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Report No: PAD4572

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US$150 MILLION

TO THE

REPUBLIC OF ANGOLA

FOR THE

ANGOLA COVID-19 STRATEGIC PREPAREDNESS AND RESPONSE PROJECT

JULY 16, 2021

UNDER THE
COVID-19 STRATEGIC PREPAREDNESS AND RESPONSE PROGRAM (SPRP)

USING THE MULTIPHASE PROGRAMMATIC APPROACH (MPA)

WITH A FINANCING ENVELOPE OF
UP TO US$6 BILLION APPROVED BY THE BOARD ON APRIL 2, 2020 AND
UP TO US$12 BILLION ADDITIONAL FINANCING APPROVED BY THE BOARD
ON OCTOBER 13, 2020

Health, Nutrition & Population Global Practice
Eastern and Southern Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective {May 31, 2021)

Currency Unit =	Angola Kwanza (AOA)
AOA 648.045 =	US$1

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Hafez M. H. Ghanem
Country Director:	Jean-Christophe Carret
Regional Director:	Amit Dar
Practice Manager:	Francisca Ayodeji Akala
Task Team Leader:	Carmen Carpio

ABBREVIATIONS AND ACRONYMS

ACG	Anti-Corruption Guidelines
AEFI	Adverse Event Following Immunization
ANC	Antenatal Care
AU AVATT	African Union's COVID-19 African Vaccine Acquisition Task Team
BFP	Bank Facilitated Procurement
CEPI	Coalition for Epidemic Preparedness Innovations
CERC	Contingent Emergency Response Component
CECOMA	Angolan Central Procurement Agency for Medicines and Medical Supplies
COVAX Facility	COVID-19 Vaccines Global Access Facility
COVAX AMC	COVID-19 Vaccines Advanced Market Commitment
COVID-19	Coronavirus Disease 2019
DO	Development Objective
DNSP	National Directorate for Health
EOC	Emergency Operations Center
EPI	Expanded Program for Immunization
EPRP	Emergency Preparedness and Response Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
EU	European Union
FM	Financial Management
FTCF	Fast Track COVID-19 Facility
Gavi	Global Alliance for Vaccines and Immunizations
GDP	Gross Domestic Product
GFF	Global Financing Facility
GRM	Grievance Redress Mechanism
HIV	Human Immunodeficiency Virus
HNP	Health, Nutrition, and Population
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IDP	Internally Displaced People
IFC	International Finance Corporation
INIS	National Institute of Investigation and Health and National Reference Laboratory
IPC	Infection Prevention and Control
IPF	Investment Project Financing
LNG	Liquid Natural Gas
M&E	Monitoring and Evaluation
MINSA	Ministry of Health
MPA	Multiphase Programmatic Approach
NCD	Non-communicable Disease
NDC	Nationally Determined Contribution
NDVP	National Deployment and Vaccination Plan
PAD	Project Appraisal Document

PDO	Project Development Objective
PHC	Primary Health Care
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PPE	Personal Protective Equipment
R&D	Research and Development
SAGE	Strategic Advisory Group of Experts on Immunization
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SOPs	Standard Operating Procedures
SPRP	Strategic Preparedness and Response Program, also known as Global COVID-19 MPA
SRA	Stringent Regulatory Authorities
STEP	Systematic Tracking of Exchanges in Procurement
TB	Tuberculosis
UNICEF	United Nations Children's Fund
VAC	World Bank Vaccine Approval Criteria
VIRAT	Vaccine Introduction Readiness Assessment
VRAF	Vaccine Readiness Assessment Framework
WB	World Bank
WBG	World Bank Group
WHO	World Health Organization

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name
Angola	Angola COVID-19 Strategic Preparedness And Response Project

Project ID	Financing Instrument	Environmental and Social Risk Classification
P176630	Investment Project Financing	Substantial

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 Project Approval Date	Expected Project Closing Date	Expected Program Closing Date
29-Jul-2021	31-Jul-2023	31-Mar-2025

Bank/IFC Collaboration

No

MPA Program Development Objective

The Program Development Objective is to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness

MPA Financing Data (US$, Millions)

MPA Program Financing Envelope	18,000.00

Proposed Project Development Objective(s)

The Project Development Objective (PDO) is to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness in Angola.

Components

Component Name	Cost (US$, millions)
Support to the COVID-19 response	10.00
COVID-19 Immunization	130.00
Community engagement and risk communication for demand creation	3.00
Project Implementation and monitoring	7.00

Organizations

Borrower:	Angola Ministry of Finance
Implementing Agency:	Angola Ministry of Health

MPA FINANCING DETAILS (US$, Millions)

Board Approved MPA Financing Envelope:	18,000.00
MPA Program Financing Envelope:	18,000.00
of which Bank Financing (IBRD):	9,900.00
of which Bank Financing (IDA):	8,100.00
of which other financing sources:	0.00

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	150.00
Total Financing	150.00
of which IBRD/IDA	150.00

Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	150.00

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2022	2023	2024
Annual	115.00	30.00	5.00
Cumulative	115.00	145.00	150.00

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

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	High
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	High
7. Environment and Social	Substantial

8. Stakeholders	Substantial
9. Other	Substantial
10. Overall	High
Overall MPA Program Risk	High

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

Have these been approved by Bank management?

[✓] Yes [ ] No

Is approval for any policy waiver sought from the Board?

[ ] 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	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

Section I. B. 1 (a). no later than thirty (30) days after the effective Date, or such later date as agreed by the Bank, prepare and adopt, and thereafter carry out the Project in accordance with a manual (the Project Implementation Manual),

Sections and Description

Section I. F. 5. the Borrower shall prepare and furnish to the Bank the first proposed Annual Work Plan and required under the Project not later than thirty (30) days after the Effective Date.

Conditions

Type	Financing source	Description
Effectiveness	IBRD/IDA	(b) The Borrower has prepared, consulted, adopted, and published the ESMF, the SEA/SH Action plan, the LMP, the IPPF and the SEP, all in form and substance satisfactory to the Bank.

I. PROGRAM CONTEXT

A. MPA Program Context

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$150 million.** The Loan will support the costs of the activities of the Angola COVID-19 Strategic Preparedness and Response Project (P176630) under the coronavirus disease 2019 (COVID-19) Strategic Preparedness and Response Program (SPRP) using the Multiphase Programmatic Approach (MPA), approved by the World Bank Board of Executive Directors on April 2, 2020 with an overall Program financing envelope of up to US$6.00 billion, and the Additional Financing (AF) to the SPRP approved on October 13, 2020 of US$12.00 billion[1]. The MPA seeks to enable affordable and equitable access to COVID-19 vaccines and help ensure effective vaccine deployment through vaccination system strengthening, and to further strengthen preparedness and response capacity in countries.

2. **This PAD describes Angola's effort to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness** The purpose is to support the government response to the COVID-19 outbreak by purchasing and deploying COVID-19 vaccines that meet the World Bank's vaccine approval criteria (VAC) and strengthening the health system to be better prepared to respond to future outbreaks. The proposed project will finance vaccine acquisition to immunize up to 20 percent of the population, supporting the country to achieve the desired 48 percent coverage. Additional project support for immunization systems will support the deployment of the vaccines donated by the COVID-19 Vaccines Global Access Facility (COVAX) which is providing 20 percent of the population coverage through the Advanced Market Commitment (AMC) fully subsidized arm and other donors and partners including China (200,000 doses) and Russia (50,000 doses); private sector donations (one million doses); a European Investment Bank Loan (2.8 million doses) and possibly a bilateral agreement with Russia to purchase additional doses. Project financing for COVID-19 vaccines purchase will follow the World Bank's updated VAC: (i) the vaccine has received regular or emergency licensure or authorization from at least one of the Stringent Regulatory Authorities (SRAs) identified by the World Health Organization (WHO) for vaccines procured and/or supplied under the COVAX Facility, as may be amended from time to time by WHO; or (ii) the vaccine has received WHO Prequalification (PQ) or WHO Emergency Use Listing (EUL). Angola is providing vaccines free of cost.

3. **The proposed project contributes directly to the development objective of the Global MPA to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness.** This project will support the country to continue to respond to the COVID-19 epidemic (currently undergoing a second wave) as well as focus on acquisition and deployment of COVID-19 vaccines. This is occurring in a rapidly evolving context where COVID-19 variants have emerged, new vaccines are coming on the market, and there is growing vaccine and vaccine brand hesitancy among the general population and health providers. Reaching levels of protection that could have a population level impact will require strengthening overall immunization capacity and health systems. Importantly, the operation seeks to ensure comprehensive population coverage and leverage the demand for COVID-19 vaccination for adults. Supporting the Government's efforts to implement the National Deployment and Vaccination

[1] Strategic Preparedness and Response Program (SSRP), also known as Global coronavirus disease 19 (COVID-19) Multiphase Programmatic Approach (MPA). The World Bank approved a US$12 billion World Bank Group (WBG) Fast Track COVID-19 Facility (FTCF or "the Facility") to assist International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA) countries in addressing the global pandemic and its impacts. Of this amount, US$6 billion came from IBRD/IDA and US$6 billion from the International Finance Corporation (IFC). The IFC subsequently increased its contribution to US$8 billion, bringing the FTCF total to US$14 billion. The Additional Financing of US$12 billion (IBRD/IDA) was approved on October 13, 2020 to support the purchase and deployment of vaccines as well as strengthening the related immunization and health care delivery system.

Plan (NDVP), the project aligns with the World Bank's crisis response support to COVID-19 in Angola, and the Angola Country Partnership Strategy FY14-FY16 (Report No. 76225-AO).

B. Updated MPA Program Framework

Table 1 below highlights how this project fits into the total envelope of the MPA for IBRD and IDA.

Table 1. MPA Program Framework

Project ID	Sequential or Simultaneous	Phase's Proposed DO	IPF, DPF, PforR[2])	Estimated IBRD Amount (US$ million)	Estimated IDA Amount (US$ million)	Estimated Other Amount (US$ million)	Estimated Approval Date	Estimated Environmental and Social Risk Rating
P176630	Simultaneous	To support the Government of Angola to acquire, manage, and deploy COVID-19 vaccines, and to strengthen its pandemic preparedness, response, and health systems' capacity.	IPF	150	N/A	0	07/2921	Substantial
		Board Approved Financing Envelope		**9,900**	**8,100**	**18,000**		

C. Learning Agenda

4. **The proposed project under the MPA Program will support adaptive learning** throughout implementation, and with partners including the WHO, the International Monetary Fund (IMF), the Center for Disease Control (CDC), the UN Children's Fund (UNICEF), and others. Key areas include:

- **Forecasting**: The project will support Angola's capacity to model, monitor, and regionally collaborate to track and anticipate the progression of the pandemic, both in terms of new cases and deaths, as well as the economic impact of disease outbreaks under different scenarios. This project will also contribute to strengthen laboratory capacity, including possible support to enable genomic surveillance.
- **Technical**: Research may contribute to knowledge around the strengths and limitations of vaccine logistics and monitoring systems, as well as effectiveness of new vaccines delivered in different contexts and against new variants. This will also contribute to enhanced preparedness for future climate-driven emergencies, building on the lessons from COVID-19 vaccine procurement and distribution. As Angola has already begun its vaccination having administered 1,181,638 doses of vaccines against COVID-19, including 761,308 first doses and 420,330 second doses (as of June 9, 2021), the lessons from this early experience of targeting and implementation will inform further deployment as a broader set of priority populations are targeted.
- **Supply chain approaches:** The project will assess a progressive transition from the use of the existing supply chain model, to outsourced last mile delivery, while integrating vaccines into the supply chain for medicines and medical supplies in terms of data and logistics systems (namely through the expansion of an electronic Logistics Management System – eLMIS). Angola has been pioneering the use of an electronics system that allows for just-in-time monitoring of last mile delivery efforts that is being further assessed to accompany the full COVID-19 vaccination campaign.
- **Social behaviors:** The project can contribute to a better understanding of beneficiary perceptions and constraints

[2] Investment Project Financing (IPF), Development Project Financing (DPF), Program for Results (PforR)

for vaccine access and acceptability, particularly in the context of and other inequalities, and fragility conflict and violence (FCV). In the case of Angola, the country is keen to learn of communications campaigns used across other countries targeted at municipal levels to address the issue of vaccine hesitancy. As part of project implementation and management, community engagement specialists will document lessons learned from communications campaigns that address vaccine hesitancy at the municipal level.

II. CONTEXT AND RELEVANCE

A. Country Context

5. **Angola is facing the greatest challenges to the country's prosperity since the end of the civil war.** As Africa's eighth largest economy, with a wealth of natural resources, Angola has the potential to generate significant economic growth and to reduce poverty. After the end of Angola's 27 year-long civil war in 2002, the economy prospered thanks to revenues from vast oil reserves, with gross domestic product (GDP) per capita doubling from US$2,000 in 2002 to more than US$5,000 by 2014. The benefits of that growth were not broadly shared however, resulting in a high level of inequity, with a Gini coefficient of approximately 0.51 (2015). By 2020, an estimated 49.9 percent of Angolans lived in poverty.[3] Heavy reliance on oil revenues and a lack of economic diversification, with agriculture and services remaining particularly untapped, have stymied broad-based growth and created few jobs, especially for young labor market entrants.

6. **While the World Bank has been engaged in Angola for almost 30 years, the dual shocks of oil price reduction and COVID-19 have dramatically changed the country context, the country's need for support, and thus the partnership between Angola and the WBG.** Angola's oil-based growth model has not been inclusive or poverty reducing—even during the period of high oil prices (2005-14) when Angola recorded rapid economic growth. Depressed oil prices have led to a five-year recession, recently further exacerbated by impacts from the COVID-19 pandemic, resulting in an increase in poverty and a decline in human development indicators. The government that assumed office in late 2017 is committed to establishing a more sustainable and inclusive growth model and substantial progress has been made in recent years towards reforming the economy.

7. **Angola is currently facing multiple crises, including severe, persistent droughts, diverse natural disasters, multiple infectious diseases epidemics — and now the global COVID-19 pandemic.** This situation could increase the number of people vulnerable to food insecurity from 2.3 to 7.4 million. Access to water resources in Southern Angola is highly vulnerable to climate extremes; more than 35 percent of livestock have died. The structural causes of these drought impacts are poor rural water point governance (lack of monitoring, maintenance and repair systems, weak institutions) and lack of drought preparedness. Adaptation to climate change, with a focus on the south, and food security, are therefore emerging as priority areas for WBG support going forward. The health consequences are indeed dire, including an exacerbation of already severe food insecurity and acute and chronic malnutrition (especially in the southern provinces), adverse impacts on the ability to treat other prevalent infectious diseases, over-burdened health care services, and higher health expenditures.

8. **Angola suffers from weak human capital, manifested in a Human Capital Index (HCI) of 0.36 (2018).** This is largely due to persistent under-investment in social sectors and human capital, but is also a result of Angola's non-inclusive growth model since the end of the civil war in 2002. Fiscal constraints will limit increases in social spending over the coming years, though the government has made efforts to protect the budget and to build systems to increase the

[3] World Bank Macro Poverty Outlook, April 2021. http://macropovertyoutlook.worldbank.org/mpo_files/mpo/mpo-sm21-ago-scope.pdf.

effectiveness and efficiency of social spending. As part of its IMF program, authorities have agreed on a floor for social expenditures, which was exceeded in 2020 and will likely also be exceeded in 2021. The World Bank is engaged to strengthen human capital, including through a DPF supporting the establishment of a flagship poverty-targeted cash transfer program (Kwenda). In the health sector, the World Bank supports the piloting of performance-based financing in selected provinces, with a view to extending the program based on results and lessons learned. In the education sector, the Girls' Empowerment and Learning for All Project (P168699) aims to improve learning quality for all and introduces a scholarship system to keep girls in secondary school, accompanying an ongoing Learning for All Project (P122700).

9. **The COVID-19 pandemic hit Angola as it was attempting to recover from the oil shock, taking a heavy toll on the economy**. With a highly oil dependent economy, the decline in the oil sector and the price of oil is the main driver of the multi-year recession. COVID-19 related disruptions also contributed to the 2020 oil decline (especially in the second quarter). Driven by rapid currency depreciation (37 percent in 2020), inflation increased to 25 percent in January 2021, with food prices rising even faster, at 31 percent. Despite increased health spending, fiscal policy has remained tight, and debt exceeds 120 percent of GDP. In 2020, the government prioritized spending on health (which increased 40 percent) and social protection. Total public debt is estimated at 128 percent of GDP at the end of 2020 (up from 107 percent of GDP in 2019). Debt-to-GDP has increased continuously despite fiscal surpluses in 2018 and 2019 due to currency depreciation (close to 80 percent of public debt is denominated in foreign currency). With the sharp drop in oil revenues, the fiscal balance fell into deficit (estimated at 1.7 percent of GDP), but the primary fiscal balance remained in surplus in 2020.

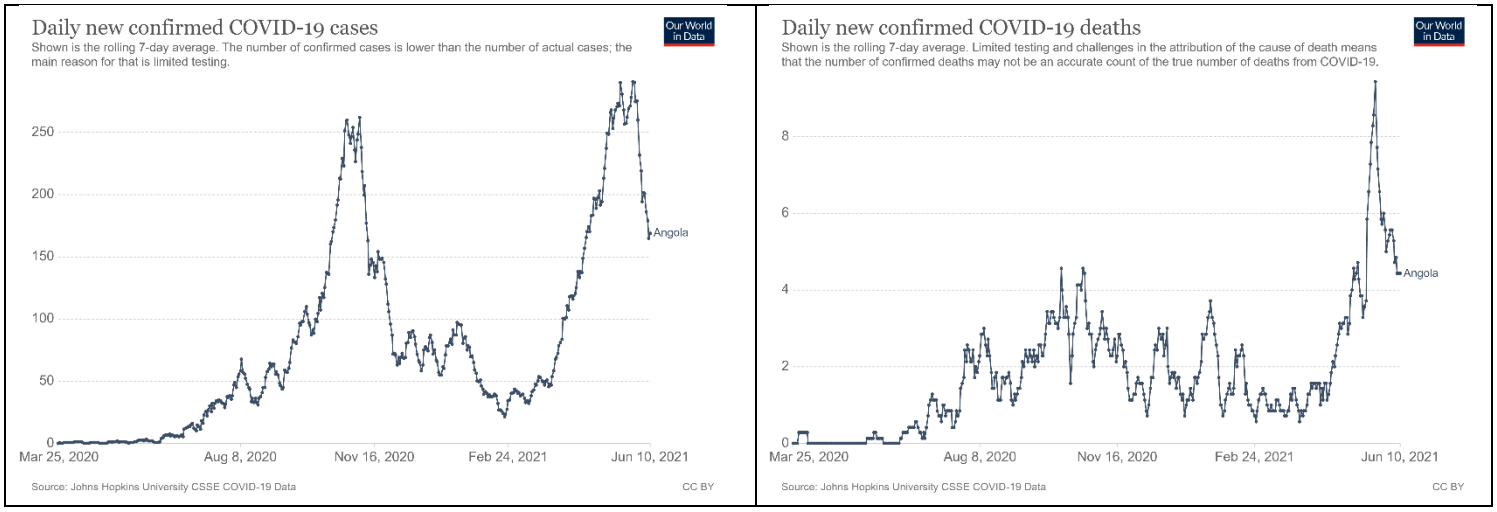
10. **The capacity to manage the epidemic together with the widespread deployment of COVID-19 vaccines will be at the core of a resilient recovery from the pandemic's dual impacts on the economy and human development in Angola.** The economy is expected to gradually pick up in the medium term, with the anticipated recovery of the oil price eliminating the fiscal deficit and reducing debt-to GDP beginning in 2021. However, much depends on the trajectory of the pandemic, and Angola's capacity to contain it. Beyond the immediate health impacts of reduced mortality and local transmission, as vaccine coverage increases, scaling up vaccination can help accelerate the easing of containment measures, allowing for a more rapid recovery of economic activity and restoration of critical human development services.

