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Report No: PAD4177

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED LOAN
IN THE AMOUNT OF US$27.35 MILLION

AND
A TRUST FUND GRANT
IN THE AMOUNT OF US$4.75 MILLION
FROM
THE GLOBAL PARTNERSHIP FOR EDUCATION

TO THE

KINGDOM OF ESWATINI

FOR A

STRENGTHENING EARLY CHILDHOOD DEVELOPMENT AND BASIC EDUCATION SYSTEMS TO SUPPORT HUMAN CAPITAL DEVELOPMENT IN ESWATINI PROJECT

April 7, 2022

Education Global Practice
Eastern and Southern Africa

CURRENCY EQUIVALENTS

Exchange Rate Effective February 28, 2022

Currency Unit =	Eswatini Lilangeni (SZL)
SZL 15.40 =	US$1

FISCAL YEAR
April 1 - March 31

Regional Vice President:	Hafez M. H. Ghanem
Country Director:	Marie Francoise Marie-Nelly
Regional Director:	Amit Dar
Practice Manager:	Muna Salih Meky
Task Team Leader:	Elizabeth Ninan Dulvy

ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
CBA	Cost Benefit Analysis
CBE	Competency Based Education
CERC	Contingent Emergency Response Component
COVID-19	Coronavirus Disease
CPS	Country Partnership Strategy
DA	Designated Account
DPMO	Deputy Prime Minister's Office
E&S	Environmental and Social
ECCD	Early Childhood Care and Development
ECCDE	Early Childhood Care Development and Education
ECE	Early Childhood Education
EGM	Early Grade Mathematics
EGMA	Early Grade Mathematics Assessment
EGR	Early Grade Reading
EGRA	Early Grade Reading Assessment
ESA	Education Sector Analysis
EMIS	Education Management Information System
ESCP	Environmental and Social Commitment Plan
ESMF	Environmental and Social Management Framework
ESSP	Education Sector Strategic Plan
FA	Financial Agreement
FM	Financial Management
FMS	Financial Management Specialist
FPE	Free Primary Education
FY	Fiscal Year
GBV	Gender Based Violence
GDP	Gross Domestic Product
GER	Gross Enrollment Ratio
GPE	Global Partnership for Education
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
HCI	Human Capital Index
HIV	Human Immunodeficiency Virus
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communication Technology
IFR	Interim Financial Report
IMF	International Monetary Fund
INSET	In-Service Education and Training
IPF	Investment Project Financing
KSA	Key Strategic Area
LEG	Local Education Group
LMIC	Lower-Middle Income Country

M&E	Monitoring and Evaluation
MELQO	Measuring Early Learning Quality Outcomes
MICS	Multiple Indicators Cluster Survey
MMS	Mobile Monitoring System
MoET	Ministry of Education and Training
MoF	Ministry of Finance
MoH	Ministry of Health
MoEPD	Ministry of Economic Planning and Development
NERCHA	National Emergency Response Council to HIV/AIDS
NGO	Non-Government Organization
NJCTL	New Jersey Center for Teaching and Learning
NPV	Net Present Value
OVC	Orphans and Vulnerable Children
PAD	Project Appraisal Document
PDO	Project Development Objective
PDI	Project Development Objective Indicator
PFMA	Public Finance Management Act
PMI	Progressive Mathematics Initiative
POM	Project Operations Manual
PPSD	Project Procurement Strategy for Development
PS	Principal Secretary
PSC	Project Steering Committee
PSI	Progressive Science Initiative
PSU	Project Support Unit
REO	Regional Education Officer
RF	Results Framework
RFI	Rapid Financing Facility
SACMEQ	Southern and Eastern Consortium for Monitoring Education Quality
SACU	Southern African Customs Union
SC	Sub-Component
SCD	Systemic Country Diagnostic
SEAH	Sexual Exploitation and Harassment
SEP	Stakeholder Engagement Plan
STEM	Science, Technology, Engineering and Mathematics
SWAGAA	Swaziland Action Group Against Abuse
SZL	Eswatini Lilangeni
TA	Technical Assistance
TLM	Teaching and Learning Material
TWG	Technical Working Group
UNICEF	United Nations Children's Fund
UNESCO	United Nations Educational, Scientific and Cultural Organization
US$	United States Dollar
WB	World Bank
WFP	World Food Program
WMP	Waste Management Plan

TABLE OF CONTENTS

DATASHEET

BASIC INFORMATION

Country(ies)	Project Name
Eswatini	Strengthening Early Childhood Development and Basic Education Systems to Support Human Capital Development in Eswatini Project

Project ID	Financing Instrument	Environmental and Social Risk Classification
P173151	Investment Project Financing	Low

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[✓] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[✓] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	[ ] Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
28-Apr-2022	30-Jun-2027

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To strengthen education service delivery and management systems in the early years and junior secondary education

Components

Component Name	Cost (US$, millions)

Strengthen coordination and regulation of Early Childhood Care, Development and Education (ECCDE) services and improve quality of ECCDE services	5.80
Improve quality and internal efficiency in basic education	23.35
Project management, capacity building and technical assistance	2.95
Contingent Emergency Response Component (CERC)	0.00

Organizations

Borrower:	Kingdom of Eswatini
Implementing Agency:	Ministry of Education and Training

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	32.10
Total Financing	32.10
of which IBRD/IDA	27.35
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	27.35

Non-World Bank Group Financing

Trust Funds	4.75
Education for All Supervising Entity	4.75

INSTITUTIONAL DATA

Practice Area (Lead)	Contributing Practice Areas
Education	Health, Nutrition & Population, Social Protection & Jobs, Water

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

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

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 Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
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 Covenants

Sections and Description

Article V - Effectiveness ; Termination. 5.01. (a) of the Financing Agreement: The Borrower has set up the Project Support Unit, including the appointment of a full-time MOET official as Project coordinator and the hiring of a financial management specialist, a procurement specialist, a monitoring and evaluation specialist and an assistant to be assigned to such unit, all in accordance with Section I.A.2 of Schedule 2 to this Agreement and in a manner satisfactory to the Bank

Sections and Description

Article V - Effectiveness ; Termination. 5.01. (b) of the Financing Agreement: The Borrower has adopted the Project Operations Manual in accordance with Section I.B.1 of Schedule 2 to this Agreement and in a manner satisfactory to the Bank

Sections and Description
Article V - Effectiveness ; Termination. 5.01. (c) of the Financing Agreement: The Borrower has prepared, consulted, and disclosed the Environmental and Social Management Framework, in a manner satisfactory to the Bank

Sections and Description
Schedule 2 – Non-standard dated legal covenant. Section 1.A.1 of the Financing Agreement: By no later than one (1) month after the Effective Date, the Borrower shall establish and thereafter maintain during Project implementation, a Project steering committee, with composition, functions and qualified staff in numbers and with experience and terms of reference satisfactory to the Bank

Sections and Description
Schedule 2 – Non-standard dated legal covenant. Section 1.A.3 of the Financing Agreement: the Borrower shall, not later than three (3) months after the Effective Date, recruit an environmental and social specialist, referred to above, under terms and reference and with qualifications and experience satisfactory to the Bank

Sections and Description
Schedule 2 – Non-standard dated legal covenant. Section 1.A.4 of the Financing Agreement: By no later than one (1) month after the Effective Date, the Borrower shall establish and thereafter maintain during Project implementation, four (4) technical working groups, with composition, functions, and qualified staff in numbers and with experience and terms of reference satisfactory to the Bank

Sections and Description
Schedule 2 – Withdrawal Conditions; Withdrawal Period. Section 3.B.1 (b) of the Financing Agreement: under Category (7), unless and until the Bank is satisfied, and has notified the Borrower of its satisfaction, that all the following conditions have been met in respect of said activities: (i) the Borrower has determined that an Eligible Crisis or Emergency has occurred, has furnished to the Bank a request to include said activities in the Contingency emergency Response Part in order to respond to said Eligible Crisis or Emergency, and the Bank has agreed with such determination, accepted said request and notified the Borrower thereof; (ii) the Borrower has prepared and disclosed all Environmental and Social Standards instruments required for said activities, and the Borrower has implemented any actions which are required to be taken under said instruments; (iii) the Borrower's authority coordinating the Contingency emergency Response Part has adequate staff and resources for the purposes of said activities; and (iv) the Borrower has adopted an CERC Manual in form, substance, and manner acceptable to the Bank.

Conditions

Type	Financing source	Description
Effectiveness	IBRD/IDA	The Borrower has set up the Project Support Unit, including the appointment of a full-time MOET official as Project coordinator and the hiring of a financial management specialist, a procurement

		specialist, a monitoring and evaluation specialist and an assistant to be assigned to such unit, all in accordance with Section I.A.2 of Schedule 2 to this Agreement and in a manner satisfactory to the Bank
Type Effectiveness	Financing source IBRD/IDA	Description The Borrower has adopted the Project Operations Manual in accordance with Section I.B.1 of Schedule 2 to this Agreement and in a manner satisfactory to the Bank
Type Effectiveness	Financing source IBRD/IDA	Description The Borrower has prepared, consulted, and disclosed the Environmental and Social Management Framework, in a manner satisfactory to the Bank
Type Disbursement	Financing source IBRD/IDA	Description under Category (7), unless and until the Bank is satisfied, and has notified the Borrower of its satisfaction, that all the following conditions have been met in respect of said activities: (i) the Borrower has determined that an Eligible Crisis or Emergency has occurred, has furnished to the Bank a request to include said activities in the Contingency emergency Response Part in order to respond to said Eligible Crisis or Emergency, and the Bank has agreed with such determination, accepted said request and notified the Borrower thereof; (ii) the Borrower has prepared and disclosed all Environmental and Social Standards instruments required for said activities, and the Borrower has implemented any actions which are required to be taken under said instruments; (iii) the Borrower's authority coordinating the Contingency emergency Response Part has adequate staff and resources for the purposes of said activities; and (iv) the Borrower has adopted an CERC Manual in form, substance, and manner acceptable to the Bank.

I. STRATEGIC CONTEXT

Introduction

1. **This Project Appraisal Document (PAD) seeks the approval of the World Bank's Board of Executive Directors to provide a loan in the amount of US$27.35 million to the Kingdom of Eswatini for the Eswatini: Strengthening Early Childhood Development and Basic Education Systems to Support Human Capital Development in Eswatini Project (IBRD Loan Number 9375).** The Project will be co-financed by a US$4.75 million grant from the Global Partnership for Education (GPE Grant Number TF0B7467).

2. **The purpose of the proposed Project is to put in place the key building blocks that are critical to improving service delivery in early childhood development, foundational learning, and secondary education to better prepare children and youth for their future.** The Project Development Objective (PDO) is to strengthen education service delivery and management systems in the early years and junior secondary education. The Project is structured around four components: 1) Strengthen coordination and regulation of Early Childhood Care, Development and Education (ECCDE) and improve quality of ECCDE services (US$5.8 million); 2) Improve quality and internal efficiency in basic education (US$23.35 million); 3) Project Management, Capacity Building and Technical Assistance (US$2.95 million); and 4) Contingent Emergency Response Component (CERC) (US$0).

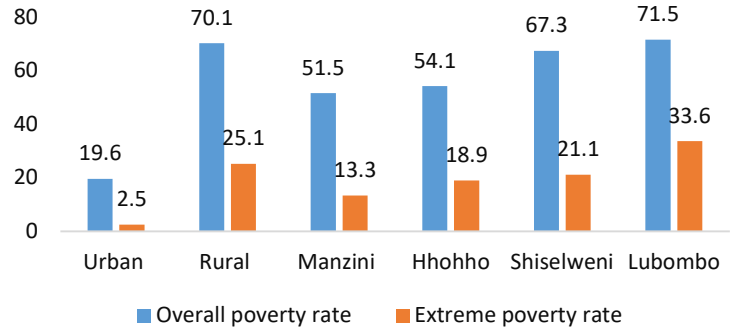
3. **The Project supports the Government of the Kingdom of Eswatini's human capital development agenda and closely aligns with its adjusted World Bank Group Country Partnership Strategy (CPS) 2015-2018 (Report No. 892010-SZ) discussed by the Board of Executive Directors on November 20, 2014 as well as with the forthcoming Country Partnership Framework 2022-2027.** The overarching policy goal for the education sector is to provide high quality primary and secondary education and life-long learning opportunities to all citizens, in order to support personal development and promote Eswatini's cultural development, economic growth, and global competitiveness. However, despite the Government's commitment and ambitious visions for the sector, there are system level challenges that need to be addressed to strengthen education and training service delivery. Given this is the first World Bank Group (WBG) engagement in the education sector in Eswatini in several years, the WBG and Government have agreed to place a strong emphasis on strengthening the foundations of the education system during this Project, including establishing curricula and a package of support for ECCDE service provision; rolling out an early grade reading program in early grades, and establishing an online training program for teachers in secondary schools who are teaching mathematics and science, with the aim to extend online learning to students in the future. The Project also supports the retention of students in secondary education through better targeting of the Orphans and Vulnerable Children (OVC) Education Grant, which is the mechanism the Government uses to support children from poor and vulnerable families to access secondary education in the country. The strengthening of the systems that deliver ECCDE, basic, and secondary education is of the upmost importance to ensure that children and youth are provided with the learning opportunities that will enable them to transform the economic and social landscape of Eswatini.

A. Country Context

4. **The Kingdom of Eswatini is a small, landlocked country in Southern Africa, bordering South Africa and Mozambique, with a population of approximately 1.1 million.**[1] Eswatini has a very young population with a median age of 22 years and with 56 percent of the population below 25 years of age in 2017.[2] With per capita Gross Domestic Product (GDP) of around US$3,300 in real terms in 2020, the country is classified as a lower-middle income country (LMIC). Eswatini is facing a significant economic slowdown due to the ongoing Coronavirus Disease (COVID-19) global pandemic. Prolonged lockdowns, travel restrictions and other measures put in place in Eswatini and in the Southern Africa region as a whole, are leading to a decline in economic activity, an increase in job losses, and reduced remittances, exacerbating challenges related to high unemployment, poverty, and persistent inequality, which the country was already grappling with pre-pandemic.

5. **Eswatini is making advances in reducing poverty and improving human capital outcomes.** However, progress has not been equitable, especially in rural areas.[4] The national poverty rate fell modestly between 2010 and 2017 (from 63 percent to 58.9 percent). The poverty incidence is very high in rural areas (at around 70 percent), and in the Lubombo and Shiselweni regions (72 percent and 67 percent respectively) (see Figure 1). At the same time, 25 percent of the rural population live below the extreme/food poverty line compared to 3 percent of the urban population – which means they cannot afford any consumption other than the minimum required caloric intake. The high levels of inequality, with an income Gini Coefficient of 0.55[5] manifests in unequal access to services such as healthcare, education, electricity, water and sanitation, as well as unequal access to markets, assets and rights[6], which hinders poverty reduction and human capital development.

Figure 1: Poverty rates by area and region



Source: World Bank, 2020.[3]

6. **Further exacerbating poverty and low human development outcomes is the high prevalence of HIV with more than a quarter (27 percent) of Eswatini's reproductive age population living with Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS).** Females are particularly at risk– 35 percent of women and adolescent girls between the ages of 15 and 49 years are HIV-positive, compared to 19 percent of boys and men in the same age group. In 2017, about 86,000 children (or 16 percent of the total number

[1] *https://data.worldbank.org/country/SZ*
[2] The Kingdom of Eswatini (forthcoming), Towards Equal Opportunity: Accelerating Inclusion and Poverty Reduction in Eswatini, Systematic Country Diagnostic
[3] Raju, Dhushyanth and Stephen D. Younger. 2020. Social Assistance Programs and Household Welfare in Eswatini. World Bank
[4] *https://data.worldbank.org/country/Eswatini* Atlas Method
[5] World Bank. 2020. World Bank Open Data. Available at: *https://data.worlsbank.org*
[6] World Bank. 2019. The Kingdom of Eswatini. Toward Equal Opportunity: Accelerating Inclusion and Poverty Reduction in Eswatini – Systemic Country Diagnostic

of 0-17-year-olds in the country) were considered single or double orphans and this is largely attributed to the impact of HIV/AIDS. Compounding this crisis is the large number of children who are considered vulnerable due to illnesses experienced by parents, are abandoned by a parent, or are living in extreme poverty resulting in a staggering 58 percent of the country's children being orphans and/or vulnerable children (OVCs) (WFP, 2019).[7] Based on the 2021 Education Sector Analysis, the Human Capital Index (HCI)[8] for Eswatini is 0.48[9], and the low HCI score in Eswatini is driven by a low adult survival rate, mainly due to HIV/AIDS and high level of vulnerability among children leading to poor early childhood outcomes and low levels of school completion.

B. Sectoral and Institutional Context

7. **The Government of Eswatini has recognized the importance of investing in the education sector and the role it plays in building the country's human capital and transforming its economic and social landscape.** This is evidenced by the high priority given to the education sector in terms of overall public spending as well as through the introduction of Free Primary Education (FPE) in 2010. The overarching policy goal for the education sector is to provide high quality basic and senior secondary education and life-long learning opportunities to all citizens, in order to support personal development and promote Eswatini's cultural development, economic growth, and global competitiveness[10]. However, despite the Government's commitment and ambitious visions for the sector, there are many challenges the system is faced with. The status of educational outcomes and the main challenges in the system are discussed below focusing on the early childhood and basic education sub-sectors.

Early Childhood (from conception to 5-years-old)

Access to Early Childhood Care, Development and Education services

8. **Expanding the provision of ECCDE services to promote early childhood development and increase school readiness is a key objective of the Ministry of Education and Training (MoET).** This is evidenced by the 2019 expansion of Grade 0 classrooms in public primary schools, which are mainly targeted in poor and rural communities. However, access to ECCDE services remains low. In 2018, coverage of ECCDE services in Eswatini was only about 28 percent for 3 to 5-year-old children, which is low compared to the average across LMICs (37.5 percent) or countries such as Malawi (39 percent), Lesotho (46 percent) and South Africa (59 percent). There are also disparities in access to ECCDE services across geographic regions of the country, with 29 percent of children enrolled in pre-schools in the Hhohho region and 33 percent in Manzini compared to only 20 percent enrollment in Lubombo and 17 percent in Shiselweni, the latter being the two poorest regions of the country.[11]

Quality of ECCDE service provision

9. **Most children in Eswatini reach primary school age lacking essential school readiness skills, including early literacy and numeracy skills, with the disparity in quality being more pronounced than the disparity in access, especially across wealth groups.** While data in the sub-sector is limited, available data from household surveys shows that only 19 percent of children aged 3 to 5 years old are developmentally on track to acquire

[7] World Food Program. 2019. Eswatini. Country Brief. September 2019.
[8] The HCI is a composite measure of survival of children under the age of five, educational attainment, stunting and the adult survival rate.
[9] Based on updated analysis of expected years of schooling and the overall HCI score, presented in the Education Sector Analysis (Dulvy, et.al, 2021).
[10] MoET. 2018. The National Education and Training Improvement Programme (NETIP) 2018/19 – 2020/21. July 2018. Mbabane: Ministry of Education and Training.
[11] World Bank. 2021. Eswatini Education Sector Analysis

literacy and numeracy skills (United Nations Children's Fund [UNICEF], 2016). In terms of access, for every child in the poorest wealth quintile, about 1.7 children from the richest quintile access ECCDE services (See Table 1). In contrast, in terms of child outcomes, for every child in the poorest wealth quintile, about 6.4 children in the richest quintile are developmentally on track in literacy and numeracy. This suggests that even when children from the poorest households have access to ECCDE services, they are not acquiring foundational skills at the same rate as their peers in wealthier households, illustrating the urgent need to improve quality of service in poor and rural areas.

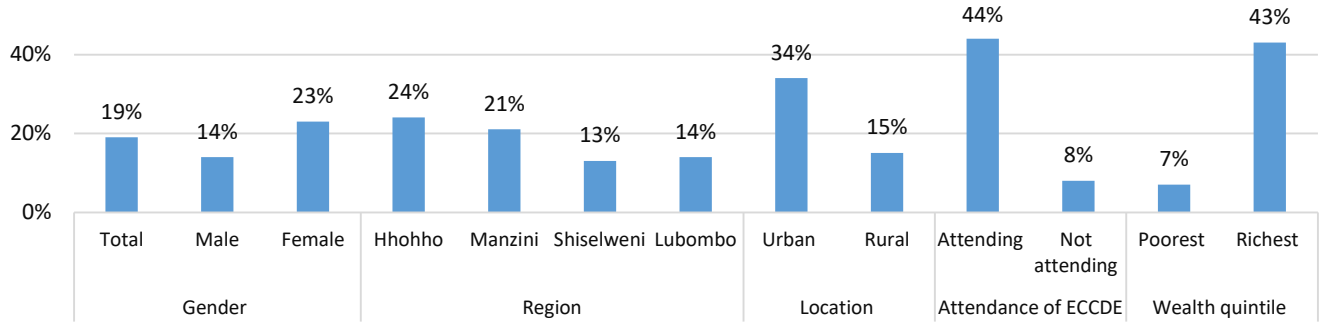
Table 1: Access to and quality of ECCDE across wealth quintiles

Wealth index quintile	Percentage of children aged 36-59 months attending early childhood education	Percentage of children aged 36-59 months developmentally on track in literacy and numeracy
Poorest	27.7	6.8
Second	23.3	15.4
Middle	25.1	14.4
Fourth	27.6	22.2
Ricest	48.4	43.2

Source: Multiple Indicators Cluster Survey (MICS), 2014/15

10. **There are also large disparities across gender, regions, and rural-urban locations at this level, signaling that educational inequalities start at a very young age.** In Lubombo and Shiselweni regions, the share of young children reaching developmental milestones towards literacy and numeracy was less than 14 percent compared to 24 percent in the Hhohho region (see Figure 2). Boys also significantly lag behind girls in their early childhood outcomes, with only 14 percent of boys reaching developmental milestones in literacy and numeracy compared to 23 percent of girls. While data is not available to examine the factors fully in the Eswatini context, evidence from other countries suggest that gaps in the capacity of ECCDE teachers and facilitators to adequately support boys is an important factor that contributes to gender disparities. This disadvantage in literacy and numeracy children face, is likely to carry through to Grade 1 and beyond, where students are not adequately prepared to take on the national curriculum which affects their academic performance across grades and puts them at higher risk of dropping out of school.

Figure 2: Children aged 36-59 months developmentally on track for literacy and numeracy (%)[12]



Source: Central Statistical Office (CSO) and UNICEF, 2016.

[12] To be developmentally on track in the literacy-numeracy domain, a child must be able to do two out of three tasks: i) name at least ten letters of the alphabet; ii) read at least four simple, popular words; and iii) know the name and recognize the symbols of numbers 1 to 10.

Coordination of ECCDE services

11. **ECCDE services in Eswatini are provided across a range of sectors, ministries and implementing entities; however, coordination amongst the key actors is currently limited.** The Deputy Prime Minister's Office (DPMO) is responsible for the overall coordination at the national level and is supposed to work closely with the MoET, Ministry of Health, Ministry of tinkhundla Administration and Development, Ministry of Home Affairs, Ministry of Agriculture, and Ministry of Natural Resources to ensure the provision of quality ECCDE services. Various ECCDE services are offered through several service delivery platforms including Neighborhood Care Points (NCPs), 'KaGoGo centers' (translated to 'Grandmothers' house), community and private pre-schools and daycare centers, and Primary Health Care facilities. Overall, the Government has very limited information on the coverage of ECCDE services, as there is no consolidated list of providers and almost no information on the type and quality of services offered to children. The inter-Ministerial coordination mechanism and regulation of ECCDE services remains weak[13] and there is no comprehensive ECCDE policy framework to guide the sub-sector.

School-aged children (6 to 18 year-olds)

12. The official starting age for children in primary school is age six. Primary education covers seven years, followed by three years of junior secondary and two years of senior secondary education. The first 10 years constitute basic education. Table 2 shows some basic statistics of the education system in Eswatini.

