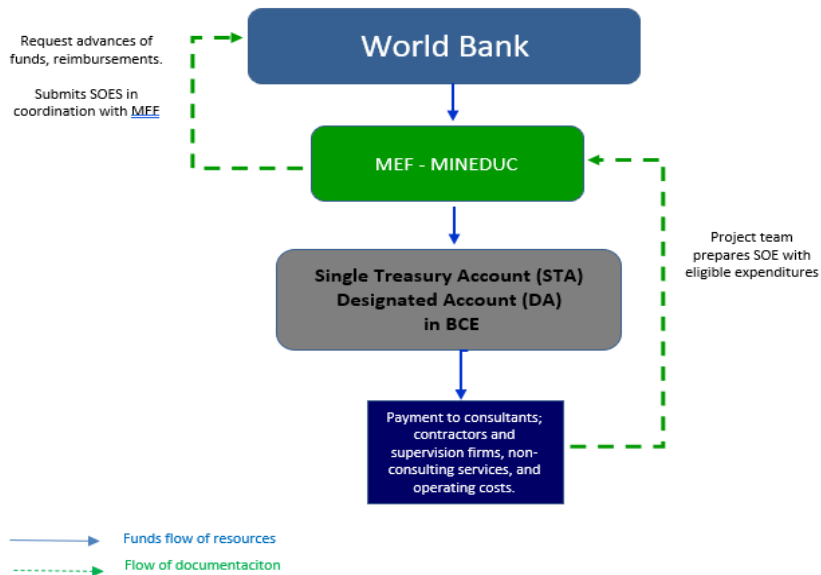


Table A1.2: Table of Loan Proceeds

Category	Amount of the Loan Allocated in USD	Percentage financed (inclusive of Taxes) ⁷⁵
(1) Civil works, consulting services, goods, non-consulting services under Part 1 of the Project.	160,000,000	100%
(2) Consulting services, goods, training, non-consulting services under Part 2 of the Project.	27,300,000	100%
(3) Consulting services, goods, training, non-consulting services, and operating costs under Part 3 of the Project.	2,700,000	100%
(4) Emergency Expenditures under Part 3 of the Project.	-	100%
TOTAL AMOUNT	190,000,000	

12. **FM supervision and implementation support.** The FM supervision program will include at least two FM reviews per year, either as standalone reviews or as part of the overall Project implementation support. Off-site FM implementation support will also be conducted through the review of the IFRs and audit report reviews, and will continuously monitor the DA activity and timely documentation of advances in Client Connection.

⁷⁵ Considering Country Financing Parameters applicable to Ecuador.



Procurement

13. The procurement capacity assessment of MINEDUC was carried out by the World Bank's procurement team in August 2023. The assessment mainly reviewed the organizational structure for implementing the Project, and the experience of the existing procurement staff. The assessment concluded that MINEDUC has prior experience in implementing World Bank-financed projects and funds from other international organizations, however, considering the increased workload due to the volume of procurements to be financed by the Project, the team would need to be strengthened with the hiring of additional experienced procurement staff.

14. MINEDUC, through the General Planning Coordination Unit, will be responsible for the implementation of procurement processes. Considering the capacity assessment mentioned before, MINEDUC will hire a Procurement Specialist (with a minimum prior experience of 3 years in procurement processes following World Bank procurement regulations) and four experienced Procurement Analysts, who will be solely dedicated and directly implement all stages of procurement processes. The functions and responsibilities of the procurement staff will be detailed in the POM.

15. A Project Procurement Strategy for Development (PPSD) has been prepared, mainly focused on the works and related services to be financed under Component 1, considering that such contracts will represent approximately 84 percent of the total Project amount. One of the conclusions of the PPCS is the division of the planned works into 3 groups, considering the technical requirements of these and with a yearly planning of one process per year per group (3 procurement processes per year), until the goal of educational institutions has been met.

16. Based on the market research information and lessons learned, the PPCS concludes that the most adequate strategy for the 3 groups of works would be to implement these procurement processes following the Request for Bids method, through an open competitive process and national market approach. These processes are expected to use lots defined by geographical zones, which aims to increase the efficiency of the processes, and also positively impacting the potential load in contract management and supervision of such works. One of the key aspects to define is that the proper market approach is National, due to the nature and spread-out localization of the works, added up to the existence of qualified and experienced contractors in country. Nonetheless, this strategy will be revisited prior to launching the first open competitive process to ensure and verify current market conditions. All works supervision services would be carried out by hiring consultant firms specialized in the provision of these services.