B. Sectoral and Institutional Context

11. **Angola reported its first case of COVID-19 on March 21, 2020, and as of July 7, 2021, had reported 39,491 confirmed COVID-19 cases and 925 resulting deaths.** Angola was one of the first African countries to adopt social distancing and restrictive measures starting with the closure of all airports to commercial flights from March 24, 2020. A state of emergency was declared on March 27, 2020, with domestic and international travel and circulation restrictions imposed nationwide. A Multisectoral Commission was set up to oversee implementation of the National Contingency Plan activities and COVID-19 related decisions. After a slow and steady increase in daily cases from March to September 2020, COVID-19 daily cases increased exponentially up to the end of October 2020, when the country saw a daily number of confirmed cases of 260 on October 27th. After two weeks of having a daily number of confirmed cases above 200, cases started to decline, stabilizing between December and January at 50 to 100 cases, and since then to the beginning of March 2021, the average daily case count had been under 50 new infections (see figure 1). However, since mid-March the cases started to increase and reaching by the end of May a new peak in transmission around 250 diagnosed cases per day, indicating a second wave of the COVID-19 pandemic in country. Since the beginning of June, the number of

newly diagnosed cases have been declining significantly. Such decline might be related to the increased roll out of the COVID-19 vaccines in country which aims at mitigating the health systems impact of the pandemic focusing on the individuals most at risk of severe disease and deaths. As expected, the epidemic curve for deaths has followed the epidemic curve for confirmed cases (see Fig 1).

Figure 1. Angola, daily New Confirmed COVID-19 Cases and deaths, respectively, rolling 7-day average from March 2020-June 10, 2021



12. **The COVID-19 pandemic and related socio-economic consequences are expected to adversely impact other key health priorities in Angola, such as Human Immunodeficiency Virus (HIV), malaria, and tuberculosis (TB**), as well as maternal, child and reproductive health and care for chronic illness. The impact will most likely arise from disruptions in the usual activities and services resulting from the mitigation strategies being utilized in response to the COVID-19 epidemic. Containment and isolation measures have led to the scaling back of certain activities and care-seeking patterns, as well as reduced capabilities of the health system due to the high demand for the care of COVID-19 patients. The pandemic has also led to interruptions in the supply of commodities because of domestic and international supply chain disruptions. It has also displaced financing for non-COVID health programs due to increased funding being directed to the health sector response to the COVID-19 outbreak. The impact on the HIV response is due to individuals being less likely to refill prescriptions, as well as an intentional scaling back of HIV services due to reduced funding to the program.[4] The impact on TB could potentially arise from treatment being discontinued or delayed treatment initiation.[2] The impact on malaria will be due to the disruption of long-lasting insecticidal net distribution and seasonal malaria chemoprevention activities, as well as a reduction in clinical case treatment by 50 percent.[2] In high burden settings such as Angola, HIV, TB- and malaria-related deaths over the next five years may increase by up to 10, 20 and 36 percent, respectively, as compared to the situation without the COVID-19 pandemic**.** Beyond the above, the COVID-19 pandemic has impacted the provision of care to patients with chronic non-communicable diseases (NCDs) and coverage of routine immunization and maternal and child primary care services. According to a UNICEF led survey in February 2021, 51.2 percent of the people interviewed by phone had not accessed essential health services during the

[4] Report 19: The Potential Impact of the COVID-19 Epidemic on HIV, TB and Malaria in Low- and Middle-Income Countries, https://www.imperial.ac.uk/media/imperial-college/medicine/mrc-gida/2020-05-01-COVID19-Report-19.pdf

COVID-19 pandemic. The three main reasons for not seeking essential services were lack of funds to pay for services, low quality of care during the pandemic and the fear of exposure to COVID-19.

13. **Angola's recent experience in managing one of the largest yellow fever outbreaks and leading a massive nation-wide vaccination campaign, will be instrumental for the successful roll-out of an ambitious COVID-19 immunization plan.** On December 2015 the first case of yellow fever was detected in Luanda among a migrant population (from Eritrea) eventually spreading country-wide to 16 of Angola's 18 provinces, resulting in 884 confirmed cases and 121 deaths. The outbreak which lasted for seven months can be explained by the low yellow fever vaccination coverage of 48.5 percent among children aged 12-24 months reported in the 2015-2016 Demographic and Health Survey, coupled with a large susceptible population who were not infected in the previous smaller yellow fever outbreaks, along with high levels of Aedes aegypti mosquito infestation in both urban and rural areas. In April 2016, Angola started a country-wide vaccination campaign, initially as a reactive campaign and concluded in February 2018 as a preventive campaign. A total of 23.74 million individuals were vaccinated country-wide achieving a reported coverage of 91.4 percent. During the vaccination exercise there were many challenges: low previous experience implementing a massive vaccination campaign; shortages of qualified vaccinators; ensuring vaccine quality with a very large number of vaccine doses being channeled through the logistical supply chain system; vaccine hesitancy (particularly among men from high socio-economic status); and last mile delivery in hard-to-reach populations. These challenges translated to the following lessons learnt that will be crucial for the success of the roll-out of the COVID-19 vaccine: strong political commitment and the presence of a high-level mechanism of emergency coordination at all levels enabled a more robust response; strong supply systems ensure effective management of vaccines and reduce wastage; engagement with armed forces as an instrumental tool for swift, robust and effective mass vaccination campaigns with a pool of trained vaccinators as well the logistics and fleet infrastructure to transport the vaccines to the most remote rural areas; and risk communication and engagement was a key tool through which to tailor messages to groups to address vaccine hesitancy for the success of vaccination efforts

14. **The COVID-19 vaccine deployment will build on the lessons of the yellow fever mass vaccination campaign**. Angola still faces significant challenges in terms of national immunization coverage that is significantly lower than the WHO target of 90 percent. The COVID-19 pandemic has put further stress on sub-optimal vaccination systems and national immunization coverage levels are expected to have decreased in 2020 and likely in 2021. The proposed project will provide upfront financing to help the government purchase and deploy COVID-19 vaccines that meet the World Bank's VAC and strengthen relevant health systems related to the government's vaccine program that are necessary for a successful deployment of the COVID-19 vaccine. This will have a positive impact on routine immunization coverage by leveraging this opportunity and ensuring combined immunization campaigns, especially for hard-to-reach populations. The combined immunization campaigns include the routine campaigns as part of the Expanded Program for Immunization (EPI) children immunization program + COVID-19 immunization.

15. **The Project is being prepared under the procedures provided for under the Bank Policy on Investment Project Financing** (hereafter the IPF Policy) Section III paragraph 12: Projects in Situations of Urgent Need of Assistance or Capacity Constraints, as approved by management (memo dated June 10, 2021). The proposed Angola COVID-19 Strategic Preparedness and Response Project meets both criteria under the IPF Policy Section III paragraph 12 when the borrowers/beneficiaries are deemed to: (i) be in urgent need of assistance because of a natural or man-made disaster or conflict; or (ii) experience capacity constraints because of fragility or specific vulnerabilities (including for small states), given the urgency of expanding vaccination coverage.

16. **The increased financial and technical support by the World Bank for vaccine purchase and deployment at country level will help accelerate efforts by other development partners.** Making funds available for vaccine purchase

and deployment will establish an enabling environment for other bilateral donors, multilateral development banks, and UN agencies to support Angola to expand coverage. At the global and country level, the World Bank investment will reinforce the COVAX Facility, which is co-led by the Global Alliance Vaccine Initiative (Gavi), the Coalition for Epidemic Preparedness Innovations (CEPI) and WHO. The World Bank is on the Board of Gavi (as a founding member) and CEPI and works closely with both partners to help accelerate development and equitable access to COVID-19 vaccines. At the country-level Gavi, WHO, UNICEF, and other development partners are supporting the COVID-19 response, through multiple working groups and the National Immunization Technical Advisory Group (NITAG). These structures enable coordination of complementary technical assistance being provided, including by UN agencies and NGOs financed by Gavi for immunization systems strengthening (as described in Box 1 below).

Box 1: Potential Supportive Roles for Partner Agencies in Implementation

Partner	Role	Financing amount (US$)
WHO	Providing technical leadership for vaccine introduction, providing technical support to National Immunization Technical Advisory Group to define on COVID-19 vaccination policy objectives, strategy, targets and vaccine safety issue, developing guidelines and conduct training on AEFI surveillance for COVID-19 vaccine related issues and other issues of vaccine pharmacovigilance, etc.	US$25,000
UNICEF	Supporting the development of a roadmap for improved integration of COVID-19 vaccine deployment with EPI and other primary health care (PHC) services, supporting the quantification and forecasting of supply needs, support to procure and install quality cold chain rooms at national level, etc.	US$150,044
Gavi/COVAX	Providing vaccines to cover the first prioritized 20% of the population and beyond, providing financing to UN and international NGOs for technical assistance and cold chain improvements.	US$530,900 for technical assistance, in addition to financing for 20% vaccine coverage
European Investment Bank	Vaccine Financing by the European Investment Bank has already been approved for a loan to support the COVID-19 response (EUR30 million) and the purchase of COVID-19 vaccines (EUR20 million).	EUR50,000,000

Angola's Response to COVID-19 and World Bank Support

17. **The Government of Angola developed and approved a National Preparedness and Response Plan to COVID-19 in March 2020. Overall coordination is the responsibility of the Multisectoral Commission for Prevention and Response to the COVID-19 Pandemic.** At the provincial level, overall coordination is ensured by the Governor of each province. At the municipal level, coordination responsibility is held by the Municipal Administrators. The plan describes a multisectoral approach to reduce community-based transmission of COVID-19 in the country and reduce related morbidity and mortality. The main strategies prioritized include: (i) adequate training of personnel for screening at points of entry; (ii) provision of information to health professionals about the spread of COVID-19 and protective measures; (iii) intensification of epidemiological and laboratory surveillance; (iv) adequate preparedness for isolation of patients and case management; (v) appropriate provision of personal protective equipment (PPE); (vi) training of health facility personnel in infection prevention and control (IPC); (vii) intensification of social mobilization; and (viii)

enforcement of social distancing measures. The final version of the plan was costed at US$30 million in the beginning of the COVID-19 pandemic. With the recent increase in transmission of COVID-19 in Angola (second wave) coupled with the prolonged nature of the pandemic, this Plan and budget are being revised to ensure that the continuity of response is adequately planned and budgeted for. In this regard, the European Investment Bank (EIB) has recently approved a Concept Note for a EUR50 million loan, of which €EUR20 million is explicitly for purchasing COVID-19 vaccines as part of the COVID-19 response. The EIB loan will be implemented through the United Nations Development Programme (UNDP) in the country and is expected to become available in the second semester of 2021. A National Technical Group for the Introduction of the COVID-19 Vaccine was established recently (along with eight subcommittees) that developed the National Distribution and Vaccination Plan (NDVP) against COVID-19, dated February 2021, which aims to rapidly reduce mortality and morbidity through immunization against COVID-19, contributing to the well-being of the population and the resumption of economic and social activities.

18. **The World Bank responded swiftly, leading a quantitative needs analysis and donor coordination platform to assess and monitor the response to COVID-19 in Angola.** The Ministry of Health (MOH), through the Health System Performance Strengthening Project (HSPSP) (P160948), led the analysis to determine the country's immediate needs for its health sector response to the COVID-19 pandemic. The analysis identified equipment and material needs including PPE, diagnostics, hygiene, and case management, across the service areas of hospital care, outpatient care, medical consultations, and laboratory services. The analysis also served as a monitoring platform through which donated and purchased COVID-19 materials were tracked. The analysis led to a coordination platform and helped ensure support was directed to areas of need and duplication was minimized. The World Food Programme (WFP), UNDP, and the World Bank participated in the analysis.

19. **In addition to World Bank support for the immediate health sector response to COVID-19, further support was made available for more complex health sector needs and for Angola's multi-sectoral response through a portfolio of projects.** On June 23, 2020, the fourth phase of the Regional Disease Surveillance Systems Enhancement Project (REDISSE IV) for Central Africa (P167187) was declared effective with a financing envelope of US$60 million for Angola. The objective of the REDISSE IV project clearly aligns with the country's COVID-19 needs, aiming to strengthen national and regional cross-sectoral capacity for collaborative disease surveillance and epidemic preparedness and provide immediate and effective response in the event of an eligible crisis or emergency. With Angola facing a growing number of COVID-19 cases and concern about inadequate hospital intensive care units, the REDISSE IV project was quickly mobilized providing US$4 million to finance 100 ventilators of which 40 were distributed in Luanda province and 60 in 12 provinces outside of Luanda, providing national coverage. Due to the COVID-19 pandemic, REDISSE IV countries have seen a slow start to the planning and implementation of activities as the key focal points at the MOH for the REDISSE IV activities are the same as for the COVID-19 response. Likewise, the regional implementation organization (ECCAS) also experienced delays in the recruitment of staff and establishment of a functional regional implementation unit. Angola has been affected by such delays. However, in the first quarter of 2021, the recruitment of the key specialists at the Project Implementation Unit (PIU) which include public health, epidemiology, animal health, and monitoring and evaluation (M&E) has taken place and the Annual Work Plan and Budget (AWPB) is under finalization.

20. **Looking ahead, the REDISSE IV project in Angola will complement the investments in the COVID-19 response by supporting system strengthening actions focused on enhanced surveillance and coordination through a One Health approach.** The REDISSE IV project will ensure the Public Health Directorate has adequate support in terms of

epidemiological surveillance, laboratory and emergency management and that such investments translate in medium/long-term sustainable health systems strengthening. In addition, US$10 million was made available through the activation of the REDISSE IV Contingent Emergency Response Component (CERC) to support the country's multi-sectoral response to the COVID-19 pandemic. Although the CERC was activated, the Government decided not to utilize the funds, due to a seemingly controlled epidemic and a downward trend of cases in September/October 2020. Given this, the REDISSE IV Angola CERC is being de-activated with funds being returned to the original project component to support disease surveillance and outbreak response. Multi-sectoral support to the COVID-19 reason was provided through existing investment projects in Angola in the water and education sectors in the amount of US$8 million to maintain water supply in seven provincial cities and to support teachers in the roll-out of distance learning and contributing to school readiness in the re-opening of schools.

National Capacity and COVID-19 Vaccination Plan

(i) Vaccine Readiness Assessment

21. **Angola has been conducting in an iterative fashion its vaccine readiness assessment to identify gaps and options to address them, as well as to estimate the cost of vaccine deployment, with the support of international organizations** (including WHO, UNICEF, and Gavi). This assessment considers the government's vaccine deployment strategy, described below in Table 2 below. Considering the uncertainties related to the COVID vaccine market, including testing, approval, availability and pricing, which require flexibility and close monitoring and strong World Bank support during implementation, the assessment will continue to be an evolving process and will be dynamically revised and updated as necessary to continue to improve project implementation.

Table 2 - Summary of Vaccination Readiness Findings from the VIRAT/VRAF 2.0 assessment[5] (April 14, 2021)

Readiness domain	**Readiness of government** *(what has been done)*	**Key gaps to address before deployment** *(gaps and how they are being addressed)*
Planning and coordination	A National Coordinating Committee (NCC) for COVID-19 vaccine introduction with terms of reference, roles and responsibilities and regular meetings has been established and the body and its leadership are accountable and functional. A National Technical Working Group (NTWG) for COVID-19 vaccine introduction with terms of reference, roles and responsibilities and regular meetings has been established. Eight NTWG subcommittees have been established. The Angolan COVID-19 NDVP, with input from relevant bodies has been finalized and validated through the Partners Platform in February 2021.	To address the gap of waste management tools and processes, support the planning and procurement of waste management materials and equipment, to ensure compliance with protocols and plans established.

[5] A multi-partner effort led by WHO and UNICEF developed the Vaccine Introduction Readiness Assessment Tool (VIRAT) to support countries in developing a roadmap to prepare for vaccine introduction and identify gaps to inform areas for potential support. Building upon the VIRAT, the World Bank developed the Vaccine Readiness Assessment Framework (VRAF) to help countries obtain granular information on gaps and associated costs and program financial resources for deployment of vaccines. To minimize burden and duplication, in November 2020, the VIRAT and VRAF tools were consolidated into one comprehensive framework, called VIRAT-VRAF 2.0.

	Identification and planning for the national vaccine access/procurement approach (e.g. COVAX Facility, bilateral purchase agreement, procurement through UN agency, African Union, self-procurement) is underway. The costs of items, due diligence mechanisms and an overall budget has been approved.	
Budgeting	COVID vaccine program costs (vaccine, operating costs, human resources (HR) and capital costs) have been included in the government budget. The Budget was finalized with development partner contributions with a total cost of US$252.2 million.	Define financial management reporting system to ensure management aspects of appropriations from the MOF/Treasury are in place.
Regulatory	All regulatory frameworks are in place, including: An expedited regulatory pathway for approval of COVID-19 vaccines, including timelines and maximum number of days. The Astra Zeneca/Serum Institute of India (AZ/SII) vaccine provided under COVAX was approved. However, the critical COVID-19 situation in India has put a strain on the production of the AZ/SII vaccine and is delaying the in-country vaccine roll out. Clarification from the national regulatory authority on the regulatory requirements, and documents needed for regulatory approvals of COVID-19 vaccines and related supplies. Regulatory procedures are in place for import permit of COVID-19 vaccines and related supplies, and identify the requirements and documents needed to import COVID-19 vaccines and related supplies, including for taxes and tariffs. Expedited import approval from appropriate authorities confirmed by WHO. Requirements and documents needed for release of vaccines are clear and there is a system in place to ensure COVID-19 vaccines can be released (lot release) in less than two days by reviewing the summary lot protocol only (testing is not required).	
Prioritization and Surveillance	Priority groups for the different vaccination phases have been identified and quantified in collaboration with the NTWG subcommittee for prioritization, targeting, and COVID-19 surveillance to facilitate epidemiological data collection to record the vaccination status of infected persons using the existing COVID surveillance system. A real-time registration and vaccine roll-out monitoring system (ReDIV) has been developed and is being implemented nationwide. The system has allowed the registration of more than 600,000 individuals from the priority groups and captured the vaccinated individuals (over 500,000) across the 18 provinces, with data disaggregated by sex, priority group, geographical location among other categories.	
Service delivery	Protocols for infection prevention and control measures including	Ensure existence of protocols

	adequate personal protection equipment (PPE) to minimize exposure risk during immunization sessions have been updated. The details related to COVID-19 vaccine delivery strategies leveraging both existing vaccination platforms and non-vaccination delivery approaches to best reach identified target groups have been finalized to include vaccination sites and personnel.	regarding consent to vaccinations, process for agreeing to or refusing to be vaccinated, and measures to protect those that refuse to be vaccinated are in place. Measures to address the accounts of inefficient delivery platforms need to be developed to ensure the large gatherings at testing sites for prolonged periods of time (exceeding three hours) are eliminated.
Training and supervision	Training plan developed for all personnel participating in the vaccination campaigns. Training materials developed by WHO have been adapted and translated. Plans to safeguard the security of staff (e.g. during an emergency or major campaign) as well as security at the central and/or regional storage facilities and for products in-transit have been established. Virtual and/or in person trainings as outlined in the training plan with technical assistance from WHO have been undertaken.	
Monitoring and evaluation	Appropriate institutional arrangements have been outlined and paper-based and/or electronic monitoring tools have been adapted to monitor progress and coverage among different at-risk categories and facilitate vaccine delivery and timely reporting. Measures are in place for data protection, and appropriate data governance regulation is in place. As highlighted above, reDIV is monitoring a set of key indicators both on the registration of the eligible population as well as on the tracking and monitoring of the vaccinated individuals allowing for a real time monitoring system that ensures data transparency and visibility, mitigating the risk of elite capture and providing the key information for programmatic changes to overcome challenges of vaccine roll out and priority population coverage. Mechanism with multiple intake points to include grievance redress has been designed and is operational for feedback in relation to the vaccine program.	This gap is being addressed through the proposed project financing to put in place risk communication strategies and Grievance Redress Mechanisms
Vaccine, cold chain, logistics, infrastructure	NTWG subcommittee for vaccine, cold chain and logistics has in place terms of reference and standard operating procedures to coordinate COVID-19 vaccines and deployment of ancillary	

	products. Key roles and responsibilities needed for vaccine and ancillary products deployment; collect and confirm contact information for key personnel and facilities have been mapped. Plan for infrastructure needs, including for energy (primary and back-up power, especially in cold chain), Information and Technology (IT)/communications (including internet connectivity) and water has been developed for the health facilities providing COVID-91 vaccines. Standard operating procedures (SOPs) or guidelines for collection and disposal of medical waste to the relevant stakeholders are in place. Vaccines will be purchased using different options to support the country's needs for direct or advance purchase, including the use of the COVAX facility, the African Union (AU) AVATT initiative or the use of Bank Facilitated Procurement (BFP), where feasible. As mentioned above, the critical COVID-19 situation in India has put a strain on the production COVID-19 vaccines underscoring the country need to assess different purchasing options. Potential port(s) of entry, points of storage (stores), and fallback facilities in the country with their respective cold chain storage (2-8C, -20C, -60/70C) and transportation capacity for vaccines and ancillary products have been mapped. Strengthening and expanding the systems and protocols for tracking and monitoring the stock management and distribution of vaccines and key supplies through the Government's existing Vaccine Logistics Management and Information System (VLMIS - LOGISTIMO) has been budgeted and formally requested to be supported by current project Assessment of dry storage and cold chain capacity at all levels with regards to the COVID-19 vaccines characteristics has been undertaken Delivery and acceptance protocols and monitoring arrangements have been defined which will determine the investments in infrastructure and equipment needed.	
Safety surveillance	Guidelines, documented procedures and tools for planning and conducting vaccine pharmacovigilance activities (i.e. AEFI reporting, investigation, causality assessment, risk communication and response) are available. Channels of data sharing mechanisms to share COVID-19 vaccine	

	safety data and findings with relevant regional and international partner identified and secured. Adequate and trained human resources are available to conduct surveillance of events attributable to vaccination. Appropriate representation, well defined Terms of Reference (ToRs and training the Adverse Events Following Immunization (AEFI) committee to review COVID-19 Vaccine safety data (e.g., causality assessment of serious AEFI, clusters of AEFI, emerging safety concerns etc.) has been established. A coordination mechanism between relevant stakeholders (NRA, EPI, MAH, MOH, WHO and others) for exchange of COVID-19 Vaccine safety information has been established. Provisions that require manufacturers to implement risk management plans and collect and report COVID-19 vaccine safety data to the NRA has been identified. Compensation schemes if there are unintended health consequences as result of vaccines, including no-fault liability funds, and associated policies are in place.	
Demand generation and communication	Developed key messages and materials for public communications and advocacy, in alignment with demand plan. A demand creation plan (including advocacy, communications, social mobilization, risk and safety communications, community engagement, and training) to generate confidence, acceptance and demand for COVID-19 vaccines has been finalized and being implemented.	Data collection systems, including 1) social media listening and rumor management, and 2) assessing behavioral and social data, are being piloted.