Table 2: Basic education summary statistics, 2018

Level of Education (official age)	No of Schools	Enrollment	Gross Enrollment Rate (GER)	Net Enrollment Rate (NER)	No of Teachers	Share of public recurrent education spending
ECCDE (3-5) *	627	21,000				0.1%
Primary (6-12)	618	237,000	126%	92%	9,107	43%
Junior Secondary (13-15)	275	77,000	100%	31%	7,400	23%
Senior Secondary (16-17)		39,000	76%	14%		12%
TVET	34	1,694				0.5%
Tertiary	48	12,374				20%

Source: World Bank (2021) Eswatini Education Sector Analysis. *ECCDE: Preliminary survey shows at least 627 pre-schools in Eswatini (in addition to 180 Grade 0 classrooms).

Access and retention in primary and secondary education

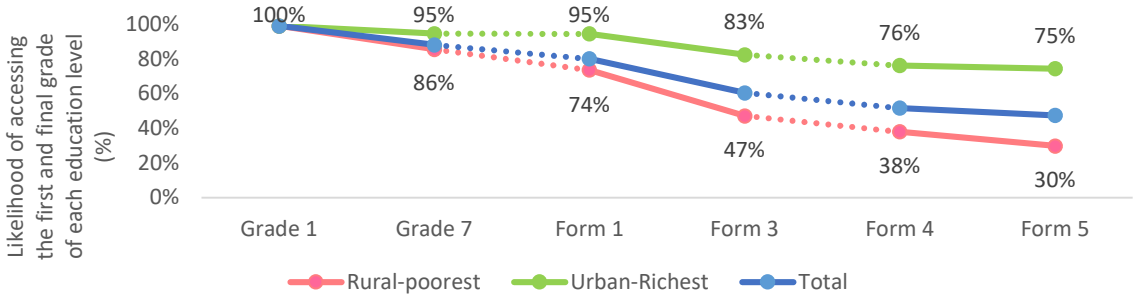
13. **Eswatini has achieved almost universal access to primary education, while remarkable progress has been made in improving access to secondary education.** After the introduction of FPE in 2010, the gross enrollment ratio (GER) at the primary level increased from 126 percent in 2009 to 132 percent in 2010. Primary GER has been declining slowly over the past decade as more children are starting primary school at the right age; however, the ratio remains above 100 percent implying overage enrollment remains a challenge. Limited access to ECCDE, which has been shown to improve school readiness, is likely to be a contributing factor for the prevalence of overage enrollment. At junior and senior secondary level, substantial improvements in access have also been made. Between 2010 and 2018, the GER in junior secondary increased from 75 to 100 percent, while in senior secondary, GER increased from 53 to 76 percent. Another major achievement for the country is gender parity in participation in primary and secondary education, reflecting gender equality in access.[14]

[13] Note, coordination at the civil society level takes place through the Swaziland National Early Childhood Development Network (SNECD) which holds monthly meetings with over 70 partners and early childhood development service providers.
[14] World Bank. 2021. Eswatini Education Sector Analysis.

14. **While the progress made in increasing access to primary and secondary education is encouraging, many children continue to drop out early across grades, leading to low completion rates.** Despite near universal access to primary education in all four regions, less than 90 percent of students' complete primary school nationally. The dropout rate is even higher at the junior secondary level. While 80 percent of children are likely to enroll in Form 1−the first grade of junior secondary, only 60 percent are likely to reach Form 3, the final grade in junior secondary. The high rate of students dropping out of school before completing basic education means significant resources are 'wasted' and spending could be more efficient. The Lubombo and Shiselweni regions have the lowest access and completion rates both at the primary and secondary levels, compared to the Manzini and Hhohho regions.

15. **Disparities are even more stark between the rural poor and the urban rich, with rural poor children being the most disadvantaged in terms of access and completion at each level of education.** About 74 percent of students from the poorest rural households enroll in the first grade of junior secondary and only 47 percent reach the final grade of junior secondary. In comparison, about 95 percent of children from the richest urban households enroll in junior secondary with 83 percent reaching the final grade. The sharp drop in student retention and the disparities persist into senior secondary grades with only 30 percent of students from the poorest rural households reaching Form 5, the final grade in senior secondary education, compared to 75 percent of the richest urban children (Figure 3).

Figure 3: Schooling profile for the most disadvantaged and most advantaged groups



Source: World Bank (2021) Eswatini Education Sector Analysis.

Factors affecting access and retention

16. **Qualitative and quantitative research shows that a combination of weaknesses within the education system and the lack of ability and willingness of parents or caregivers to send their children to school contribute to the high levels of school dropout.** These factors include poverty, the high cost of schooling, pregnancy, vulnerabilities that children face if they are orphans or have parents who are ill, the low motivation of learners particularly when they are falling behind, the inability of teachers to support children who are falling behind, unmet special needs, the lack of monitoring of learning levels by schools and parents, and lack of schools, particularly at the secondary education level.

17. **One of the key binding constraints leading to many students dropping out, especially at the secondary level, is the high cost of schooling, which particularly affects poor and vulnerable children.** To address this issue, the Government has put in place the OVC education grant program. The OVC education grant, which is paid directly to schools, aims to subsidize school fees for children who are orphaned, vulnerable or poor, to ensure that they can access secondary education, which is not free in Eswatini. However, the 2021 Education Sector

Analysis finds that an estimated 70 percent of children who are eligible for the grant are not receiving it. Many schools charge top-up fees, beyond what is covered by the OVC grant. Non-fee costs of attending school such as the costs of uniforms, transportation, and learning materials, are also not covered by the grant, posing an additional barrier to staying in school. There are no social assistance programs providing direct financial support to poor households to help them keep their children in secondary school until completion.

18. **A major factor for girls dropping out of school, even at the primary level, is pregnancy**. Around 18 percent of girls drop out because of pregnancy in primary school, and this rises to 35 percent of girls at the junior secondary level. Girls located in rural areas are twice as likely to drop out at the primary and junior secondary level as a result of pregnancy compared to their urban counterparts. A key driver behind the high rates of unwanted early pregnancies is poverty, with poor and underprivileged girls being forced to engage in inter-generational relationships and transactional sex, to achieve basic economic security[15]. The low status of girls in society also makes them vulnerable to exploitation and abuse. A 2018 national study[16] found that just under half (48 percent) of girls and women between the ages of 13 to 24 reported having experienced some form of sexual violence, while 1 in 3 girls experienced some form of sexual violence before the age of 18.

19. **Boys also face their own set of vulnerabilities that are interlinked with poverty, the impact of HIV/AIDS on the family structure, and limited support and resources.** There are groups of vulnerable boys who lack positive male role models, having lost their fathers, and who are expected to become the main providers for their families. In the context of poverty and limited opportunity, these boys are at risk of dropping out of school and facing sexual predation, and economic exploitation. Many engage in substance abuse and get involved in the growing and/or sale of marijuana.[17] These vulnerabilities were further accentuated by the COVID-19 pandemic (see Box 1).

Box 1: Impact of COVID-19 in the Education Sector

In the education sector, the pandemic is having a devastating effect. In order to contain the spread of the virus, the Government closed all schools and educational institutions in March 2020, affecting over 370,000 learners nationally across all levels of education. Starting October 2020, selected grades at the secondary reopened with a plan to gradually reopen all grades in a phased manner. However, following a surge in COVID-19 cases in January 2021, the planned phased reopening was delayed. Currently, all schools have reopened and are operating using various precautionary protocols.

The COVID-19 pandemic has affected learning and accentuated the digital divide between the rich and the poor in Eswatini and is likely to lead to increase in the dropout rate. Following school closures, some schools were able to continue teaching, using available technologies to deliver lessons. However, most students only had access to learning programs through television, radio and print media, which the MoET managed to set-up and run within weeks of schools closing.

Despite these efforts, the pandemic has devastated the education system. While data is not yet available for the 2020 and 2021 academic years, there are concerns that the dropout rates have worsened due to the prolonged school closures, especially among vulnerable and marginalized children, who were already faced with significant constraints in accessing quality education. Emerging evidence shows that many children have experienced significant loss of learning. Anecdotal evidence also shows that the pandemic has led to an increase in adolescent pregnancy. In addition, as the economic impact of the pandemic continues to unfold, households face increasing challenges to keep their children in school, especially at the secondary level. This shows the urgent need to mobilize resources to recover and rebuild the education system.

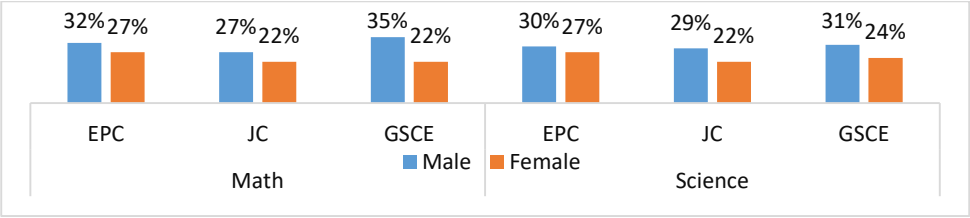
[15] Dlamini, N., 2019. The Implication of Teenage Pregnancies in Eswatini: A Trend and Spatial Analysis.
[16] www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)60247-6/fulltext
[17] Erasmus, Y. et al. 2019. SADC Regional Study of Vulnerability Amongst Boys (ages 14-20 years) in Schools. Durban: MIET Africa

Quality of primary and junior secondary education

20. **Low quality of education is another key factor driving the poor performance of students, contributing towards the high dropout rate**. Eswatini does not have a national learning assessment system and only participates in a regional learning assessment, i.e., the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ), which is infrequent and historically has been administered every six years. The 2007 SACMEQ[18] results showed that majority of Grade 6 students (72 percent) had minimum acceptable reading skills or higher, although among this group only 9 percent had acquired analytical and critical reading skills, which may be considered necessary to effectively learn other subjects. At the same time, 7 percent of Grade 6 students only had basic or emergent reading skills, which means they were only a couple of steps away from being illiterate. For mathematics, less than one-in-five Grade 6 students were competent in numeracy meaning they could translate verbal, graphic, or tabular information into arithmetic form to solve a problem but had not acquired the higher order skills expected at this stage.

21. **The national examination results show that overall failure rates are high for the core subjects – English, Mathematics, siSwati and Science – and students in rural schools perform considerably worse in these subjects than students in urban schools.** This is even after weaker performing students have left the education system before being able to sit for the final examination. In 2019, only 50-57 percent of Eswatini Primary Certificate (EPC) candidates, depending on the subject, were learning at least half of what is expected for English, Mathematics or Science. In the same year, at the secondary levels (i.e., in the Junior Certificate (JC), and General Certificate for Secondary Education (GCSE) examinations), only 44-56 percent of candidates demonstrate understanding of at least half of the English, Mathematics, Science, or siSwati curriculum, with the worst results being observed in Mathematics and Science subjects. In Mathematics and Science, girls significantly underperform compared to boys both at the primary and secondary level, with a higher level of gender disparity at the secondary level.

Figure 4: Share of 'Good Passes' by Gender, Examination, and Subject 2019



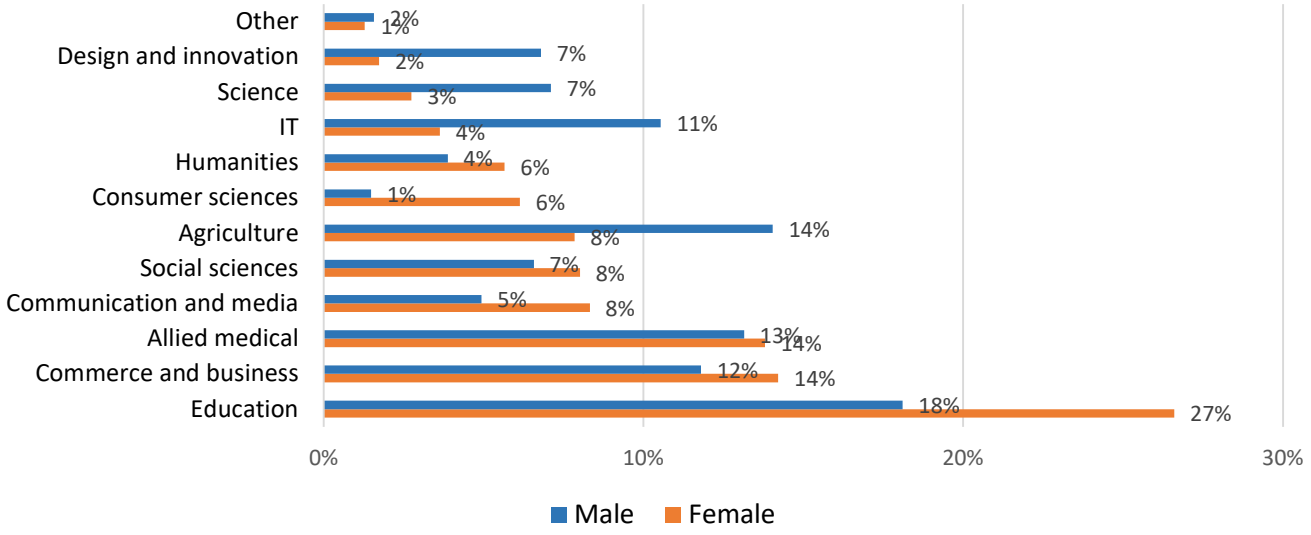
Source: World Bank (2021) Eswatini Education Sector Analysis.

22. **The low level of learning, particularly among girls, in Mathematics and Science at the basic and secondary education levels have implications at the tertiary level in terms of enrollment and gender parity.** Few students enter Science, Technology, Engineering, and Mathematics (STEM) fields after graduating from senior secondary school, even though the Government has identified STEM education as a key priority area to prepare Eswatini's youth for the future workforce. In 2019, only 1 out of 5 secondary school graduates opted for either Mathematics, Physical Science or Information and Communications Technology (ICT) as an examination subject in senior secondary. Of these, only 29 percent scored above the minimum score required to enter higher education, meaning that less than 10 percent of the 2019 cohort qualified for higher education in STEM-related fields.

[18] Eswatini participated in another round of the regional assessment in 2013 but some outstanding technical issues raise questions about the most recent student performance levels reported and limit further analyses of the data.

23. **Overall, women are well represented in higher education in Eswatini; however, in science and technology fields, where overall enrollment rates are low, they are severely underrepresented.** For example, 7 percent of men in undergraduate programs enrolled in Science fields compared to only 3 percent of women, while in information technology fields 11 percent of men enrolled compared to only 4 percent of women (See Figure 5). This affects women's ability to pursue employment opportunities in STEM occupations, which often offer the fastest-growing and highest-paid jobs. This shows that quality gaps in STEM education at the secondary level and the gender inequalities that open up early in basic education require urgent attention. If unaddressed, current patterns lead to underutilization of the human capital potential of Eswatini, especially in regard to women's contribution to innovation and harnessing of technological advances that can drive economic growth.

Figure 5: University enrolment by faculty 2017



Source: World Bank (2021) Eswatini Education Sector Analysis.

Factors affecting student learning outcomes and gender gap in STEM

24. **Gaps in the availability of high-quality teachers is a key driver of poor learning outcomes in Eswatini.** Teacher deployment in the country is generally efficient, with a strong correlation between enrollment and number of teachers deployed to schools and low pupil-to-teacher ratios across all four regions. However, large groups of teachers have not received any in-service training, a smaller percentage lack the required qualifications for the level they are teaching, and a large percentage of teachers have inadequate content knowledge and pedagogical skills. The problem is particularly acute at the secondary level, where over 30 percent of teachers do not have any teaching qualification (but have another qualification such as a non-teaching bachelors' degree). The education system is also facing challenges in attracting qualified teachers to rural schools due to a lack of incentives to take up such postings. The shortage of qualified teachers in rural areas is particularly acute in STEM and ICT subjects, where there is nationally a shortage of qualified teachers to begin with.

25. **Teachers are also not capacitated to address the various challenges girls face in pursuing STEM education.** There is an extensive body of literature regionally and globally showing that gender norms, stereotypes, and biases play a central role in driving girls' underperformance in Mathematics and Science and

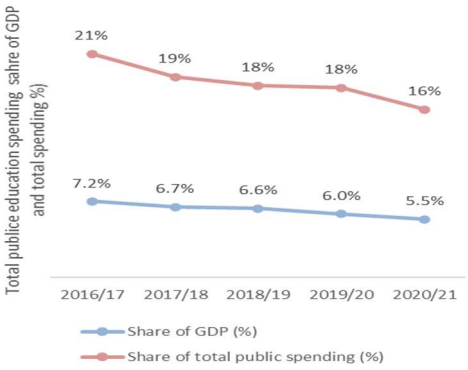
their low representation in male-dominated STEM fields. Gender stereotypes and biases and differing expectations sent for boys and girls by families, teachers and communities, have been shown to contribute to a decrease in confidence, interest and aspirations of girls, discouraging them from engaging in STEM subjects. These factors also contribute to women leaving STEM careers, which in turn leads to a dearth of women role models in STEM fields, further exacerbate existing biases and reducing girls' aspirations– effectively creating a vicious cycle (Hammond, et. al., 2020). These issues have not received significant policy attention in Eswatini, and teachers are not prepared or supported to address these persistent gender gaps.

26. **Another factor that affects quality of education, especially in STEM and ICT-related subjects is gap in the digital infrastructure of schools and inadequate digital learning resources.** The need for digital technologies has become more important in the face of the COVID-19 pandemic. Critical pillars for successful "EdTech" interventions include digital infrastructure, digital content (learning resources), digital skills (especially in terms of qualified and trained teachers, administrators and support staff) and an enabling policy environment. In Eswatini, almost all primary and secondary schools have access to electricity. While only 8 percent of students in primary schools have internet connectively, about 58 percent of secondary schools are connected to the internet, though the connection is slow, unreliable and expensive. However, the use of EdTech solutions to improve the quality and delivery of education remains nascent.

Education financing:

27. **Eswatini spends more on education than the average for LMICs but less than the average for Southern African Customs Union (SACU) countries and spending is declining.** Public education spending per school-age child has declined over the last five years after adjusting for inflation. The shares of GDP (5.5 percent) and total public spending (16 percent) allocated to education in 2020/21 reflects this decline overtime (see Figure 6), indicating that although the education sector remains the most important sector in terms of overall government spending, growth in its share of the national budget has stalled compared to several other ministries. Uncertainty about future SACU revenues, coupled with the effects of the COVID-19 pandemic, means there is limited fiscal space to increase public education spending over the next few years. This is a cause for concern given that further investments in education are needed to expand access to ECCDE, to help keep children in school in basic and secondary education and to improve quality especially during the recovery period from the COVID-19 pandemic.

Figure 6: Public education spending as a share of GDP and public total spending



Source: World Bank 2021.

28. **There is also a need to improve efficiency and equity in education sector financing in Eswatini**. In 2020/2021, as in previous years, the Government allocated a large share of its education budget to tertiary education while spending on ECCDE remained minimal despite the limited and supply and high demand for these services. ECCDE programs accounted for a mere 0.1 percent of the total education budget because of very limited public provision. Meanwhile, tertiary education received a very large share of public education spending (20 percent) relative to its enrollment share (3 percent). This has direct equity implications as most individuals attending tertiary education come from the richest households.

29. **Recurrent non-salary spending as well as development spending related to improving the quality of education is inadequate.** Salary costs, grants and subsidies constituted a massive 95 percent of total recurrent spending in the education sector, whereas spending on materials and supplies accounted for the remaining 5 percent, with most of it going toward textbook provision at primary level in 2016/17. Development spending was also very low at around 4 percent of total public education spending. This is a concern because adequate availability of teaching and learning materials of various kinds and in-service professional development support for teachers is essential for teachers to be effective in the classroom and for students to learn; currently many schools lack equipment, laboratories, and libraries and teachers get almost no capacity building support.

The Government's Commitment for Human Capital Development and Opportunities

30. **The Government of the Kingdom of Eswatini has shown strong commitment to improving human capital outcomes for all.** Recognizing the importance of human capital as a key contributor towards sustainable and inclusive economic growth, in March 2019 Eswatini became one of the 'early adopters' of the Human Capital Project (HCP)− a global effort that aims to ensure that "all children reach their full potential, growing up well-nourished and ready to learn, attaining real learning in the classroom, and entering the job market as healthy, skilled, and productive adults". There are several ongoing initiatives supported by the Government, development partners and the World Bank in the human capital development agenda that the proposed Project will build on. Some of these opportunities are highlighted below.

31. **The Government has prioritized ECCDE and early primary grades to promote early childhood development and ensure that children are acquiring foundational skills.** Quality standards for preprimary education, the Swaziland Early Learning and Development and Standards (SELDS), and a Multi-Sectoral ECCDE Framework 2018-2022 have been developed, although these frameworks have yet to be adopted. Pre-service training programs for ECCDE teachers have been introduced at two of the five public teacher training institutions (TTIs). The introduction of the Grade 0 program for 5-year-olds through public primary schools in rural areas is another important initiative towards improving access. As of April 2022, there are 180 schools of a total of 618 public primary schools that have Grade 0 classrooms. The MoET is also rolling out a new curriculum in early primary grades that is promising a new approach to teaching reading and mathematics. However, the MoET requires additional support to ensure teachers are well trained in early grade pedagogy, to develop and distribute supplementary materials and to put systems in place to regularly assess student learning.

32. **To address the complex constraints adolescents face in completing their education, the Government and development partners are supporting various programs in the areas of health, psychosocial support, and safety and protection of children.** Some of these are led by United Nations (UN) agencies, Non-Governmental Organizations (NGOs) and private organizations that support in- and out-of-school children and youth, such as the Girls and Boys Empowerment Clubs administered by the Swaziland Action Group Against Abuse (SWAAGA); the HIV/Health Promotion program (Kwakha Indvodza) and the 'DREAMS' initiative administered by Bantwana; Community Voice in Action administered by World Vision; and the Dignity Packs program administered by Moya Center. Building on ongoing initiatives across sectors, there is need to mobilize additional resources to scale-up some of the successful interventions, especially in lagging communities and parts of the country.

33. **The proposed Project will be the first operation supported by the World Bank in the education sector in Eswatini in a long time.** Complementary to the financing provided by the International Bank for Reconstruction and Development (IBRD), the Government has also successfully mobilized funding from the Global Partnership for Education (GPE), which will be used to jointly finance the proposed operation. This shows the renewed and strong

commitment from the World Bank and other international donors to support the education sector. The World Bank is also currently supporting Eswatini's human capital agenda through several ongoing operations across various sectors, including in health and nutrition, water and sanitation, and more recently by providing emergency support for the COVID-19 pandemic response (see Annex 7). The proposed operation will build synergies with ongoing and forthcoming operations to address constraints to human capital development holistically.

C. Relevance to Higher Level Objectives

34. **The proposed Project comes at a critical time when the Government has committed to a 'turnaround strategy' to promote human capital development and attain macro-fiscal stabilization and growth, as captured by the various national strategic plans.** One focus area of Eswatini's Strategic Road Map (2019 - 23) is to improve the delivery of services and foster a culture of excellence (improved efficiency and effectiveness of the public sector and technological innovation). It also responds to Outcome 3 of the National Development Plan (2019/20-2021/22): Towards Economic Recovery, which focuses on enhanced social and human capital development. The specific sectoral outcomes include improved access to quality health and health services; improved access to quality, relevant and inclusive education, and lifelong learning opportunities; reduced poverty rates; youth and other vulnerable groups empowered with adequate skills and opportunities; and improved and coordinated research and development and innovation systems for evidence-based planning and policy formulation. The Project aligns well with many of these objectives. The Project will also support the implementation of the country's long-term Education Sector Strategic Plan (2022 – 2034, currently under preparation) which includes a broad set of strategic plans and goals from ECCDE to higher education and takes cognizance of cross-cutting issues such as HIV/AIDS, gender, and inclusiveness.