17. The proposed procurement processes to be financed by the project include the following:

- i. Works. Works to be financed under this Project will include the rehabilitation of schools, construction of rehabilitation of school restrooms, and construction of a new school, among others.
- ii. Goods. Goods to be financed under this Project will include physics and chemistry equipment, furniture, IT equipment, and educational equipment, among others.
- iii. Non-consulting services. The Project will finance services such as printing of educational materials, among others.



- iv. Selection of consulting services. Consulting services to be financed under the Project will be related works supervision, technical assistance for educational methodologies, development of training for teachers, and hiring of the PIU staff, among others.
- v. Operating costs. Operating costs refer to reasonable recurrent expenditures that would not have been incurred by the PIU in the absence of the Project. The Project will finance operating costs such as accommodation, transport, and per diem that would not have been incurred absent the Project.

18. From a procurement perspective, the fiduciary risk rating is Moderate. The key issues and risks concerning procurement for Project implementation include: (i) current structure and workload of MINEDUC, considering the incremental work due to the volume of planned procurement processes to be financed by the Project; (ii) coordination between technical units and procurement; and (iii) potential risks in the decentralization of the contract management function to MINEDUC district offices. The agreed corrective measures are: (i) equip the PIU and the procurement unit with appropriate staff in terms of qualifications and quantity; (ii) appropriately define in the POM the roles and responsibilities of the technical and procurement units; and (iii) MINEDUC will ensure that if the need to decentralize the contract management of a specific contract to a ministerial district office is determined, such staff possess the technical capacity and experience to perform all administrative duties as set forth in the specific contract.

19. As per paragraph 5.9 of the Procurement Regulations, the World Bank's Systematic Tracking and Exchanges in Procurement (STEP) system will be used to prepare, clear, and update Procurement Plans and conduct all procurement transactions for the Project.

20. *Frequency of Procurement Supervision.* In addition to prior review supervision to be carried out by the World Bank, the Bank will perform implementation support missions and procurement post review missions, selecting a sample in accordance with the procurement risk determined at such time.

Implementation Support Plan

21. **The proposed Implementation Support Plan (ISP) is consistent with the Bank's operational guidelines for Investment Project Financing and considers the Project-specific challenges and risks, as defined in the Systematic Operations Risk-Rating Tool.** It also draws on lessons learned from previous Bank-financed projects in the education sector in Ecuador.

22. **The ISP is based on mechanisms that would enable enhanced implementation support to Government of Ecuador (GoE);** timely and effective Project monitoring; and guidance on technical, fiduciary, environmental, and social aspects. The ISP would entail technical meetings and implementation support missions with the GoE, especially with MINEDUC; regular technical meetings; field visits, as needed; and monitoring and evaluation. The Bank's implementation support would broadly consist of:

- i. Capacity-building activities to strengthen the ability to implement the proposed activities, covering the technical, fiduciary, and environmental and social dimensions.
- ii. Provision of technical advice and implementation support geared towards the attainment of the PDO and intermediate results indicators.



- iii. Ongoing monitoring of implementation progress, including regular review of key outcome and intermediate indicators, and identification of bottlenecks.
- iv. Monitoring changes in risks to the Project, identification of appropriate mitigation measures, and compliance with the Loan Agreement

23. Technical meetings and semi-annual supervision missions would seek to provide strategic support to MINEDUC to assess implementation progress; ensure the continued strategic alignment of the Project to local priorities, especially through continuous engagement with key stakeholders in the education sector and Project beneficiaries; and build MINEDUC's capacity to evaluate Project progress and ensure achievement of Project results. The Bank's support will also include the hiring of specialized consultants for the Project's technical aspects as needed, including, but not limited to, specialists on teacher and director training, school infrastructure, and impact evaluation design and monitoring.

Table A1.3: Main Focus of Implementation Support

Time	Focus	Skills Needed
Year 1	<ul style="list-style-type: none"> • Ensure Project budgeting and allocation • Monitor and Results Framework • Review staffing of implementing unit • Assist client in formulation of terms of reference and assessment of resources required to implement Project components • Determine TA needs 	<ul style="list-style-type: none"> • Project management, monitoring, and evaluation • Operations and implementation support • Financial management • Procurement management • ESF management
Years 2-4	<ul style="list-style-type: none"> • Monitor Program budgeting and allocation • Monitor Results Framework • Review technical performance • Assess fiduciary performance • Monitor E&S performance • Carry out Mid-Term review to assess the Project's performance and identify if any changes are needed in the Project's design 	<ul style="list-style-type: none"> • Project management, monitoring, and evaluation • Operations and implementation support • Impact evaluation design • Financial management • Procurement management • ESF management
Year 5	<ul style="list-style-type: none"> • Monitor Project budgeting and allocation • Complete all planned infrastructure works • Monitor Results Framework • Assess technical, fiduciary, and E&S performance • Begin collecting data for the implementation completion and results report in the final 6 months of implementation 	<ul style="list-style-type: none"> • Project management, monitoring, and evaluation • Financial management • Procurement management • ESF management

24. The following table presents the estimated number of staff weeks and trips (for Bank staff and specialized consultants) that would be required during Project implementation.