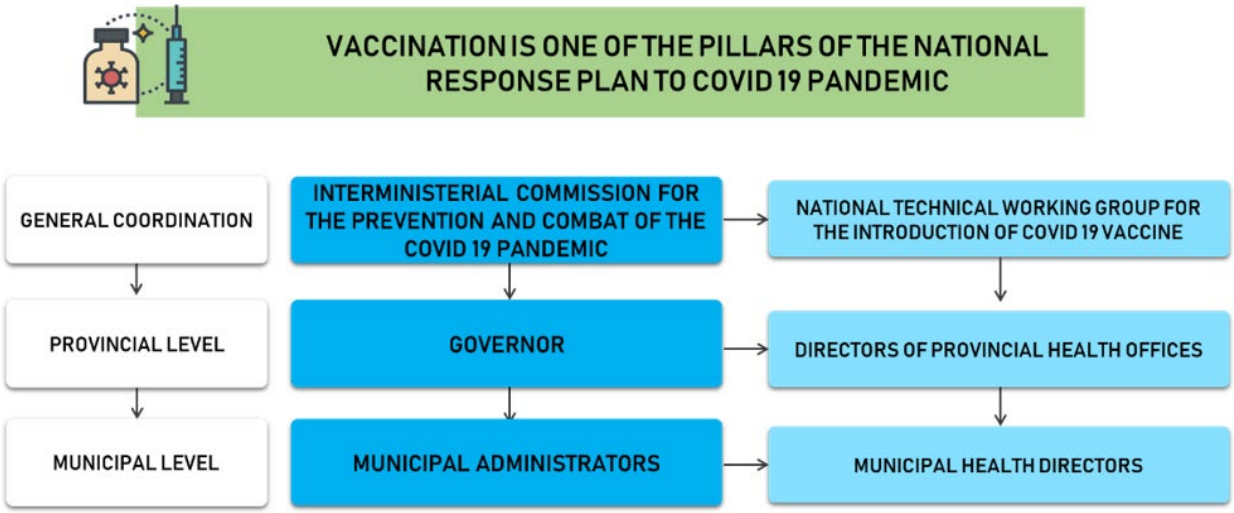
22. **Angola has made progress in its COVID-19 preparedness and response efforts with key accomplishments having been made.** With financing support of US$15,007,000 from the Health System Performance Strengthening Project (HSPSP, P160948), Angola invested in the following areas: coordination and strategic planning (US$600,000); risk communication and social mobilization (US$2 million); epidemiological surveillance, rapid response teams, and case investigation (US$2 million); points of entry (US$7,000); national laboratory network (US$700,000); infection prevention and control (IPC) (US$6 million); case management (US$2.5 million); and operational and logistics support (US$1.2 million). Furthermore, to be prepared for the arrival of the COVID-19 vaccines, the country proactively developed a NDVP and the ReDIV system and organized its cold chain system to be prepared to have received COVID-19 doses and their administration. The country faces outstanding needs in being able to access the full number of doses to achieve its COVID-19 vaccination target.

(ii) ***National Deployment and Vaccination Plan***

23. **Angola's National Deployment of the COVID-19 vaccine organizational structure follows the structure of the response to the COVID-19 emergency**. The general coordination oversees the Intersectoral Commission for Prevention

and Control of COVID-19, which is replicated at the provincial and municipal level under the leadership of the authorities at each level (see Figure 2 below).

Figure 2. Organizational structure COVID-19 vaccination (through administrative levels)



24. **Angola's vaccine distribution will be overseen by the Minister of Health supported by the Multisectoral Commissions and the NTWG for the introduction of the vaccine against COVID-19 (Ministerial Order nº 815/GAB.MIN/MS/2020).** The NTWG has eight sub-committees: (i) Vaccination and service delivery; (ii) Logistics and cold chain; (iii) Communication and demand creation; (iv) Epidemiological surveillance; (v) Research; (vi) Pharmacovigilance of adverse effects following immunization (AEFI); (vii) Monitoring and evaluation of vaccination coverage and impact; and (viii) Physical safety during vaccination events and custody of vaccines. Technical specialists from partner organizations including WHO, UNICEF, the World Bank, the (NITAG), CDC and Gavi consultants, have been supporting the NTWG and will be formally integrated into the subcommittees and will support the planning process of monitoring and evaluation.

25. **The Angolan NDVP draws on the findings of the VRAF/VRAT 2.0 assessment and gap analysis, targeting the most vulnerable and at risk of severe COVID-19 infection.** The Angola NDVP was approved and validated in the Partners Platform in February 2021. The Angolan NDVP targets a total of 15.6 million people (48.6 percent of the population) to be reached in two-phases. Phase 1 of the NDVP aims to reach 20 percent of the population (6.4 million people), with up to 12.8 million doses of vaccines to be provided by the COVAX-AMC Facility. The prioritization process for Phase 1 of the vaccination strategy is based on the national epidemiological analysis and the WHO Strategic Advisory Group of Experts on Immunization (SAGE) Values Framework and includes the most exposed groups (front line workers) and the most at risk (people with comorbidities and over the age of 40 years old). Phase 2 represents an additional 29 percent of the population and expands the target group to include the population over 18 years of age.

26. **Thorough cold chain for COVID-19 vaccination assessments have been conducted to inform project design and cold chain needs at the Angolan EPI.** The national vaccine deposit has one cold room + 2ºC + 8ºC of 123 m3 of liquid capacity and one freezer Room -15ºC to -25ºC of 70 m3 liquid capacity. For ultra-cold chain conservation -70ºC, 10 ultra-cold chain Freezers of 780 liters of storage capacity each are available. Additional 19 ultra-cold-chain freezers are in the process of arriving in the country and will be strategically distributed in the provincial capitals. At the provincial level, all 18 provinces have a cold room at least 7 m3 net except for the Province Cuando Cubango. All the provinces with cold

rooms have a backup generator for electricity. For Cuando Cubango, additional cold chain equipment is included in the COVAX cold chain proposal. At the municipal level, the installed capacity of vaccination campaigns against polio will be used. To improve the municipal level cold chain storage capacity, a proposal for additional cold chain support at the municipal level from COVAX was submitted with the country logistic team. The Vaccination Program has four refrigerated vehicles for secure vaccine delivery in the country. In addition, private refrigerated vehicles will be rented during campaigns to distribute vaccines and other materials through the Central Procurement Agency for Medicines and Medical Supplies (CECOMA, in its Portuguese acronym). The Armed Forces has offered to transport the vaccines in line with the plans presented by the logistic group. The transport of vaccines from municipalities to vaccination posts will be done utilizing long range cold boxes.

27. **The EPI supply chain has been strengthened with the support of Gavi through the implementation of an electronic Logistics Management Information System (LOGISTIMO/IOTA).** With support from Gavi, Angola is in the process of implementing the *Logistimo* Vaccine Logistics solution, with six provinces fully operational (the provinces more affected by the pandemic are already on the platform), with the supply chain operational from the Main National Deposit to six provincial, 60 municipal, 911 sanitary units, with 1,108 users trained, and operating the IOTA system on a daily basis. The Iota system is a management application used by health workers at primary health care centers and district warehouses. The NDVP envisions the expansion of the Logistimo/IOTA system to the 18 provinces, which will provide the oversight, verification and monitoring of logistics associated with the transport, storage and distribution of the vaccines from the airport to the end-user.

28. **Angola's ReDIV real-time registration and vaccine roll-out monitoring system provides data visibility, transparency and assures the integrity of the implementation of the vaccination program.** The ReDIV system was designed in March 2021 to provide a digital platform for nominal pre-registration of the eligible priority population for the COVID-19 vaccine. The system entails a stepwise process that starts with pre-registration, followed by validation and approval prior to administering the vaccines. The pre-registration is made first by the institution which has to register in the platform (https://www.vacina.gov.ao). After this step the verification and validation by the respective ministry, the employees of the institution can register themselves in the platform. Such information is validated by the supervisor/focal point for validation at the respective ministries. After the pre-registration, validation and approval (ReDIV back office) the ReDIV system schedules the appointment and generates a printout that confirms the appointment which needs to be presented at the vaccination site. For the eligible groups based on comorbidities, the registration is being done by the hospitals responsible for the patient's care. The system is now being further developed and adapted for stage 2 of phase 1, which will be financed and supported by this World Bank project financing. To overcome the barriers to get the printout, printing stations have been created at all municipal levels. As soon as the individual gets vaccinated, the ReDIV system is updated in real time. The dashboards and reports of the ReDIV system are shared daily with the *NTWG* and key partners and stakeholders (including the World Bank), providing a real-time update for decision makers, which can address any bottlenecks or challenges with informed, tailored and immediate actions. The experience of the ReDIV roll-out thus far has been its use to monitor the progress made in the vaccination effort to ensure priority groups are being targeted.

29. **Angola's AEFI surveillance system has been adapted to track and monitor any COVID-19 AEFI events.** The country already has a routine Integrated Disease Surveillance and response system that includes the notification and investigation of serious adverse events. The notification of serious adverse events post-immunization will be made

immediately by the health personnel of the vaccination posts or the health service that attends the case, to the surveillance team of each municipality for subsequent investigation using the adapted investigation form developed by the central level. Subsequently, the Provincial Pharmacovigilance team will undertake in-depth investigations of probable causality and report to the central level, within a period of no more than three days, which will in turn be transmitted to the WHO for further investigation if necessary. The central and provincial level, in coordination with the WHO surveillance, UNICEF Communication and the Ministry of Health risk communication teams will make the decision of what type of information should be given about the severe AEFI to the local population and if necessary at a national-level to maintain credibility in vaccines and transparency. In support of this, the AEFI committee has been trained to review COVID-19 vaccine safety data as part of the ongoing vaccination roll-out.

30. **Angola's Risk Communication and Community Engagement Plan (February 2021) will be key for the successful roll out of the COVID-19 vaccination.** One of the key lessons learnt from the Yellow Fever campaign was that risk communication and community engagement will determine the success and comprehensive coverage of the population. Angola, has developed and is implementing a comprehensive Risk Communication and Community Engagement Plan, which aims to create demand for the COVID-19 vaccine; increase awareness about the COVID-19 vaccine; provide clear, transparent, correct and timely information, including the justification for prioritizing specific groups that will receive the vaccine in the first stage of phase one; increase community confidence in the vaccine; respond to and clarify public concerns about hesitation and distrust about the vaccine; and encourage people to continue adopting behaviors to prevent COVID-19 infection, even after vaccination. The Plan is being used for the ongoing roll-out by activating channels for the community to communicate their concerns which include several methods such as: online media monitoring (social media, internet), offline (TV, radio) and strengthening a 24 hour hotline information number (111) to ensure that the population has access to information on vaccination, prevention, case references and other topics related to COVID-19. These channels are further described in paragraphs 47-49 of component 3.

31. **Angola's coverage and purchase plan (June 2021), which is fluid and constantly evolving, (Table 3) currently include different vaccines with different sources of financing, some of which are yet to be confirmed.** The COVAX AMC has committed to provide Angola with doses to cover 20 percent of the population (13,224,240 doses) and on March 2, 2021 delivered 624,000 doses of AstraZeneca/Serum Institute of India (AZ/SII). This has been complemented by donations from the People's Republic of China of 200,000 doses of Sinopharm and 50,000 doses of Sputnik V from Russia. Furthermore, on April 30th, Angola was able to secure an additional 495,000 doses of AZ/SII from the Democratic Republic of Congo that had been donated by the COVAX facility and were at risk of expiration due to delays in the vaccination process. This amount will be discounted from the overall allocation from COVAX to Angola, which will remain at the 13,224,240 doses. Additionally, on April 21, 2021, Angola expressed its interest to purchase an additional 13,005,760 COVID-19 vaccines doses through the COVAX facility to supplement the fully subsidized AMC doses. These doses will be funded through a combination of sources: World Bank financing through this project; private sector oil companies have committed to finance one million COVID-19 doses; the EIB loan to Angola (Concept Note approved in the end of April), from which €20,000,000 will be used to procure COVID-19 vaccines (2.8 million doses estimated to be purchased). Regarding the donation from private sector and in light of ethical concerns of equity for those who cannot pay, as well as, regulatory issues on whether private provision would meet government standards, the Government of Angola (GoA) decided to channel donations to purchase vaccines through the COVAX facility. As such, the private sector donations will fund part of the 13 million COVID-19 vaccines being purchased through COVAX. World Bank financing up

to US$85 million will be applied through this project to cover up to 12 million (estimated at US$7/dose) which could be purchased through the COVAX facility. The US$7/dose does not include ancillary products and transport fees that will need to be paid on top of the US$7/dose. The exact number of vaccines to be procured with the financial allocation from the World Bank will depend on vaccine cost and regimen (one or two doses). As detailed below, the remainder of project financing will, provide financing to the continued COVID-19 response (including re-vaccinations or booster doses as may be needed as well as the population groups below the age of 18 when approved vaccines for this age group become available) and support the COVID-19 vaccine deployment, strengthening the immunization systems through supply and cold chain investments as well as immunization information systems. In addition, Angola is in the process of negotiation with the Russian Federation to purchase an additional six million doses of Sputnik V vaccines through their National State Budget. The total cost of the NDVP is estimated at US$252.2 million[6], 90 percent of which is for vaccine doses and shipping. Table 3 below provides a summary of Angola's vaccine coverage and purchase plan.

32. **In addition, to vaccines acquired through COVAX, the AVATT convened by the African Union, is in the process of negotiating, through UNICEF, additional access to vaccines that would contribute to taking the total population covered up to 60 percent, in countries that request for it.** When firm contracts are in place between UNICEF, as the appointed procurement agent, and the manufacturers, UNICEF will conclude contracts with participating countries for the supply of the vaccines. Advanced discussions to ensure compliance have resulted in the agreement to have these contracts reviewed by the World Bank to ensure that they comply with all operational policies and provide value for money in terms of both price and delivery times before financing from this Loan can be disbursed toward the member country upon its request. Access to doses through the AU/AVATT would contribute to Angola getting closer to its NDVP targets and potentially access Johnson and Johnson vaccines which due to the single-dose administration as well as cold-chain requirements show greater comparative advantage versus other available vaccines. Angola has submitted an expression of interest to use this mechanism to acquire vaccines in parallel with the submission to the COVAX facility and could finance such procurement partially with World Bank financing, depending on vaccine availability and contracts meeting the World Bank guidelines.

[6] Angola National Deployment and Vaccination Plan and Budget.

Table 3: Angola Vaccine Coverage and Purchase Plan

Note: This is based on the current available estimates as of May 5, 2021. The table will be updated as more accurate information becomes available.

Source of financing – IBRD Loan	Population targeted[7]		Vaccine(s)				Number of doses needed	Estimated total U$ (millions)	World Bank's VAC Status	Contract status	Vaccines already arrived in the country	
	%	Number	Source	Name	Price (US$/dose)	Shipping (US$/dose)					Name	Doses
Phase 1	Includes stages 1 and 2 covering the frontline workers of different sectors and people with diagnosed co-morbidities (stage 1; 3%) and adults over the age of 40 years old (stage 2; 17%)											
COVAX vaccines and IBRD loan for deployment	19.2	6,294,534	COVAX	AZ/SII + Pfizer + to be confirmed (tbc)	0	0	2 doses	0	4 SRA + WHO EUL	Completed	AZ/SII	624,000 (March 2,2021) 495,000 (April 30,2021) 100,620
											Pfizer	100,620 (May 2021)
Donations from China	0.6	100,000	China	Sinopharm	0	0	2 doses	0	WHO EUL	Completed	Sinopharm	200,000 (March 2021)
Donations from Russia	0.2	25,000	Russia	Sputnik V	0	0	2 doses	0	Not approved	Completed	Sputnik V	40,000 (May 11,2021)
Phase 2	All adults above the age of 18 years old (28.6%)											
COVAX vaccines and IBRD loan for deployment	0.8	125,000	COVAX	TBC	0	0	2 doses	0	4 SRA + WHO EUL	Completed		
IBRD loan for vaccine procurement	12.9	4,159,200	COVAX / AU/AVATT	TBC	7	0	1 or 2 doses	58,228,800	4 SRA + WHO EUL	Expression of interest signed		

population.es the estimation of 32,097,670 people as its total population.

Source of financing – IBRD Loan	Population targeted[7]		Vaccine(s)				Number of doses needed	Estimated total U$ (millions)	World Bank's VAC Status	Contract status	Vaccines already arrived in the country	
	%	Number	Source	Name	Price (US$/dose)	Shipping (US$/dose)					Name	Doses
and deployment												
European Investment Bank	4.4	1,400,000	COVAX / AU/AVATT	TBC	7	0	1 or 2 doses	0	4 SRA + WHO EUL	Concept Note approved		
Donation private sector oil companies	1.2	500,000	COVAX	TBC	7	0	2 doses	0	4 SRA + WHO EUL	Pending		
Bilateral agreement	9.3	3,000,000	Russia	Sputnik V	TBC	TBC	2 doses	0	Not approved	Pending		
National Total	**48.6%**	**15,603,734**		**Multiple**				**TBC**				**1,319,000**

33. **For vaccine acquisition outside the COVAX facility, Angola will need to enter into indemnification arrangements with manufacturers**. The COVAX facility has negotiated a form of indemnity on behalf of AMC participants, which was adopted by Angola as the basis for the receipt of its first COVAX shipment. In parallel, a compensation program for individuals in AMC countries to cover any serious adverse events arising from vaccines received through COVAX is being established. For vaccines acquired outside COVAX, Angola will need to establish the necessary indemnification frameworks per manufacturer agreements prior to acquisition. Box 2 below highlights support the World Bank will provide through the project to ensure readiness for any vaccine procurement pursued outside COVAX.

Box 2: Liability and Indemnification Issues in Vaccine Acquisition

- The rapid development of vaccines increases **manufacturers' potential liability** for adverse effects following immunization.
- Manufacturers want to protect themselves from this risk by including **immunity** from suit and liability clauses, **indemnification** provisions, and other **limitation of liability** clauses in their supply contracts.
- **Contractual provisions and domestic legal frameworks** can all operate to allocate that risk among market participants, but **no mechanism will eliminate this risk entirely.**

For COVAX-financed vaccines:

- COVAX has negotiated model indemnification provisions with manufacturers for vaccines purchased and supplied under the COVAX AMC.
- In providing vaccines through COVAX AMC, COVAX requests COVAX AMC participants to have in place an indemnity agreement directly with manufacturers, and the necessary indemnity and liability frameworks for that purpose – either in the form of the COVAX model indemnification arrangements or prior bilateral arrangements with manufacturers.
- The COVAX Facility will have a no-fault compensation scheme for AMC countries as part of its risk mitigation strategy. This will cover vaccines supplied only through COVAX AMC.
- Angola will have to consider what it will take to implement these indemnification provisions (including statutory implementation) and how they can avail of the benefits of the no-fault compensation scheme.

For vaccines purchased outside of COVAX:

- Angola will need to enter direct indemnification arrangements with manufacturers.
- Angola does not currently have legislation in place to provide statutory immunity for manufacturers and has no national no fault compensation scheme.
- Adoption of any such indemnification provisions or compensation scheme would have to be in accordance with Angola's own national strategy and framework.