35. **The proposed Project is aligned with the adjusted World Bank Group Country Partnership Strategy (CPS) FY15-18 (Report No. 892010-SZ)[19] discussed by the Board of Executive Directors on November 20, 2014, the forthcoming Country Partnership Framework 2022-2027, and the Systematic Country Diagnostics (SCD).[20]** The proposed Project will contribute to Pillar II (Strengthening State Capabilities) of the CPS, primarily through Objective 2−Improved Social Services Delivery in order to improve human capital outcomes. The proposed Project, which is expected to serve as a flagship operation in the education sector, takes a *life cycle approach* to address the most critical constraints in human capital development from early childhood, through primary, to junior secondary education (See Box 2). While the Project uses the education sector as the main entry point, it will build synergies with operations across other sectors to facilitate collaboration towards a more harmonized approach for human capital development in the country. This approach is consistent with key pillars of the HCP supported by the World Bank and adopted by the Government of Eswatini.

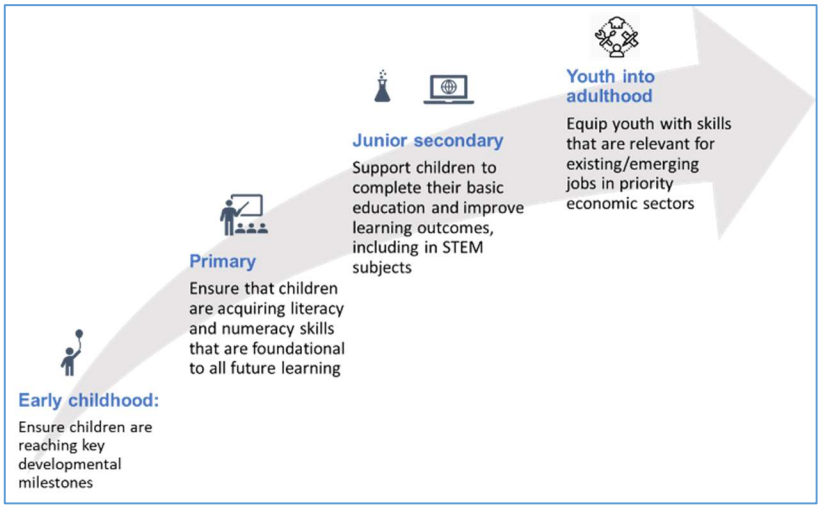
36. **The Project's design is also aligned with the World Bank's larger corporate objectives, including on gender equality and human capital development.** The Project's emphasis on addressing human capital disparities in disadvantaged areas reflects the World Bank's twin goals of reducing extreme poverty and building shared prosperity. The Project's focus on addressing gender imbalances (e.g., by addressing the disadvantages boys face at the ECCDE level and the challenges girls face in pursuing STEM subjects), aligns very well with the World Bank's commitment to promote gender parity in human capital development. The Project's design is also aligned with the focus and aims of the World Bank Group Strategy for Africa (2019) which emphasizes strengthening human capital as an important strategy – through, among others, promoting gender equity in education and fostering

[19] World Bank 2018. The Performance and Learning Review (PLR – Report No. 126205-SZ) extended the CPS by two years to FY20.
[20] World Bank. 2019. The Kingdom of Eswatini. Toward Equal Opportunity: Accelerating Inclusion and Poverty Reduction in Eswatini.

female employment and access to job opportunities. In the Eswatini context, the disparity in STEM education is a key source of disparity that is prioritized under the Project and is expected to have long-term impact on women's labor market outcomes.

Box 2: Life Cycle Approach to Human Capital Development in Eswatini

Improving human capital outcomes requires a holistic response to the multiple and varying needs of individuals at different stages of life. A life-cycle approach that focuses on (i) Early Childhood; (ii) School Age (primary and junior secondary); and (iii) Youth to Adulthood can provide a practical framework that can be applied to provide all children and youth with a comprehensive package of services–involving all relevant sectors, to ensure that all children grow up healthy and reach their maximum learning and productivity potential.



The proposed Project will use the life-cycle approach, focusing on the first two stages of the life-cycle, to tackle some of the most binding conatrints on human capital development, esepcially in education. It aims to lay the foundation to transform the ECCDE and basic education systems in Eswatini. Inetrventions targted at the Youth to Adulthood stage of the life cycle will be supported though a separate operation that is currently under preparation, with strong focus on promoting skills development and youth employment.

37. **The proposed Project's focus areas are also aligned to GPE's three priorities: (i) improved and more equitable learning outcomes, (ii) increased equity, gender equality and inclusion, and (iii) effective and efficient education systems.** The focus of the Project on supporting disadvantaged students from poor and rural tinkhundla to stay in schools and to learn and the emphasis on addressing gender disparities, will contribute towards the first two priorities of the GPE. Moreover, improved learning is a key ingredient to improving retention across grades; hence the Project's support will also contribute towards improved efficiency in the system by ensuring that students are staying in school and are acquiring critical skills that are essential for them to be successful during their basic education years and beyond. In addition, in targeted tinkhundla that have high dropout rate, the Project will provide comprehensive support to adolescents to address both social and economic reasons for dropout; this approach will contribute to the third priority of the GPE by improving efficiency in the education system.

II. PROJECT DESCRIPTION

A. Project Development Objective (PDO)

38. **PDO Statement:** To strengthen education service delivery and management systems in the early years and junior secondary education.[21]

39. The PDO level indicators will be as follows:

- Develop learning assessment systems and complete at least one measurement of each of the

[21] Early years refers to center based ECCDE services, Grade 0 classrooms in primary schools, and the first three years of primary education.

following: (a) child development outcomes and (b) early grade reading and Mathematics outcomes in Grade 3
- Number of Grade 1 – 3 teachers trained and supported in the delivery of the early grade reading and mathematics program
- Percentage of junior secondary schools applying technology-based Mathematics and Science education in targeted areas

40. This Project is designed as a first phase engagement in the education sector of Eswatini and as such it puts a strong emphasis on strengthening education service delivery and management systems. To this end, the Project aims to put in place the key building blocks that are critical to improve service delivery in ECCDE and basic education, strengthen the management of these sub-sectors and promote accountability for results, as captured by the PDO. By achieving this objective, the Project seeks to contribute towards the higher-level objective of improving quality of basic education in the medium to the long run.

41. In this regard, the Project is fully aligned with the Education Sector Strategic Plan (ESSP) (2022-2034). The overall goal of the ESSP is "children and youth prepared for life through quality education, leading to enhanced social and human capital development and inclusive growth". To achieve this goal, seven key strategic areas (KSAs) have been identified covering all education sub-sectors. The linkages between the Project interventions for the next five years and the KSAs of the ESSP for the next 12 years are highlighted below. A more detailed discussion on the linkage between the ESSP and the Project can be found in Annex 2.

Table 3: Project's Linkage with the Education Sector Strategic Plan (2022-2034)

ESSP KSAs (next 12 years: 2022 - 2034)	Relevant Project Interventions (next 5 years: 2022 - 2027)		
	Early childhood	**Primary**	**Junior Secondary**
1: Improving educational quality and student learning at all levels	• Provision of a holistic ECCDE package consisting of: (i) caregiver training; (ii) Teaching and Learning Materials (TLM); (iii) water and school feeding in targeted centers • Building quality assurance systems including: (i) mapping of ECCDE providers and (ii) regular quality assessment surveys	• Putting in place the building blocks for early grade reading and Mathematics program consisting: (i) in-service training; (ii) TLMs; (iii) assessment of foundational skills; and (iv) strengthening parental involvement.	• Developing and rolling-out an ICT enabled model to improve the quality of STEM education in junior secondary education focusing on: (i) online teacher training and coaching and (ii) improved classroom instruction using ICT tools.
2: Retaining students in school until completion	• System strengthening interventions in ECCDE and primary education (see row above) will contribute towards improving foundational learning, which is expected to improve retention across grades.		• Address barriers to retention by: (i) supporting adolescents through boys/girls' clubs; (ii) supporting the Government to strengthen the OVC grant program and improve its linkage with educational outcomes by: a) undertaking an initial study of the OVC grant, b) pilot and test different options to improve effectiveness and reach of OVC grant, c) offer Technical Assistance (TA) to develop and adapt key documents and policies related to the OVC grant, and d) enroll at least one cohort of students into the OVC grant using the new targeting approach

3: Strengthening entry and exit points of the education system	• Developing and rolling-out an ECCDE quality improvement package		
4: Enhancing teacher development and management	• Supporting the development and rolling-out of in-service training and support programs for: (i) ECCDE practitioners and teachers, (ii) Grade 1-3 teachers, and (iii) junior secondary mathematics and science teachers		
5: Ensuring adequate and equitable education financing	• Ongoing engagement with the Government, including to meet the GPE requirements on sector financing, to rationalize and increase spending, including by reallocating financing to under-funded areas such as ECCDE and non-recurrent expenditure areas in basic education		
6: Further improving access	• Complementing the Government's effort to expand access to Grade 0, by developing and rolling-out an ECCDE quality improvement package		• Testing out and implementing different programs aimed at addressing economic and non-economic barriers to accessing and completing secondary education
7: Strengthening system resilience and preparing for future crisis prevention			• Build capacity in the use of EdTech solutions in basic education including in teacher training and classroom instruction • Supports life-skills education, which will mitigate the socio-emotional impact of the pandemic on adolescents.

B. Project Components

42. The Project consists of four components: (i) Strengthen coordination and regulation of ECCDE and improve quality of ECCDE services; (ii) Improve quality and internal efficiency in basic education; (iii) Project management, and capacity building and technical assistance; and (iv) CERC. The Project will be financed by IBRD (US$27.35 million) and funding from the GPE multiplier grant (US$ 4.75 million). Sub-components focused on foundational skills (sub-components 1.1, 1.2 and 2.1) will be funded through combined financing from the two sources (see Table 4 for the breakdown of the allocation), while sub-components focused on the junior secondary level and project management will be covered by IBRD financing.

43. **The GPE grant resources, in an amount of US$4.75 million for the recipient-executed portion, will be available for joint co-financing, subject to the completion of GPE Membership Process and submission of an appraised and endorsed education sector plan.** The GPE multiplier grant[22] was approved by GPE Board on November 18, 2021. Prior to the transfer of the GPE grant resources, Eswatini is required to complete the GPE Membership Process[23] and submit an appraised and endorsed education sector plan to the GPE Board. The grant agreement will be signed upon compliance of the afore-mentioned conditions, which are expected to be met prior

[22] The GPE Multiplier is an innovative finance instrument that provides an incentive and the financial resources to catalyze more and better investment in education. The GPE Multiplier works alongside other sources of external funding. It can be invested as a grant or used to lower the interest rate on concessional lending, for example from multilateral development banks or bilateral donors.
[23] A process involving 4 steps: 1) expression of interest, 2) confirmation of interest, 3) identification of a constituency, and 4) notification to the GPE Board

to May 31, 2022 for the Grant to be effective by June 1, 2022. In the meantime, project implementation will start with only available IBRD resources. In case the co-financing does not materialize, the Project will be restructured to be proportionately scaled down.

Table 4: Project Components and Sub-Components

Component	Activity	IBRD	GPE	Total
Component 1: Strengthen coordination and regulation of ECCDE and improve quality of ECCDE services (US$5.8 million)	1.1: Systems strengthening to improve ECCDE service delivery (US$1.3 million)	US$0.35 million	US$0.95 million	US$1.3 million
	1.2: Improve the quality of ECCDE services in targeted centers (US$4.5 million)	US$2.5 million	US$2.0 million	US$4.5 million
Component 2: Improve quality and internal efficiency in basic education (US$23.35 million)	2.1 Improve literacy and numeracy in the early grades (US$8 million)	US$6.2 million	US$1.8 million	US$8 million
	2.2: Improve the quality of Mathematics and Science instruction in secondary education (US$12 million)	US$12 million		US$12 million
	2.3: Improve retention in secondary education (US$ 3million)	US$3.35 million		US$3.35 million
Component 3: Project management, capacity building and technical assistance (US$2.95 million)	3.1: Project Management, Capacity Building and Technical Assistance (US$2.95 million)	US$2.95 million		US$2.95 million
Component 4: CERC (US$0).				

44. Across the Project components, interventions related to system strengthening in key areas of the ECCDE and basic education sub-sectors will be implemented at the system level (i.e., nationally and covering all four regional education offices). In addition, different packages designed to improve service delivery at ECCDE, primary and junior secondary levels will be developed and rolled-out in targeted areas to jump start quality improvement in the education system, prioritizing disadvantaged areas. Interventions targeted at ECCDE centers will focus on community and not-for-profit private centers in tinkhundla where public provisioning is low, but the population of young children is high. Interventions that seek to provide direct support to primary and junior secondary schools, teachers and students will be implemented in priority tinkhundla that are rural and have high poverty and dropout rates. The schools covered under the Project will all be not-for-profit. This approach is expected to maximize the impact of the Project in geographic areas that have low human capital outcomes. The Project targeting is summarized in Box 3 and additional discussion is provided under each sub-component below and elaborated further in Annex 2, section A.[24]

[24] Across all interventions, the project will not support for-profit private schools. At the ECCDE level, public Grade 0 classrooms and community ECCDE centers will be the target, while at the primary and junior secondary level government schools and government-aided community and missions schools will be included in the targeted areas.

Box 3: Summary of Project Targeting

A. System strengthening interventions

- ECCDE data system development and utilization
- Establishment and utilization of learning assessment systems (ECCDE, Early Grade Reading and Mathematics assessments)
- Improvement of in-service teacher training and pedagogy support systems at ECCDE, early primary and JS levels
- ICT integration in junior secondary education
- Develop strategies to strengthen the OVC-grant program and improve its targeting and impact
- Overall project management support and capacity building

B. Interventions to be implemented in priority tinkhundla[25]

Quality of education in early years

- Improve quality of ECCDE services in 300 ECCDE centers (180 Grade 0 classes, 15 government pre-schools and 105 ECCDE centers in tinkhundla where public provisioning of ECCDE services is low but the population of children is high)
- Improve literacy and numeracy instruction in early primary grades (243 public primary schools in poor and rural tinkhundla)

Quality of education and improved retention in junior secondary

- Improve quality of Mathematics and Science education using ICT (126 public JS schools)
- Test out the impact of providing tablets for students to improve quality of education (20 out of the 126 JS schools)
- Provide support to adolescents through peer groups and clubs (62 of the 126 JS schools)

Phase	Coverage (#)	Coverage (%)	Total (#)
ECCDE Providers	300	21%	1450
Primary schools	243	40%	610

Phase	Coverage (#)	Coverage (%)	Total (#)
JS schools	126	46%	275

Component 1: Strengthen coordination and regulation of ECCDE and improve access to quality ECCDE services

45. This component aims to strengthen ECCDE service delivery in Eswatini by putting in place the key building blocks that are essential for a well-integrated, multi-sectoral ECCDE system that provides a holistic package of services for children. First, it will strengthen the ECCDE delivery system by improving the quality and utilization of data generated by the system. Second, the Project aims to improve the quality of services delivered by supporting the rollout of the new ECCDE curriculum and testing out a model that provides a holistic set of services to children, aligned with minimum norms and standards and involving all relevant sectors. The model which will be tested out in a targeted number of ECCDE centers and all existing Grade 0 classrooms will be used to lay the foundation to comprehensively improve ECCDE service delivery and ultimately child development outcomes in Eswatini.

Sub-component 1.1: Systems strengthening to improve ECCDE service delivery

46. The objective of this sub-component is to strengthen the ECCDE delivery system by improving the quality and utilization of data generated by the system. Ultimately, the aim is to improve the monitoring and regulation of all ECCDE providers and strengthen coordination across the sub-sector. There are two aspects of data system strengthening support that will be financed under the Project. First, an update of the mapping of all ECCDE

[25] The tinkhundla that will be prioritized under interventions at the ECCDE level will be finalized based on the ongoing ECCDE mapping exercise, giving priority to tinkhundla where public provisioning of ECCDE services is low but the number of young children is high. Across all interventions, for-profit schools will not be included. At the primary and junior secondary level, only public schools (government owned and government aided community and missions schools) will be covered.

providers will be financed by the Project. Second, the Project will finance the development and implementation of a national, periodic assessment of the quality of ECCDE services and child development and education outcomes. Through this support, the Project seeks to build the capacity of the MoET and the DPMO to undertake similar data collection initiatives as part of their regular monitoring and evaluation processes (e.g., embedded in the Education Management Information System (EMIS) and learning assessment systems).

Mapping of ECCDE service providers:

47. The MoET, with financing from the GPE and support from United Nations Children's Fund (UNICEF) has recently completed a mapping of ECCDE service providers to generate a comprehensive overview of the ECCDE services coverage in Eswatini. The mapping will form the basis for moving towards a systematized process for better monitoring and coordination of the sub-sector, where the data can be consolidated into the overall MoET EMIS system. The MoET with support from UNICEF is in the process of developing a web based EMIS system which provides real time information at all levels with unique PIN numbers to track schools, learners, teachers and non-teaching staff. Key quantitative ECCDE indicators will be integrated and updated on an annual basis using the new web based EMIS system under the Annual Education Census Framework. However, given the regular turnover of ECCDE service providers in Eswatini and considering that many providers are not registered under the MoET, the Project will finance another physical mapping of ECCDE providers around year 4 of the Project. The mapping will focus on what ECCDE services are available in Eswatini and where these services exist. It will seek to collect and update information on, but not limited to, the location, number of children by age category, number of practitioners/ caregivers/ teachers, some details on the learning environment and the types of services offered.

Assessment of the Quality of ECCDE service provision:

48. The Project will also finance a more in-depth periodic quality assessment in a nationally representative sample of ECCDE service providers to better understand the quality of ECCDE services provided and measure early child development and educational outcomes. The quality assessment survey that will be supported by the Project will build on existing tools such as the Measuring Ealy Learning and Quality Outcomes (MELQO)[26], which focuses on children's learning and development outcomes and the quality of early learning environments, and Teach ECE which focuses measuring teaching quality in the classroom. The quality assessment survey will also collect information about the resilience of ECCDE facilities against climate change and related disaster risks, particularly storms and floods. While the Project does not support any construction, the data collected through the Project will provide the MoET with invaluable information that can be used to plan and enhance the climate resilience of ECCDE infrastructure through future rehabilitation and expansion efforts.

49. **Targeting:** Interventions under sub-component 1.1 will be implemented nationally. The mapping of ECCDE service providers will cover all public and private service providers in the country. The quality assessment survey will cover a nationally representative sample of providers, comprised of a sample of ECCDE centers that will be supported under sub-component 1.2 and non-Project supported providers. Capacity building support to strengthen data management and utilization will be targeted centrally at the MoET and DPMO and the regional education offices.

Sub-component 1.2: Improve the quality of ECCDE services in targeted centers

50. This sub-component seeks to support the rollout of the new ECCDE curriculum (Grade 0) in targeted

[26] The MELQO tools were developed by UNICEF, the World Bank, and the Brookings Institution, and includes a child direct assessment, classroom quality observation, and interviews with parents, teachers and directors.

ECCDE centers, laying the foundation to systematically improve quality of ECCDE services in Eswatini. Through this intervention, the Project aims to achieve two objectives: (i) ensure the provision of high quality ECCDE services in targeted centers, many of which cater to underserved communities; and (ii) in doing so, develop and test an effective model to rollout the new curriculum and provide a holistic package of ECCDE services nationally.

Standard package of support:

51. The standard package of support that will be financed under this sub-component will include the provision of indoor and outdoor teaching and learning and play materials, in-service teacher training and continuous in-classroom support to build teachers/caregivers pedagogical capacity to implement the new curriculum, water tanked to ECCDE centers that do not have access to water, and meals provided to children in targeted ECCDE centers through the expansion of the existing school feeding program. These interventions will be targeted at Grade 0 classrooms in public primary schools and community and non-for-profit ECCDE centers, focusing on 5-year-old children. However, many community- and private ECCDE centers also cater to children under the age of 5; hence the Project will provide support to help finalize the curriculum for these younger ages and develop the teacher training program.

52. Given the capacity gap of the MoET and the DPMO, the Project will finance technical assistance to support the undertaking the following: (i) reviewing and finalizing the Grade 0 curriculum, (ii) finalizing Grade 0 workbooks and teacher guides that are in the process of being developed, (iii) developing training manuals for teachers and practitioners and training material for school administrators and inspectors so that they can provide continuous in-classroom support, (iv) reviewing and updating the 2021 curriculum for 3 to 5-year-old children, (v) developing training manuals for teachers to support younger children in ECCDE centers, (vi) piloting teaching and learning materials and rapidly evaluating to refine and finalize the package; and (vii) training of master trainers.

53. Once the package is developed with support from the TA, the Project will also finance key costs related to the provision of in-service training to teachers, school leaders and inspectors in targeted providers (e.g., materials, transport, etc.). A strong focus of the teacher training will be on building teachers' capacity to help children who are not meeting developmental milestones catch-up, including boys and children from low-income households, which will be critical to close gender gaps and other disparities in early childhood outcomes. In-service training will take place twice under the Project, with the initial training of Grade 0 and ECCDE teachers followed by refresher training in later years. The sub-component will also support the implementation of follow-up support for teachers in the classroom. The in-classroom support will utilize the ECCDE zones, where each zone has one ECCDE officer; each zone officer will support a cluster of ECCDE providers.

54. Under this sub-component, the Project will finance the procurement of water tanks and support the tanking of water to targeted ECCD centers that do not have piped water. The Project will also finance the provision of nutritious meals for children in selected centers, focusing on poor and rural areas, that are not covered by the current school feeding program.[27] In doing so, the Project aims to lessen the impact of climate change on households and communities, especially from the adverse impacts of droughts. Droughts, which are becoming more frequent in the country due to climate change, threaten households' food security and access to clean water, which can have detrimental impact on children's overall development and learning. By ensuring that children in rural and disadvantaged communities are receiving nutritious meals and clean water, the Project will help reduce

[27] Financing of food expenditures have been authorized as eligible under the project by the Regional Vice President office (AFEVP) of the World Bank on November 18, 2021.

the impact of drought and food insecurity on children at a critical stage in their lives.

55. **Targeting:** This sub-component will be implemented in 300 ECCDE centers and Grade 0 classrooms in underserved areas, many of which are also poor and rural communities. There are currently 180 Grade 0 classrooms in public primary schools in Eswatini – 45 per region and 15 standalone government pre-schools that will be supported under the Project. The additional 105 ECCDE centers will be community and not-for-profit private centers in tinkhundla where public provisioning is low, but the population is high. The final list of ECCDE providers will be determined based on the data from the ongoing mapping exercise.

Component 2: Improve quality and internal efficiency in basic education

56. This component aims to strengthen the provision of basic education, focusing on two priority areas: (i) system strengthening to improve the quality foundational literacy and numeracy skills in early primary grades as well as Mathematics and Science education in junior secondary education, and (ii) testing out options to improve student retention through the end of junior secondary education by piloting different interventions in tinkhundla with very high dropout rates. Both of these interventions areas are expected to contribute towards the recovery and rebuilding of the basic education system following the devastating impact of the COVID-19 pandemic.

Sub-component 2.1. Improve literacy and numeracy in the early grades

57. The main objective of this sub-component is to put in place the key building blocks that are needed to improve the teaching and learning of foundational literacy and numeracy skills in early primary grades. To this end, this sub-component will finance the development of an Early Grade Reading (EGR) and Early Grade Mathematics (EGM) program that is aligned with the new Competency Based Education (CBE) curriculum in English, siSwati, and Mathematics for Grades 1 to 3. The four core elements of the proposed EGR and EGM program are: (i) development and provision of materials for teachers and learners, (ii) training and follow-up support for teachers, (iii) implementing learning assessments, and (iv) improving parental engagement; each of these core areas are discussed in more detail below. In addition, the Project will finance the roll-out of the EGR and EGM program in targeted areas of the country.