Table A1.4: Task Team Skills Mix Required for Implementation Support

Skills Needed	Staff Weeks per Year	No. of Trips per Year
Task Management, Monitoring and Evaluation		
Task Team Leader – Senior Education Specialist/Economist	10	2
Analyst	10	2
Program Assistant	6	0
Specialized consultants	To be determined according to needs	
Teacher and Director Training Specialist		
Infrastructure Specialist		
Impact Evaluation Support		
Procurement Specialist	4-6	2
Financial Management Specialist	4-6	2
Social Specialist	4-6	2
Environmental Specialist	4-6	2
Counsel	1	0
Disbursement Officer	1	0



ANNEX 2: Climate Adaptation and Mitigation Activities

Subcomponent	Activities	Estimated Cost (US\$ million)	Associated Indicators
Component 1: Resilient, Inclusive, and Learning-Centered School Infrastructure		160.0	
Subcomponent 1.1	<p>Adaptation:</p> <ul style="list-style-type: none"> School infrastructure design for resilience for flooding and effective sheltering from heavy rain Target schools with higher risk of exposure to climate change induced natural disasters. School infrastructure design in compliance with <i>Normativa Ecuatoriana de Construcción</i>, which establishes requirements for seismic resistance, climate resilience, and energy efficiency. School infrastructure design in compliance with guidelines issued by the CONADIS to ensure accessibility for persons with disabilities and/or limited mobility. Repair infrastructural damage caused by climate change induced natural disasters. Adjust elevation of classrooms and/or school facilities to reduce flood risk. Relocate classrooms and/or school facilities to avoid flooding. <p>Mitigation:</p> <ul style="list-style-type: none"> Works to improve/install WASH facilities, incorporating sustainable and scalable energy efficiency solutions. Incorporate energy efficiency measures (usage of LED lighting) Increase access to natural ventilation and lighting in classrooms. Prioritize the use of local materials to stimulate local economy and reduce GHG emissions associated with transportation. Selection of construction firms to prioritize sustainable management of construction and demolition waste to properly reduce, reuse, recycle, and dispose of waste to reduce GHG emissions. 	43.4	<p><u>PDO 1:</u> Percentage of new infrastructure that meets quality standards</p> <p><u>PDO 2:</u> Increased enrollment due to interventions in physical learning environments</p> <p><u>IRI 1:</u> Students benefiting from direct interventions to enhance learning</p> <p><u>IRI 2:</u> Number of schools that receive infrastructure works under the Project</p> <p><u>IRI 3:</u> Percentage of schools progressing out of “Deteriorated” status</p>



Subcomponent	Activities	Estimated Cost (US\$ million)	Associated Indicators
Subcomponent 1.2	<p>Adaptation</p> <ul style="list-style-type: none"> Sites selected in areas of low climate hazard risks and exposure. School infrastructure design for resilience for flooding and effective sheltering from heavy rain Target schools with higher risk of exposure to climate change induced natural disasters. School infrastructure design in compliance with <i>Normativa Ecuatoriana de Construcción</i>, which establishes requirements for seismic resistance, climate resilience, and energy efficiency. School infrastructure design in compliance with guidelines issued by the CONADIS to ensure accessibility for persons with disabilities and/or limited mobility. New school construction meeting standards established under the Millennium Corporation Challenge (FOMILENIO II) <p>Mitigation:</p> <ul style="list-style-type: none"> Installation of WASH facilities, incorporating sustainable and scalable energy efficiency solutions. Incorporate energy efficiency measures (usage of LED lighting) Increase access to natural ventilation and lighting in classrooms. Prioritize the use of local materials to stimulate local economy and reduce GHG emissions associated with transportation. Selection of construction firms to prioritize sustainable management of construction and demolition waste to properly reduce, reuse, recycle, and dispose of waste to reduce GHG emissions. 	42.1	<p><u>PDO 1</u>: Percentage of new infrastructure that meets quality standards</p> <p><u>PDO 2</u>: Increased enrollment due to interventions in physical learning environments</p> <p><u>IRI 1</u>: Students benefiting from direct interventions to enhance learning</p> <p><u>IRI 2</u>: Number of schools that receive infrastructure works under the Project</p> <p><u>IRI 3</u>: Percentage of schools progressing out of “Deteriorated” status</p>
Subcomponent 1.3	<p>Adaptation:</p> <ul style="list-style-type: none"> School infrastructure design for resilience for flooding and effective sheltering from heavy rain School infrastructure design in compliance with <i>Normativa Ecuatoriana de Construcción</i>, which establishes requirements for seismic resistance, climate resilience, and energy efficiency. 	72.5	<p><u>PDO 1</u>: Percentage of new infrastructure that meets quality standards</p> <p><u>PDO 2</u>: Increased enrollment due to interventions in physical learning environments</p>