Possible World Bank support to Angola, depending on needs elaborated over the course of preparation, may include:

- Information sharing on (i) statutory frameworks in OECD countries and other developing countries; and (ii) overall experience in other countries
- Provide training and workshops for government officials to cover familiarize them with the issues.
- For World Bank-financed contracts, provision of Hands on Expanded Implementation Support (HEIP)

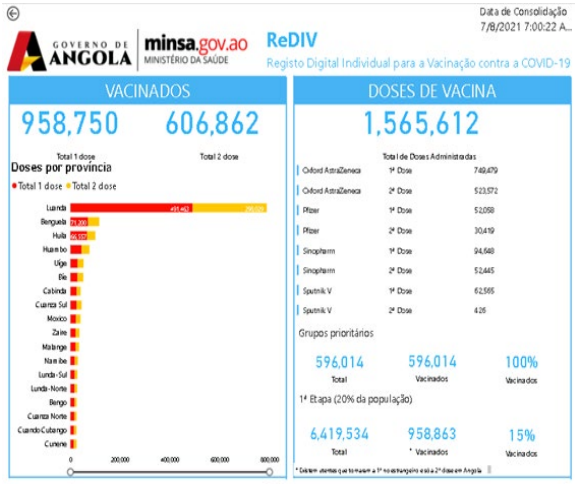
The Project implementation manual (PIM) will make clear that the country's regulatory authority is responsible for its own assessment of the project COVID-19 Vaccines' safety and efficacy, and is solely responsible for the authorization and deployment of the vaccines in the country.

34. **The project is designed to address key gaps identified in the readiness assessment and activities described in the Government's National Plan for Vaccination Against COVID-19, while strengthening health systems that can increase COVID-19 vaccination rates.** Financing from this project will support the acquisition, management, and deployment of COVID-19 vaccines, including support to ensure effective utilization of vaccines received to cover priority groups. Financing will also strengthen health systems that enhance the COVID-19 response.

(iii) Update on COVID-19 vaccination roll-out

35. **Angola started the COVID-19 immunization campaign as soon as the first batch of AZ vaccines was delivered by the COVAX Facility.** As highlighted above, the ReDIV system has been key for the successful monitoring of the COVID-19 vaccine roll out of the first stage 1 of Phase 1. As of July 10, 2021, 1,227,211 people have pre-registered for a vaccine through the ReDIV platform and 1,565,612 doses of COVID-19 vaccine have been administered, of which: 958,750, first dose and 606,862 second doses. A higher number of people vaccinated has been in the capital city, Luanda, which is not unexpected as one third of the population lives in the capital and the vast majority of the prioritized population for the first stage of Phase 1 lives in Luanda. Figure 3 below shows the dashboard of the ReDIV system from July 7, 2021.

Figure 3. ReDIV pre-registration and vaccine roll out real-time monitoring system



C. Relevance to Higher Level Objectives

36. **The proposed project is aligned with the World Bank's Country Partnership Strategy (CPS) FY14-FY16 (Report No. 76225-AO) and approach to supporting socio-economic impacts from COVID-19 in Angola.** The dual shocks of oil price reduction and COVID-19 have dramatically changed the country context, the country's need for support, and thus the partnership between Angola and the World Bank Group. The project is aligned with the World Bank Group's Country Partnership Strategy FY14-FY16, for Angola (Report No. 76225-AO), which was extended for three years up to FY20 through the Performance Learning Review (PLR) (Report No. 100984-AO). A Systematic Country Diagnostic (SCD) was finalized in December 2018 and identifies human capital strengthening as a priority for eliminating extreme poverty and boosting shared prosperity in Angola through: (i) improving education services; (ii) improving health and nutrition services; and (iii) expanding water and sanitation infrastructure and services. This COVID-19 vaccine and distribution operation will support the country's recovery from the pandemic and strengthen EPI systems thereby improving immunization coverage in country, which is aligned with the recent SCD priority focus.

37. **The project will continue to contribute to increasing the efficiency of social programs, which was one of the two pillars of the CPS**. The CPS supports institutional reforms and investments to create conditions favorable to improving social sector indicators, especially relating to child and maternal mortality. Strengthening of the health sector, by improving the quality of care across Angolan's health system, is critical to ensuring the delivery of quality health services at the provincial and municipal level. This is in line with the twin goals and the adoption of strategies aimed to boost shared prosperity. The proposed project is also in line with the Health, Nutrition, and Population (HNP) sector goal of ensuring Universal Health Coverage (UHC), specifically by focusing on one of the three HNP priority directions of improving service coverage.

38. **The proposed project directly supports the government's National Development Plan (PDN) 2018-2022 of increasing the utilization of essential social services.** The PDN underscores the role of the health sector in ensuring quality health services are available and delivered at the municipal health facility level. The project also contributes to the objectives of Angola's health sector as part of the PDN 2018-2022, which seeks to reinforce the capacity and performance of the national health system with a view to improving the health of the population and their engagement in the economic and social development process of the country.

39. **The proposed project will also build synergies with other donor-financed activities supporting the health sector in Angola.** Specifically, the proposed project would directly coordinate with Gavi in defining the quantities of vaccines to be purchased using World Bank financing based on COVAX AMC financing of vaccines to cover 20 percent of the population. The project will also work in close coordination with the WHO to define technical assistance and on-the-ground actions to support adequate cold chain infrastructure and systems for vaccine storage and deployment. Close coordination will also be further developed with the United States Agency for International Development (USAID), which convenes monthly meetings of partners in Angola to coordinate actions in support of COVID-19 response needs in the country.

III. PROJECT DESCRIPTION

A. Development Objectives

40. **The Project objectives are aligned with the results chain of the COVID-19 SPRP of the MPA and its Additional Financing.** Building on the support provided through other health projects in the portfolio, the need for additional resources to expand the COVID-19[8] response through the vaccination rollout was formally conveyed by the Government of Angola on February 9, 2021.

Project Development Objective: To prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness in Angola.

PDO level indicators:

- Percentage (%) of population vaccinated, which is included in the priority population targets defined in the national plan [disaggregated by sex];
- Number of COVID-19 designated hospitals with oxygen producing units

Intermediate Indicators:

- Number of health staff trained in infection prevention and control per MOH-approved protocols (disaggregated by sex);
- Number of designated laboratories with staff trained to conduct COVID-19 diagnosis;
- Number of COVID-19 Rapid Response Teams trained;
- Number of provincial level Effective Vaccine Management (EVM) assessments completed with composite scores of 80% or higher;
- Percentage of targeted sites where requested Cold Chain Equipment has been installed and functional;
- Number of provinces where Logistimo/IOTA management system has been implemented;
- Number of municipalities with health facilities that have adapted COVID-19 related AEFI mechanisms for notification and investigation;
- Number of vaccination centers that have implemented standard operating procedures (SOPs)
- Number of selected hospitals that implemented updated guidelines for the collection and disposal of COVID-19 vaccine related medical waste;
- Number of health professionals and community workers trained in COVID-19 immunization risk communication and community engagement (disaggregated by sex);
- Number of people reached with key messages and materials developed for public communications and advocacy, in alignment with COVID-19 risk communication and demand plan (disaggregated by sex);
- Consultations through multi-media platform (111 hotline) with key information on COVID-19, including vaccinations;
- Number of community health workers trained to deliver key messages to promote demand for COVID-19 vaccines and other essential health services

[8] "Project COVID-19 Vaccine" means a vaccine for the prevention of COVID-19, authorized by the Recipient's national regulatory authority for distribution, marketing and administration within the territory of the Recipient, and acquired or deployed under the Project. Vaccines that meet the Bank's VAC may be different than those authorized by the GoA. The Bank's VAC will apply in the context of vaccine procurement and deployment under the project.

B. Project Components

Component 1: Support to the COVID-19 response (US$10 million)

41. **Support to the COVID-19 response.** This component will provide support to the GoA to respond to the COVID-19 epidemic during this current second wave of COVID-19 transmission which began in May 2021. Support will be provided for the enhancement of disease detection capacities through provision of technical expertise, laboratory equipment and systems to ensure prompt case finding, confirmation and management as well as contact tracing, consistent with WHO guidelines in the Strategic Response Plan through two sub-components.

42. **Sub-component 1.1: Case Detection, Laboratory Confirmation, Contact Tracing, Recording, Reporting (US$5 million):** (i) strengthen disease surveillance systems and epidemiological capacity for early detection and confirmation of cases through the strengthening of the Rapid Response Teams (RRTs) namely through training and capacity building as well as purchasing vehicles to increase the RRTs fleet and guarantee active surveillance activities; (ii) combine active detection of new cases with active contact tracing; (iii) support operational costs for epidemiological investigation; (iv) strengthen provincial and municipal level risk assessments; (v) provide on-time data and information for guiding decision-making and response and mitigation activities; (vi) strengthening the national laboratory diagnostic to conduct COVID-19 diagnostic tests and training of laboratory staff (selection for such trainings will be gender sensitive and the output of this activity will be tracked through a gender disaggregated indicator); (vii) in the mid-term, build capacity for handling key priority diseases, including disease outbreaks induced by climate emergencies, in accordance with WHO guidance and synergic to the investments made by the REDISSE IV project; (viii) purchase reagents, test kits, laboratory consumables as well as the necessary PPE equipment for adequate infection prevention and control practices. Additional support will be provided to strengthen health management information systems to facilitate recording and on-time virtual sharing of information.

43. **Sub-component 1.2: Health systems strengthening (US$5 million):** Assistance will be provided to the health care system for preparedness planning to provide optimal medical care, maintain essential community services and to minimize risks for patients and health personnel, including training health facilities staff and front-line workers on risk mitigation measures and providing them with the appropriate protective equipment and hygiene materials. The project will support upgrading/refurbishment of health care facilities to increase COVID-19 case management capacity at municipal level as well as ensure that adequate oxygen supply is ensured at all levels of the healthcare system including at municipal level. Refurbishment will also include equipping health facilities with solar panels. The project will support strengthening medical waste management in health care facilities in relation to COVID-19 waste management the project will include procurement of equipment and training of staff. Special attention will be paid to waste management in flood-prone areas.

Component 2: COVID-19 Immunization (US$130 million)

44. **This component will provide financing to support the purchase and deployment of COVID-19 vaccines.** This component includes three sub-components: support to strengthen the supply and cold-chain system, purchase of vaccines, COVID-19 vaccine program delivery.

45. **Sub-component 2.1: Strengthening supply chain and cold chain (US$10 million):** The following key activities will be financed: (i) reactivation of the national logistics working group with appropriate terms of reference and SOPs for the storage, distribution, transportation and use of COVID-19 vaccines, vaccine distribution planning using route optimization to minimize fuel use, vaccination materials, and treatment of vaccination waste; (ii) provision of SOPs for conservation, transportation, vaccination and guidelines for the collection and disposal of waste appropriate to local conditions; (iii) purchase climate friendly cold chain equipment at all levels (solar direct drive refrigerators and low Global Warming Potential (GWP) refrigerators), capacity and location of vaccine and material storage points, in relation to the characteristics of the COVID-19 vaccines received and fill the supply and logistics gaps identified; (iv) organize the central and provincial vaccine warehouses, creating conditions for the reception of vaccines and material, transportation logistics, cold chain and additional personnel necessary for distribution to lower levels; (v) implement the IOTA Platform's Cold Chain Temperature Management module; (vi) update the product list with the codes for the new vaccines, related materials and train in digital management of vaccine and material stock (IOTA) to the provincial and municipal staff of the 12 provinces in need and procure telephones for such monitoring of COVID-19 vaccine stock in real time; (vii) implement at 18 provincial and district levels the IOTA Vaccine Logistics Management Digital Platform (in six provinces the system is operating at provincial, districts and health facility level), expanding from approx. 1,000 points for stock monitoring to approx. 2,100 points in the three levels of the health system; and (viii) strengthen EPI's fleet for service delivery through the purchase of vehicles. In addition, this component will finance maintenance of existing cold chain equipment, warehouses, vehicles, other logistics infrastructure, and refurbishment and maintenance of facilities to be resilient to climate shocks.

46. **Sub-component 2.2: Procurement of COVID-19 vaccines and related consumables (US$90 million):** In alignment with Board approved criteria, the World Bank will provide up to US$90 million to finance vaccine acquisition (mostly likely through the COVAX or AU/AVATT purchasing mechanisms). This aims to enable coverage of approximately 20 percent of the population (a two-dose regimen at an estimated US$7/dose). This will complement COVAX AMC and other sources, as detailed in Table 3, to reach the Government's current coverage target of 48.6 percent of the population. The availability and terms of vaccines remain fluid and prevents the planning of a firm sequence of vaccine deployment, especially as the actual delivery of vaccines is unlikely to be immediate. Rather, the proposed World Bank financing enables a portfolio approach that will adjust during implementation in response to developments in the country pandemic situation and the global market for vaccines. This financial support will be aligned with the NDVP, developed by the Government with support from WHO, UNICEF and Gavi. This will be accompanied by support under this component to acquire vaccination supplies (syringes and safety boxes), personal protective equipment for vaccinators, and related equipment for vaccine administration and infection prevention and control, including water and sanitation.

47. **Sub-component 2.3: COVID-19 vaccine service delivery (US$30 million):** This sub-component will support COVID-19 vaccine program delivery which is aligned with the NDVP. As highlighted above the NDVP encompasses two

phases. Phase 1 covering the first 20 percent of the population includes two stages: Stage 1 that targets the most exposed groups such as first line health workers, people with an established diagnosis of a relevant co-morbidities, personnel of social services, including teachers and other exposed groups such as police, inmates, refugees, security personnel and public transport drivers estimated at 3 percent of the population; and stage 2 which will cover 17 percent of the population and includes the population 40-years-old and over, which have shown the highest morbidity and hospitalizations due to the high prevalence of comorbidities (obesity, diabetes, cardiovascular diseases). Even though the elderly people have the highest lethality rates from COVID-19 and have the highest priority to be vaccinated, the Angola NDVP targets them under this second stage of Phase 1 due to difficulty in locating them given the geographical dispersion and because the ReDIV system is still being configured to register the general public for vaccination. Phase 2 represents an additional 29 percent of the population and expands the target group to include the population over 18 years of age. To note; the highest incidence rates (incidence rates by age group) are in the 30 to 54-year-old age groups, which indicates that to reduce the transmission of this disease, the age strata younger than 40 years old have to be targeted in order to achieve immediate epidemiological impact on mortality and transmission. Due to the complex nature of such a mass vaccination campaign, this sub-component will include the following key activities: (i) vaccine targeting - the COVID-19 vaccination effort will create unprecedented challenges for targeting essential workers and vulnerable groups in the adult population, therefore, this component will support the correct identification and targeting of prioritized population groups for Stages 1 and 2 of vaccine deployment; (ii) training front-line delivery workers and ensuring reach and effectiveness of service delivery modalities (this may involve the temporary recruitment of health workers to be contracted in the initial phase); (iii) support the implementation and expansion of the ReDIV system to allow for the pre-registration of beneficiaries and the digital registration of vaccinated persons, and monitoring the vaccination of Stage 1 and later on Stage 2 of the COVID-19 vaccination roll out – the ReDIV system will allow to monitor the access of the population to vaccines and ensure that both men and women have equal access to vaccines and, in instances where a disproportionate sex coverage is found, identify appropriate actions that can be taken; (iv) strengthen and adapt Pharmacovigilance System (PVS) to be sensitive to detect AEFI for the COVID-19 vaccine using the Integrated Disease Surveillance and response system that includes the notification and investigation of serious adverse events and financing the development of specific guidelines and provision of necessary trainings; and (v) ensure adequate waste management, through the investment in waste management and disposal supplies and maintenance, structuring the collection and transportation of waste to identified disposal sites and, implement waste collection, transport, and disposal plans. Table 4 below outlines Angola's priority groups for vaccination and Table 6 provides a Summary of vaccine sourcing and World Bank financing.

Table 4: Priority groups for vaccination Angola

	Population group	Number of people	% of population
Stage 1 (20%)			
Phase 1 (3%)			
1	Health workers	117,488	0.4
2	Social services and teachers	87,000	0.3
3	People with established diagnosis of comorbidities	417,000	1.3
4	Police, inmates, refugees*	243,442	0.7
5	Public transport drivers' and market vendors	98,000	0.3

Phase 2 (17%)			
1	≥80 years	96,799	0.3
2	75-79 years	129,071	0.4
3	70-74 years	221,096	0.7
4	65-69 years	345,619	1.1
5	60-64 years	500,999	1.6
6	55-59 years	676,983	2.1
7	50-54 years	879,435	2.7
8	45-49 years	1,102,633	3.4
9	40-44 years	1,503,969	4.3
Total Stage 1		**6,419,534**	**20**
Stage 2 (29%)			
1	35-39 years	1,466,929	4.6
2	30-35 years	1,749,756	5.5
3	25-29 years	2,100,625	6.5
4	20-24 years	2,549,011	7.9
5	18-19 years	1,317,879	4.1
Total Stage 2		**9,184,200**	**28.6%**
	Total	**15,603,734**	**48.6%**

*Refugees and internally displaced persons living in high-density camps will be included in this priority group based on the presence of risk factors per WHO Strategic Advisory Group of Experts on Immunization (SAGE) recommendations. Their estimated refugee population in Angola is 62,000 (2020 data), mostly from the Democratic Republic of Congo (DRC).The majority of refugees in Angola live in urban areas (mostly Luanda), although there are significant numbers in the Lóvua settlement, Lunda province, near the DRC border where the United Nations High Commission for Refugees (UNHCR) has a presence and support programs – including a voluntary repatriation program which until 2020 has been in place.

Component 3: Community engagement and risk communication for demand creation (US$3 million)

48. **Preventing elite bias and increasing community confidence in vaccines are crucial to acceptability and improved participation in the response to COVID-19.** Under this component, a national risk-communication plan, and activities to ensure community participation in COVID-19 vaccination efforts and accountability mechanisms will be ensured. This will include accurate information sharing, efforts to create demand, counter measures for addressing mis- or disinformation, and dissemination of educational materials to promote behavior changes that prevent transmission and COVID-19 infection, and climate induced water and vector-borne diseases (e.g., vaccination, hand washing, etc.). This Project will capitalize on previous undertakings by the Government of Angola, use existing structures such as the network of community health workers (*community development and sanitary agents*- ADECOS) as the mobilization channel recognized by the MOH to support the COVID-19 communications campaign, NGOs/CBOs and their relations with established women and youth-led civil society organizations as well as with local and traditional leaders and faith based organizations There is an extensive experience of the use of the ADECOS networks in support of the health system actions and their engagement under World Bank health projects to support the yellow fever vaccination campaign, malaria outreach efforts, and nutrition interventions.

49. **Building on global lessons, the project will support the use of digital technologies to increase demand, reduce vaccine hesitancy, and engage communities in the monitoring of the vaccine roll out.** The project will support the incorporation of key messages and two-way information channels on COVID-19 vaccinations through interactive multi-media platforms (which can also be employed for vaccinations for other diseases including those induced by climate emergencies). These include online media surveillance including social media monitoring; and a 111 hotline to report adverse reactions and seek medical advice and referrals. This project will ensure that capacity building and monitoring supervisions will take place to ensure the quality of the 111 hotline. The project will also support facility level outreach and accountability mechanisms at provincial and municipal levels to help monitor and promote the vaccine rollout, including to identify any cases of elite capture, corruption, or illicit fees for services. This will require the development of standard protocols, clear terms of reference and an integrated data management platform to triage, channel, and respond to complaints registered in these mechanisms.

50. **Multi-level health promotion interventions will be tailored to the specific needs of vulnerable and hard-to-reach groups.** These interventions will be designed to be understood by all, including women, girls, and other disadvantaged populations who are illiterate or lack access to information sources. Building "vaccine literacy" for the COVID-19 vaccine is also an opportunity to boost overall confidence in vaccinations, thereby leading to greater utilization and retention in the EPI program. To monitor perceptions and behavioral change interventions, financing will include beneficiary research on perceptions, obstacles, and levels of vaccine uptake and equity of distribution.

51. **This project will also seek to address gender dimensions of social and behavior change communications**, to ensure that beneficiary research identifies and monitors possible misconceptions that may be disproportionately held among women who face greater barriers in accessing and using reliable information, and among men who may oppose vaccination for themselves or for female members of their households. Since the inception of the vaccine roll-out, the coverage among men has been significantly higher than women (likely due to decreased access as the targeted population stage 1 of phase 1 are mainly men) and therefore interventions to support gender sensitive risk communications should be delivered using multiple outreach mediums, including messaging through radio, television, and community-based platforms in local languages. Risk communications will also incorporate information related to disease prevention in the event of climate shocks.