Materials for teachers and learners:

58. The Project will finance the development and provision of teaching and learning materials for teachers and learners that are aligned with the new curriculum and complements existing resources, to promote learner-centered teaching practices in early grade reading and Mathematics, based on sound pedagogical theory. The MoET has already developed learner books and teacher guides for Mathematics, English and siSwati for Grades 1-3 and there is no imminent need for these materials to be revised. The Project will provide support to ensure that there is a sufficient supply of these materials in classrooms. Moreover, the Project will finance the development or adaptation of additional supplementary materials including reading materials, worksheets, remedial and enrichment activities, continuous assessment tools, and detailed guides for teachers on how to support learners and bridge learning gaps. Teaching and learning materials (e.g., supplementary reading materials for children) that will be developed under the Project, when appropriate, will include information on climate change and related topics, in a way that is accessible and engaging to young children, to raise their awareness about critical climate related issues that affect their environment.

Training and support for teachers:

59. The sub-component will finance the development of an in-service teacher training program to build

teachers capacity to implement the new curriculum and the EGR and EGM program in their classrooms. With the introduction of the new curriculum, teacher training has largely involved basic orientation workshops for primary inspectors, In-Service Education and Training (INSET) officers, and subject panel members around the curriculum and half-day orientation workshops for teachers to introduce them to the new materials. This support is unlikely to be sufficient to build teachers pedagogical skills to effectively teach numeracy and literacy skills to their students. To fill this gap, under the Project, an enhanced training program will be developed by INSET with technical assistance financed through the Project. A core group of master trainers, comprised of experts from INSET, as well as other departments in the MoET such as the National Curriculum Council (NCC) and primary inspectorate, and as needed experts from teacher training institutions will be trained on the EGR and EGM program with financing from the Project. This core group will then train a larger group of trainers, who will then train and support teachers across zones within the four regions (using a clustered training workshop model). In addition, the Project will support follow-up supervision and in-classroom coaching and mentorship for teachers by the trainers, including using a peer-to-peer support model at the cluster level. Principals will also be trained on the new curriculum and the roll-out of the EGR and EGM program and on how to provide support for teachers.

Assessment:

60. The Project will provide support to strengthen the assessment of foundational skills both in a classroom setting and at the system level. First, as part of the in-service teacher training program (see above), teachers will be trained on how to use continuous assessments as an integral part of their classroom instruction, by regularly assessing their students' learning progress, identifying gaps and providing tailored support. In addition to training, teachers will also be provided with high-quality assessment tools (As part of the TLM package their will receive), which they have the autonomy to adapt to their classroom instruction. This support is expected to reduce the burden on them by eliminating the need for each teacher to develop their own assessments. The Project will also finance the development and implementation of standardized national early grade reading and Mathematics assessments (EGRA and EGMA) at the Grade 3 level. The EGRA and EGMA assessments will be conducted on a periodic basis (every two to three years) in a nationally representative sample of schools. The purpose of a standardized national assessment would be to measure gains in foundational skills over time at the system level. Capacity building support will be provided to the Examination Council or Eswatini (ECESWA) and the MoET to gradually institutionalize EGRA and EGMA in the education sector's quality assurance systems.

61. **Improving parental engagement:** The sub-component will also support the MoET to develop different strategies to improve parents and care-givers engagement in their children's education and empowering them to be involved in their children's literacy and numeracy development. This will mainly be done building school leaders capacity (as part of the training they will receive) on different ways to improve parental involvement.

62. **Targeting:** System strengthening support across the four core areas of the EGR and EGM program will be targeted centrally at the MoET as well as the four regional education offices. The full package of EGR and EGM interventions under this sub-component will be rolled-out in 243 primary schools in the targeted priority tinkhundla (i.e., those with high poverty and dropout rates) with possibility of expanding to additional schools.

Sub-component 2.2. Improve the quality of Mathematics and Science instruction in secondary education

63. The objective of this sub-component is to support the integration of innovative technology-based service delivery approaches in basic education, focusing on the improvement of the quality of Mathematics and Science education in junior secondary schools and on closing gender disparities in STEM education. To this end, the Project will finance the adaptation and rollout of the Progressive Mathematics Initiative (PMI) and Progressive Science

Initiative (PSI) program. In doing so, the Project aims to respond to the stark learning gaps and digital divide observed between children from wealthier and poorer households and from urban and rural communities, which was laid bare during the COVID-19 pandemic. The PSI-PMI model, which was developed by the New Jersey Center for Teaching and Learning (NJCTL), uses digital technology to create a student-centered classroom environment that fosters interactive teaching and learning methods and group discussion and peer-learning amongst students. In addition, the program includes extensive online in-service teacher training, which focuses on teachers' Science and Mathematics content knowledge and pedagogical skills. The model has been successfully implemented in several countries in the region and has shown positive results - both in terms of improved quality of classroom instruction as well as higher levels of student learning.

64. The teacher training part of this intervention will put strong focus on addressing teacher gender biases that may impact their instruction and their interactions with students, while also equipping them with skills and tools to foster a classroom environment that encourages girls to develop into strong STEM students. To this end, as part of the program development and adaptation process, an assessment on the classroom environment as well as on teachers' behavior and pedagogical practice in the classroom will be conducted to identify factors affecting girls' performance in STEM subjects. Based this assessment, relevant training content will be integrated into the PSI-PMI teacher-training program to help teachers develop gender-responsive pedagogical approaches. Through this approach, the Project aims to ensure that teachers provide equal learning opportunities for girls and boys, and challenge cultural and gender norms that affect girls' self-esteem, self-belief, and performance in Mathematics and Science. In addition, the Project will promote gender equity within this sub-component by ensuring that women are prioritized to participate as trainers, coaches and as trainee teachers, including a unit on gender equity in STEM course for the trainers and coaches, and ensuring that all classroom instruction materials developed under the Project are free of gender stereotyping and harmful bias.

65. To help the MoET implement the PSI-PMI program, the Project will finance the hiring of NJCTL to support the implementation of the program. Specifically, the following key areas will be financed under this sub-component. As a first step, the Project will finance a review of the alignment between the PSI-PMI program and the Eswatini junior secondary Mathematics and Science curriculum. In addition, an assessment of the classroom environment and teachers' practices will be conducted to identify factors that adversely affect girls' performance. Based on the curriculum review and assessment, the PSI-PMI program will be adapted for the Eswatini context and then will be piloted and evaluated in a sample of schools. Building on the pilot and after modifying the intervention based on the findings of the evaluation, the model will be scaled up across all four regions in target schools. As part of the scale up, all Mathematics and Science teachers in target schools will be trained on the new teaching and learning approach and gender responsive pedagogical methods, through a combination of online and face-to-face training.[28] In addition, classrooms will be equipped with interactive projectors, whiteboards, necessary software, and ancillary equipment. In addition, high priority schools will receive tablets for students which will be used to test the differential impact of the model on learning (for students with and without devices).

66. During the implementation of the online teacher training, teachers' content knowledge and pedagogical skills, including on how effectively they support girls and boys, will be regularly assessed through assessments and lesson observations (through video recordings which teachers will make and submit on a regular basis), which are embedded in the NJCTL's online teacher training courses. To assess the students' learning outcomes, teachers will

[28] The online training can occur at different times and spaces particular to each teacher, as opposed to synchronous training which takes place at the same time for all teachers, usually through live online meetings or in-person sessions.

use the formative assessment tools they will have access to as part of the PSI-PMI package. If students need additional support, teachers will provide remedial materials and support.

67. By strengthening the use of ICT in teacher training and starting to lay the foundation for e-learning technology to be integrated into basic education service delivery, the Project is expected to improve the education system's resilience and ability to tackle disruptive socks, including pandemic and climate-related by making EdTech more accessible. By supporting online in-service teacher training, the Project will contribute towards reducing the carbon footprint of in-service teacher training programs, by eliminating the need for extensive travel by teachers and trainers that would have been required for face-to-face in-service training. In addition, climate change related topics will be included as part of the content that will be provided to teachers and students through the PSI-PMI curriculum to build their awareness about risks and mitigation and adaptation measures.

68. **Targeting:** Through a phased approach, this intervention will be implemented in 126 junior secondary schools in priority tinkhundla that have high poverty and high dropout rate as well as in a few low performing schools in peri-urban areas. In addition, 20 pilot junior secondary schools will receive the full package of support, which will include tablets for students, in addition to the teacher training and classroom instruction interventions. These 20 pilot schools will be used to test out the differential impact of the PSI-PMI model on student learning with or without devices for students, in order to inform future expansions of the program. The sub-component will also provide capacity building support to the MoET, University of Eswatini, and other teacher training institutions (including hardware and training), to gradually transfer the program to the Government.

Sub-component 2.3. Improve retention in secondary education

69. The objective of this sub-component is to strengthen existing interventions as well as test out new approaches to address economic and non-economic barriers that lead to high dropout rate in junior secondary education. Specifically, the program will provide financing and technical assistances to strengthen programs that provide support for adolescent boys and girls (e.g., through life-skills education and mentorship) to stay in school. In addition, the sub-component will finance the assessment and review of key aspects of the OVC education grant program, test out different options to improve its effectiveness in improving retention among poor and vulnerable children, and enroll at least one cohort of students into the OVC grant using the new approaches. The two areas of intervention under this sub-component are discussed in more detail below:

Strengthening the OVC education grant program:

70. Under this intervention, the Project seeks to strengthen the OVC education grant program to address economic barriers that prevent boys and girls from accessing and completing secondary education. The OVC-grant program provides financial support to needy children enrolled in government junior and senior secondary schools. The grants, which are intended to cover tuition and examination costs, are directly paid to schools on behalf of each beneficiary student. While the grant amount for children to attend public schools is standard, school fees are not standardized and vary considerably amongst secondary schools and regions and often the grant amount it not sufficient to cover the direct costs of schooling. This highlights the need to assess the grant amount to ensure the effectiveness of the program to achieve its stated objective of improved educational outcomes. Household survey data and consultations with the MoET and the DPMO also show that there is room to improve the targeting and reach of the program.

71. To strengthen the OVC grant program and improve its linkage with educational outcomes, especially in terms of the retention of students in secondary grades, the Project will provide financing and technical assistance

to: (i) undertake an initial study that reviews the current targeting, coverage, amount and alignment with school fees of the OVC grant; as well as identify the barriers that prevent eligible beneficiaries from poorest households from accessing the grant; and assess the impact of the grant, and propose relevant changes/options to strengthen the OVC grant program; (ii) pilot and test different options to improve the effectiveness of the OVC grant in selected tinkhundla that have the highest poverty levels and secondary education dropout rates in the country. The options to be tested may include different amounts of the grant, different targeting approaches, and different distribution mechanisms.

72. Based on the findings of the pilot, (iii) technical assistance will be provided to the DPMO and MoET to develop and revise the following documents: (a) develop a strategy to improve the impact and cost-effectiveness of the program; (b) update and strengthen the National OVC Guidelines to incorporate changes to the targeting approach, grant amount, and any other related matters; and (c) review the Eswatini National Policy for Children2. The development and revision of these policy documents will involve the hiring of TA (consultants) to work with the DPMO and other stakeholders but procurement for these consultants will be done through the MoET's PMU in consultation with the DPMO.

73. Once the National OVC Guidelines have been approved by Cabinet, the Project will support the DPMO and MoET to (iv) enroll at least one cohort of students into the OVC grant program using the new targeting approach across the country which includes support for at least 50 OVCs with Special Education Needs (SEN) and provide them with the necessary assistive devices (wheelchairs, spectacles, hearing aids, walking aids, etc.).

74. To ensure sustainability in the implementation of the revised National OVC Guidelines related to the grant, the Government of the Kingdom of Eswatini, will ensure that the cohort of selected to receive the Grant under the revised guidelines will continue to receive the grant till they complete secondary school and track them through the use of the Information Management System linking the DPMO and EMIS, into post-secondary education placements including other available social services (e.g. Livelihoods projects) in their respective communities. Furthermore, the cohort will be enrolled into the in-school extra-curricular boys' and girls' clubs also supported under the Project.

75. The sub-component's objective to improve the targeting and impact of the OVC grant program to ensure that poor households receive support to send their children to secondary school will contribute towards building communities' resilience to the impacts of climate change on human capital formation. By providing support to cover school fees and related costs in pilot areas and by developing a strategy for improving the OVC-grant nationally, the Project will contribute towards the reduction of the burden on poor household to choose between providing food and education for their children when faced with climate shocks such as droughts or floods.

Support for girls and boys to stay in school:

76. This intervention will support the MoET to scale up existing in-school and out-of-school programs that provide non-financial support for adolescent boys and girls and have shown promising results, especially in terms of improving retention/re-enrollment in secondary education. The sub-component will finance the review and adaptation of select promising programs and the roll-out of these programs in targeted areas. Through this support, the sub-component aims to equip adolescent boys and girls with a wide range of psychosocial skills and relevant knowledge (e.g., communication, assertiveness, self-awareness, information on nutrition, substance abuse related issues, hygiene, sexual and reproductive health, teen pregnancy, gender-based violence (GBV), career choice etc.) in order to empower them to effectively manage day-to-day life challenges, make informed decisions, and successfully transition into adulthood. In addition, a key element of the life-skills program will be

content to raise adolescents' awareness about climate change and effective actions they can take to build climate resilience and mitigate its impact within their communities.

77. Through this intervention, the Project will tackle issues such as adolescent pregnancy, substance abuse, and other risky behaviors, that are critical factors leading to dropout in Eswatini as well as gender norms and biases that impact career choice of youth, both of which have lasting adverse impacts into adulthood. Focus will also be given to raising adolescents' awareness about GBV and sexual exploitation and harassment (SEAH) risks and give them information on how to access referral services and programs. Additional measures aimed at preventing and mitigating risk of GBV and SEAH are included in the Project's Environmental and Social Management Framework (ESMF).

78. To implement this intervention, the Project will provide support to the MoET first to undertake an initial assessment of existing programs that are being implemented by NGOs in the targeted areas. During project preparation, the MoET identified several relevant programs that may be engaged in this intervention, which will be selected through a comprehensive evaluation. Financial support will be provided by the sub-component to help the selected NGOs in close collaboration with the MoET to adapt, refine and strengthen their programs, train mentors and educators, and develop the required materials. The Project will provide financing to cover operational costs to roll-out the refined programs using both within-school and out-of-school channels including using boys' and girls' clubs and other safe space approaches. In addition, the Project will finance an evaluation of these programs to assess the effectiveness of the interventions to inform future scale up efforts.

79. This sub-component will be implemented in 9-high priority tinkhundla (constituencies) that have high poverty and high dropout rates based on an analysis of annual school census data and household survey data.

Box 4: Project's response to COVID-19 pandemic

The Project does not include a separate component for COVID-19 response. However, the interventions under Component 1 and Component 2 will directly contribute towards the education sector's short- to medium-term response to the COVID-19 pandemic in several ways, a few of which are highlighted below:

- The strengthening and utilization of data collection and learning assessment systems (under Sub-Component (SC) 1.1 and 2.1) will provide invaluable data and information to assess the pandemic's impact on the education system, including on student learning. The baseline data from these assessments will be critical for the MoET to design and implement recovery plans, while data from future rounds of assessment will be useful to monitor progress.
- Quality improvement interventions at the system and school level (under SC1.2, 2.1 and 2.2) will play a critical role in the recovery of learning following the prolonged disruption to schooling. Particularly, interventions related to in-service teacher training and support for teachers at the ECCDE, primary and junior secondary levels will have a critical role in building teachers' capacity to use continuous assessment to diagnose learning gaps and support their students to catch up by implementing "teaching at the right level" approaches.
- The integration of technology in teacher training and classroom instruction (under SC2.2), with strong focus on marginalized parts of the country, is expected to contribute towards the recovery of learning, build resiliency of the education system to future shocks and closing the digital divide in the education system.
- Interventions related to student retention (under SC2.3), which are targeted towards areas that have high poverty and high dropout rate and children who are at risk of dropping out, will play an important role in bringing back all children to schools and supporting them to complete their secondary education.

Component 3: Project Management, Capacity Building, and Technical Assistance

80. The objective of this component is to strengthen key management capacities of the MoET, which is the main implementer of the Project, as well as build the Project-related required institutional capacity of regional and local education offices. The following key areas will be supported under the component.

81. The Project will strengthen MoET's capacity to manage and implement the Project. Prior to Project effectiveness, the MoET will establish the Project Support Unit (PSU) to manage key aspects of Project implementation, including in the areas of procurement, financial management, supervision of Project activities, M&E and reporting, and environmental and social risks management. As fully described in Annex 1 , the PSU will have a 'hybrid' structure that is comprised of full-time MoET staff seconded to the PSU and full-time consultants hired under the Project in key operational areas (procurement, financial management, Monitoring & Evaluation (M&E) and environmental and social safeguards).[29] This 'hybrid' approach allows MoET staff to shadow Project-hired qualified consultants to build their capacity and reduce future reliance on external support for project implementation. The Project will also cover selected operating costs of the PSU related to project management.

82. In addition, the Project will finance training for MoET and regional and local education office staff in the areas of M&E, data management and quality assurance and accountability systems as well as climate change and gender equity in basic education. As the need arises, the Project will also finance study tours for the MoET to learn from countries in the region that have implemented similar interventions successfully[30].

83. Second, under this component, the Project will provide TA to undertake select studies, including: (i) an assessment of challenges and opportunities in basic education to promote inclusive education; and (ii) strategies to integrate digital technology in education service delivery including to improve gender equity in STEM.

84. Lastly, the Project will provide support to the MoET to strengthen citizen-engagement systems to ensure beneficiaries and stakeholders have a platform to raise their concerns, provide input and enhance accountability for results under the Project and in the basic education system more broadly. To this end, the Project will finance regular surveys of beneficiaries using locally available technology (mobile monitoring system) and provide technical assistance to integrate these surveys into the regular MoET data collection systems. Initially, the mobile monitoring system (MMS) will use the U-report system that is developed and supported by UNICEF. This intervention will also support the functioning of a grievance redress mechanism operating at the national, regional and local levels.

Component 4: CERC

85. This component is included in accordance with paragraphs 12 and 13 of World Bank Investment Project Financing (IPF) Policy– contingent emergency response through the provision of immediate response to an eligible crisis or emergency, as needed. The component will allow the Government to request from the World Bank rapid reallocation of Project funds to respond promptly and effectively to an emergency or crisis. This could be the result of a natural or climate change related disaster or other crisis that have the potential to cause adverse impacts on

[29] The project will also finance the hiring of consultants in key technical areas required in the implementation of the various sub-components; but these TAs are financed under the respective sub-components and are discussed under Component 1 and 2.
[30] It should be noted that training and knowledge transfer in technical areas is also integrated in technical assistance that will be provided under other components.

the education sector. An operational manual for this component will be developed if and when needed.

C. Project Beneficiaries

86. It is expected that the Project will benefit 68,340 students, 1,841 teachers and 243 school leaders during the project implementation timeline. The direct beneficiaries under each of the Project components are described below:

- **Component 1**: The mapping and quality assessment to improve the quality and utilization of data generated in the system will be implemented in all ECCDE centers in Eswatini and will benefit current and future ECCDE students by contributing towards better regulation and coordination of the sub-sector. To be conservative, these beneficiaries are not accounted as direct beneficiaries under the Project. A comprehensive package of services will be provided to a total of 300 Grade 0 classrooms (5-year-old children) and private/community ECCDE centers serving poor and underserved communities (children ages of 3 and 5-years) and will also support children with special needs in these service provisioning locations. An estimated 36,000 students and 450 ECCDE teachers/practitioners are expected to benefit directly from the Project interventions.

- **Component 2**: Interventions under sub-component 2.1, which focus on improving literacy and numeracy in the early grades, will benefit multiple cohorts of Grade 1 to 3 students in the 243 target primary schools. Overall, a total of 37,500 students, 1000 teachers and 243 school leaders are expected to benefit. Sub-component 2.2, which supports the integration of ICT in Science and Mathematics education in junior secondary schools will cover 126 junior secondary schools and will benefit an estimated 21,840 junior secondary students across multiple cohorts as well as about 441 teachers. Sub-component 2.3 will target a sub-set of schools supported under sub-component 2.2, focusing on tinkhundla with high dropout and poverty rates; an estimated 10,800 students will benefit from interventions under this sub-component 2.3. However, since these beneficiaries are also included under sub-component 2.2, and hence they are not double counted.

Table 5: Estimated direct beneficiaries

	Number of schools	Total number of students	Total number teacher	Total number of school leader
C1	300 ECCDE	9,000	400	0
SC 2.1	243 primary schools	37,500	1000	243
SC 2.2	126 Junior Sec schools	21,840	441	0
SC 2.3	62 Junior Sec schools	10,800	NA	0
	Total	68,340 (beneficiaries under SC2.3 are also included under 2.2, hence not double counted)	1,841	243

Note: These estimates are conservative estimates taking into account the following key issues: (i) post-COVID-19 enrollment data is not yet available and the full impact of the pandemic on enrollment is not known, hence stringent assumptions are made in the estimation of student beneficiaries in the coming few years; (ii) there is still risk that the ongoing pandemic will affect implementation early on, which might reduce the number of beneficiaries that will be reached by the Project. These estimates also do not include student and teachers that will benefit from the system strengthening interventions that are implemented centrally.

D. Results Chain

E. Rationale for World Bank Involvement and Role of Partners

87. The rationale for the World Bank's support for Eswatini's human capital agenda includes: (a) the World Bank's long-term and systemic engagement in human development sectors in Eswatini; (b) its multi-sectoral expertise to support the Government tackle the most critical constraints to student learning and retention holistically; and (c) its ability and convening power to crowd-in development financing and technical support as well as bring together different development partners.

88. **The World Bank has been a consistent and significant funder of human development sectors and other related sectors in Eswatini over the years.** It currently finances operations in health, nutrition, and water and sanitation. Given the COVID-19 crisis, the World Bank is supporting the Ministry of Health through the Eswatini COVID-19 Emergency Response Project (P173883, US$14.0 million) to respond quickly and contain the virus by limiting transmission, investing in disease surveillance, improve testing and provide the necessary training and protective equipment needed for health care workers. The World Bank is also supporting the new Health System Strengthening for Human Capital Development in Eswatini (P168564, US$20.0 million) as well as the Kingdom of Eswatini: Water Supply and Sanitation Access Project (P166697, US$45.0 million) and the Network Reinforcement and Access Project (P166170, US$40.0 million). This operation is also aligned with a programmatic series of two Development Policy Loans (DPL) to support the Government of Eswatini's economic reform program. Following the completion of the first DPL (Eswatini Economic Recovery Development Policy Loan I, P174447, US$40 million), the forthcoming second DPL operation (Eswatini Economic Recovery Development Policy Loan II, P175317, US$75 million) focuses on stabilizing the country's fiscal position, improving competitiveness and supporting economic recovery, while at the same time supporting policy responses to strengthen the health system and mitigate the impact of the COVID-19 pandemic on the poor and vulnerable. The DPL focuses on three key pillars: protecting lives and livelihoods, strengthening transparency and public financial management, and opening up of the economy and improving competitiveness. Considering that the proposed operation envisions a multi-sectoral approach to human capital development, the experience the World Bank brings from ongoing operations to the education sector is particularly relevant. Moreover, the World Bank is also in a position to facilitate collaboration and synergy between the proposed Project and these and future operations.

89. **Building on World Bank experience and lessons learned in the education sector across the world, the World Bank can provide strong technical guidance and implementation and supervision support to enhance project implementation which in turn will strengthen the basic education system.** In this regard, using the World Bank's HCP framework, it is providing technical guidance to the project design so that the education system is strengthened in critical areas, children can benefit from multi-sectoral interventions through improved targeting criteria, digital interoperable platforms across sectors are finally effective and efficient management of service delivery. In addition, the World Bank has extensive experience overseeing GPE financed projects in the region, which involves coordination with several development partners, academics and civil society organizations through the Local Education Group (LEG). The World Bank has the institutional knowledge and in-house financial and technical expertise to administer the GPE grant component of the Project.