Subcomponent	Activities	Estimated Cost (US\$ million)	Associated Indicators
	<ul style="list-style-type: none"> School infrastructure design in compliance with guidelines issued by the CONADIS to ensure accessibility for persons with disabilities and/or limited mobility. Replace damaged infrastructure. Adjust elevation of classrooms and/or school facilities to reduce flood risk. <p>Mitigation:</p> <ul style="list-style-type: none"> Works to improve/install WASH facilities, incorporating sustainable and scalable energy efficiency solutions. Incorporate energy efficiency measures (usage of LED lighting) Increase access to natural ventilation and lighting in classrooms. Prioritize the use of local materials to stimulate local economy and reduce GHG emissions associated with transportation. Selection of construction firms to prioritize sustainable management of construction and demolition waste to properly reduce, reuse, recycle, and dispose of waste to reduce GHG emissions. 		<p><u>IRI 1:</u> Students benefiting from direct interventions to enhance learning</p> <p><u>IRI 2:</u> Number of schools that receive infrastructure works under the Project</p> <p><u>IRI 3:</u> Percentage of schools progressing out of “Deteriorated” status</p>
Component 2: Strengthening Fundamental Skills and Equipping Children to Learn		27.0	
Subcomponent 2.1	<p>Adaptation</p> <ul style="list-style-type: none"> Training on new ECE curricula, which will include aspects relating to climate and sustainability. Creation of early childhood classrooms and spaces using climate resilient and learning centered design. 	24.5	<p><u>PDO 3:</u> Vocabulary score for children ages 43-59 months enrolled in public ECE institutions</p> <p><u>IRI 4:</u> Number of schools equipped and receiving pedagogical material for implementation of new curricula</p> <p><u>IRI 5:</u> Increase access to children’s books</p> <p><u>IRI 7:</u> Teachers recruited or trained</p>



Subcomponent	Activities	Estimated Cost (US\$ million)	Associated Indicators
Subcomponent 2.2	<p>Adaptation</p> <ul style="list-style-type: none">• Creation of libraries that include books that raise awareness of climate care and impacts. <p>Mitigation</p> <ul style="list-style-type: none">• Use of local materials for reading spaces, whenever possible.	1.6	IRI 6: Number of students with access to reading spaces



ANNEX 3: School Safety Measures in Infrastructure Design

1. MINEDUC strives to ensure safety and security in all schools at the national level. The infrastructure works proposed under Component 1 include measures that are expected to increase the overall safety of schools. Among others, they include a new bathroom design and employ private security services, as explained below.

Improved Bathroom Design

2. The adoption of gender-separated, open school bathroom designs offers an innovative perspective to effectively address violence and improve safety in educational settings. The proposal for this new design is based on the premise that improved visibility and surveillance can reduce inappropriate behavior and risk of violence. The design includes the removal of unnecessary walls to create a more visible environment, facilitate oversight by administrative and teaching staff, and deter inappropriate behavior. This design also prevents the creation of hidden areas prone to improper activity and promotes a culture of respect. The new bathroom designs are based on the following considerations:

- i. Separation by gender. Providing separate bathrooms can reduce the possibility of unwanted encounters. These toilets must be designed with doors in each individual stall, and must have good visibility in the access areas to increase security.
- ii. Increased Visibility. Open bathrooms allow for wider and clearer visibility compared to traditional designs. This continuous direct visibility from surrounding areas such as hallways and common areas can help reduce acts of violence and bullying by making the actions more visible to school staff and other students.
- iii. Supervision. Open designs facilitate active supervision by school staff. By removing visual obstacles, faculty and staff can easily spot any inappropriate behavior and address it immediately, increasing safety and reducing the opportunity for violent acts.
- iv. Reduction of hidden spaces. The implementation of open bathrooms creates a culture of proactive prevention. By having an environment where students are conspicuous, they are more likely to avoid inappropriate behavior, knowing that any action will quickly be detected and corrected.

Provision of Private Security Services

3. Private security services are hired for all schools by MINEDUC's Zone or District Coordinations. These services help ensure control, surveillance, recording, protection of assets, and the safety of persons within schools.

4. These security services are provided for the school by MINEDUC while schools are functioning. When schools are undergoing works, security services are hired by the works contractors.