Component 4: Project Implementation and Monitoring (US$7 million)

52. **Institutional Strengthening.** Building on the technical assistance provided through COVAX and other partners, the project will strengthen capacities of key institutions in Angola's immunization system, including for planning, budgeting, and procurement; vaccine distribution, quality control and monitoring and related safeguards; and regulation of vaccine safety and indemnification systems, as well as developing contingency plans for safe vaccine delivery and availability in the case of climate emergencies.

53. **This component will strengthen the existing Functional Governance** and COVID-19 immunization implementation structure at the National Directorate of Public Health (DNSP in its Portuguese acronym), which will be the key technical agency for project implementation. Such strengthening will include the hiring of logisticians to support the roll out of the COVID-19 vaccine in all 18 provinces as well as risk communication and community

engagement specialists to ensure a comprehensive demand creation and high levels of vaccine adherence and documentation of lessons learned from communications campaigns used across other countries to address the issue of vaccine hesitancy at the municipal and communal levels. The PIU of the World Bank portfolio, known as the *Unidade Central de Coordenação* (UCC in its Portuguese acronym) will be responsible for project management and fiduciary aspects of project implementation (financial management, procurement, safeguards), and will be strengthened through this component in terms of the recruitment of additional staff and covering operating costs, necessary training and equipment, support for procurement, financial management, environmental and social risk and impact management, logistics and distribution, and M&E, and reporting activities. Emphasis will be placed on enhancing the monitoring and prospective evaluation framework for vaccine deployment at the country and subnational levels, to align with epidemiological shifts. Project and national M&E systems will be further strengthened with timely recording and reporting of performance benchmarks and results. The activities for M&E capacity building include: (i) collection of data from line ministries and other implementation agencies; (ii) compilation of data into progress reports; (iii) carrying out of surveys; (iv) carrying out of annual expenditure reviews; (v) impact evaluation on quantitative and qualitative aspects of the project interventions, and (vi) potentially contracting a third-party monitoring agent. Climate activities financed by the project, such as training of health workers for handling climate-related disease outbreaks, refurbishment of health facilities to include solar panels, and vaccinator training on strategies to adapt vaccination efforts in the event of climate shocks, will also be monitored.

Table 5: Project cost and financing (US$ million)

Project Components	IBRD Financing	Trust Funds	Total
Component 1: Support to the COVID-19 response	10	0	10
Component 2: COVID-19 Immunization	130	0	130
Component 3: Community engagement and risk communication for demand creation	3	0	3
Component 4: Project Implementation and Monitoring	7	0	7
Total Costs	**150**	**0**	**150**

Table 6: Summary of vaccine sourcing and World Bank financing

National plan target (population %)	Source of vaccine financing and population coverage			Specific vaccines and sourcing plans	Doses purchases with World Bank financing	Estimated allocation of World Bank financing
	COVAX grant	World Bank-financed through COVAX or direct purchase	Other*			
Phase 1- Stage 1 (3%)	3%		COVAX 3%	AstraZeneca Pfizer/BioNTech		**Procurement:** US$90,000,000 **Deployment:** US$48,000,000 Project Management US$2 million
Phase 1- Stage 2 (17%)	16.2%		COVAX 16,2% China – 0.6% Rússia – 0.2%	Sinopharm Sputnik V AstraZeneca Pfizer/BioNTech		
Phase 2 (28.6%)**		15,6%	ACEPA (3,5%) BEI (9,5%)	Moderna. Johnson &Johnson a Pfizer/BioNTech	11,000,000 COVAX/AVAT	

Note: Sequencing is flexible based on vaccine availability from different sources.

C. Project Beneficiaries

54. **The project beneficiaries include direct beneficiaries and, in the long-term, the population at large (32,097,670), who will benefit from decreased risk from contracting COVID-19 and other vaccine-preventable diseases, through deployment of the COVID-19 vaccine and strengthened systems for immunization.** The project will directly benefit the target population of the Angola NDVP which includes a total of 15.5 million people.

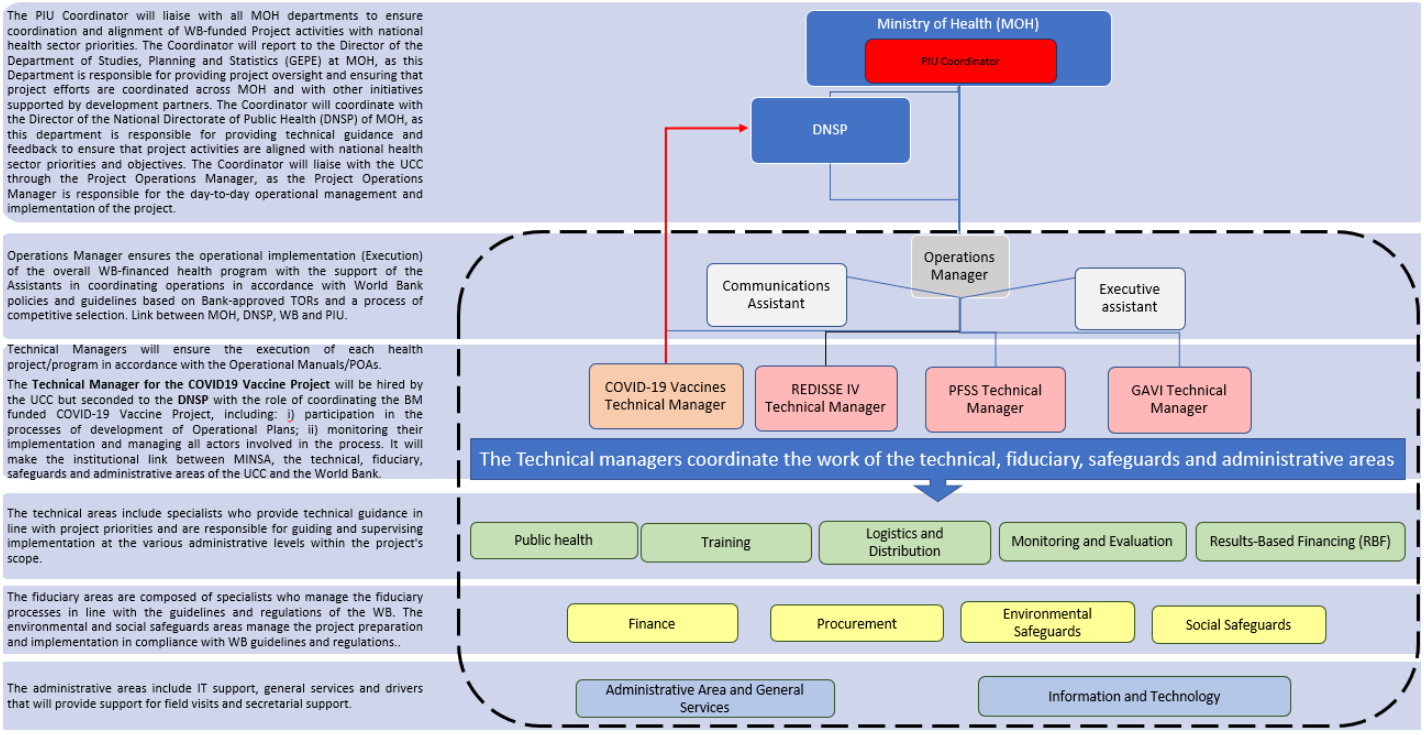
IV. IMPLEMENTATION ARRANGEMENTS

C. Institutional and Implementation Arrangements

55. **The COVID-19 Multisectoral Intersectoral Commission for Prevention and Combat control, led by the Minister of State and Head of the House of Security of the President of the Republic has been the authority responsible for coordinating the implementation of emergency activities against COVID -19, with the Minister of Health acting as spokesperson for the Commission.** Within the framework of the Committee, the functional governance and the implementation of the immunization project structure against COVID-19 is under the purview of the DNSP and who is responsible for the technical implementation of this project. The Ministry of Health Planning Department (GEPE in its Portuguese acronym), through the Project Implementation Unit (the UCC), leads the implementation of the health sector investments in Angola funded by the World Bank. GEPE will be responsible for project management and fiduciary functions for the project, in coordination with the DNSP within MINSA and other stakeholders, including provincial and municipal authorities, for the implementation of project activities. The UCC is well experienced in managing World Bank financed projects. The UCC is led by an operations manager (currently under a selection process) and supported by technical, fiduciary and administrative staff, overseeing operations related to

the different World Bank investment project financing for the Angola health sector which includes the Health System Performance Strengthening Project (HSPSP, P160948), the Gavi additional financing for child health (P168956), and the regional REDISSE IV project (P167817). The UCC, under the leadership of the MOH, will continue to manage the activation and implementation of the CERCs in coordination with the Ministry of Finance as well as provide guidance to the MOH on implementation and support the implementation of the Girls Empowerment and Learning for All Project (P168699). The capacity at DNSP and UCC will be strengthened through: (i) additional technical assistance for the EPI program in the Directorate of Public Health; (ii) additional procurement specialists (including HEIS as needed); (iii) supply chain, logistics and distribution specialists and advisors to strengthen the DNSP team responsible for launching the COVID-19 vaccine; and (iv) other technical specialists, as needed, requested from the main health offices and directorates of the MOH, and health departments at the provincial level, including public health and communications, the regulatory authority, the Directorate of Pharmacists and the National Reference Laboratory (INIS). Specialists in environmental and social safeguards will also be engaged, to provide technical assistance and to strengthen and simplify Grievance Redress Resolution Mechanisms and improve waste management at provincial levels. As highlighted above, the ReDIV system, managed by the COVID-19 immunization implementation structure at DNSP/MINSA, will provide global supervision and verification of vaccination implementation in order to mitigate the risks of favoring elite capture, forced vaccination and exclusion due to geographic dispersion. These implementation arrangements are reflected in the Ministerial Letter, as in the negotiated agreement, from the Minister of Health to the World Bank dated June 29, 2021 which outlines these arrangements (see figure below illustrating the UCC organization chart and implementation arrangements for this project).

Figure 4. Organogram of the PIU and implementation arrangements for the Angola COVID-19 SPRP project



56. **The financial management (FM) and disbursement arrangements in place for the Angola HSPSP will apply to the proposed operation.** The UCC will have overall fiduciary responsibility for implementation of this proposed project. An FM team consisting of two specialists in financial management, one responsible for the area and two accountants and five assistants, report to the UCC Operations Manager and have overall responsibility for project FM matters. The project funds, expenditures, and resources will be accounted for using a computerized accounting software and the basis of accounting will be Financial Reporting under Cash Basis. The PIU/MoH will prepare quarterly unaudited interim financial reports (IFRs) and provide such reports to the World Bank within 45 days of the end of each calendar quarter. The project financial statements (covering all project funds and expenditures) will be audited annually, and the audit report will be submitted to the World Bank no later than six months after the end of each financial year, that is June 30th of each following year.

57. **The procurement arrangements for the project will be managed by the UCC team.** The UCC includes a procurement officer and supporting procurement staff. The team that will support this operation is the same responsible for the procurement function under the current active health projects (HSPSP, REDISSE IV, Gavi). The Procurement Specialist is being recruited. Considering the emergency response required for this Project and the overall risks involved, the UCC shall identify the procurement staff to be exclusively dedicated to this project. It should be composed at the minimum of a Procurement Specialist and a Procurement Assistant.

58. **The UCC team is staffed to manage environmental and social safeguards measures under the project.** The UCC is fully staffed and well-experienced in managing World Bank-financed projects including one operation under the Environmental and Social Framework (ESF) which is the REDISSE IV project (P167817). The UCC is gradually developing strategies, structures, and environmental and social (E&S) risk management tools both at central and municipality levels to comply with ESF requirements and applicable national environmental regulations. The UCC has a team of E&S specialists which includes an overall safeguards coordinator and specialists focused on supporting the implementation of actions at the local level (provincial, municipal). As indicated above, the project implementation arrangements were defined during negotiations.

59. **The Project Implementation Manual (PIM) for the operation, to be completed 30 days after project effectiveness, will also set out detailed guidelines, methods and procedures for the implementation of the project.** This includes: (i) the different roles and responsibilities in implementation and mechanisms for coordination; (ii) budget and budgetary controls; (iii) flow of funds, disbursement procedures and banking arrangements; (iv) financial, procurement and accounting procedures; (v) personal data collection and processing in accordance with applicable national law and good international practice; (vi) monitoring and evaluation arrangements; (vii) the annual work plans and budgets; (viii) measures related to the use of security or military personnel in the implementation of project activities or for provision of security observing required safeguards (as described in the projects legal agreements); and (ix) such other arrangements and procedures as required for effective implementation. Specific to COVID-19 vaccines, the PIM will include: (i) rules and procedures for prioritizing intra-country vaccine allocation following principles established in the WHO Fair Allocation Framework, including an action plan setting out the timeline and steps for implementing such rules; (ii) rules and procedures establishing minimum standards for vaccine management and monitoring, including medical and technical criteria, communications and outreach plan, cold chain infrastructure, and other related logistics infrastructure; and (iii) a vaccine distribution plan, including action plan

setting out timeline and steps for immunization. The PIM will also describe arrangements for third party monitoring of project implementation, with a focus on environmental and social aspects.

D. Results Monitoring and Evaluation Arrangements

60. **Monitoring and case management of COVID-19 patients is done through the COVID-19 monitoring systems at the DNSP.** This paper-based surveillance monitoring system has been rolled out at the level of all districts, health facilities, and call centers. In tandem with this system and at provincial level the DHIS2 system is aggregating the data as well as the tracking of any COVID-19 related AEFIs. This system will continue to be coordinated by the Department of Epidemiological Surveillance (DES) at the DNSP in collaboration with the Angolan EPI. Together these sectors will be responsible for reporting, processing, analyzing, and producing health statistics for decision making. The UCC will also have a dedicated monitoring and evaluation specialist, responsible for providing quarterly updates on the project results framework, drawing from the broader monitoring framework of the NDVP.

61. **The ReDIV system will be expanded to allow for pre-registration and monitoring of vaccine deployment for the second phase of Stage One.** To respond to these needs, the monitoring system described above will be strengthened and expanded to continue to collect data on vaccination coverage over time by region, population groups and risk groups, prioritization of target groups and provision of vaccination registries/certificates and personal vaccination certificates for vaccinated persons, with monitoring of individuals to reduce non-compliance (no return for the 2nd dose). The Logistimo/IOTA platform for logistics information management will track the management of stocks and loss of vaccine residues or losses of vaccines and inventory levels and other data for surveillance and research, for example on vaccine safety and efficacy, and will be fully integrated and interoperable with ReDIV. Through this project, the expansion of the Logistimo/IOTA platform to the 18 provinces, will ensure that the entire record of logistical information on the management and distribution of vaccines and other supplies is properly managed at provincial, municipal-district and unit levels. Lot numbers, expiration dates, manufacturer, quantity, date, origin and destination will be verified and recorded in the inventory control and management registration form and incorporated into Logistimo/IOTA. In addition, by funding this project, remote temperature monitoring will be ensured in all units where the Logistimo/IOTA has been installed (approx. 1,200) and will be installed (approx. 2000).

62. **The pharmacovigilance systems at health facility level using recommended standard procedures will be incrementally strengthened with more active strategies.** These strategies include the use of cohort event monitoring, sentinel posts, and potentially specific studies, as well as awareness raising/communication and yet to be created pharmacovigilance committees. Grievance redress systems and hotlines will also be equipped to channel reporting of adverse reactions, to provide relevant information to the public, and to report any misallocation or elite capture of vaccines that should be allocated to target groups under the national plan.

63. **Monitoring and follow-up systems will also harness digital technologies**. This will include the use of an SMS follow-up system for beneficiaries that require second doses (through the ReDIV system), use of vaccination history data to generate forecasts on future vaccine needs and generate visualizations that facilitate decision making, usage of remote temperature controlled cold chain storage technology, and utilization of registration of vaccine administration and digital vaccination certificates once all the prescribed doses have been completed. Digital

vaccination certificates will be accessible through the ReDIV system application at any computer with internet access. To account for internet access limitations, physical vaccination cards will also be used, as well as off-line ReDIV modules and paper-based reporting tools as required.

E. Sustainability

64. **Investments in COVID-19 vaccination preparedness and deployment will help reduce the negative effects of COVID-19 and stabilize the economic growth of the country.** Vaccination of eligible populations will help prevent new COVID-19 infections and improve health outcomes for people who get COVID-19, easing pressures on the health system, access to health and other services, and potentially helping economic recovery. Short-term investments needed to set up an effective COVID-19 vaccination campaign will be essential to further deploy vaccines to reach aspired herd immunity and eliminate negative consequences of COVID-19 in general. In addition, assistance to enhance vaccination preparedness will improve overall system readiness to respond not only to the COVID-19 pandemic, but other vaccine-preventable diseases and emergencies. The sustainability of the Project would also depend on the capacity of the implementing agencies to effectively implement those interventions.

65. **Investments in expansion of the electronic Logistic Management System as well as in the ReDIV platform will provide long-term and sustainable benefits to the EPI in Angola.** The expansion of the *Logistimo*/IOTA to the 18 provinces will improve data visibility, supply chain transparency, streamline processes and procedures, contributing to overall gains in effectiveness and efficiency of the EPI supply chain countrywide. The system will also provide through the metadata a complete mapping with geocodes of health facilities in the country, which has been updated in six provinces in the country. Investing in the ReDIV system to allow for the registration of all individuals that are eligible and received a COVID-19 vaccine will create credible and realistic database of the population and identification of all the priority and target groups not only for Phase 1 but also for the general population in Phase 2. Due to the fact that only one third of the population in Angola is properly documented (has formal ID), this system will allow to collect key personal information that can be shared with the Minister of Interior and Ministry of Justice to streamline the process of increasing the access to ID cards. Further, the MoH would like to take stock from the lessons learnt from the ReDIV system and adapt and tailor it to allow for the tracking of the pediatric routine immunization vaccines and therefore digitalize the entire EPI program, which would in turn produce long-lasting gains to the Angolan EPI.

V. PROJECT APPRAISAL SUMMARY

F. Technical, Economic and Financial Analysis

66. **The economic rationale for investment in a COVID-19 vaccine is strong, considering the massive and continuing health and economic losses due to the pandemic.** As of February 2021, worldwide, more than 50 million people have been confirmed to be infected by the virus and over 1.2 million have been confirmed to have died. Global output is projected to have declined by 4.9 percent in 2020, with cumulative losses across 2020 and 2021 exceeding US$12 trillion. With a highly oil dependent economy, the decline in the oil sector and the price of oil is the main driver of the multi-year recession in Angola. COVID-19 related disruptions also contributed to the 2020 decline (especially in

the second quarter). Driven by rapid currency depreciation (37 percent in 2020), inflation increased to 25 percent in January 2021, with food prices rising even faster, at 31 percent. Despite increased health spending, fiscal policy has remained tight, and debt exceeds 120 percent of GDP. Economic activity has been disrupted as containment measures (domestically and globally) have affected demand for goods and services, despite the support of a good agricultural harvest. This will further constrain already underfinanced social services for health, education, and social protection as demand increases.

67. **The successful development, production, and delivery of a vaccine can help reverse these trends, generating benefits that will far exceed vaccine-related costs.** A rapid and well-targeted deployment of a COVID-19 vaccine can help reduce the increases in poverty and accelerate economic recovery. The effective administration of a COVID-19 vaccine will also help avoid the associated health care costs for potentially millions of additional cases of infection, further disruptions in health services, and associated health-related impoverishment. Global experience with immunization against diseases shows that by avoiding these and other health costs, vaccines are one of the best buys in public health. For the most vulnerable population groups, especially in countries without effective universal health coverage, the potential health-related costs of millions of additional cases of COVID-19 infection in the absence of a vaccine represent a significant or even catastrophic financial impact and risk of impoverishment. The pandemic is also having dire effects on other non-COVID-19 health outcomes. Increased morbidity and mortality due to interruption of essential services associated with COVID-19 containment measures hinder access to care for other health needs of the population, including maternal and child health services. Routine immunization has been affected, threatening polio eradication and potentially leading to new outbreaks of preventable diseases, with their own related deaths, illnesses and long-term costs. Simultaneous epidemics are overwhelming public health systems in different countries that had few resources to begin with, and services needed to address the needs of people with chronic health conditions, and mental and substance use disorders have been also disrupted.