90. **The World Bank has effectively supported the Government to pool funding from different sources and help align the Project with interventions financed by other development partners, by leveraging its convening power.** There are several development partners in Eswatini that are actively supporting the education sector and human capital development broadly including GPE, UNICEF, United Nations Educational, Scientific and Cultural Organization (UNESCO), Government of Japan, and the European Union. The World Bank and the Government are jointly and actively engaging with these partners to facilitate better collaboration and enhance complementarity

in several ways. First the proposed Project will be financed jointly between the World Bank and GPE, enabling the Government to design a comprehensive Project covering all key aspects of basic education. The World Bank has provided technical support to the Government to mobilize this funding. Second, the Government and the World Bank are working closely with the LEG, which includes all key development partners, to strengthen the oversight of the Project and accountability for results. The World Bank's support in this area will continue throughout Project implementation. Third, where opportunities exist, synergy with programs supported by development partners are integrated in the project design (e.g., the school feeding intervention under sub-component 2.1 will leverage systems established through WFA support; citizen engagement mechanisms of the Project will use the MMS system supported by UNICEF). The main operations currently supported by Development Partners (DPs) are presented in Annex 5, and through ongoing dialogue, other ways for collaboration will be explored.

F. Lessons Learned and Reflected in the Project Design

91. **This will be the first education operation supported by the World Bank in Eswatini.** While there are no country-specific lessons that can be directly drawn on from World Bank supported operations in Eswatini's education sector, the design of the Project draws on other education projects in the World Bank Education portfolio in the region and operations and projects across other human development sectors in Eswatini-particularly health. In addition, the Project design strongly leverages the education sector analysis and the Human Capital Note titled "Investing in Human Capital in Eswatini: A Framework for a Coordinated Multi-sectorial Approach", which were completed in 2021 with support from the World Bank. Some of the key lessons reflected in the design of the Project from these sources are summarized below:

92. **Strengthen coordination and collaboration with other Ministries that are critical for human capital development.** Experience from ongoing operation and findings reflected in the Human Capital Note show that a coordinated and harmonized approach across key human development sectors is needed to ensure that all children grow up healthy and reach their maximum learning and development potential and all youth become productive and contributing citizens of the country. Leveraging this lesson, across key intervention areas, this Project promotes a multi-sectoral approach to ensure that children are provided with a package of services to ensure that they are reaching key developmental milestones and are completing their basic education. In order to ensure collaboration and coordination among relevant Ministries, the Project will include an inter-ministerial oversight and advisory group– the Project Steering Committee.

93. **Support demand- and supply-side interventions.** From a design perspective, the Project's approach to improve student retention underscores that 'supply-side' interventions are not enough to address the low transition to and high dropout rates across secondary grades. A key lesson that has emerged from ongoing projects in the region, including in Lesotho, is that interventions aimed at improving learning environments and quality of teaching are not adequate to address the high dropout rate at the secondary level, as they do not address critical demand-side constraints to school attendance such as the direct and indirect costs of schooling, pregnancy among adolescent girls and other vulnerabilities faced by both boys and girls. The Project design takes these lessons into account by supporting the MoET to scale up existing in-school and out-of-school programs that provide different types of support for adolescent boys and girls, including using life-skills education, safe space and mentorship etc., and have shown promising results, especially in terms of improving access to and retention/re-enrollment in secondary education; as well as strengthening the OVC education grant program.

94. **Integration of digital technology in basic education service delivery.** Lessons that are emerging from the ongoing COVID-19 pandemic show that education systems that are fully reliant on the traditional service delivery

model are vulnerable to disruptions and are missing out on innovative approaches that can be used to improve quality education. The need to leverage technology to strengthen the basic education system has emerged as a key priority for Eswatini. Incorporating this lesson, the Project applies several approaches to integrate technology to improve education service delivery. Specifically, technological solutions will be used to support the professional development of teachers and improve classroom instruction in Mathematics and Science at the junior secondary level. In addition, locally accessible technology such as SMS and phone surveys will be used to improve citizen engagement and accountability systems. Capacity building support will also be provided to the MoET so that they can build on these interventions and expand the integration of EdTech in basic education provision.

95. **Building teachers capacity to address gender gaps in education:** There is extensive evidence globally showing that teachers' perceptions about boys' and girls' ability to learn (e.g., in early childhood boys are often perceived as disruptive and difficult to teach and in STEM education girls are perceived as less capable) is a critical factor that can prevent diverse students from thriving and persisting in basic education, including in STEM subjects. Teachers unconscious bias and perceptions about their students has been shown to influence students' self-perceptions, beliefs, and achievement. While evidence from developing countries is lacking, there are many studies from developed countries that show that teacher-targeted interventions (e.g., in-service professional development) that leverage the relevant psychological mechanisms (e.g., awareness about unconscious biases, motivation, individuation, and empathy) have substantial promise to reduce teachers' biases and harmful perceptions and improve the outcomes of students who are historical marginalized (Nagdi and Roehrig, 2019[31]; Dee and Gershenson, 2017[32]; Sansone, 2017[33]). This lesson from other countries is integrated in the project design, by incorporating relevant training for teachers on gender disparities in education and how to address them (e.g., as part of in-service training for ECCDE teachers and the online teacher training for Mathematics and Science teachers in junior secondary). Specifically, the trainings will aim to build teachers' capacity to support both boys and girls, by implementing student-centered and tailored pedagogical approaches in ECCDE and applying female friendly teaching approaches in STEM education at the junior secondary level.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

96. The MoET is the primary implementing agency and will be responsible for the overall coordination and implementation of the Project. The Project will be implemented using existing structures and systems at all relevant levels of the education system.

97. **The Principal Secretary (PS)** of the MoET, accountable to the Minister MoET, will act as the Head of the Project, providing strategic vision and overall leadership in the management of the Project. In this capacity, the PS MoET will ensure that the implementation of the Project is carried out in strict alignment with the Project's Legal Agreement and Financial Agreement (FA) and Project Operational Manual (POM) and will, to the best of his/her abilities, warrant that the PDO, intermediate and final targets of result indicators, as fully described in the

[31] El Nagdi, M. and Roehrig, G.H., 2019. Gender equity in STEM education: the case of an Egyptian girls' school. Theorizing STEM education in the 21st century.
[32] Dee, T. and Gershenson, S., 2017. Unconscious Bias in the Classroom: Evidence and Opportunities, 2017. Stanford Center for Education Policy Analysis.
[33] Sansone, D., 2017. Why does teacher gender matter?. Economics of Education Review, 61, pp.9-18.

Project's Results Framework (RF) and Monitoring Matrix, are achieved.

98. **The Director of Education**, accountable to the PS of the MoET, would be responsible of the overall coordinating effort required for the implementation of the Project's sub-components. The Director will carry out this coordination effort under the strategic guidance provided by the PS. In this capacity, the Director of Education MoET becomes the factual Project Director.

99. Concerning the day-to-day professional and technical aspects of the Project, the Director of Education will be supported by the:

a) The Chief Inspector Primary Education/ECCD for sub-components 1.1, 1.2 and 2.1; and

b) The Chief Inspector Secondary Education for sub-component 2.2 and 2.3.

100. Concerning the day-to-day administrative, fiduciary, monitoring and reporting aspect of the Project, the Director of Education will be supported by a PSU whose composition and tasks are further described in Annex 1 to the PAD.

101. **The PSU** will be responsible for supporting and managing the fiduciary aspects of the Project by ensuring adherence to the FA and the POM as it concerns financial management, procurement, monitoring, reporting and evaluation and social and environmental risk management, as well as the effective and timely implementation of the grievance redress mechanism (GRM). The PSU will be led by a Project Coordinator.

102. The PSU will have a hybrid structure. A Project Coordinator will be seconded by the MoET on a full-time basis to take on the role of de facto PSU/Project Coordinator for the entire implementation cycle. The MoET will hire a Financial Management Specialist, a Procurement Specialist, an M&E Specialist, an E&S Risk Management Specialist and a Project/Office Assistant, who meet the skills and qualifications requirements as agreed between the World Bank and the MoET and further specified in the POM. These positions will need to be filled by Project effectiveness.

103. In order to build the capacity of the MoET in these fiduciary, safeguards and monitoring positions, the MoET will also second on a full-time basis an accountant, a procurement officer, an M&E specialist and an E&S specialist to work alongside the Project-hired specialists and eventually take over these roles, upon approval by the World Bank.

104. **Technical working groups (TWGs).** To further support the implementation, monitoring and reporting aspects of all the Project's sub-components and provide the appropriate collaborative space for all the implementing stakeholders within and outside the MoET to address and solve specific, mostly technical, implementation issues, four TWGs would be established:

- Component 1 TWG: This TWG will be established to support the implementation of all interventions under sub-components 1.1 and 1.2. One person will be assigned by the MoET on full-time basis to lead the TWG and will report to the Chief Inspector of Primary Education/ECCDE.
- Sub-Component 2.1 TWG: TWG to support the implementation of the early grade reading and mathematics activities under sub-component 2.1 will be established and will be led by a technical specialist seconded by the MoET, on-full time basis, who will report to the Chief Inspector of Primary Education.
- Sub-Component 2.2 TWG: A third TWG will be established to support interventions related to junior

secondary Mathematics and Science education under sub-component 2.2, with a technical lead person assigned by the MoET on full-time basis and reporting to the Chief Inspector of Secondary Education.

- Sub-Component 2.3 TWG: The final TWG will be established to support interventions related to improving student retention in junior secondary education including support for adolescent boys and girls through youth clubs and interventions related to the OVC education grant program. A TWG lead, which is assigned by the MoET on full-time basis will report to the Chief Inspector of Secondary Education. In addition, the DPMO will assign someone to lead the work on the OVC education grant intervention under sub-component 2.3, as part of this TWG.

105. These TWGs will be supported by different technical assistance that will be hired by the Project (see discussion under Project description and summary in Annex 2, Table A2.5). In addition to reporting to the respective Chief Inspectors, the TWG leads will also report to the PSU/Project Coordinator. The TWGs will have monthly meetings chaired by the Director of Education to review the implementation progress of the Project, analyze challenges and identify corrective and/or preventive measures, following up on previous agreements and updating outcome and intermediate outcome/output indicators.

106. **Project Steering Committee (PSC):** Reporting at a level above the MoET, will be through a PSC, to be chaired by the PS MoET. The PSC has been conceived as an inter-ministerial and inter-agency body aiming mainly at guiding the implementation of the Project and promoting coordination and articulation at the highest decision-making level between all components and sub-components, in particular when different Ministries and entities outside the MoET are required to participate in their implementation, to ensure that all the functional elements of the Project are well synchronized.

107. **LEG.** To further reinforce the horizontal articulation of the Project's different stakeholders including other government ministries, development partners, civil society organizations and teacher's formations, the collaborative forum of the ongoing LEG within the Eswatini education sector and chaired by the PS MoET will be utilized.

108. **Human Capital Liaison Officer:** Many of the Project interventions across Component 1 and 2 will require the MoET to collaborate with other ministries (e.g., Ministry of Health, Ministry of tinkhundla, Ministry of Agriculture etc. (see Annex 1 for details)). To facilitate collaboration across line ministries and build synergy across projects and programs in human capital development the Human Capital Liaison Officer, under the Ministry of Economic Development and Planning will play a key role.

109. The Implementation Arrangement is described in more detail in Annex 1 and in the POM, along with an Organogram depicting the reporting and accountability lines.

B. Results Monitoring and Evaluation Arrangements

110. **The RF will form the basis for the routine monitoring of Project results and progress towards the PDO.** The RF will be updated every six months as part of the semi-annual implementation support missions (ISMs) and will be reported in the Implementation Status and Results Reports (ISRs). The MoET, through the PSU, will monitor, verify, and report on the achievement of results, using the mutually agreed descriptions and protocols for each indicator. The monitoring and evaluation plan, and necessary protocols to monitor implementation and provide high quality data for indicators will be elaborated in the POM. The Project will harness the well-established EMIS to monitor and track progress at the national, regional, school, and community levels. The Regional Education Officers will also be responsible for monitoring activities at the local level.

111. Data and information on implementation performance and results will be drawn primarily from four sources: (a) data collected through the MoET's EMIS and other existing data collection systems; (b) ECCDE and basic education quality related data collected through surveys financed under the Project; (c) progress reports and information provided by the PSU; and (d) beneficiaries survey.

- **Data from EMIS and other existing systems:** EMIS data and annual statistical reports based on key education data collected by the MoET will be a key source of data on beneficiary students, teachers, schools, and a resource that will be used to monitor the Project progress and report on key Project indicators, including on Project beneficiaries.
- **Data on ECCDE services and foundational learning outcomes collected through learning assessment surveys:** A key gap in the MoET's existing M&E systems is the lack of data on ECCDE services and the quality of basic education. To fill this gap, the Project will provide financing and technical assistance to the MoET to undertake several surveys that will be used to collect data in these key areas, including a mapping of ECCDE providers, an ECCDE quality assessment, EGRA and EGMA at the primary level, and data on teachers' capacity as part of in-service teacher training interventions. The data from these sources will be used to report on Project indicators as well as monitor quality at the system level. In addition, evaluations are included under selected sub-components (e.g., evaluation of the youth support and OVC-grant related interventions) to gather evidence on the impact of these interventions on achieving the intended outcomes.
- **Progress reports:** The PSU will regularly compile implementation progress reports, including on the implementation of Project activities as well as Financial Management (FM), procurement and E&S issues, using inputs from regional education offices, implementing departments and units within the MoET as well as drawing from M&E visits to tinkhundla and schools.
- **Beneficiary surveys:** The Project will also support the implementation of a phone- and/or SMS-based beneficiary surveys that will be used as an additional source of data to monitor the Project progress and impact and directly get input from beneficiaries on the implementation of key interventions (e.g., provision of learning materials for students).

112. **Capacity-building and skills transfer:** To the extent possible, M&E under the Project will build on existing M&E arrangements. Moreover, a key aspect of the M&E support under the Project will be building the MoET's M&E capacity and strengthening quality assurance systems. This will be mainly done through the transfer of skills through targeted technical assistance in the areas where data is not currently collected by the MoET and designing data collection systems (e.g., learning assessment surveys) that can be integrated and institutionalized as part of the MoET's data collection and quality assurance systems.

113. **World Bank support:** The World Bank will provide technical support to strengthen M&E of the Project, including fiduciary and E&S safeguards oversight during project implementation. The World Bank will provide training to the MoET in areas where capacity is lacking (e.g., procurement and environmental and social risk management). Implementation Support Missions will be carried out jointly by the MoET and World Bank teams, involving the LEG, every six months, at a minimum. The World Bank will also continuously monitor compliance with World Bank fiduciary requirements and E&S safeguards. Joint progress reviews will be carried out on an annual basis. A mid-term review and end-term review of the Project will be carried out roughly half-way through project implementation and leading up to and following the closing of the Project, respectively.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Technical Analysis

114. **Strategic relevance:** The proposed Project is well aligned with the Government's strategy for sustainable and inclusive growth and poverty reduction as outlined in the National Strategic Development Plan (2018/19-2022/23). In addition, the Project's design is underpinned by several analytical works on human capital development in Eswatini, including the Education Sector Analysis (ESA) completed in June 2021. The ESA, drawing from a wide range of data sources, identifies binding constraints in the education sector, some of which are prioritized to be addressed under this Project. Further, the Project's interventions are carefully designed to be strongly aligned with the ESSP (2022-2034) and the associated implementation strategy.

115. **Technical soundness:** The Project's technical design is informed by evidence from the education and economics literature and draws from the experience of World Bank supported projects in the region and globally. Some of this evidence is summarized below, while a more detailed discussion is presented in Annex 4.

- First, the Project's interventions aimed at building foundational skills (i.e., by improving the quality of ECCDE services and early grade reading and Mathematics instruction) are supported by extensive evidence in the education literature. There is a vast body of research and regional and global experience showing that investments in early childhood education and foundational skills is more impactful and cost-effective compared to investments made later in life. A World Bank study across 12 countries, for example, found that children who attend pre-school stay in school for, on average, a year longer. In addition, research shows that reading and basic numeracy skills are foundational to all types of academic learning in higher grades. On the contrary, the lack of these foundational skills has been shown to significantly reduce children's ability to master other subjects and contributes towards repetition and early dropout. Research also shows that learning results can be improved if there is an effective student learning assessment system in place. The Project's support to introduce the ECCDE quality assessment, EGRA and EGMA to monitor the quality of education, children's early development and acquisition of foundational skills can, therefore play a critical role in spurring the education system's progress towards achieving its learning goals.
- Second the Project significantly invests in the improvement of Mathematics and Science education at the junior secondary level, with strong emphasis on closing gender gaps, by supporting the integration of digital technology in teacher training and classroom instruction. Mathematics and Science education are key to unlocking Eswatini's rapid economic development potential and enhancing the country's global competitiveness. The PSI-PMI model, which the Project will implement in targeted schools, has been shown to be an effective technology-enabled solution to improve mathematics and science education in low-capacity contexts.
- Evidence emerging from both developed and developing countries shows that diagnosing and tackling gender bias in the classroom to address the negative impact of stereotypes can play and important role in increasing the interest and aspiration of girls in STEM education. Studies in the United States show that offering non-stereotypical classes in STEM fields increased the number of young women who expressed an interest in computer science class (Master, Cheryan, and Meltzoff 2016). Integrating anti–gender bias manual into the materials used for in-service teacher training have also shown promising results in shifting

teachers' attitudes and teaching approach (Blumberg 2008). Providing teachers with information on women as role models in engineering and raising their awareness of these women's contributions to society appear to help overcome stereotypical conceptions of gender and STEM education (Hoh 2009). The Project's interventions focusing on integration of gender responsive pedagogy in the PSI-PMI program (both in terms of teacher training and provision classroom instruction materials that are free of gender stereotypes) are in line with this evidence.

- Third, the Project will test out different interventions aimed at addressing demand-side constraints leading to dropout including life-skills education and support for adolescents, and a pilot to improve the effectiveness of the OVC-grant program to address poverty related constraints. Global research and experience from home-grown NGOs provide evidence that equipping youth with life-skills and knowledge on sexual and reproductive health empowers them to make informed choices and reduces risky behaviors. Finally, there is strong evidence across low- and middle-income countries showing that financial support to poor households is one of the most effective strategies to improve student retention. This evidence supports the Project's interventions aimed at addressing economic and non-economic barriers to secondary education.

Economic Analysis

116. **Project development impact:** The interventions under the proposed Project will contribute towards Eswatini's long-term development agenda through several channels:

- **Building Eswatini's human capital:** The proposed Project is expected to generate higher growth in the longer term by improving the level of human capital in the country. Increased human capital can spur growth both by increasing labor productivity and by contributing towards innovation and rapid diffusion of new technologies[34].
- **Returns to quality education:** There is a growing consensus that quality education is needed to equip youth with the skills they need to be productive in ever-changing labor markets that are increasingly influenced by digital technology. Literature shows that improvements in the quality of education, including through investments in ECCDE, early primary grades and STEM education, can lead to improved cognitive skills, which in turn has been shown to increase earnings for individuals in the long run (Leuven et al, 2004; Patrinos 2020). This provides a strong rational for the Project's focus on strengthening systems to improve quality of education in ECCDE and basic education.
- **Positive externalities:** There is an established body of work showing that education creates a wide set of positive externalities for society (e.g., improved fertility and health, increased social engagement and cohesion, etc.), which is also the case in the context of Eswatini. Given these significant and far-reaching positive effects of education, there is a strong argument to be made for increased public investment in basic education, especially in poor and rural areas of the country.
- **Estimated economic returns:** The expected economic returns associated with the Project investments are high, as estimates from a cost-benefit analysis (CBA) show. For the CBA, economic benefits that come from improved labor market outcomes for Project beneficiaries are considered. These labor market befits

[34] Romer, P.M., 1990. Endogenous technological change. Journal of political Economy, 98(5, Part 2), pp.S71-S102. Mankiw, N.G., Romer, D. and Weil, D.N., 1992. A contribution to the empirics of economic growth. The quarterly journal of economics, 107(2), pp.407-437.

can arise in at least two ways: (i) returns due to improved quality of schooling, and (ii) returns due to increased quantity of schooling. On the cost side, the CBA takes into account the full Project cost, as well as additional operational costs that may be incurred by the Government to implement the Project, costs of schooling that are incurred by households and opportunity costs incurred by beneficiaries. Considering the expected labor market returns for Project beneficiaries, the Project is expected to generate an estimated economic return of US$61 million in present value terms. Taking into account the various cost associated with the Project (i.e., the projects full budget, additional operational cost to be incurred by the MoET, cost to households and opportunity costs of beneficiaries), the Net Present Value (NPV) of the Project at completion is estimated to be US$31 million, while the Internal Rate of Return (IRR) is estimated at 15.9 percent. These estimates represent a significant expected positive return for the Project investments. Detailed discussion of the CBA is presented in Annex 4.

Financial analysis

117. Eswatini spends a substantial share of its public sector budget on education and a significant share of the education spending goes to recurrent expenditure, mainly teacher salaries. The Project investments will have some implication on the recurrent education budget of the MoET. Overall, the Project costs (i.e., estimated at US$32.1 million excluding the cost associated with World Bank Project supervision) accounts for 3.9 percent of the annual education sector budget, which is low considering that the Project will be implemented across five years. However, breaking down the Project investments under the different levels of basic education shows that the Project investment in ECCDE are more than five times the current annual public spending. This is mainly driven by the very low Government spending in ECCDE (accounting for only 0.1 percent of overall public spending in education). The Project investments account for about 5 percent of public spending at the junior secondary level and 1.5 percent at the primary level.

118. Many of the Project interventions focus on building systems, particularly in terms of in-service teacher training and support programs (including at ECCDE, primary and junior secondary levels), new curriculum roll-out, undertaking quality assurance and learning assessment systems (ECCDE quality assessment survey, EGRA and EGMA) and introducing the use of ICT in junior secondary education. The Project will cover some of the initial fixed costs to setting up these key systems while also supporting full implementation in targeted areas. However, across all sub-components, scaling up the Project interventions and maintaining the systems developed under the Project will require additional investment from the Government. All of the Project interventions are directly linked with the priority areas identified in the ESSP (2022-2034); and this direct linkage is expected to facilitate the sustainability of Project interventions. However, considering the recent decline in education sector financing, careful reallocation of resources or mobilization of new financing will be required to sustain and scale up the Project interventions.

B. Fiduciary

(i) Financial Management

119. The assessment of the MoET's financial management (FM) system shows that, in general, the proposed arrangements for the Project are adequate to manage the financial management aspects of the Project. The Financial Controller of the MoET will take the ultimate accountability for the loan proceeds. There is a proposed PSU to manage the Project and the FM aspects will be strengthened by newly recruited Financial Management Specialist (FMS), who will be supported by an accountant seconded by the MoET for adequate segregation of duties. The FMS will have a dual reporting role to the Financial Controller and the Project Coordinator in the PSU.

120. The Project will use the existing accounting system called "Entire" for recording and reporting on the use of funds. The system is currently in use for all the World Bank funded operations in the country (Health Strengthening, COVID-19 and other projects) and with prior experience, the World Bank concludes that it is adequate to account on the use of funds. All the Project transactions will be governed the Public Finance Management (PFMA) of 2017, supplemented by the POM.

121. The Project will use Advance disbursement method based on six months expenditure forecast. Other disbursement options such as reimbursements, direct payments, and special commitments will also be available to the Project. The Project activities will be financed from two sources of financing, namely, the IBRD laon and the GPE grant. However, both sources will finance the same activities and hence a combined Designated Account (DA) will be opened by the MoF to receive funds from the World Bank.

122. The Project will report on the use of funds through quarterly unaudited interim financial reports (IFRs) to be submitted to the World Bank 45 days after the end of the financial quarter.

123. The Project's annual audit report and the auditors' management letter and management's response thereto are to be submitted to the World Bank within six months after the end of the fiscal year, namely, September 30, each year. The FM arrangements meet the World Bank's minimum requirements, and the Financial Management risk is assessed as **Moderate**. See Annex 3- Financial Management and risk rating for the Project.

(ii) Procurement

124. All procurement to be financed under the Project will be carried out in accordance with the World Bank Procurement Regulations for IPF Borrowers (dated July 2016, revised November 2017, August 2018 and November 2020) and the provisions stipulated in the Legal and Project Agreements. Project procurement will be carried out by the PSU established in the MoET. The unit will have a dedicated procurement specialist who will be a focal point for the Project procurement and will be supported by a procurement officer assigned to the Project by the MoET. Project implementation will be carried out in accordance with the 'Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants', dated July 1, 2016 (Anticorruption Guidelines).

125. The major planned procurement includes: (i) TA to support the development and implementation of various interventions, (ii) procurement of ECCDE teaching and learning materials for both indoor and outdoor activities, (iii) procurement of development of training manuals/modules for teachers in English, Siswati and Mathematics in the early grades (1 to 3), (iv) procurement of training materials for teachers, (v) procurement of learning resources such as interactive projectors, whiteboards, necessary software, and ancillary equipment, (vi) TA to support implementation of ICT-enabled teaching and learning for Mathematics and Science programs and development of specifications for the procurement of necessary equipment, and (viii) TA for strengthening of Project implementation unit.

126. Procurement capacity and risk assessments were carried out to review the MoET Procurement Unit's organizational structure for implementing the Project and the interaction between the Project's staff responsible for procurement duties and management of the MoET. The assessment identified that the proposed multiple implementing agencies, including MoET and DPMO, have no experience with World Bank Procurement Regulations for IPF Borrowers. Based on the assessment and taking note of the role and responsibility of the MoET for procurement, the procurement risk rating is assessed as 'Substantial'. The Project support unit requires strengthening of its procurement and contract management capacities. The MoET will recruit an experienced

procurement specialist to support the Project. The World Bank team will provide the needed support and training.

127. The key risks and preliminary risk mitigation action plan is indicated in the table below. The residual risks after the implementation of the mitigation measures proposed in Table 6 would be reduced to "Moderate".

Table 6. Procurement risks and mitigation measures

	Risk	Mitigation Measure
a	Slow procurement processing and decision making with potential implementation delays.	Put in place mechanisms for regular follow up and monitoring of procurement processes to ensure expedited review and approval.
b	Delay in readiness of procurement packages due to insufficient technical requirements (ToRs/specifications)	MoET to ensure that ToRs/Specifications, and bid documents for key activities for the 1st year of implementation are ready by Project negotiation
c	Challenges of bids submission due to COVID-19 movement restrictions	MoET team to closely watch market trends, promptly propose more efficient procurement approaches and methods as need arises and update procurement plan accordingly with support from the World Bank. MoET to include flexibilities in the bidding procedures to allow for submission of bids by electronic means.
d	Limited competition as a few competent bidders may refrain from submitting bids due to COVID-19 pandemic.	
e	MoET lack of procurement capacity and familiarity with the Procurement Procedures for IPF Borrowers	MoET to recruit an experienced procurement specialist dedicated to the Project and assign a procurement officer to work the procurement specialist. World Bank will provide training and implementation support.

128. If the COVID-19 pandemic situation persists and industries continue to be impacted by COVID-19, procurement processes and implementation of the contracts will be affected. To deal with the potential procurement delays because of the spreading of COVID-19, the World Bank will support the MoET in applying any procedural flexibilities in bid submission modality and bid submission dates and by advising the MoET on the contractual provisions, which could be invoked by contractors/suppliers/consultants in relation to COVID-19 pandemic.

129. A Project Procurement Strategy for Development (PPSD) has been developed to determine the approach to market, the selection methods, evaluation options, and sustainability considerations that may need to be included in the Project's procurement processes. The PPSD considered these and other factors in determining the Procurement Plan, especially the packaging given the small local supplier base. Framework agreements will be considered for bulk purchases such as ICT equipment and stationery to minimize repeat procurements. Large contracts for goods and consulting services will be open to the regional and international markets for better competition and access to specialized skills.

130. The MoET prepared a Procurement Plan acceptable to the World Bank. The plan will be uploaded into the STEP system, a planning and tracking system that will provide data on procurement activities, establish benchmarks, monitor delays, and measure procurement performance. The Procurement Plan includes (a) a brief

description of the activities/contracts to be procured during the first 18 months of Project implementation, (b) the approach to market and selection methods to be applied, (c) cost estimates, (d) time schedules, and (e) the World Bank's review requirements. CERC procurement follows the World Bank's Guidance Note on Procurement in FCV and Situations of Urgent Need.

131. The Eswatini Public Procurement Act 2011 has been assessed and indicates that the country's regulations are generally consistent with international best practices, although some weaknesses were identified, which should be mitigated through adequate measures to ensure that (a) contract documents have an appropriate allocation of responsibilities, risks, and liabilities; (b) contract award is published; and (c) the national regulations do not preclude the World Bank from its rights to review procurement documentation and activities under the financing.

132. The Request for Bids/Request for Proposals document shall require that bidders/proposers submitting bids/proposals present a signed acceptance at the time of bidding, to be incorporated in any resulting contracts, confirming application of, and compliance with, the World Bank's Anticorruption Guidelines, including without limitation, the World Bank's right to sanction and the World Bank's inspection and audit rights.

133. With the incorporation of the abovementioned provisions, the Eswatini Public Procurement Act will be acceptable to be used under those procurements using the open national approach not subject to the World Bank's prior review as agreed with the World Bank in the approved Procurement Plan.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

134. **Environment and Social risk rating for the Project under the World Bank's Environmental and Social Framework is expected to be low.** The interventions that will take place under Component 1 will include data system strengthening (subcomponent 1.1), which will include an update of the mapping of the universe of ECCDE provider. Second, the Project will support a national and periodic assessment of the quality of ECCDE services and child development and education outcomes in the country using a quality assessment survey. Potential social risks from this are associated with ensuring assessments take on an inclusive approach, ensuring interests and particular challenges faced by persons with disabilities, girls, and other minorities are mainstreamed into the assessment. Subcomponent (1.2) seeks to support the rollout of the new ECCDE curriculum (Grade 0) in targeted ECCDE providers by providing a holistic package of services. The risk associated with this is around targeting and ensuring providers targeted are those where the needs are highest. This is being mitigated through the targeting approaches adopted by the Project which include a focus on vulnerable and underserved communities. Component 2 aims to support interventions to address two priority issues in basic education− quality and internal efficiency. First, the component will support interventions aimed at improving the quality of education, with a strong focus on foundational literacy and numeracy skills in early primary grades and Mathematics and Science education in junior secondary education. Second, the component will support interventions aimed at improving

retention of children through the end of junior secondary education including by equipping them with life-skills to enable them to make informed choices as they transition into adulthood and testing out different options to strengthen the linkages between social protection programs and student retention. The risk is associated with not mainstreaming and adopting specific measures to ensure girls equally benefit from the intervention and that the specific challenges of high rates of drop out for boys is addressed. This is mitigated in the Project through the specific focus on reducing dropouts for both boys and girls through interventions in youth centers and strengthening OVC education grant program which aims to address economic barriers that prevent boys and girls from accessing secondary education. There is a specific emphasis in the Project on both boys and girls staying in school which mitigates risks of exclusion.

135. **The Project's Environmental Risk Rating is classified as Low due to the nature of the proposed interventions.** Overall, the Project activities are focusing on capacity building and technical assistance type of activities. These include strengthening coordination and regulation of Early Childhood Care Development and Education (ECCDE) services and improving access to quality ECCDE services under Component 1; and Project management, capacity building and technical assistance under Component 3. The Project will not support development of any physical infrastructure. However, Sub-component 1.2 Improve the quality of ECCDE services in targeted centers, will finance the procurement of water tanks and support the tanking of water to targeted ECCDE centers that do not have piped water. Installation of water tanks will take place within footprints of existing ECCDE centers in areas that constitute modified habitats. The potential environmental impacts and risks related to the installation of tanks include generation of non-hazardous waste such as building rubble, occupational health and safety (OHS) and community health and safety risks including exposure and spread of COVID-19, isolated loss of vegetation, erosion, and environmental pollution due to improper waste management, generation of dust, noise, and vibration. The potential risks and impacts are considered to be (i) predictable and temporary and/or reversible; (ii) low in magnitude; (iii) site-specific, without likelihood of impacts beyond the actual footprint of the Project; and with a (iv) low probability of causing serious adverse effects to human health and/or the environment. The Project's risks and impacts can be managed through the preparation and implementation of sub-Project specific Environmental and Social Management Plans (ESMP) and additional instruments, as required, and identified during sub-Project screening. No adverse impacts on biodiversity and habitats are expected.

136. Under Sub-component 2.2: Improve the quality of Mathematics and Science instruction in secondary education, there will be some activities involving procurement of some ICT equipment (interactive projectors, whiteboards, necessary software, and ancillary equipment) to improve the quality of Mathematics and Science education in junior secondary schools using an innovative ICT-enabled model– the PMI and PSI, which uses digital technology for teacher training as well as classroom instruction to scale up ongoing online teacher training initiatives on math and sciences. The repairs, servicing and end-of-life disposal of ICT equipment may result in environmental risks related to electronic wastes (e-wastes), hazardous waste and solid wastes if not managed appropriately. Environmental best practices shall be in place for managing repairs and end-of-life disposal of ICT equipment involved in the online training program. The type and amount of such equipment required, the associated cycle of replacement or upgrades, existing e-waste, hazardous and solid waste management measures in Project implementing entities, regulatory framework, and in-country capacities, vendors, agencies to manage end of life disposal of electronic equipment and parts will be analyzed during Project preparation. As such, and to ensure the management of e-waste and other hazardous waste, the Project ESMF includes a Waste Management Plan (WMP) proportionate to the level of risk. The WMP will include some simple technical guidelines on how to manage and arrange for the disposal of ICT equipment (end-of-life and during repairs).

137. All risks and impacts are considered to be predictable, localized and of short duration and can be mitigated through the implementation of the Environmental and Social instruments which were prepared for this Project and that will be further developed at sub-Project level.

138. An Environmental and Social Management Framework (ESMF); Stakeholder Engagement Plan (SEP) and Environmental and Social Commitment Plan (ESCP) have been prepared for the Project and were made publicly available through the World Bank website on November 16, 2021. As described in the SEP, these instruments were consulted with the key relevant stakeholders. The ESMF outlines the applicable legal and institutional framework associated with the execution of this Project, the environmental risks and impacts and how it proposes to mitigate these following the mitigation hierarchy, as well as the relevant implementation capacity to achieve the Project objectives. The ESMF requires all sub-projects to be screened to determine sub-project specific E&S impacts and risk and identify the relevant additional E&S instruments which will need to be prepared. A Labor and worker management procedure, Occupational health and safety and community health and safety procedures form part of the ESMF. The ESMF including the WMP and Labor Management Procedures (LMP) will be disclosed prior to Project Effectiveness.

139. The SEP that was prepared in line with Environmental and Social Standards (ESS) 10 and has been disclosed through the World Bank website on November 16, 2021 by the client sets out the structure of the Project grievance redress mechanism as well as the methods for stakeholder engagement, including effective communication tools for consultations and disclosure in line with the World Bank guidelines on COVID-19. Several stakeholder consultations as documented in the existing plan have taken place and will continue throughout the Project lifecycle.

140. MoET lacks experience with the implementation of World Bank funded projects and the Project implementation unit has not yet been established; though it will need to be established prior to Project effectiveness. Therefore, the capacity for managing and implementation of environmental aspects during implementation is considered to be limited. Provision for dedicated environmental and social resources for the MoET through the PSU have been included in the ESCP. In addition, the ESCP sets out specific capacity building requirements and training that will be implemented for this Project.

141. **Climate Screening.** Eswatini is highly vulnerable to climate change and faces increased risks of frequent droughts, storms, and floods. Households in rural and poor areas of the country, which are the primary target under the Project, are particularly exposed and vulnerable to climate change because they depend more on farming and natural resources for their livelihoods. Given this, the Project aims to increase awareness of climate change and support the beneficiaries in acquiring climate change adaptation and mitigation skills by integrating relevant and appropriate content in teaching and learning materials and all trainings. Moreover, by supporting the provision of water and supporting school feeding in targeted areas, the Project also supports measures to limit the potential impact of climate change on human capital (see Annex 9 for detailed discussion).

142. **Gender**. Through an in-depth analysis of the sectoral challenges (summarized under Sector Context), key areas of gender disparities in the basic education system have been identified. These include, boys lagging behind in early childhood development outcomes including in literacy and numeracy, girls lagging behind in STEM education, and various risks adolescent boys and girls face in staying in school (e.g., adolescent pregnancy for girls, and substance abuse for boys). Across the Project sub-components, interventions have been integrated to address these constraints including by training ECCDE practitioners and junior secondary Mathematics and Science teachers to use gender responsive pedagogy and by supporting adolescent boys and girls who are at risk of

dropping out, through life-skills education, mentorship, and boys and girls clubs that provide safe space. The Results Framework, beyond disaggregating key indicators by gender, captures several indicators to measure gender gaps including 1) Female share of students benefiting from technology-based mathematics and science education, and 2) Share of female adolescents in targeted junior secondary schools benefiting from youth clubs.

143. **Citizen engagement.** Citizen engagement (CE) will be crucial to achieving the Project's objectives, addressing social and environmental risks and building citizens buy-in to enhance sustainability. CE mechanisms are integrated in the Project to also ensure the inclusion of beneficiaries, including those who are often excluded. This will be achieved through identifying the appropriate community monitoring mechanisms that will enhance citizens voice, participation and oversight, including using the MMS to collect feedback and input from a wide range of stakeholders at the local level as well as by establishing GRM system at the school level involving school-based management committees (SBMCs), which include community members. To monitor citizen engagement, the Results Framework monitors the improvement in citizen satisfaction with quality of education service delivery in targeted schools.

V. GRIEVANCE REDRESS SERVICES

144. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported Project may submit complaints to existing Project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address Project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, because of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and World Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

145. **The overall risk rating for the Project is Substantial**. Some of the key areas contributing to the overall risk rating (focusing on those rated as substantial) are discussed below, while a more detailed discussion is presented in Annex 5. For discussions on fiduciary risks (financial management and procurement related risks) and environmental and social risks see the Project Appraisal Summary section above.

146. **The political and governance risk is rated as Substantial**,[35] given the complex decision-making processes across the formal and traditional governance structures of the country, affecting borrowing from international entities such as the World Bank Group and potentially decision-making process during Project approval and implementation stages. To address this risk, building on the lessons from the Performance and Learning Review (PLR) of the CPS for FY15-18, the World Bank has been engaging from the start with all key stakeholders (including Ministry of Finance (MoF) and Ministry of Economic Planning and Development (MoEPD)) on the Project design and development. This approach is expected to facilitate clarity on the Project design among all key stakeholders

[35] This is consistent with the Systematic Country Diagnostic (No. 892010-SZ) and the Country Policy and Institutional Assessment (CPIA) rating.

and lead to timely decision-making at all stages. There are also additional risks related to political instability in the country, as reflected by frequent protests in summer 2021. These protests have led to disruption to service delivery, closure of schools and have impacted the MoET's functioning including during Project preparation. There is a high likelihood that the key issues leading to these protests will not improve in the short-run and may impact Project implementation in the first few years. Considering the unpredictable nature of this issue and the limited direct influence of the MoET has to mitigate them, the risk rating under this category remains **Substantial.**

147. **The macroeconomic risk is rated Substantial as the country's fiscal trajectory continues to be an area of concern**. As revenue streams have been reduced due to economic slowdown in the sub-region[36] and the COVID-19 crisis. In response, the Prime Minister has recently announced fiscal consolidation measures to deal with specific issues concerning economic recovery, however, there are concerns that some of these measures may lead to a stagnation or reduction of education sector financing. Already, in the past five years, education sector financing has been declining in Eswatini. These macroeconomic challenges threaten to exacerbate the situation and raise serious concerns on whether education sector financing will recover during Project implementation. To mitigate the impact of macroeconomic risks on the Project implementation and sustainability, the World Bank, GPE and the LEG are engaged in ongoing discussions as part of the ESSP preparation process, on the protection of education sector financing in the coming few years, the reallocation of financing within the education sector (e.g., towards the ECCDE sub-sector and non-recurrent cost in basic education that are essential to the education sector recovery and quality improvement), as well as on ways to improve efficiency in spending. Moreover, as part of the GPE application process for the joint financing of the Project, a letter from the MoF is expected on its commitment to reverse the downward trend in education sector financing and increase the allocation to the basic education sector over the next few years. All of these mitigation measures are expected to create stability in the basic education sector, which is critical for the Project implementation, and to provide resources to sustain the Project interventions in the long run. However, whether these measures can be fully implemented will depend to a large part on the recovery of both the local and regional economy; hence the risk rating remains **Substantial.**

148. **The risk rating for technical design of the Project is Substantial.** As discussed in detail under Project design, the Project applies a life-cycle approach for human capital development, focusing on the first two stages of the life-cycle– early childhood and school age, which translate to the first three cycles of the education system– ECCDE, primary and junior secondary education. This relatively wide scope for the Project is deliberately chosen by the Government and the World Bank, to ensure that the key challenges in the three sub-sectors, which are very much interrelated, are addressed in a holistic and comprehensive manner. However, the wide Project scope also contributes to the complexity of the technical design of the Project and raises the risk rating in this regard. To mitigate for this risk, extensive preparation has been made to clearly define the implementation arrangements for all key activities and the structures for implementation are being put in place. In addition, the Project will provide significant TA to the MoET to build capacity in key technical areas. However, there is concern on whether the MoET will be able to mobilize the required TA on time, considering capacity gaps in procurement, hence the risk rating remains **Substantial;** it will be revised during implementation as needed taking into account progress

[36] Miscellaneous and unidentified revenue represented the largest share of non-tax revenues in 2016 (9.2% of GDP and 82.3% of non-tax revenues). The majority of this category comes from the Southern African Customs Union (SACU) revenue-sharing agreement (*OECD* 2018). ESwatini's major source of revenue dropped by 18% from SZL 7.1billion (2017/18) to SZL 5.8 billion (2018/19) and is set to decline further (*Times of Swaziland* 2018)

in the first six months of implementation.

149. **Stakeholder risk is Substantial.** While interventions related to system strengthening in key areas of the ECCDE and basic education sub-sectors will be implemented at the system level, there are additional packages designed to improve service delivery at ECCDE, primary and junior secondary levels that will be developed and rolled-out in targeted areas to jump start quality improvement in the education system, prioritizing disadvantaged areas. The targeting of certain areas and not others may encounter opposition of some stakeholders. Similarly, the implementation of some of the interventions such as the introduction of new ICT-enabled teaching practices could also encounter opposition. To mitigate these risks, the World Bank is working closely with country counterparts to ensure that the criteria for selection of priority areas is clear, sound, and backed by evidence and available data. Additional efforts are being made to ensure general support for the prioritization approach for relevant interventions is strong. The Project will also establish citizen engagement and GRM mechanisms to engage stakeholders on the targeting criteria and the objectives, importance and expected benefits of the Project activities and consult them for feedback.

RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Eswatini

Strengthening Early Childhood Development and Basic Education Systems to Support Human Capital Development in Eswatini Project

Project Development Objectives(s)

To strengthen education service delivery and management systems in the early years and junior secondary education

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
To strengthen education service delivery and management systems in the early years							
Develop learning assessment systems and complete at least one measurement of each of the following: (a) child development outcomes and (b) early grade reading and mathematics outcomes in Grade 3 (Yes/No)		No	No	No	Yes	Yes	Yes
Number of Grade 1 – 3 teachers trained and supported in the delivery of the early grade reading and mathematics program (Number)		0.00	0.00	300.00	600.00	700.00	800.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
To strengthen education service delivery and management systems in junior secondary education							
Percentage of junior secondary schools applying technology-based mathematics and science education in targeted areas (the total number of junior secondary schools was 275 in the 2018 EMIS) (Percentage)		0.00	0.00	7.00	20.00	36.00	36.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Component 1: Strengthen coordination and regulation of ECCDE and improve quality of ECCDE services							
Number of ECCDE centers, Grade 0 classrooms and pre-schools receiving a package of services to support child development (Number)		0.00	0.00	75.00	200.00	275.00	275.00
Percentage of ECCDE teachers and practitioners showing improvement in their pedagogical skills (Percentage)		0.00	0.00	0.00	30.00	30.00	40.00
Percentage increase in the proportion of 5-year-old children reaching key		18.6% based on the 2014 MICS data; to be updated	0.00	0.00	3.00	3.00	5.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
development milestones in literacy and numeracy in targeted ECCDE centers, pre-schools, and Grade 0 classrooms (Text)		in the first year of the project.					
Percentage increase in the proportion of 5-year-old children reaching key development milestones in literacy and numeracy in targeted ECCDE centers, pre-schools, and Grade 0 classrooms (Boys) (Text)		14% based 2014 MICS; to be updated in the first year of the project.	0.00	0.00	5.00	5.00	8.00
Component 2: Improve quality and internal efficiency in basic education							
Percentage of primary schools that received support to implement the early grade reading and mathematics program (total number of primary schools was reported at 610 in 2018 EMIS) (Percentage)		0.00	0.00	10.00	20.00	30.00	35.00
Number of junior secondary mathematics and science teachers completing the online teacher training (Number)		0.00	0.00	50.00	240.00	400.00	400.00
Percentage gain in competency level of mathematics and science teachers who completed the online training (Text)		Baseline to be determined in the first year of the project.	TBD	TBD	TBD	TBD	End target will be set based on the baseline.