68. **While, the uncertainty around the costs and long-term effectiveness of COVID-19 vaccines make it difficult to calculate its cost-effectiveness, the effective launch of a COVID-19 vaccine will have direct benefits in terms of averted costs of treatment and disability, as well as strengthened health systems.** Estimated COVID-19 treatment costs from low- and middle-income countries are US$50 for a non-severe case and $300 for a severe case. This excludes costs of testing of negative cases, as well as the medical costs associated with delayed or forgone care-seeking, which usually results in higher costs. The estimated cost of vaccinating 20 percent of the population in Angola is US$15 million (excluding the costs of the COVAX grant for vaccines); which means the vaccine would need to avert 50,000 severe cases to break even. The economic benefits of slowing down the economic downturn are likely to significantly exceed the US$15 million needed to vaccinate 20 percent of the population, leaving aside the immediate health benefits. Given both the economic and health system benefits, an effectively deployed COVID-19 vaccination program presents significant benefits. Investments in vaccine delivery systems generate health and economic benefits beyond just delivering the COVID-19 vaccine. First, investments in last-mile delivery systems to administer the COVID-19 vaccine to remote communities will require strengthening community health systems, which can have spillover effects to effective delivery of other services, helping close the significant urban-rural gap in health services and outcomes. Second, as the COVID-19 vaccine is introduced and lockdowns and movement restrictions are eased, patients can continue to access care for other conditions.

G. Financial Management

69. **The overall financial management was assessed to be adequate with substantial residual risk**. FM assessment was conducted remotely In line with the guidelines as stated in the Financial Management Practices Manual issued by the Financial Management Sector Board on March 1, 2010 (revised on February 10, 2017) to evaluate whether the project meets the World Bank's minimum FM requirements in Directives and Policy for IPF. The assessment was done on the UCC, the established PIU, which works closely with the Ministry of Health. The UCC has experience in implementing World Bank financing projects, including, the AO Municipal Health Service Strengthening Project (P111840), Angola Health System Performance Strengthening Project (P160948), and REDISSE IV (P167817). In addition, the UCC will be the implementing agency that shall be responsible for the financial management arrangements of the proposed project. The assessment complied with the World Bank Guidance on FM in World Bank IPF Operations issued on February 28, 2017 and the various FM and disbursement measures for preparation of operations under COVID-19 emergencies including the modalities for engagement of UN partners. The assessment revealed that there are acceptable financial management arrangements for the UCC, established over time managing the implementation of several Bank-financed operations. However, the following FM actions should be implemented to ensure adequate project FM arrangement: (i) upgrade the automated accounting package to accommodate this project and have it fully operational three months after project effectiveness; (ii) develop and adopt the Project Implementation Manual including the section of the FM procedures and (iii) recruit two accountants. The FM section of the PIM of the ongoing projects will be used as bases for preparation for the proposed project. The recent review of the FM arrangements of the ongoing projects implemented by the UCC concluded it continues to have acceptable FM arrangements. Based on this, the performance risk ratings are Moderately Satisfactory.

70. **The Government has the option to engage the UN agencies to facilitate the project execution for which standard templates of contractual engagement will be used.** The World Bank stipulated FM and procurement procedures for contracting UN agencies will apply. The World Bank will ensure that the Reporting and Fraud and Corruption Prevention requirements of the standard agreements are in place. The UN agencies will conduct agreed activities and submit quarterly reports on the utilization of advances to the UCC. The content and format of the report will be agreed with the government. It may include description of activities undertaken, goods purchased, with detail of quantity and value, cumulative data, funds balance, disbursement plan, etc.

71. **The following project FM arrangements have been agreed upon.** The project funds, expenditures, and resources will be accounted for using an automated accounting packages, and basis of accounting will be Financial Reporting under Cash Basis. The IBRD funds will be disbursed on transaction basis (statements of expenditures) using the following methods: (i) reimbursement; (ii) advances; (iii) direct payments; and (iv) special commitments. The UCC will prepare quarterly unaudited interim financial reports (IFRs) and provide such reports to the World Bank within 45 days of the end of each quarter. The project financial statements will be audited annually by an external auditor, and the audit report together with a separate Management Letter will be submitted to the World Bank no later than six months after the end of each fiscal year.

H. Procurement

72. **Procurement under the Project will be carried out in accordance with the WB's Procurement Regulations for IPF Borrowers for Goods, Works, Non-Consulting and Consulting Services,** dated November 2020. Procurement will also use standard WB bidding and procurement documents for procurement of vaccines and pharmaceuticals. The project will be subject to the WB's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016. The Project will use the Systematic tracking of Exchanges in Procurement (STEP) to plan, record and track procurement transactions.

73. **Procurement Strategy for Development (PPSD).** The UCC has prepared a PPSD in accordance with the provisions of the Procurement Regulations. The PPSD will include market conditions, risks, and market approaches and selection methods for acquiring COVID-19 vaccines and other procurable items under the project, resulting in development of Procurement Plan. The COVID-19 vaccine will be procured through different approved sources, one option is the AU under which UNICEF will sign the supply and delivery contract. The vaccines procurement process, irrespective of the amount, will be subject to World Bank prior review procedures through STEP. The Procurement Plan, agreed between the World Bank and UCC, will specify procurement methods and their applicable thresholds, as well as activities that will be subject to the World Bank prior and post review.

74. **The major planned procurement under this project will include**: (i) medical/laboratory equipment and consumables; (ii) PPE; (iii) clinical management equipment; (iv) refurbishment and equipment of medical facilities; (v) technical assistance for updating or reviewing national plans and costs including the National COVID-19 Immunization microplanning; (vi) human resources for response including COVID-19 vaccination; (vii) additional capacity or refurbishment of national, subnational and facility based and mobile and climate-friendly cold chain equipment and supplies including cold rooms, ice lined refrigerators (ILR) and vaccine carriers; (viii) fuel-efficient vehicles including refrigerator vehicles and vaccinator personnel transport; (ix) technical assistance for demand creation – including mass media and communication campaigns; (x) vaccine logistics and information management systems and information systems to monitor adverse effects from immunization, (xi) purchase of COVID-19 vaccines, and waste management materials and equipment.

75. **Review by the World Bank of procurement decisions.** The table below indicates the initial values for prior review by the World Bank for activities in the procurement plan. Activities estimated to cost below these amounts shall be treated as post review and will be reviewed by the World Bank during the Implementation Support Mission under a Post Procurement Review exercise. Exception is made to the procurement of vaccines that will be all prior review, independently of the contract amount. The World Bank may, from time to time, review the amounts based on the performance of the implementing agency.

Table 7. World Bank Prior Review Values

Procurement Type	Prior Review (US$)
Works	5,000,000

Goods and Non-Consulting Services	1,500,000
Consultants (Firms)	500,000
Individual Consultants	200,000

76. **Frequency of procurement reviews and supervision.** The World Bank's prior and post-reviews will be carried out based on thresholds indicated in the table above. The World Bank will conduct supervision missions every six months and annual post-procurement reviews; the standard post-procurement reviews by World Bank should cover at least 20 percent of contracts subject to post-review. Post-reviews consist of reviewing technical, financial, and procurement reports on project procurement actions by World Bank staff or consultants selected and hired by the World Bank according to procedures acceptable to the World Bank. Project supervision missions shall include a World Bank procurement specialist or a specialized consultant. The World Bank may also conduct an Independent Procurement Review at any time until two years after the closing date of the project.

77. **The current global demand for COVID-19 vaccines exceeds the supply in the global market which makes it more difficult for client countries to negotiate terms and conditions.** Procurement of vaccines will therefore follow Direct Selection. Angola will purchase vaccines using a combination of options which includes purchasing through COVAX, the AU AVATT initiative and direct purchase from manufacturers and perhaps from other countries with excess vaccines*.* Contracts for vaccines purchase financed by the World Bank will be subject to the World Bank's prior review irrespective of value and procurement approach. The arrangements for freight for the vaccines, including that for COVAX financed vaccines and the AU AVATT, will be financed under the proposed project and may require the engagement of specialized UN Agencies. World Bank funding will only be used to finance vaccines that meet the World Bank VAC. Of note, for all donations and excess stock from other countries for which procurement regulations do not apply, all vaccine requirements (VAC, data protection, no forced vaccination, etc.) and general requirements (Anticorruption Guidelines, ESF) apply.

78. The country procurement approach will utilize the flexibility provided **by the World Bank's Procurement Framework for fast-track emergency procurement.** Key measures to fast track procurement include: (i) use of simple and fast procurement and selection methods fit for an emergency situation including direct contracting, as appropriate; (ii) streamlined competitive procedures with shorter bidding time; (iii) use of framework agreements including existing ones; (iv) procurement from UN Agencies enabled and expedited by World Bank procedures and templates; (v) use of procurement agents; (vi) force account, as needed; and (vii) increased thresholds for Requests For Quotations and national procurement, among others. As requested by the Recipient, the World Bank may also provide proactive assistance in accessing existing supply chains through Bank Facilitated Procurement (BFP) under HEIS. The use of BFP and HEIS, together with the boosting of fiduciary capacity through the PIU will also help manage fiduciary risks of fast-tracked procurements to meet urgent needs for deployment.

79. **Recognizing the significant disruptions in the usual supply chains for medical consumables and equipment for COVID-19 response, the World Bank will provide, at Borrowers' request, World Bank BFP.** The country may be significantly constrained in purchasing critically needed supplies and materials due to significant disruption in the

supply chain, especially for PPE. The supply problems that have initially impacted PPE are emerging for other medical products (e.g. reagents and possibly oxygen) and more complex equipment (e.g. ventilators) where manufacturing capacity is being fully allocated by rapid orders from developed countries.

80. **BFP has been found to be an approach that can proactively assist countries in accessing existing supply chains.** Once the suppliers are identified, the World Bank could proactively support borrowers with negotiating prices and other contract conditions. Recipients will remain fully responsible for signing and entering into contracts and implementation, including assuring relevant logistics with suppliers such as arranging the necessary freight/shipment of the goods to their destination, receiving and inspecting the goods and paying the suppliers, with the direct payment by the World Bank disbursement option available to them.

81. **BFP, in accessing available supplies, may include aggregating demand, whenever possible, extensive market engagement to identify suppliers from the private sector and UN agencies.** The World Bank is coordinating closely with UN agencies (specifically WHO and UNICEF) that have established systems for procuring medical supplies and charge a fee which varies across agencies and type of service and can be negotiated (around 5 percent on average).

I. Legal Operational Policies

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

J. Environmental and Social Standards

82. **The environmental risk rating is considered "Substantial" under the World Bank's ESF. The main source of environmental risks and impacts are expected from the acquisition, deployment, and disposal of COVID-19 vaccines and consumables.** A project implementation unit (PIU), referred to as the *Unidade Central de Coordenação* (UCC), leads the implementation of World Bank financed health sector investments in Angola. The UCC was formally established as a unit linked to the Ministry of Health (MoH) to receive guidance on policy priorities from the MoH Cabinet of Studies and Planning (GEPE). The UCC is fully staffed and well-experienced in managing World Bank-financed projects including one operation under the ESF: The Regional Disease Surveillance Systems Enhancement regional project REDISSE IV (P167817). he UCC has a committed team of seasoned Environmental and Social (E&S) specialists who have been gradually developing robust strategies, structures, and E&S risk management tools both at central and municipality levels to comply with ESF requirements and applicable national environmental regulations. At provincial and municipal level, Environmental and Social Officers were hired and tasked with ensuring E&S risk management oversight, including addressing capacity building needs. The capacity building program being designed will provide, among others, standard operating procedures and guidelines for the collection and disposal of waste appropriate to local conditions.

83. **Key environmental concerns are related with some of the activities proposed, that have the potential to bring about environmental risks and impacts associated with transportation, distribution and storage of medical supplies, and handling, collection, transportation and disposal of biological and chemical waste, as well as water and soil contamination from health and pharmaceutical waste**. Such risks and impacts are expected to be moderate to substantial, albeit temporary and readily mitigated and may include (a) medical and pharmaceutical waste management issues related to waste handling and collection, transportation, deployment, and disposal of hazardous and infectious healthcare and laboratory waste; (b) occupational health and safety issues (infections from COVID-19 and deployment and administration of vaccines); (c) environmental pollution, namely soil and water contamination from mismanagement of health and pharmaceutical waste; and (d) community health and safety due to increased risk of exposure and contact with COVID-19 virus during vaccination campaigns or at healthcare facilities. Community health and safety risks are expected as a result of the project activities that would entail face-to-face interactions with the public. As such, ESS1, ESS2, ESS3, ESS4, ESS7 and ESS10 are relevant to the project at this stage.

84. **The social risk rating is Substantial**. The proposed project activities are expected to generate largely positive social and economic benefits and impacts. They will save lives currently at risk due to the pandemic, and broadly contribute to the economic recovery of the country. Nonetheless, if appropriate mitigation measures are not adequately considered, some planned interventions are likely to result in adverse social impacts. Negative social impacts are mainly related to a broad risk of inequality in access to vaccines, due to political pressures to provide vaccines to groups that are not prioritized due to need or vulnerability or should target groups be misaligned with available vaccines. Component 2 will support the acquisition of COVID-19 vaccine and related supplies and Component 4 will support vaccine targeting, i.e., adequate identification and targeting of prioritized population groups, and training of front-line delivery workers. There should be consensus to first target health workers, other essential workers, and the most vulnerable populations, which will include a mix of the elderly, people with co-morbidities, and people in high-population density location. If not well managed, vaccine targeting may lead to social conflict among interested groups and exclusion of marginalized groups (women, elderly, poor, refugees). There is also a risk that they may not receive information about access and services unless communication is adequately managed.

85. **A robust Stakeholder Engagement Plan (SEP), adopted by effectiveness, will outline all types of stakeholders (particularly marginalized and vulnerable groups, and persons with disabilities) and means of consulting, engaging and informing them.** The SEP will also outline the means for reducing social conflict through improved and timely communication to stakeholders. Further, vaccine distribution systems need to take into account marginalization and exclusion issues related to accessibility of vaccination locations for individuals with disabilities; risk of vulnerable groups unable to access facilities, services and access to vaccination due to their income and distance from health centers. Furthermore, the project includes citizen engagement indicators that measure the number of people reached with key messages and materials developed for public communications and advocacy, in alignment with COVID-19 risk communication and demand plan, Consultations through multi-media platform (111 hotline) with key information on COVID-19, including vaccinations, and the number of community health workers trained to deliver key messages to promote demand for COVID-19 vaccines and other essential health services.

86. **Another potential risk is the increased incidence of reprisals and retaliation especially against healthcare workers and researchers.** Further, and linked to the social risks stated above, it is important to have clarity on the risks

that may arise related to any mandatory aspect of the national program and whether and how this mandatory element relates to cultural, social and traditional community practices and values. Such risks need to be considered in view of the mitigation hierarchy and balanced against the health-related requirements of any mandatory vaccination program. The SEP will inform the population of the role of healthcare workers and take stock of the potential impacts of vaccination on cultural, social and traditional community practices and values. There are also risks related to Gender Based Violence (GBV) and Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) during community consultations and outreach and risks related to the spread of COVID-19 infections. A GBV and SEA/SH assessment by effectiveness will analyze risks and recommend actions in line with the risk level. A COVID-19 protocol will also be developed and implemented across the range of project activities. In addition, the project includes PDO and intermediate level indicators disaggregated by sex to support monitoring efforts ensuring that there is no limitation in accessing services and vaccines due to gender.

87. **Following the ESF, the government will prepare a package of E&S documents to assess potential environmental and social risks and impacts related to the project's activities and propose adequate mitigation measures to prevent, mitigate and/or address them in a manner proportionate to the likely risks and impacts.** By effectiveness, the project will prepare, consult upon, and disclose an Environmental and Social Management Framework (ESMF) including an Infection Control and Waste Management Plan (ICWMP), Labor Management Procedures (LMP), an Indigenous Peoples Planning Framework (IPPF), and a SEA/SH action plan. The ESMF will cover a broad range of environmental aspects including: ESS1 – environmental risks screening forms, Environmental and Social Management Plans (ESMPs) and training requirements (vaccine delivery, health care waste management); ESS2 – Occupational Health and Safety measures as per the WHO, CDC, WB Environment Health and Safety (EHS) Guidelines and other good international industry practice (GIIP); ESS3 – pollution, water and energy resource consumption management of the WASH facilities and equipment of the cold chain; and ESS4 - infection control and prevention measures to limit the spread of COVID-19 during the vaccination activities. The project Environmental and Social Commitment Plan (ESCP) includes the material measures and actions required for the project to meet the requirements of the World Bank Environmental and Social Framework over a specified timeframe and commitments to undertake the required assessments and production of the necessary instruments for the Project. Mitigation measures for site-specific impacts will be managed through the implementation of required safeguards instruments to be prepared as per the ESMF. Relevant capacity building measures have been included in the ESMF and ESCP.

88. **The PIU team is already engaged with current health portfolio projects and it is expected that additional support will be required in overall ESF implementation of this project, and on issues of pollution and waste management, community health and safety, Gender Based Violence (GBV), SEA/SH, Grievance Redress Mechanism (GRM), inclusion and gender, outreach and community engagement as well as to adequately conduct communication campaigns for vaccine distribution and provision.** This will be done through capacity building targeting urgent issues and providing specific training. Given the specificities of the Project, hiring specific personnel to support its implementation will be discussed with the borrower, and such requirements will be identified by negotiations. The capacity of the UCC to manage waste disposal is weak and the project will provide support to standard operating procedures and guidelines for the collection and disposal of waste appropriate to local conditions in line with Good International Industry Practices (GIIP).

Gender Dimensions and Targeting Vulnerable Groups

89. **With a score of 0.536 in the Gender Inequality Index, Angola ranks 148 out of 182 countries.** Angola's score underpins the need for gender sensitive planning and programming which has been taken in this project to ensure that women have equal access to project's activities, outputs and outcomes. Particularly in emergency situations and pandemics, gender inequalities and norms influence access to critical health services, as well as risk of exposure to disease. As summarized above, factors that constrain access to and use of health services by women in Angola include limited mobility and financial capacity, competing demands of paid and unpaid work, and limited access to information. Furthermore, while men do worse clinically once infected, women face a higher than average risk of COVID-19 infection, death, loss of livelihood, and gender-based violence. They have also been impacted by discontinuity of essential Reproductive, Maternal, Newborn, Child, and Adolescent Health + Nutrition (RMNCAH+N) services, including for maternal and sexual and reproductive health, and GBV. These gender dimensions intersect with other inequalities, particularly for populations that are poor, with limited access to formal education, living in hard-to-reach areas, temporary or informal settlements.

90. **There is also a risk that vaccine deployment plans could leave women and other vulnerable groups behind.** Considering the larger male morbidity and mortality of COVID-19 and the tendency in many countries to overlook the importance of gender inequalities in social and economic activity. Monitoring and implementing activities outlined in the ESCP, ESMF, and SEP will help ensure appropriate stakeholder engagement, proper awareness raising and timely information dissemination. This will help: (i) avoid conflicts resulting from false rumors; (ii) ensure equitable access to services for all who need it; and (iii) address issues resulting from people being kept in quarantine. These will be guided by standards set out by WHO as well as other international good practices including social inclusion and prevention of SEA/SH. Mechanisms to engage citizens, and target beneficiaries more specifically, in providing ideas and feedback on program delivery will help identify gaps at the point of service delivery (information availability, access to testing and vaccination, access to relevant care, equal treatment etc.), build community knowledge and confidence, establish trust, ensure governments respond to community needs (including vulnerable groups), and thus optimize the impact of the COVID-19 emergency response.

91. **As detailed above, the project components all address gender dimensions with targeted interventions including**: (i) integration of gender-responsive approaches in communications strategies with the public, including use of multiple accessible mediums in local languages; (ii) use of targeted messaging, and the creation of responsive platforms for registry of inquiries and grievances, through a variety of mediums to target women and different vulnerable groups; (iii) inclusion of interventions to support demand creation/restoration of essential RMNCAH-N services together with COVID-19 vaccinations, critical to averting increases in excess mortality and mobility for women and girls and improving access to sexual and reproductive health and rights These interventions will be monitored and measured through the project results framework, and through safeguards instruments such as through measuring the number of health professionals trained to reach out to the community and directly target populations for RMNCAH+N services with public communication and demand plan in alignment with COVID-19 risk as well as the number of people reached with key messages developed for public communication to properly inform on COVID-19 risks in accessing health services. As described in the ESCP and detailed in the SEP, the project will adopt a GBV/SEA/SH specific GRM outlining specific procedures to manage and resolve GBV/SEA/SH related claims, maintaining confidentiality in an appropriate manner to ensure an appropriate response for such claims

Climate Exposures

92. **Climate risk and vulnerabilities: Angola is highly exposed to several climate risks, including rising sea levels, floods, erosion, droughts, and epidemics.** Mean annual temperature is projected to increase between 1.2 and 3.2°C by 2060, and 1.7 and 5.1°C by 2090, with warming expected to increase more rapidly in the interior and eastern parts of the country. Projected changes in precipitation vary, with some estimates indicating changes in median annual rainfall ranging from -1 to -6 percent by the 2090's. The country's development has been significantly hindered by war, creating a state where a substantial portion of the population is still without adequate access to food, potable water, sanitation, education, healthcare, electricity, and other basic services. An array of naturally occurring hazards, including flooding, erosion, droughts, and epidemics, further impede development. Projected changes in temperature and rainfall are likely to increase the frequency and severity of these climatic events, all of which have the potential to impact the project's target population. Additionally, sea level rise poses a major threat to its coastal population, where it is estimated that 50 percent of Angolans reside. Recent cycles of droughts and floods in the southern provinces caused an estimated US$242.5 million in agricultural losses, severely impacting the estimated 40.5 percent of the population living below the poverty line, including target beneficiaries of this project. Finally, under climate change, epidemics of vector- and water-borne diseases in Angola are likely to intensify. Increasing rainfall and flooding will compromise access to clean and potable water, putting populations at increased risk for water-borne diseases (e.g. cholera, and other diarrheal diseases). This is particularly concerning given that only 49 percent of the population is estimated to have access to safe water. Similarly, increasing temperatures will expand the geographic range and prolong the seasonality of vectors causing malaria and yellow fever. This is particularly important for Angola where malaria is the leading cause of death and accounts for 20 percent of maternal mortality.

93. **Climate policy landscape: the government of Angola has indicated its commitment to address climate change.** In 2012, the National Committee on Climate Change and Biodiversity was created under the Minister of Environment. The committee is tasked with harmonizing programs and policies and creating the necessary conditions for the implementation of a National Climate Change Plan. As such, climate change has been integrated into broad national strategies through the 2013-2017 National Development Plan under the framework of the new Constitution of Angola. Angola has yet to ratify the Paris Agreement, however, the country's intended Nationally Determined Contribution (NDC) outlines clear mitigation and adaptation activities to curb the impact of climate change across various sectors. Additionally, one of the pillars of Angola's Country Partnership Framework with the World Bank stresses enhancing the quality of health services, protecting vulnerable and marginalized citizens, and building resilience to potential shocks, including those attributable to climate change. Climate-related activities outlined in this project align with national and global priorities to address climate change.

94.

95. **The proposed project intends to address these vulnerabilities, enhance climate resilience and adaptation, and mitigate greenhouse gas emissions through the following activities.** Climate adaptation activities and corresponding vulnerabilities will be addressed as outlined in the table below:

Table 7. Climate adaptation activities

Project Component/Sub-component and Cost	***Climate-related action***	***Description***	***How will activity address climate-related vulnerabilities?***
<u>Sub-component 1.1:</u> Case Detection, Laboratory Confirmation, Contact Tracing, Recording, Reporting (US$5million)	• Surveillance for climate-induced disease outbreaks, with a focus on contact tracing and case management	• Surveillance training will incorporate modules on contact tracing and case management for diseases induced or exacerbated by climatic events (ex: cholera, typhoid, meningitis, and malaria)	• Better management and case detection of epidemics of water- and vector-borne diseases induced or exacerbated by climatic events in the context of historic vulnerability to climate-induced outbreaks in Angola
	• Laboratory capacity for identifying climate-induced disease outbreaks	• Develop capacity for detection and handling of key priority diseases, including disease outbreaks induced by climate emergencies	• Better management and case detection of epidemics of water- and vector-borne diseases induced or exacerbated by climatic events
<u>Sub-component 1.2:</u> Health systems strengthening (US$5 million)	• Preparedness and Response to Climate Shocks	• Provide training and guidelines for health workers' preparedness and response to climate shocks. Trainings will include specific modules and materials on preparedness and response to climactic shocks, particularly flooding and droughts.	• Strengthened preparedness and response to the country's climactic shocks.
	• Improved medical waste	• Strengthen medical waste management in flood prone areas	• Adapt waste management solutions to consider

	management in flood prone areas	through proper disposal of medical needles/syringes in syringe boxes and ensuring disposal sites are not in flood plains	risks associated with flooding and increased rainfall
Sub-component 2.1: Strengthening Supply chain and cold chain (US$10 million)	• Increase the supply chain's resilience to flooding	• Organize central and provincial warehouses by raising equipment above ground to mitigate impact of flooding on vaccine storage and delivery	• Adapt vaccine storage solutions to consider flood risks
Sub-component 2.3: COVID-19 Vaccine service delivery (US$30 million)	• Adapt vaccination campaigns to climate shocks	• Implement training module for vaccinators that covers strategies to adapt vaccination efforts in the event of climate shocks	• Adapt vaccination campaign strategy to consider climate risks due to flooding, increased rainfall, droughts.
Component 3: Community engagement and risk communication for Demand Creation (US$3 million)	• Promote community trust and confidence in vaccines for climate-induced diseases	• Implement national risk-communication plan to promote vaccine uptake and counter vaccine hesitancy and misinformation associated with vaccines for climate-induced diseases (ex: cholera, typhoid, yellow fever, etc.)	• Promote uptake of vaccines to combat vaccine-preventable diseases associated with climate-related factors (e.g. cholera is associated with increased rainfall, flooding)
	• Behavior change communication on transmission and prevention of climate induced diseases	• Distribute educational materials and implement communication campaigns on methods for	• Reduce the transmission and spread of climate induced diseases

		preventing and reducing the transmission of climate induced, vector and water borne diseases such as Malaria and cholera	
	• Digitally monitor hesitancy towards vaccines for climate-induced vaccine preventable diseases	• Digitally monitor vaccine hesitancy associated with vaccines for diseases induced by climate shocks	• Promote uptake of vaccines to combat vaccine-preventable diseases, including those associated with factors (e.g. cholera is associated with increased rainfall, flooding)
Component 4: Project implementation and monitoring (US$7 million)	• Contingency plans for climate emergencies	• Develop contingency plans for vaccine distribution in the event of climate emergencies	• Ensure vaccination happens safely in the event of climate emergencies
	• Monitor climate investments	• The project's monitoring component will include monitoring of climate investments	• Monitor implementation of climate investments against plans

96. **The project will also include the mitigation activities outlined below:**

Table 8. Climate mitigation activities

Project Component/Sub-component & Cost	***Climate-related action***	***Description***
Sub-component 1.2: Health systems strengthening (US$7.5 million)	• Climate-friendly facility upgrades and refurbishment for health facilities (US$1.4 million estimated)	• Conduct climate-friendly facility upgrades and refurbishment for health facilities including proper sealing of doors and windows, reflective paint, and LED lights. Procurement documents for refurbishments will incorporate these measures. Refurbishments will improve passive cooling and reduce energy used by non-efficient lighting, contributing to health facilities' fuel efficiency.
Sub-component 2.1: Strengthening Supply chain and cold chain (US$10 million)	• Route Optimization for COVID-19 Vaccine Distribution	• Group shipments and combine deliveries to locations for vaccine delivery to minimize distances travelled and fuel use. Route optimization will also adjust routes for vehicles depending on weather and road conditions. This will improve fuel mileage and fuel efficiency of the vehicles.
	• Climate Friendly Cold Chain (US$3 million estimated)	• Purchase Solar Direct Drive Refrigerators and refrigerators which use low Global Warming Potential (GWP) refrigerants • Procurement conditions will be used to ensure cold chain purchases are climate friendly
	• Cold Chain Temperature Monitoring (US$0.5 million estimated)	• Implement IOTA Platform's Cold Chain Temperature Management module to manage temperatures within storage facilities, maintain

		consistent temperatures, and reduce carbon footprint
	• Digital Logistics Management and Information System (LMIS) (US$3 million estimated)	• Expand the IOTA Vaccine Logistics Management Digital Platform from ~1200 to ~2000 sites to digitize tracking vaccine logistics and minimize use of paper materials • Digital monitoring of vaccines is also expected to improve tracking of vaccines reduce unnecessary wastage of vaccines, reducing the quantity of waste which needs to be disposed
	• Purchase vehicles (US$1 million estimated). This may include electric vehicles	• Strengthen EPI's fleet for service delivery by purchasing vehicles. The Government will assess the potential to purchase electric vehicles to reduce carbon emissions
Sub-component 3: Community engagement and risk communication for Demand Creation (US$3 million)	• Digital monitoring of vaccine hesitancy to reduce paper and fuel use	• Promote digital monitoring of vaccine hesitancy to minimize use of paper materials, energy outputs, and fuel associated with transportation

VI. GRIEVANCE REDRESS SERVICES

97. **Communities and individuals who believe that they are adversely affected** by a World Bank supported project may submit complaints to existing project-level grievance redress mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of Bank 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 Bank Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's corporate Grievance Redress Service (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*.

98. **The project will utilize both existing and project-specific GRM** to enable a broad range of stakeholders to channel concerns, questions, and complaints to implementation agencies. This can include support for COVID-19 Call Centers with toll-free numbers, publicly disclosed throughout the country. GRM mechanisms will be equipped to handle cases of SEA/SH in an ethical and confidential manner, following a survivor-centered approach and prioritize survivor's safety, confidentiality, and well-being at all times. The project results framework includes an indicator to measure consultations through multi-media platform (111 hotline) with key information on COVID-19, including vaccinations.

VII. KEY RISKS

99. **The overall risk to achieving the PDO is high.** The large-scale acquisition and deployment of COVID-19 vaccines entail certain significant risks. A mass vaccination effort stretches capacity, in particular in low-capacity environments such as Angola, entailing risks. The proposed World Bank support for Angola to develop vaccination acquisition strategies and investment in deployment system capacity specifically aim to mitigate these risks. The remaining risk must be considered against the risk of resulting in the country having less timely and effective deployment of vaccines, potentially exacerbating development gaps and eroding past development gains.

100. **Political and governance risks are Substantial**. Although improvements have been observed over the last two years, concerns remain around governance. The current Government has shown strong commitment to implementing critical governance reforms and recorded early wins in this regard, such as introducing measures to reduce corruption, initiating a first wave of privatizations, and passing laws to improve competitiveness. However, vested interests are strong and may derail reform efforts, with the pandemic causing further uncertainty. The continued curbing of social spending—to ensure surpluses needed to service high debt levels—also represents significant risk, in terms of a possible worsening of social indicators as well as possible social discontent. There may be political risks to the project related to the commitment and ability of the authorities to ensure appropriate targeting of the project-supported vaccines to reach the priority populations, based on objective public health criteria, and ability to manage public sentiment should there be a gap between vaccine targets and vaccine delivery. These risks will be mitigated through the assurance mechanisms that this project will support such as the establishment of an acceptable policy and plan for prioritized intra-country

allocation that will be monitored by the ReDIV system. There are also risks related to governance of vaccine purchase and deployment, such as potential fraud and substandard quality. In addition, there are risks associated with fraudulent attempts to gain access to vaccines to be administered not following approved protocols of priority populations or for personal gain. This includes the risk of elite capture and of corruption in the implementation of the vaccination program. This will be mitigated through the government's vaccine oversight, verification, and monitoring efforts (highlighted in the monitoring section above which include the ReDIV real-time monitoring system and potential third-party monitoring to be further discussed and assessed with the counterpart. This will be further mitigated through the application of anti-corruption guidelines for vaccine purchase and deployment, and robust financial management oversight of the use of funds, as elaborated in the fiduciary risks below. Residual risk remains Substantial.

101. **Macroeconomic risk is High.** The decline in oil prices, coupled with a reduction in oil production and tighter global financing conditions due to COVID-19 have dampened growth prospects, increasing the need for additional fiscal consolidation. This could limit space for borrowing and decrease momentum on Angola's reform program, particularly putting social spending at risk. Angola's fiscal constraints pose risks in terms of the capacity to purchase vaccines at scale and finance other COVID-19-related interventions—while keeping up financing of non-COVID-19 related costs in the health sector. The proposed project specifically aims to mitigate this risk by providing financing for vaccine purchase and distribution and promoting prioritized deployment to vulnerable groups. Bringing COVID-19 case numbers down will, over time, reduce the recent extraordinary spending and also allow for the economy to return to normalcy. Residual macroeconomic risk will remain as the country aims to scale vaccine access to higher coverage levels.

102. **Sector strategies and polices risk is Substantial.** While there are national plans for the COVID-19 response and vaccinations, gaps highlighted in readiness assessments, and the challenges associated with the phased prioritization for COVID-19 vaccinations, make this risk Substantial. To mitigate this risk, the World Bank is coordinating with other key partners, including WHO, Gavi, and UNICEF, to help the government strengthen and detail its COVID-19 policy framework. The project will also support the MOH to operationalize and assess the viability of its strategy for COVID-19 vaccines deployment (including for identification of people with comorbidities), for potential adaptation over the course of implementation.

103. **Technical Design of Project or Program risk is Substantial.** Political pressures and different interpretations of which standards to follow may create pressure for Angola to purchase vaccines before they have been appropriately certified. In the case of Angola, the Global COVID-19 MPA AF mitigates this risk as financing will only be used for vaccines that meet the World Bank's VAC. The other risk relates to the commitment and ability of the authorities to ensure appropriate targeting of the vaccines to priority populations, based on objective public health criteria and ability to manage public sentiment should there be a gap between vaccine targets and vaccine delivery. This risk will be mitigated through the assurance mechanisms that this project will support, together with UN agencies and other development partners, including a strong policy and plan for prioritized allocation. The initial version of this prioritization produced and submitted with Angola's COVAX application is aligned with the WHO's SAGE Values Framework.

104. **Institutional Capacity for Implementation and Sustainability risk is High.** Vaccine deployment, cold-chain, and distribution capacity are currently sub-optimal in Angola, especially for the anticipated scale and population group coverage foreseen for COVID-19 vaccination. This risk will be mitigated by this project financing and technical support for

immunization system strengthening, including conducting capacity assessments in coordination with WHO, Gavi, UNICEF, and other partners.

105. **Fiduciary risk is High:** The financial management residual risk is Substantial and procurement risk is High considering the uncertainties and risks associated with the procurement and deployment of vaccines. Risks specific to vaccines include:

- Procurement Procedures. Procurement activities under the proposed project will be carried out in accordance with the World Bank's "Procurement Regulations for IPF Borrowers" (Procurement Regulations) dated November 2020 and the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006 and revised in January 2011 and as of July 1, 2016, and other provisions stipulated in the Financing Agreements.

- At borrower's request, the Bank will offer BFP as support to the country's own procurement of COVID-19 vaccines complying with the Bank's VAC as well as medical consumables, including PPE, and capital equipment. BFP constitutes additional support to borrowers over and above usual Hands-on Expanded Implementation Support, which will remain available. BFP may include hands-on support to Borrowers in negotiating contract conditions with manufacturers / suppliers and facilitating market access. The Borrower will remain fully responsible for signing and entering into contracts and implementation."

- Based on the virtual procurement assessment, the residual risk is High. Procurement planning, procurement processing, contract management and the related decision-making authority under the proposed project will be under the UCC. The team that will support this operation is the same team responsible for the procurement function under the current active health projects (HSPSP, REDISSE IV, Gavi). This procurement team is made up of a procurement officer and a procurement assistant. A Procurement Specialist is being recruited for the UCC. Considering the emergency response required to this project and the overall risks involved in the procurement of vaccines indicated in the section of key risks below, the UCC will need to identify procurement staff to be exclusively dedicated to this project with extensive experience in the procurement of vaccines and medicines, including at the minimum of a Procurement Specialist and a Procurement Assistant.

- The procurement of vaccines includes risks associated to: (i) the complexity of the vaccines market given the significant market power enjoyed by vaccine manufactures; (ii) inability of the market to supply adequate quantities of vaccines to meet demand; (iii) the limited market access due to advance orders by developed countries; (iv) weak bargaining; and (v) delays in triggering emergency procurement procedures, which could delay procurement and contract implementation, including payments. To mitigate the risks the options identified are to support the country's needs for direct or advance purchase, including the use of the COVAX facility, the African Union (AU) AVATT initiative or the use of BFP, where feasible, as well as the use of the ReDIV system to support the vaccines deployment and ensure that proper accountability, verification, and transparency of vaccine roll out. On the other hand, BFP is also available.

- Financial Management. The key FM risks relate to: (i) untimely funds flow or lack of liquidity and (ii) lack of adequate controls over the transparent, prioritized distribution and application of vaccines, particularly for the most vulnerable population groups. This project will assess and strengthen control systems, facilitate the timely flow of funds, and ensure adequate liquidity to finance project activities.

106. **Environmental and Social risks are Substantial**. The measures to address social and environmental risks include the need for infection prevention and control improvements in health facilities, such as assessment and mitigation measures for medical waste risk management that will be scaled up as inoculation sites expand. The environmental risk rating is substantial mainly because of the risks and impacts stemming from the acquisition and deployment of COVID-19 vaccines and consumables. The social risk is anticipated to be at least substantial in Angola because there is a broader social risk of inequity in access to vaccines, due to political pressures to provide vaccines to groups that are not prioritized due to need or vulnerability, or should target groups be misaligned with available vaccines. The country may engage security forces in the vaccine distribution as had been done in the successful yellow fever vaccination campaign in 2016. Environmental and social risks are also increased by climate vulnerabilities, which the project can help address through adaptive measures to support the health system and vulnerable groups. The climate screening for this project was conducted prior to appraisal. The GoA should ensure that this plan be subject to timely and meaningful consultations in accordance with ESS 10. There should be consensus to first target health workers, other essential workers, and the most vulnerable populations, which will include a mix of the elderly, people with co-morbidities, and people in high-population density location. Notably, these groups include sub-populations that are disproportionately at risk for climate shocks. Consequently, prioritizing their vaccination for COVID-19 will inadvertently reduce their vulnerability to climate impacts. The World Bank will also continue to provide technical and implementation support to mitigate this risk. All targeting criteria and implementation plans will be reflected in country's national vaccination program.

107. **Stakeholder Risks are substantial**. In addition to the risks and mitigation measures for ensuring inclusion of vulnerable groups in the vaccination roll out mentioned above, another potential risk is the increased incidence of reprisals and retaliation, especially against healthcare workers and researchers. This risk will be mitigated through explicit inclusion in robust stakeholder identification and consultation processes. Further, and linked to the social risks stated above, it is important to have clarity on the risks that may arise related to any mandatory aspect of the national program and whether and how this mandatory element relates to cultural, social and traditional community practices and values. Such risks need to be considered in light of the mitigation hierarchy and balanced against the health-related requirements of any mandatory vaccination program. In addition, the GRMs required under the ESF should be in place and equipped to address community, worker, and/or individual grievances related to such issues, including those linked to indemnification for any AEFI. It will also include requirements related to being able to have GRMs in place to address labor and working conditions, as well as SEA/SH.

108. **Other substantial risks include those associated with data management and privacy.** Large volumes of personal data, personally identifiable information and sensitive data are likely to be collected and used in connection with the management of the COVID-19 outbreak under circumstances where measures to ensure the legitimate, appropriate and proportionate use and processing of that data may not feature in national law or data governance regulations, or be routinely collected and managed in health information systems. In order to guard against abuse of that data, the Project will incorporate good international practices for dealing with such data in such circumstances. Such measures may include, by way of example, data minimization (collecting only data that is necessary for the purpose); data accuracy

(correct or erase data that are not necessary or are inaccurate), use limitations (data are only used for legitimate and related purposes), data retention (retain data only for as long as they are necessary), informing data subjects of use and processing of data, and allowing data subjects the opportunity to correct information about them, etc. In practical terms, operations will ensure that these principles apply through assessments of existing or development of new data governance mechanisms and data standards for emergency and routine healthcare, data sharing protocols, rules or regulations, revision of relevant regulations, training, sharing of global experience, unique identifiers for health system clients, strengthening of health information systems, etc.