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Number of students benefiting from technology-based mathematics and science education (Number)		0.00	0.00	1,500.00	6,000.00	14,000.00	21,000.00
Female share of students benefiting from technology-based mathematics and science education (Percentage)		0.00	0.00	50.00	50.00	50.00	50.00
Policy note on how to strengthen the targeting and impact of the OVC grant is completed (Yes/No)		No	No	No	No	Yes	Yes
Number of adolescent girls and boys in targeted junior secondary schools benefiting from youth clubs (Number)		0.00	0.00	1,000.00	3,600.00	7,200.00	10,000.00
Share of female adolescents in targeted junior secondary schools benefiting from youth clubs (Percentage)		0.00	0.00	50.00	50.00	50.00	50.00
Number of cohorts enrolled under new OVC education grant targeting approach (Number)		0.00	0.00	0.00	0.00	0.00	1.00
Component 3: Project management, capacity building and technical assistance							
Improvement in citizen satisfaction with quality of education service delivery in targeted schools (Percentage)		0.00	0.00	0.00	5.00	10.00	15.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Students benefiting from direct interventions to enhance learning (CRI, Number)		0.00	0.00	30,000.00	50,000.00	70,000.00	95,000.00
Students benefiting from direct interventions to enhance learning - Female (CRI, Number)		0.00	0.00	15,000.00	25,000.00	35,000.00	47,500.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Develop learning assessment systems and complete at least one measurement of each of the following: (a) child development outcomes and (b) early grade reading and mathematics outcomes in Grade 3	Indicator tracks the development of learning assessment systems to collect data on foundational skills, including ECCDE outcomes and EGR and EGM outcomes. To achieve the target: (a) an ECCDE quality assessment must be completed at least once to collect information on child development outcomes of 5	Once	Project reporting	MoET will undertake the ECCDE quality assessment, EGRA and EGMA learning assessments and submit the data and report.	MoET

	year old children using a nationally representative sample of ECCDE centers; and (b) EGRA and EGMA in Grade 3 must be completed at least once to measure EGR and EGM in a nationally representative sample of primary schools.				
Number of Grade 1 – 3 teachers trained and supported in the delivery of the early grade reading and mathematics program	This indicator tracks the number of Grade 1-3 teachers teaching reading and mathematics, who are trained on improved instruction methods for EGR and EGM, including on the use of supplementary materials and formative assessment inline with the new curriculum. To meet the target, trained teachers have to receive follow-up support at least twice a year in the form of a classroom observation followed by a feedback or coaching session provided by the school principal, trainer or coach.	Annually	Project reporting	MoET will compile data on the number of teacher trained and have received follow-up support working with the regional education offices. Additional corroborating data on the number of teachers receiving training and follow-up support will be collected using a Mobile Monitoring System (MMS).	MoET

Percentage of junior secondary schools applying technology-based mathematics and science education in targeted areas (the total number of junior secondary schools was 275 in the 2018 EMIS)	Indicator tracks the share of junior secondary schools that are implementing the PSI-PMI model which integrates technology in mathematics and science education. Specifically, the indicator tracks the number of schools that: (i) have at least one mathematics and one science teacher that have completed the online teacher training, (ii) have upgraded at least one junior secondary classroom with projector, (iii) students have access to the PSI-PMI materials (either through hardcopy print out or using devices) and (iv) teachers are using the PSI-PMI material in classroom instruction.	Annually	Project reporting	Data to be collected by inspectors and compiled by the MoET. Mobile Monitoring System (MMS) will be used to corroborate the data.	MoET

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Number of ECCDE centers, Grade 0 classrooms and pre-schools receiving a package of services to support child development	This indicator tracks the number of targeted ECCDE centers and Grade 0 classrooms that are receiving a package of services to support child development. The package includes: (i) caregiver training and support on the new curriculum and (ii) provision of teaching and learning materials. In centers that do not have access to adequate water, water will be provided through tanks; and ECCDE centers that are not covered under the current school feeding program will be provided with support to provide meals to students.	Annual	Project reporting	MoET will compile report on number of ECCDE centers and the types of support they have received.	MoET
Percentage of ECCDE teachers and practitioners showing improvement in their pedagogical skills	This indicator tracks the share of ECCDE teachers and practitioner in project targeted ECCDE centers that have shown some	3 times in Grade 0 classrooms and 2 times in other	ECCDE quality assessment Survey.	This indicator will be include in the ECCDE quality assessment surveys used for PDIs.	MoET and DPMO.

	improvement in their pedagogical skills following training provided under the project. The indicator will be measured using a teacher pedagogy component of the quality assessment survey. A baseline for teachers pedagogical skills will be set in the first year of the project and will be tracked through follow-up ECCDE quality assessment surveys.	ECCDE centers.			
Percentage increase in the proportion of 5-year-old children reaching key development milestones in literacy and numeracy in targeted ECCDE centers, pre-schools, and Grade 0 classrooms	This indicator tracks the percentage of 5-year-old children in targeted ECCDE centers, Grade 0 classrooms in primary schools, and pre-primary schools supported under the project, who reach the minimum developmental milestones in literacy and numeracy . This will be measured by the child development and early learning assessment part of the ECCDE quality assessment survey. This indicator will focus on two domains, i.e.,	3 times in Grade 0 classrooms and 2 times in other ECCDE centers.	ECCDE quality assessment surveys	This indicator will be tracked using data collected through the ECCDE quality assessment surveys, specifically the child development and early learning assessment.	MoET and DPMO

	literacy/language and mathematics/numeracy. To measure this indicator, the share of 5-year-old children in targeted schools and centres who meet the milestones in both domains will be estimated over time and the percentage improvement in these results will be reported. Based on the the 2014 MICS data, a suggestive baseline is included which shows the share of children who are developmentally on track in literacy and numeracy nationally; based on this baseline targets are also set. The baseline and targets for this indicator will be updated in the first year of the project and will be re-assessed in Year 4 and Year 5.				
Percentage increase in the proportion of 5-year-old children reaching key development milestones in literacy and numeracy in targeted ECCDE centers, pre-schools, and Grade 0	This indicator tracks the percentage of 5-year-old male children in targeted ECCDE centers, Grade 0 classrooms in primary	3 times in Grade 0 classrooms and 2 times in other	ECCDE quality assessment Survey.	This indicator will be tracked using data collected through the ECCDE quality assessment surveys,	MoET and DPMO

classrooms (Boys)	schools and pre-schools supported under the project, who reach the minimum developmental milestones in literacy and numeracy . This will be measured by the child development and early learning assessment part of the ECCDE quality assessment survey.	ECCDE centers.		specifically the child development and early learning assessment.	
Percentage of primary schools that received support to implement the early grade reading and mathematics program (total number of primary schools was reported at 610 in 2018 EMIS)	This indicator tracks the share of primary schools that have received (i) supplementary materials for students, (ii) have at least one trained teachers per grade for Grades 1-3 and (iii) the principal is trained on the implementation of the early grade reading and early grade mathematics program.	Annually	Project reporting based on data compiled by MoET.	The MoET will compile data on delivery of materials and training of teachers and principals. The data will be corroborated using the MMS.	MoET
Number of junior secondary mathematics and science teachers completing the online teacher training	This indicator tracks the number of mathematics and science teachers who complete the full PSI-PMI training.	Annual	Project reporting	MoET will compile data from the service provider.	MoET
Percentage gain in competency level of mathematics and science teachers who	Competencies of mathematics and science	Annually	Assessment data from	Assessment data as part of the online	MoET in collaboration with the service provider

completed the online training	teachers who completed the online teacher training measured by the exam conducted as part of the online training. Baseline will be established at beginning of training with regular assessments beginning included through out the training and a final assessment being conducted at the end of the training. The baseline and endline target will be set based on the pilot phase.		online teacher training	teacher training	firm
Number of students benefiting from technology-based mathematics and science education	This indicator tracks the number of junior secondary students in targeted schools that are benefiting from the PSI-PMI program, being taught by teachers trained under the program, using classrooms equipped with projectors and using content provided under the program. The PSI-PMI model will be rolled out in grades Form 1 to Form 3 gradually and it will also be phased across schools. The indicator	Annually	Project reporting and annual school census data	The MoET will compile data on the number of students that are benefiting from the PSI-PMI model. In addition enrollment data from EMIS school census data will be used corroborate the reported results.	MoET

	will be calculated each year as number of junior secondary students who have benefited under the program cumulatively.				
Female share of students benefiting from technology-based mathematics and science education	This indicator tracks the female share of the total number of junior secondary students in targeted schools that are benefiting from the PSI-PMI program, being taught by teachers trained under the program, using classrooms equipped with projectors and using content provided under the program. The indicator will be calculated each year as number of female junior secondary students who have benefited under the program cumulatively divided by the total number of junior secondary students benefiting from the program.	Annually	Project reporting and annual school census data	The MoET will compile data on the number of students that are benefiting from the PSI-PMI model. In addition enrollment data from EMIS school census data will be used corroborate the reported results.	MoET
Policy note on how to strengthen the targeting and impact of the OVC grant is completed	This indicator will be met when a policy note on how to improve key aspects of	Once	Project reporting	Project reporting	MoET and DPMO

	the OVC grant program is completed based on the findings of the initial study as well as at least one pilot and evaluation on the OVC program conducted under the project.				
Number of adolescent girls and boys in targeted junior secondary schools benefiting from youth clubs	This indicator tracks the number of girls and boys in target schools who have joined boys and girls clubs that provide life-skills training, mentorship and other extracurricular activities supported under the project.	Annual	Project reporting	MoET to compile data from NGOs and beneficiary schools.	MoET
Share of female adolescents in targeted junior secondary schools benefiting from youth clubs	This indicator tracks the female share of students in target schools who are benefiting from the boys and girls club intervention.	Annual	Project reporting	MoET to compile data from NGOs and beneficiary schools.	MoET
Number of cohorts enrolled under new OVC education grant targeting approach	This indicator tracks the number of cohorts enrolled under the new OVC education grant targeting approach, with the target of enrolling at least one cohort under the new OVC education grant targeting	Annual	Project Reporting	MoET will report based on monitoring	MoET

	approach.				
Improvement in citizen satisfaction with quality of education service delivery in targeted schools	This indicator tracks the change in the share of citizens (students, parents and community members) served by schools (ECDE, primary, and junior secondary) targeted under the project who report that they are satisfied with the quality of education. The indicator will be tracked using a beneficiaries survey using a representative sample of schools. Baseline will be set in the first year of the project and improvement will be measured as percentage increase from the baseline.	Annually	Beneficiaries survey using MMS	Survey of representative sample of schools and interview of beneficiaries using Mobile Monitoring System (MMS).	MoET
Students benefiting from direct interventions to enhance learning		Annual	Enrollment data from EMIS	Annual school census	MoET
Students benefiting from direct interventions to enhance learning - Female		Annually	Enrollment data from EMIS	Annual school census	MoET

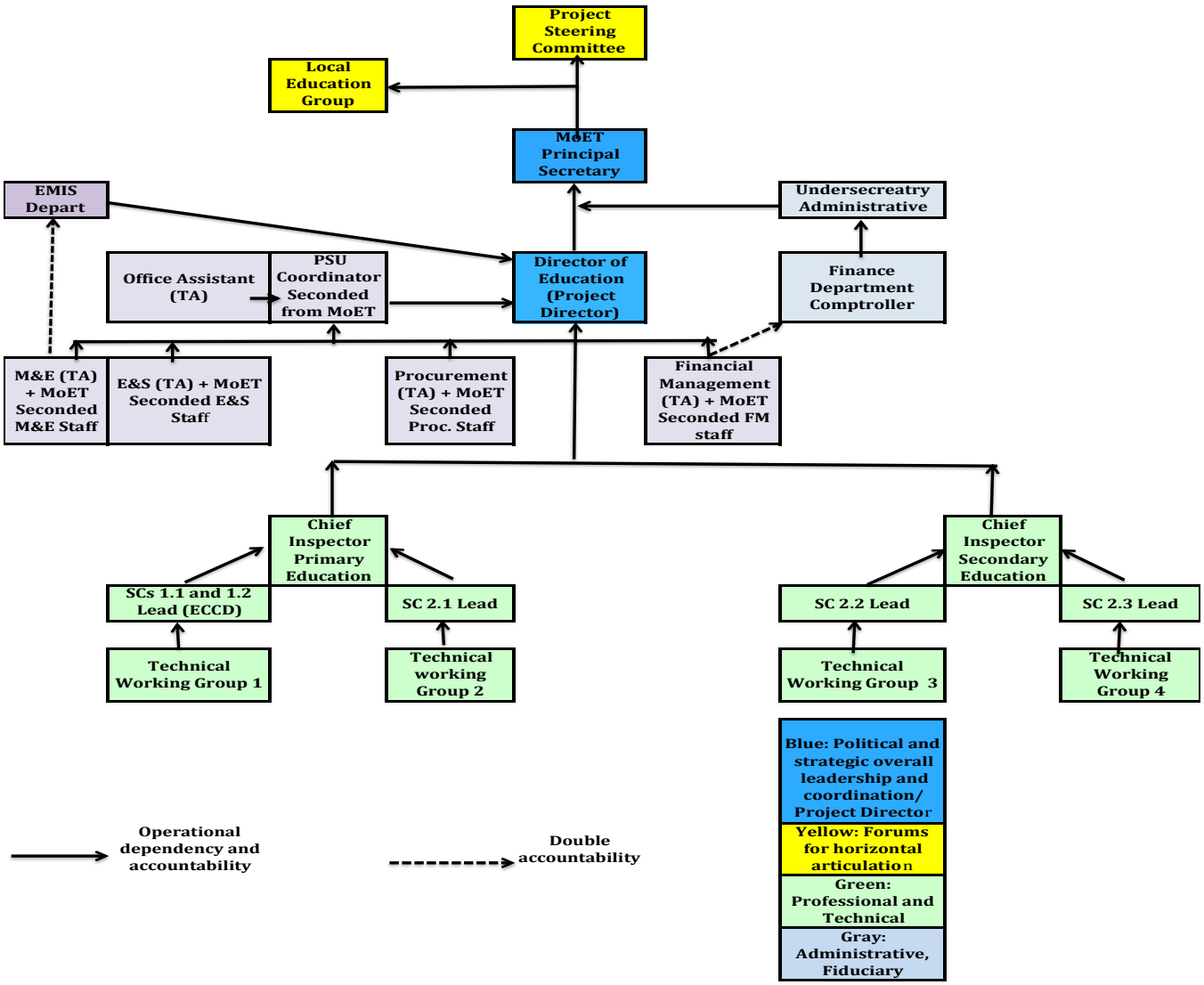
ANNEX 1: Implementation Arrangements and Support Plan

A. Overall institutional implementation arrangements

1. The Project will be implemented under the leadership of the Ministry of Education and Training, which, as per the Legal Agreement and Grant Agreement (GA), would be acting as the implementing agency. The Project will be implemented through existing MoET structures and staff at all levels of the education system. The MoET will be supported by a PSU, housed in the MoET and accountable to the Principal Secretary (PS) of the MoET through the Director of Education of the MoET.

2. The details of the Project implementation arrangement as illustrated in the following organizational chart (Figure A1.1) are described below and further elaborated in the POM.

Figure A1.1: Project Organizational Chart



B. Central institutional implementation arrangements

3. **Head of the Project.** The PS of the MoET, will be acting, on behalf of the Minister of MoET, as the Head of the Project, providing the Project's required strategic vision and overall leadership and will be accountable for the Project's performance. In this capacity, the MoET PS will ensure that the implementation of the Project is carried out in strict alignment with the Project's FA, GA, and POM and will, to the best of his/her abilities, warrant that the PDOs, intermediate and final targets, as fully described in the Project RF and Monitoring Matrix, are achieved. The MoET PS will be accountable to the Minister of the MoET on matters related to the Project implementation process.

4. **Director of Education.** The Director of Education, accountable to the PS of the MoET, would be responsible for the overall coordinating effort required for the implementation of the Project's sub-components. The Director will carry out this coordination effort under the strategic guidance provided by the PS.

5. Concerning the day-to-day professional and technical aspects of the Project, the Director of Education will be supported by the: (a) The Chief Inspector Primary Education/ECCD for sub-components 1.1, 1.2 and 2.1; and (b) The Chief Inspector Secondary Education for sub-components 2.2 and 2.3.

6. Concerning the day-to-day administrative, fiduciary, monitoring and reporting aspects of the Project, the Director of Education will be supported by a PSU whose composition and tasks are further described below.

7. In this capacity, MoET's Director of Education becomes the factual Project Director. Accordingly, the Director of Education will provide overall coordination of Project activities, comprising:

- Communication with implementation entities and directorates including horizontal and vertical articulation with the institutional and regional levels;
- Supporting the various implementation entities; and
- Organizing monthly internal performance review meetings.

8. **PSC.** The PSC has been conceived as an inter-ministerial and inter-agency body aimed at guiding the implementation of the Project and promoting coordination and articulation at the highest decision-making level between all components and sub-components and all the key implementing stakeholders to ensure that all the functional elements of the Project are well synchronized.

9. The PSC will, inter-alia: (a) provide overall policy guidance to the Project implementation process; (b) approve the Project's Annual Work Plan and Procurement Plans as well as the proposed budget; (c) review and endorse the annual Project progress reports including the external audit; and (d) discuss and resolve critical implementation issues which may arise and that may affect the Project implementation process and/or hinder achievement of the PDOs and intermediate and final targets.

10. The PSC will carry out bi-annual program reviews, or with any other frequency as needed, and assess performance, potential challenges that could be anticipated early and craft preventive and/or corrective strategies where and when necessary, to incorporate lessons learned on the ground. The PSC will be chaired by the PS of the MoET and will be comprised by Project-related representatives of the various participating agencies including the DPMO, Ministry of Health (MoH), Ministry of Tinkhundla, National Emergence Response Council to HIV/AIDS (NERCHA) and others. The Director of Education in the MoET, supported by the PSU manager, will act as the secretary of the PSC.

11. **LEG.** To further support the coordination and monitoring of the Project, the Project will use the LEG, which is an ongoing collaborative forum of stakeholders within the education sector led by the MoET and comprises Government ministries, development partners, civil society organizations and teacher's formations. Quarterly LEG meetings chaired by the MoET PS will be used to regularly take stock of the Project progress.

12. **The PSU,** housed in the MoET will be responsible for the following day-to-day functions:

a) Managing the Project by ensuring fiduciary compliance in strict adherence to the FA, GA, and the POM as it concerns financial management, procurement, monitoring and social and environmental risk management as well as the effective and timely carrying out of the GRM;
b) Ensuring the carrying out of the required reporting as stipulated in the FA, GA, and the POM and periodic updating of the RF;
c) Ensuring the carrying out of supervision and monitoring of Project activities as stipulated in the FA and the POM;
d) Ensuring the timely contracting of the TA to carry out the required surveys, impact evaluations and other related studies as further detailed in Annex 2 of the PAD;
e) Ensuring the preparation of the annual work plans, procurement plans and budgets; and
f) Updating of the POM as needed in consultation with the MoET PS through the Director of Education and the World Bank.

13. The PSU will be constituted using a hybrid structure. It will have five MoET staff seconded to the Project on full-time basis: (i) one PSU/Project Coordinator; (ii) one financial officer or accountant; (iii) one procurement officer; (iv) one M&E officer; and (v) one E&S safeguard officer.

14. These seconded staff would be supported by consultants financed by the Project working full-time on the Project in the following roles throughout the entire implementation cycle: (i) one Project Assistant; (ii) one financial management specialist; (iii) one procurement specialist; (iv) one M&E specialist; and (v) one E&S specialist. The detailed roles, responsibilities and attribution of this PSU staff and their terms of reference will be described in the POM. The MoET seconded staff will 'shadow' the Project-hired specialists in order to build their skills and capacity in the respective fields, with the aim of the MoET staff fully taking the key roles gradually.

15. To ensure institutional ownership in the management of this Project, it has been agreed that: (i) the financing officer at the PSU will also be accountable to the Financial Controller of the MoET, who will be the highest Ministerial authority managing the Project's designated account; and (ii) the M&E officer and specialist in the PSU will also be accountable to the Head of EMIS in the MoET.

16. **TWGs.** Four TWGs will be established to support the day-to-day implementation of the Project sub-components and provide the appropriate collaborative forum to address and solve specific implementation issues.

- Component 1 TWG: This TWG will be established to support the implementation of all interventions under sub-components 1.1 and 1.2. One person will be assigned by the MoET on full-time basis to lead the TWG and will report to the Chief Inspector of Primary Education/ECCDE. Moreover a focal point will also be assigned by the DPMO to be part of the TWG and support the implementation of ECCDE related interventions.
- Sub-Component 2.1 TWG: To coordinate the implementation of the early grade reading and mathematics activities under sub-component 2.1, a second TWG will be established and will be led by a technical specialist seconded by the MoET, who will report to the Chief Inspector of Primary Education.

- Sub-Component 2.2 TWG: A third TWG will be established to support interventions related to junior secondary Mathematics and Science education under sub-component 2.2, with a technical lead person assigned by the MoET and reporting to the Chief Inspector of Secondary Education.
- Sub-Component 2.3 TWG: The final TWG will be established to support interventions related to improving student retention in junior secondary education including support for adolescent boys and girls through youth clubs and interventions related to the OVC education grant program. A TWG lead, which is assigned by the MoET will report to Chief Inspector of Secondary Education. In addition, the DPMO will assign someone to lead the work on the OVC education grant intervention under sub-component 2.3, as part of this TWG.

17. The TWGs will have monthly progress status meetings chaired by the Director of Education to review the implementation progress of the Project, analyze challenges and identify corrective and/or preventive measures, following up on previous agreements and updating outcome and intermediate outcome/output indicators. The frequency of these meetings could change if required.

18. **Component 1: Strengthen coordination and regulation of ECCDE and improve quality of ECCDE services.** The Chief Inspector Primary Education/ECCD in the MoET will be responsible for the overall coordination of this component including its two sub-components, being supported by the TWG for ECCDE on the day-to-day management of the Component. In implementing this component, the MoET will be supported by the National Children's Coordination unit in the Deputy Prime Minister's Office (DPMO). Other Ministries and agencies that will support the MoET to implement this component are: MoH, Ministry of Tinkundla, NERCHA, and World Food Program (WFP). Other entities involved in supporting child services more indirectly include the Ministry of Natural Resources and Energy (water supply in rural schools and electricity connections to schools), the Eswatini Water Services Corporation (water and sanitation services in urban and peri -urban schools), the Ministry of Justice (child protection services) and the Ministry of Home Affairs (Child registration and identification).

19. **Component 2: Improving internal efficiency and quality in Basic Education**. The MoET through its Chief Inspector Primary Education and Chief Inspector Secondary Education will be responsible for leading and coordinating this component since the interventions are targeted at primary and secondary schools. Specifically, the Chief Inspector for Primary Education, supported by the TWG for early grade reading and mathematics on day-to-day management and coordination of activities will be responsible for the implementation of sub-component 2.1, while the Chief Inspector for Secondary Education will be responsible for sub-components 2.2 and 2.3 supported by the TWG for Mathematics and Science (sub-component 2.2) and TWG for student retention (sub-component 2.3).

20. Other entities that will be involved in the implementation of this component are: University of Eswatini (UNESWA), other teacher training institutions, the Deputy Prime Minister's Office for the strengthening the OVC grant, the MoH (life-skills programs in schools, mental health services for children/youth, substance abuse services for youth), Education Testing Guidance and Psychological Services, the Ministry of Tinkhundla and existing NGOs supporting Adolescent Youth Clubs inside schools and communities, the Ministry of ICT and the Ministry of Natural Resources and Energy (water, electricity and internet connections for secondary schools, access to bulk purchase of laptops and other ICT goods). The POM describes in more detail the specific tasks undertaken by these entities in the implementation of the Project.

21. **Human Capital Liaison Officer:** Many of the Project interventions across Components 1 and 2 will require the MoET to collaborate with other ministries as described above. To facilitate collaboration across line ministries and build synergy across projects and programs in human capital development, the Human Capital Liaison Officer,

under the Ministry of Economic Development and Planning (MoEDP), will play a key role.

C. Regional institutional implementation arrangements

22. **The four Regional Education Offices (REO) of the MoET** in Hhohho, Manzini, Shiselweni and Lubombo will provide, through their cadre of school inspectors, the required vertical articulation (link), oversight and reporting between the central/national authorities, regional/district authorities, and the participating primary, junior secondary and ECCDE centers and services.

D. Local/institutional (school) level implementation arrangements

23. At the local level:

a) The selected ECCDE centers and services will participate in the implementation of sub-components 1.1 and 1.2;
b) The selected primary schools will participate in the implementation of sub-component 2.1; and
c) The selected junior secondary schools will participate in the implementation of sub-component 2.2 and 2.3.

E. Financial Management and Disbursement Arrangements

24. The World Bank conducted a FM Assessment of MoET as the implementing entity and as required by the World Bank's Policy on Financial Management. The main objective of the assessment, which included a review of the budgeting, accounting, internal controls, flow of funds, financial reporting, auditing arrangements at MoET, and completion of FM assessment questionnaire by the relevant officials was to ensure that acceptable financial management arrangements are in place for the implementation of the Project.

25. Acceptable FM arrangements ensure that: (1) the funds are used only for the intended purposes in an efficient and economical way; (ii) all transactions and balances are correctly recorded to support preparation of regular and reliable financial statements that are subject to auditing arrangements acceptable to the World Bank; and (iii) internal controls are considered capable of safeguarding the agencies' assets.

26. The overall conclusion of the Financial Management Assessment is that the Project's financial management arrangements have an overall risk rating of "Moderate", which satisfies the World Bank's minimum requirements, ***except for*** the issues referred to in the Financial Management Action Plan.

27. **Risk Assessment and Mitigation:** The table below shows the results of the risk assessment from the Risk Rating Summary. This identifies the key risks project management may face in achieving Project objectives and provides a basis for determining how management should address these risks.

Table A3.1: FM Risk Mitigation Assessment Risk Rating; H (High), S (Substantial), M (Moderate), L (Low)

Risk	Risk Rating	Risk Mitigating Measures incorporated into the Project Design	Conditions of Negotiations, Board or Effectiveness	Residual Risk Rating
Inherent Risk				
Country Level The country's fiscal trajectory continues to be an area of concern. Revenue streams have reduced due to economic slowdown in the sub-region and the COVID-19 crisis.	S	The Prime Minister announced fiscal consolidation measures to deal with specific issues concerning economic recovery	No	S

Risk	Risk Rating	Risk Mitigating Measures incorporated into the Project Design	Conditions of Negotiations, Board or Effectiveness	Residual Risk Rating
Entity Level The multiple implementing entities involved in the project (MoET, the Ministry of Tinkhundla, the Deputy Prime Ministers Office, as well as several private entities (ECCDE centers and NGOs supporting Youth Clubs), the coordination and monitoring of Project activities and outcomes might be a challenging under the Project.	S	The PSC has been conceived as an inter-ministerial and inter-agency body aimed at guiding the implementation of the Project and promoting coordination and articulation at the highest decision-making level to ensure that all the functional elements of the Project are well synchronized		S
Project Level This is the first World Bank financed Project in the education sector, which raises the risk to implementation of the Project considering the lack of experience and familiarity on the MoET with World Bank procedures and policies	S	Capacity building will be intensified to acclimatize the Project and its staff with the World Bank requirements.		S
Inherent Risk				S
Control Risk				
Budgeting Annual budget targets may not be achieved and over runs may occur due to (i) ongoing challenges of the COVID-19, where continuous implementation may be affected by the regulatory lockdowns, and (ii) excess price escalations due to scarcity of resources due to COVID-19 impact.	M	Rigorous budget review will be conducted on monthly basis to mitigate the risks and propose timely interventions to the changing budget plans.		M
Accounting No risk identified; the Project will use the existing accounting system used in the Ministry which has proven to be adequate.				
Internal Control Risk that some internal control procedures may not be observed by the Project staff.	M	The risk will be mitigated through ongoing supervision by the World Bank, intense follow up externa audit findings and the inclusion of the Project in the annual internal plans for the Ministry.		M
Staffing The proposed FMS to be recruited by the Project may not possess the required experience for the World Bank funded projects.	M	FM supporting the Project will be initiated and continually trained by the World Bank until Satisfactory levels on competencies are achieved.	Yes. Appointment of qualified and experienced project FMS is a condition of effectiveness	M
Funds Flow No risk identified as the funds will flow into the Designated Account and payments will be made centrally from MoET.	L		No	L
Financial Reporting	M	FMS will be employed for full dedication to the financial management of the project, including		M

Risk	Risk Rating	Risk Mitigating Measures incorporated into the Project Design	Conditions of Negotiations, Board or Effectiveness	Residual Risk Rating
The project may not be able to produce periodic reports to monitor and effectively manage the project.		financial reporting. FMS will take full responsibility of producing IFRs for timely submissions.		
Auditing No risk identified, The MoET is mandated by the PFMA to submit it audited financial statements six months after the financial year to the Parliament and the compliance has been observed.				
Overall Risk	M	Based on the risks identified and proposed mitigations, the FM risk will be Moderate.		M

28. **Major Strength**- Although the MoET has no experience with the World Bank's requirements, the portfolio has been growing and have exposed the principals in the MoF to the World Bank's requirements. The project will have the advantage of peer learning from the recently declared effective projects.

29. **Weaknesses and Action Plan-** The proposed FM people may be unfamiliar with specific financial and disbursement arrangement of the World Bank. Onboard and periodic trainings will be offered to mitigate this risk.

30. **Budgeting -** The annual budget will be prepared based on approved work plans which will be reviewed and approved by the World Bank. Monitoring of the budget will happen through the reviews of the management reports and the interim unaudited IFRs which will be submitted to the World Bank on quarterly basis. The PFMA requires any budget virements to be approved through the governance structures and deviations from the regulations are taken serious by the Government.

31. **Accounting** - The Project accounting system will be based on government accounting software called "Entire". The experience with the closed projects and the ongoing Health projects has proven that the system is capable of producing project annual financial statements, IFRs, and other reports necessary to monitor and manage effectively the Project.

32. **Staffing** - The overall responsibility for Project FM will rests with the Financial Controller of MoET. The FC will be supported by the recruited FMS in the PSU. For proper segregation of duties, the FMS will be supported by the Accountant to be seconded from MoET. The terms of reference for the FMS and the Accountant will be developed such that the best skills set will be deployed for the Project. The FMS will also have a dual reporting role to the Financial Controller and the Project Coordinator.

F. Internal control and internal auditing arrangement

33. ***Internal Controls*** - The Project's internal controls will be based on the government's PFMA of 2017 and supplemented by the POM. The POM is currently in draft at the time of preparation of the Project, but will be adopted prior to Project effectiveness. The FMS will be required to update the FM section of the POM on a regular basis to keep abreast of the new business developments in consultation with the World Bank.

34. ***Internal Audit*** – The internal audit unit based at MoF has responsibility for performing internal audit functions across entire government of Kingdom of Eswatini. Considering limited capacity of this unit, and involvement of various spending units, there is need to put in place a strong internal control mechanism and quality control assurance system at all levels. Therefore, the Project will appoint qualified internal auditor with relevant experience with donor-financed projects within four months after the Project effectiveness.

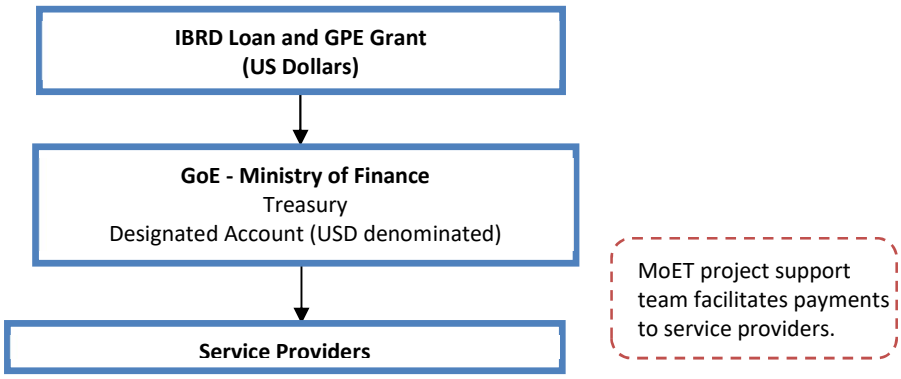
35. **Financial Reporting** – The Project will produce on a regular basis required financial reports to monitor and effectively manage the Project. Interim unaudited IFRs will be produced on a quarterly basis and submitted to the World Bank 45 days after the financial quarter. The contents of these reports should consist of: (i) A narrative summary of the Project implementation highlights, (ii) Sources and uses of funds, (iii) Uses of funds by Project component/activity- both actual and cumulative, (iv) The Designated Account Activity statement, (v) Summary of payments made for contracts subject to the World Bank's prior review; and (vi) Summary of payments made for contracts not subject to the World Bank's prior review.

36. The Project accounting system is capable of producing quarterly reports. The reports will be submitted to the MoF with relevant supporting documentation within 30 days of the end of the reporting quarter. Final review and submission of the reports to the World Bank by MoF is within 45 days of the end of the reporting period.

G. Funds Flow and Disbursement Arrangement

37. **Flow of funds**– The agreed funds flow diagram is presented below, and should be viewed in the context of the funds flow arrangement as well disbursement arrangements described below

Figure A1.2: Funds Flow



38. ***Funds Flow*** – Upon the signing of the Loan Agreement, the World Bank will open a Loan Account in its books, in the name of the Government. Funds will flow from the World Bank (Loan Account) into the US dollars Pooled Designated Account to be opened by the government of Kingdom of Eswatini at the Central Bank. A secondary designated account will be opened and maintained in the local currency by the Ministry of Finance to receive funds from the Central Bank and finance activities of all the Project components.

H. Banking Arrangements

39. A pooled Designated Account: To be opened at Central Bank of Eswatini and denominated in US Dollars. Disbursements from the World Bank Loan will be deposited in this account. A secondary designated account will be maintained by the MoF to process payments to the local suppliers.

40. ***Disbursement Arrangements*** – The Project will use the Advance disbursement method whereby withdrawals from the loan account will be deposited in the DA for payment of the World Bank financed eligible expenditures. Disbursements from the loan account will be based on quarterly IFR documentation to be prepared and submitted by MoET to MoF. The submission will be within 30 days of the end of the reporting quarter. For withdrawal from the loan account, MoF will be responsible for submitting withdrawal applications supported by IFRs, within 45 days of the end of each reporting period. The Government will also have the option of using: (i) the Direct Payment disbursement method involving direct payments from the loan account on behalf of the Government to the suppliers of goods and services that have a value above set threshold; (ii) the Reimbursement disbursement method, whereby the Government makes payments for the World Bank eligible expenditures and submits withdrawal application for reimbursement; and (iii) the Special Commitment method whereby the World Bank at the request of the Government, will issue special commitments to suppliers of the goods under the World Bank financed components. Government will issue special commitments to suppliers of goods under the World Bank financed components. Upon effectiveness of the loan agreement and submission of a withdrawal application, the World Bank will disburse an amount equivalent to six months expenditure into the DA. Subsequent disbursements will be based on six- monthly estimated expenditure, taking into account the balance in the DA at the end of the reporting period.

41. **External Audit -** The Project financial statements will be audited by the Office of the Auditor-General of Eswatini in accordance with International Standards on Auditing promulgated by the International Organization of the Supreme Audit Institutions (INTOSAI) and the audit report together with the Auditor General's management letter and management response, will be submitted to the World Bank within six months after the financial year-end, i.e., September 30 each year.

42. The Auditor General will be required to express a single opinion on the Project financial statements. These will include financial information of activities implemented under all Project components. In addition, a detailed management letter containing the auditor's assessment of the internal controls, accounting system and compliance with financial covenants in the IBRD Loan Agreement, suggestions for improvement, and management's response to the auditor's management letter will be prepared and submitted to management for follow-up actions.

43. **Project Governance and Accountability** – No matters of governance and accountability came to light during the assessment. However**,** the Project will have adequate financial management in place to ensure that funds are used for the purposes intended and to prevent material errors and fraud. The World Bank will review adequacy of Project financial management during implementation review missions, and the government of the Kingdom of Eswatini will ensure that adequate financial management is maintained through the implementation of the Project.

I. FM Conditionality

44. ***Negotiations*** – Conditions identified as part of the FM assessment to be met in advance of Negotiations have been successfully met. These include: (i) agree Unaudited IFRs formats and contents; (ii) agree external audit terms of reference.

45. ***Effectiveness*** – FM condition of effectiveness is the appointment of the qualified and experienced Project Financial Management Specialist.

46. Action Plan - In order to establish an acceptable control environment and to mitigate financial management risks the following measures should be taken by the due dates as indicated in the financial management action plan below.

Action	Responsibility	Completion date
Appointment of qualified and experienced Project FMS for PSU	MoET	Effectiveness

47. **Supervision Plan***:* Financial management supervision will be carried out by the FMS once a year in line with the moderate risk rating. The FMS will also: (a) Review the quarterly IFRs; and (b) Review the Audit Reports and Management Letters from the external auditors and follow-up on material accountability issues by engaging with the TTL, Client, and/or Auditors.

J. Procurement Arrangements

48. A Project Procurement Strategy for Development (PPSD) has been developed to determine the approach to market, the selection methods, evaluation options, and sustainability considerations that may need to be included in the Project's procurement processes. The PPSD considered these and other factors in determining the Procurement Plan, especially the packaging given the small local supplier base. Framework agreements will be considered for bulk purchases such as ICT equipment and stationery to minimize repeat procurements. Large contracts for goods and consulting services will be open to the regional and international markets for better competition and access to specialized skills.

49. The MoET prepared a Procurement Plan acceptable to the World Bank. The plan will be uploaded into the STEP system, a planning and tracking system that will provide data on procurement activities, establish benchmarks, monitor delays, and measure procurement performance. The Procurement Plan includes (a) a brief description of the activities/contracts to be procured during the first 18 months of Project implementation, (b) the approach to market and selection methods to be applied, (c) cost estimates, (d) time schedules, and (e) the World Bank's review requirements. CERC procurement follows the World Bank's Guidance Note on Procurement in FCV and Situations of Urgent Need.

50. The Eswatini Public Procurement Act 2011 has been assessed and indicates that the country's regulations are generally consistent with international best practices, although some weaknesses were identified, which should be mitigated through adequate measures to ensure that (a) contract documents have an appropriate allocation of responsibilities, risks, and liabilities; (b) contract award is published; and (c) the national regulations do not preclude the World Bank from its rights to review procurement documentation and activities under the financing.

51. The Request for Bids/Request for Proposals document shall require that bidders/proposers submitting bids/proposals present a signed acceptance at the time of bidding, to be incorporated in any resulting contracts, confirming application of, and compliance with, the World Bank's Anticorruption Guidelines, including without limitation, the World Bank's right to sanction and the World Bank's inspection and audit rights.

52. With the incorporation of the abovementioned provisions, the Eswatini Public Procurement Act will be acceptable to be used under those procurements using the open national approach not subject to the World Bank's prior review as agreed with the World Bank in the approved Procurement Plan.

53. **Procurement of goods, works, and non-consulting services.** Goods and non-consulting services to be

procured under this Project will include ICT equipment, teaching and learning materials and equipment. There are no civil works envisaged under the Project.

54. Procurement, while approaching the international market, will be done using the World Bank's standard procurement documents. Procurement while approaching the national market will be done using the national standard bidding documents, subject to incorporation of the abovementioned provisions, with an additional annex to address the World Bank's Anticorruption Guidelines and ensure universal eligibility.

55. **Procurement of consultancy services.** Consulting services to be procured under the Project include hiring of firms to carry out studies, assessments, and related activities. Hiring of individual consultants will be limited to international consultants required for Project implementation. Specialised program for online learning and support for adolescent boys and girls will be procured through direct selection.

56. **Operating costs.** These items will be procured using the borrower's national procurement and administrative procedures acceptable to the World Bank, including selection of Project implementation support personnel.

57. **Record keeping.** All records pertaining to award of bids, including bid notifications; register pertaining to sale and receipt of bids; bid opening minutes; bid evaluation reports; and all correspondence pertaining to bid evaluation, communication sent to/with the World Bank in the process, bid securities, and approval of invitation/evaluation of bids would be retained by the MoET and uploaded in STEP.

58. The following details shall also be published on the United Nations Development Business online and the World Bank's external website: (a) an invitation for bids for procurement of goods and works following open international market approaches, (b) request for expression of interest for selection of consulting services following open international market approaches, and (c) contract award details of all procurement of goods and works and selection of consultants using open international market approaches.

59. **Fiduciary oversight by the World Bank.** The World Bank shall prior review contracts according to the prior review thresholds set in the PPSD/Procurement Plan. All contracts not covered under prior review by the World Bank will be subject to post review during implementation support missions, including missions by consultants hired by the World Bank or through supreme audit institutions as part of the financial audit. The World Bank may, at any time, conduct independent procurement reviews of all the contracts financed under the credit**.**

60. **Contract management.** The MoET will identify high-value contracts for increased contract management support and indicate them in the Procurement Plan. The MoET will develop key performance indicators for such identified contracts and the indicators will be monitored during the actual execution of contracts. The World Bank team will provide additional due diligence and independent review of the contract performance of such identified procurements. A fully staffed Project team of the MoET will be responsible for overall Project/contract management.

ANNEX 2: Climate Co-Benefits

1. In Eswatini, the risks related to climate change are increasing. Climate change is expected to result in increases in monthly maximum temperatures, which are expected to be 1.2 to 2.4°C above the historical mean. Annual precipitation is expected to fall by 36.0mm in 2040-2059. Frequent droughts, storms, and floods are all critical risks identified in the SCD as a result of climate change. The country has recently been impacted by large variations in rainfall, resulting in increased rainfall intensity in some periods as well as recurring drought events. The patterns are expected to have increasingly adverse effects on agricultural production, particularly on smallholder farmers and communities. These changes in turn are likely to impact food security and households' ability to invest in children's and youth human capital (e.g., health and education).

2. This Project supports various adaptation and mitigation measures integrated throughout the Project sub-components with the aim of lessening the impact of climate change and related disaster risks, which include drought, storms, and floods on educational outcomes and building resiliency in the education sector. The adaptation and mitigation measures by sub-component are discussed below and summarized in Table A2.1.

3. Under sub-component 1.1, as a part of the quality assessment of ECCDE centers, particularly as part of the learning environment observation tool, information on the resilience of ECCDE centers against climate change related disaster risks will be collected. This information will inform the MoET to take necessary actions to make sure that the facilities are resilient. The Project's support will also help institutionalize the regular collection of data on the climate resilience of school and ECCDE infrastructure in the long run. Moreover, under sub-component 1.2, the Project will supply water to ECCDE centers that are without piped water using water tanks that provide extra storage. As a part of this intervention, the Project will support the schools and ECCDE centers to regularly fill water tanks using locally accessing and sustainable sources and enable them to use the tanks for extra water storage in the event of a drought to mitigate the risk of losing access to water. Under sub-component 1.2, ECCDE targeted centers in poor communities will also be supported to provide nutritious meals for children. This intervention is expected to mitigate the impact of food insecurity due to frequent drought and other climate related disasters on children's early physical and cognitive development and prevent adverse impact on their long-term human capital outcomes.

4. Component 2 will use interventions supported under the Project to raise awareness about climate change among students and teachers and to strengthen the resilience of the education sector to climate change related disruptions. Under sub-component 2.1, the Project will support the integration of content on climate change and adaptation and mitigation measures in early primary grade reading materials in a way that is context relevant and age appropriate. In addition, content on climate change will also be included in in-service teacher training for early primary grade teachers, to build capacity of teachers to teach their students about climate change as part of lessons across subjects.

5. In addition, as part of the in-service teacher training for junior secondary teachers under sub-component 2.2, science teachers will receive training on climate change risks as well as mitigation and adaptation measures. Relevant content on climate change will also be integrated into classroom instruction materials for junior secondary students as part of the PSI-PMI program. The PSI-PMI model, which will be used to improve science and mathematics instruction in junior secondary education, uses digital technology to provide in-service teacher training as well as support classroom instruction. This innovative approach is expected to reduce the carbon footprint associated with large scale teacher trainings, as teachers will not be required to travel frequently to receive face-to-face training. This intervention will also lay the foundation for greater integration of ICT in education service provision across basic education, which will enhance the education system's resilience to

external shocks including climate related disasters that may disrupt in person instruction.

6. Under sub-component 2.3, life-skills education and extracurricular support for adolescent boys and girls will incorporate specific sessions and activities for students to help raise their awareness about climate change as well as mitigation measures which can be applied in their communities. The economic impact of climate change on household can also affect educational outcomes, especially at the junior secondary school level, by reducing households' ability to pay for school fees and related costs and increasing demand for child labor (e.g., to earn extra money to lessen economic hardship). The Project's support to strengthen the OVC grant program as well as expand the grant coverage and amount as a pilot in targeted areas is another approach the Project will use to mitigate the impact of climate related shocks on households and their ability to invest in their children's education by serving as a safety net.

7. Under Component 3, capacity building training that will be provided to MoET staff as well as regional and local education offices will incorporate material on climate change, its impact on the education sector and the role of the education sector to mitigate and adapt to climate related risks. Component 3 will also support citizen engagement surveys that will use locally available SMS or phone-based surveying tools. In doing so, the Project will help the Eswatini education system to move away from traditional data collection processes that rely on paper-based surveys using numerous enumerators travelling across the four regions of the country. By moving towards innovative approaches to data collection that use existing technology, the Project will help reduce the carbon footprint of M&E activities under the Project and in basic education more broadly. In addition, these citizen engagement surveys will be used to gather information on the impact of climate change on households and their ability to educate their children. This approach will enable the MoET to collect critical information that can be used to assess the impact of climate change and design mitigation and adaptation measures.

8. The Project includes CERC (Component 4), which will enable the Government to respond in a timely manner to any climate change related disaster that may occur during the life of the Project to mitigate the impact on the education sector and human capital outcomes of children and youth. Combined, the different adaptation and mitigation approaches integrated under the Project are expected to reduce the anticipated risk from climate change related risks. A comprehensive ESMF has also been developed to ensure due diligence to address aspects of the Project that may have impact on the environment.

Table A2.1: Climate Actions Incorporated into Project Design, by Sub-component

SC	Climate Actions Incorporated
1.1: Strengthen systems to improve ECCDE service delivery (US$1.3 million)	**Data for future infrastructure adaptation:** As part of the assessment of learning environments of ECCDE centers (i.e., as part of the environment observation quality assessment), information on the resilience of ECCDE facilities against climate and disaster risks will be collected. The data and information gathered through this process will help the Government to improve the climate resilience of ECCDE infrastructure as part of future rehabilitation and expansion efforts. This will also help institutionalize the regular collection of data on the climate resilience of school and ECCDE infrastructure in the long run.
1.2: Improve the quality of ECCDE services in targeted centers (US$4.5 million)	**Mitigating the impact of climate change on educational outcomes:** Climate change is worsening the risk that rural and poor communities face due to disaster risks such as frequent droughts, storms, and floods in Eswatini. This risk in turn threatens households' food security and access to clean water which can have a detrimental impact on children's overall learning and development in the early formative years. Under this sub-component, the Project will provide support to ensure that children in rural and disadvantaged communities are receiving nutritious meals, which will help reduce the impact of climate change on children's development. In addition, the sub-component will provide clean water (by providing tanks that can be used for water harvesting) to ECCDE centers that do not have water supply. The water tanks will provide extra water

	storage space to help mitigate the impact of drought on the ECCDE centers students and teachers as well as the surrounding community.
2.1: Improve literacy and numeracy in the early grades (US$8 million)	**Equipping children with relevant knowledge on climate change adaptation and mitigation in the early grades:** As part of interventions aimed at improving early grade reading and numeracy outcomes, the Project will support the integration of age appropriate and relevant topics in the curriculum and in classroom instruction to raise children's awareness about climate change and the risk it brings to their communities as well as what they can do to reduce their communities impact on the environment. This will be done by integrating relevant content as part of teaching and learning materials that will be developed under the Project as well as building teachers' capacity to teach the topic to young children as part of in-service teacher training programs.
2.2: Improve the quality of Mathematics and Science instruction in secondary education (US$12 million)	**Teaching junior secondary school students about climate change:** This sub-component will support the use of the technology-based PSI-PMI model to improve the quality of mathematics and science instruction in junior secondary schools. As part of the PSI-PMI content for students and the in-service teacher training program, climate change related topics will be included in order to raise students' awareness about this critical issue and about mitigation and adaptation measures that are relevant for their context as well as raise teachers' capacity to teach the topic in a manner that is relevant for the Eswatini context. **Mitigating the high carbon footprint of face-to-face in-service teacher trainings:** One of the innovative aspects of this sub-component is the use of online training to provide teachers with an extensive in-service training that is expected to take 240 to 300 hours. If this training was to be provided using a face-to-face modality, it would require hundreds of teachers to make several rounds of trips to a central location to participating in training. By introducing online in-service training therefore the Project will contribute towards reducing the impact of face-to-face training on the environment. While the Project will be focusing on 126 schools and mathematics and science teachers, the model can be expanded to other grades and subjects in the long run. **Strengthening the climate resilience of the education system:** By strengthening the use of ICT in teacher training and starting to lay the foundation for e-learning technology to be integrated into basic education service delivery, the Project will help lessen the impact on the environment and improve the education system's resilience and ability to tackle disruptive, climate-related shocks (e.g., flooding) in the future. Appropriate environmental safeguard measures are included in the Project implementation plan to ensure proper disposal of old equipment and mitigate impact on the environment.
2.3: Improve retention in secondary education (US$3.35 million)	**Equipping adolescents with relevant knowledge on climate change mitigation and adaptation measures:** Extracurricular activities and life-skills education for adolescent boys and girls will integrate information on climate change risks, mitigation and adaptation measures. **Mitigating the economic impact of climate change on human capital outcomes:** Reducing the economic impact of climate change on households and their ability to send their children to junior secondary school by strengthening the OVC grant program.
Component 3: Project Management, Capacity Building and Technical Assistance	**Capacity building**: Building the capacity of MoET staff and regional and local education offices on the impact of climate change and how the education sector can adapt through training. **Data collection and citizen engagement**: Using technology for data collection (e.g. citizen engagement surveys using SMS and phone) to reduce impact on the environment by minimizing the use of face-to-face traditional surveys and using these surveys to collect information on the impact of climate change on households and their children's education
Component 4: CERC	**Disaster response:** Support the government to respond in a timely manner to any climate change related disaster