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VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Angola

Angola COVID-19 Strategic Preparedness And Response Project

Project Development Objective(s)

The Project Development Objective (PDO) is to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness in Angola.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
Percentage (%) of priority population vaccinated, based on the targets defined in national plan			
Percentage (%) of population vaccinated, which is included in the priority population targets defined in the national plan [disaggregated by sex]. (Percentage)		1.80	48.00
Number of COVID-19 designated hospitals with oxygen producing units			
Number of COVID-19 designated hospitals with oxygen producing units (Number)		3.00	11.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
Component 1: Emergency COVID-19 response				
Number of health staff trained in infection prevention and control per MOH-approved protocols (disaggregated by sex) (Number)		1,500.00	5,000.00	10,000.00
Number of designated laboratories with staff trained to conduct COVID-19 diagnosis (Number)		13.00	15.00	18.00
Number of COVID-19 Rapid Response Teams trained (Number)		85.00	120.00	170.00
Component 2: COVID-19 Immunization				
Number of provincial level EVMs assessments completed with composite scores of 80% or higher (Number)		0.00	10.00	18.00
Percentage of targeted sites where requested Cold Chain Equipment has been installed and functional (Percentage)		0.00	80.00	90.00
Number of provinces where Logistimo/IOTA management system has been implemented (Number)		6.00	12.00	18.00
Number of municipalities with health facilities that have adopted COVID-19 related AEFI mechanisms (Number)		50.00	80.00	130.00
Number of vaccination centers that have implemented standard operating procedures (SOPs) (Number)		30.00	110.00	180.00
Number of selected hospitals that implemented updated guidelines for the collection and disposal of COVID-19 vaccine related medical waste (Number)		40.00	120.00	200.00
Component 3: Community engagement and risk communication for demand creation				

Indicator Name	PBC	Baseline	Intermediate Targets	End Target
			1	
Number of people reached with key messages and materials developed for public communications and advocacy, in alignment with COVID-19 risk communication and demand plan (disaggregated by sex) (Number)		0.00	3,000,000.00	8,000,000.00
Number of health professionals and community workers trained in COVID-19 immunization risk communication and community engagement (desegregated by sex) (Number)		0.00	7,000.00	15,000.00
Number of community health workers trained to deliver key messages to promote demand for COVID-19 vaccines and other essential health services (Number)		0.00		324.00
Consultations through multi-media platform (111 hotline) with key information on COVID-19, including vaccinations (Number)		0.00		3,000,000.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Percentage (%) of population vaccinated, which is included in the priority population targets defined in the national plan [disaggregated by sex].	Numerator; number of people fully vaccinated for COVID-19 in the priority population targets defined in the national plan through project financing,	Every 6 months	Ministry of Health (MINSA/DNSP)	Extraction from health management information system (ReDIV)	Ministry of Health (MINSA/DNSP)

	acquisition or deployment. Denominator; total population (estimated at 31,443,109)				
Number of COVID-19 designated hospitals with oxygen producing units	Number of COVID-19 designated hospitals with cryogenic oxygen tanks	Every 6 months	Ministry of Health (MINSA/DNSP)	Ministry of Health - COVID19 designated hospitals	Ministry of Health

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Number of health staff trained in infection prevention and control per MOH-approved protocols (disaggregated by sex)	Number of health staff trained in infection prevention and control per MOH-approved protocols	Every 6 months	Ministry of Health	Ministry of Health registry of on number of staff trained	Ministry of Health
Number of designated laboratories with staff trained to conduct COVID-19 diagnosis	Designated laboratories with trained staff who have the capacity to conduct COVID-19 diagnosis (This information will be provided on a national-level and disaggregated to the provincial-level based on the location of the laboratory)	Every 6 months	Ministry of Health	Data registry of Ministry of Health on trained staff	Ministry of Health
Number of COVID-19 Rapid Response Teams trained	Number of COVID-19 Rapid Response Teams trained	Every 6 months	Ministry of Health (MINSA/DNSP	Ministry of Health (Responsible for the RRTs)	Ministry of Health (Responsible for the

			)		RRTs)
Number of provincial level EVMs assessments completed with composite scores of 80% or higher	Number of provincial level EVMs (Effective Vaccine Management) assessments completed with composite scores of 80% or higher	Every 6 months	Ministry of Health, DNSP	Ministry of Health EVMs assessment data records	Ministry of Health
Percentage of targeted sites where requested Cold Chain Equipment has been installed and functional	Numerator: Number of targeted sites where requested Cold Chain Equipment has been installed and functional Denominator: Number of targeted sites that requested Cold Chain Equipment (This information will be provided on a national-level and disaggregated to the provincial-level based on the location target sites)	Every 6 months	Ministry of Health EPI's program	Compilation from district and provincial plans	Ministry of Health
Number of provinces where Logistimo/IOTA management system has been implemented	Number of provinces that have the LOGISTIMO platform implemented and functioning	Every 6 months	Ministry of Health	Ministry of health data on LOGISTIMO implementation	Ministry of Health
Number of municipalities with health facilities that have adopted COVID-19 related AEFI mechanisms	Number of municipalities with health facilities that have adopted COVID-19 related AEFI mechanisms.	Every 6 months	Ministry of Health	Ministry of Health, DNSP, Provincial Health Department	Ministry of Health
Number of vaccination centers that have implemented standard operating procedures (SOPs)	Number of vaccination centers that have implemented standard	Every 6 months	Ministry of Health	Ministry of Health, DNSP	Ministry of Health

	operating procedures (SOPs) or guidelines updated for collection and disposal of COVID-19 vaccine related medical waste (number) (This information will be provided on a national-level and disaggregated to the provincial-level based on the location target sites)				
Number of selected hospitals that implemented updated guidelines for the collection and disposal of COVID-19 vaccine related medical waste	Number of selected hospitals across Angola's 18 provinces that have implemented updated guidelines for the collection and disposal of COVID-19 vaccine related medical waste.	Every six months	Ministry of Health (MOH) / National Directorate of Public Health (DNSP)	MOH / DNSP	MOH / DNSP
Number of people reached with key messages and materials developed for public communications and advocacy, in alignment with COVID-19 risk communication and demand plan (disaggregated by sex)	Number of people reached with key messages and materials developed for public communications and advocacy, in alignment with COVID-19 risk communication and demand plan	Every 6 months	Ministry of Health (Project Implementation Unit)	Ministry of Health	Ministry of Health
Number of health professionals and community workers trained in COVID-19 immunization risk communication and community engagement (desegregated by sex)	Number of health professionals and community workers trained in COVID-19 immunization risk	Every 6 months	Ministry of Health registration records on staff that	Ministry of Health staff training registration records	Ministry of Health

	communication and community engagement (desegregated by sex)		participated in training.		
Number of community health workers trained to deliver key messages to promote demand for COVID-19 vaccines and other essential health services	The number of community health workers that receive training from the MOH on proper messages to reach out to the population to increase demand for COVID-19 vaccination. Community health workers includes ADECOS and agentes comunitarios da saude.	Quarterly	MoH Training reports	Inspection of aggregated training reports on number of ADECOS trained	
Consultations through multi-media platform (111 hotline) with key information on COVID-19, including vaccinations	The number of consultations that take place through multi-media platforms, specifically Angola's 111 hotline, with key information on COVID-19, including vaccinations.	Every 6 months (cumulative)	Backend database of hotline	Compilation of metrics from 111 hotline / Daily COVID-19 report from COVID-19 commission.	MOH

ANNEX 1: Summary Table on Vaccine Development and Approval Status

COUNTRY: Angola
Angola COVID-19 Strategic Preparedness And Response Project

Status of Vaccines as of 06/02/2021

Vaccine	SRA Emergency Use Approval	WHO PQ/EUL
BNT162b2/COMIRNATY Tozinameran (INN) - Pfizer BioNTech	United Kingdom: December 2, 2020 Canada: December 9, 2020 United States of America: December 11, 2020 European Union: December 21, 2020 Switzerland: December 19, 2020 Australia: January 25, 2021	WHO Emergency Use Listing (EUL): December 31, 2020
mRNA-1273 - Moderna	USA: December 18, 2020 Canada: December 23, 2020 EU: January 6, 2021 Switzerland: January 12, 2021 UK: January 8, 2021	WHO EUL: April 20, 2021
AZD1222 (also known as ChAdOx1_nCoV19/ commercialized as COVISHIELD in India) - AstraZeneca/Oxford	UK: December 30, 2020 EU: January 29, 2021 Australia: February 16, 2021 (overseas manufacturing); March 21, 2021 (for local manufacturing by CSL – Seqirus) Canada: February 26, 2021	WHO EUL: February 15, 2021 for vaccines manufactured by SK Bio and Serum Institute of India
Ad26.COV2.S - Johnson & Johnson	USA: February 27, 2021 Canada: March 5, 2021 EU: March 11, 2021 Switzerland: March 22, 2021 UK: May 28, 2021	WHO EUL: March 12, 2021
BBIBP-CorV - Sinopharm		WHO EUL: May 7, 2021
CoronaVac - Sinovac		WHO EUL: June 1, 2021

ANNEX 2: Project Costs

COUNTRY: Angola
Angola COVID-19 Strategic Preparedness And Response Project

COSTS AND FINANCING OF THE COUNTRY PROJECT

Program Components	Project Cost	IBRD or IDA Financing	Trust Funds	Counterpart Funding
1. Support to the COVID-19 response	10	10		
2. COVID-19 immunization	130	130		
3. Community engagement and risk communication for demand creation	3	3		
4. Project Implementation and Monitoring	7	7		
Total Costs	150	150		
Total Costs	150			
Front End Fees				
Total Financing Required	150			

ANNEX 3: Implementation Arrangements and Support Plan

COUNTRY: Angola
Angola COVID-19 Strategic Preparedness And Response Project

1. **The World Bank's implementation support will focus on helping the MoH to unblock potential operational bottlenecks** by providing advice and undertaking analytics to strengthen the technical quality of implementation and assure timely implementation. The extent of implementation support that will be provided depends on recognized needs and opportunities.

2. **In terms of strengthening compliance, technical assistance may be needed as described in the relevant sections of the Appraisal Summary.** With fiduciary risk rated as substantial (procurement risk is high), technical assistance to procurement and FM will be prioritized, also with the UN Agencies supporting procurement process. The Project will use the existing PIU, appropriately staffed, with relevant qualifications. The project can support additional training in the use of the STEP and the new World Bank Procurement Framework. Implementation support for FM will be undertaken mainly during, and in response to the findings of, the semi-annual FM supervision reviews. For environmental and social safeguards, the World Bank will monitor compliance through the reports submitted by the PIU and take remedial and supportive action as needed.

3. **Within the technical domain, the focus for the World Bank's implementation support will be related to the timely coordination of the pandemic response and COVID-19 vaccination.** This will include technical assistance to: (i) COVID-19 vaccination and testing messages prepared; (ii) coordination mechanisms in place; (iii) curriculum and training approaches; and (iv) use of the relevant IT systems.

4. **Development partners are expected to provide technical assistance, and procurement operational support, to strengthen the implementation of select project activities, in line with their respective mandates.** The WHO, with its in-country expertise and overall coordination role for COVID-19 response activities, will continue to be an important technical partner. Gavi will be leading the dialogue and procurement through the COVAX facility. Additionally, UNICEF and UNDP may provide operational support with respect to the procurement and delivery of vaccines to Angola. The World Bank will coordinate its implementation support with these partners to get the most value-for-money, avoid duplication, and exploit synergies.

5. **While implementation support will be provided throughout project implementation, it is anticipated that more intense support will be needed in the first 12 months after project approval.** The World Bank, through technical and fiduciary specialists based in-country, can provide in-depth support for the project set up, during the first 12 months – from approval to effectiveness, and through early implementation – and after main activities are set. Implementation support in the first 12 months will focus on coordinating with development partners and capacity building of relevant institutions—MoH, DNSP, EPI—to support effective preparation and deployment of COVID-19 vaccination plans and increase of COVID-19 testing capacity.

Table 3.1: Summary of activities in the implementation arrangements and support plan

Timeline	Focus	Skills Needed	Resource Estimate
0–12 months	Setting up project implementation activities through institutional capacity strengthening, preparation for first procurement packages and technical assistance for implementation design.	Project management, operational, technical (including M&E), fiduciary, environment, and social.	At minimum, 3 formal implementation support missions. Just-in-time technical assistance.
12–24 months	Continued institutional capacity enhancement, implementation monitoring, operational and technical assistance to support implementation.	Project management, operational, technical (including M&E), fiduciary, environment, and social.	Two formal implementation support missions; just-in-time technical assistance.
Completion phase	Implementation Completion Report (ICR) and final payments	Project management, technical, fiduciary.	ICR mission

Financial Management

6. **Project FM Risk Assessment and Mitigation Measures**

Mitigation measures are described in the table below.

Table 3.2. FM Risk Assessment and Mitigation

Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Yes/No)	Residual Risk
Inherent risk	**H**	**—**	**—**	**S**
Country level. PFM system: Weaknesses in the budget execution, internal controls, capacity development, and general oversight.	H	The Government is committed to implement Public Financial Management (PFM) reforms and improve governance with support of the development partners. The Bank is supporting PFM reform initiatives through various ASAs and other International donors are also supporting the various country's reforms.	No	H
Entity level. The PIU may not be able to meet the FM requirements for Bank-financed projects due to the number of projects it currently implements. The PIU moved its office from within the Ministry to another location.	S	The PIU will recruit two qualified and experienced project Accountants to strengthen the current FM team to ensure the appropriate management of the project funds. The Financial Management Manual will be developed and adopted for the project by no later than 30 days after effectiveness as it is part of the PIM. The PIU will have at least one official from the MOH based in the PIU.	No	S
Project level. The MoH may fail to ensure an acceptable project FM environment, especially at the provincial level due to lack of FM capacity.	S	The PIU is composed of qualified and experienced project FMS and other finance staff. In addition, two more accountants will be recruited to handle project FM matters. Project FM Manual and guidelines will be adopted by MoH for project implementation.	No	S

Control Risk	S			S
Budgeting. Weak budgetary execution monitoring may lead to budgetary overruns or inappropriate use of project funds.	S	The Financial Management Manual will spell out the budgeting and budgetary control arrangements to ensure appropriate budgetary oversight. The IFR will include analysis/explanation on the budget execution. The Bank will review the draft budget as well as the quarterly IFR and provide comments.	No	M
Accounting. The current accounting software used by the PIU is not able to accommodate these project funds and expenses. Project funds, expenditures, and resources might not be properly accounted for, due to the emergency nature of the project, and timely and accurate consolidation of data and dissemination of information might be a challenge.	S	PIU will upgrade the existing automated accounting package in order to accommodate this project, to account for project funds, expenditures and resources. Though PIU has experienced financial staff onboard, FM's capacity will be strengthened through the recruitment of two accountants. The existing staff at provincial level will provide the necessary information on the decentralized funds.	No	S
Internal control. Noncompliance with internal control activities at the Ministry of Health and at Provincial Directorates such as project expenditures authorization, proper documentation, distribution of the vaccines and safeguards of assets.	H	Financial and administrative procedures to be employed by the PIU/MOH in project implementation will be documented in the Financial Management Manual, including the procedure for the deployment of the vaccines, vaccine safeguard, and distribution. PIU will make use of the real-time vaccine registration and monitoring system used in the country to incorporate the data in its quarterly reports produced by the internal auditor. Simplified guidelines will be used by the Province Directorates.	No	S

Funds flow. Funds channeled from the DA to provinces may not be used for intended purposes due to weak capacity at provincial level. The failure by commercial banks to make payments in foreign currency may impact negatively the implementation of project activities,	H	Internal control mechanism for transfer to and management of funds by the participating provinces will be documented in the FM Manual. Capacity of the provinces' finance staff who will be managing project funds will be strengthened. Disbursements of project funds will be handled by PIU as finance staff are familiar with Bank's disbursement procedures. To facilitate payments the project will make use of Direct payment (DP), and the ceiling of DP will be lowered	No	S
Financial reporting. Delay may be noted in the submission on time of project IFRs produced by PIU due to delays in submission of financial reports by the Provincial Directorates	S	PIU will upgrade the existing automated accounting package that will enable timely generation of financial information. Finance staff will undertake frequent visits to the provinces to oversee the project and provide support as needed.	No	S
Auditing. Quality of the audit; delays in submission of audit reports or delays in implementing the recommendations of the management letter.	S	Additional FM will be recruited to prepare Periodic Financial Statements (PFS) on time. An independent and qualified external audit firm will be hired to carry out the annual audit.	No	M

Governance and accountability. Possibility of corrupt practices, including bribes, abuse of administrative and political positions, mis procurement and misuse of funds, and so on, are a critical issue.	H	Project FM arrangements (including annually audit of project accounts and World Bank FM supervision including review of transactions and asset verification) designed to mitigate the fiduciary risks in addition to the PIU overall internal control systems. Use of third party monitoring, (e.g private audit firm) to check compliance with required COVID-19 vaccine systems, procedures and controls. PIU has procurement specialist in place and recruitment of two accountants will mitigate these risks.	—	S
OVERALL FM RISK	**S**	**—**	**—**	**S**

Note: H = High; M = Moderate; S = Substantial.

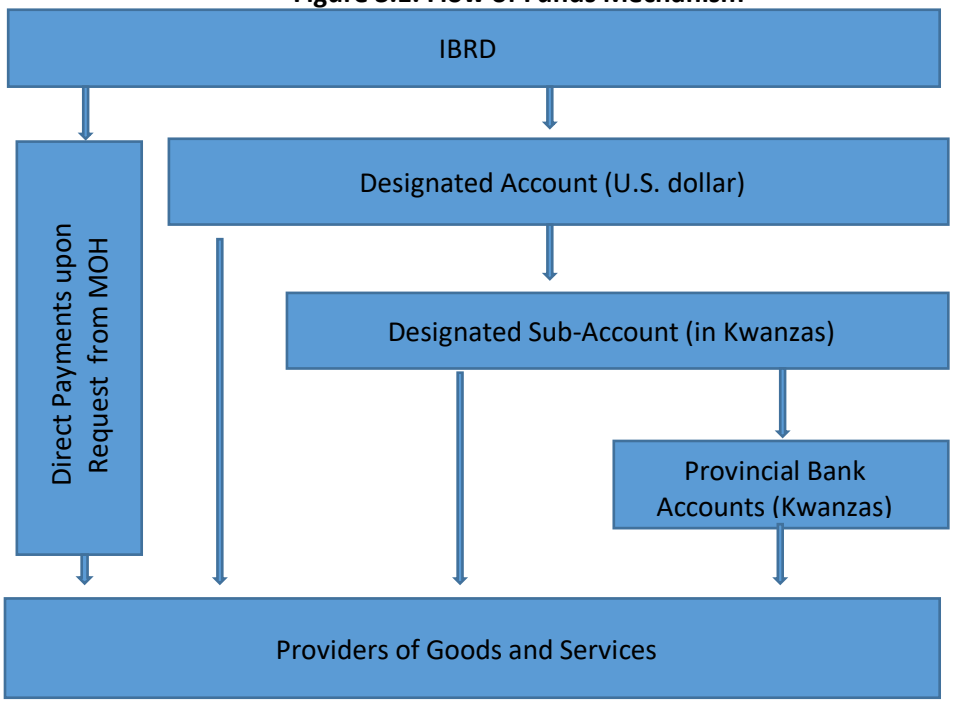
7. **FM action plan.** To establish an acceptable control environment and to mitigate FM risks, the following measures should be taken by the due dates indicated in the FM action plan below.

Table 3.3. FM Action Plan

No.	Action	Responsibility	Completion date
1	Appointment of two qualified and experienced project Accountants	PIU/MOH	No later than three months after effectiveness
2	Develop and adopt the Project Implementation Manual including FM procedures	PIU/MOH	By effectiveness
4	Upgrade or purchase a computerized accounting software for the project	PIU/MOH	Within three months after effectiveness
5	Prepare an addendum to the contract of the project external auditors or recruit new external audit firm	PIU/MOH	No later than three months after effectiveness

8. **Flow of Funds and Disbursement Arrangements.** MoH will establish and maintain a segregated Designated Account (DA) in U.S. dollars at the commercial bank under terms and conditions acceptable to IBRD. Funds in the DA will be used to finance eligible project expenditures in accordance with the Loan Agreement and Disbursement Letter. From the DA, the PIU will: (i) make payments for foreign consultants and suppliers of goods and services; (ii) transfer funds to the DA sub-account in local currency to facilitate payments of local eligible project expenditures and transfer funds to separate provincial bank accounts (to facilitate payments of eligible project expenditures to be incurred at provincial and local levels). The figure below depicts the funds flow mechanism for the project activities to be financed under the traditional disbursement methods.

Figure 3.1. Flow of Funds Mechanism



9. **Budgeting**. The PIU will prepare annual budgets based on the annual work plans and the approved procurement plan. Activities for the various components have been discussed and it is expected that the PIU will prepare annual budgets that cover activities proposed to be carried out in each fiscal year. The project will also be responsible for producing variance analysis reports comparing planned with actual expenditures on a quarterly basis. The periodic variance analysis will enable the timely identification of deviations from the budget. These quarterly variance analysis reports will be part of the IFRs that will be submitted to the World Bank on a quarterly basis. The budget preparation and monitoring of budget execution will be described in the Financial Management Manual, and formats for annual budget and monitoring reports will be included as annexes.

10. **Staffing.** The PIU/MoH will be responsible for fiduciary aspects of the project. The overall responsibility of project FM matters rest with the project FMS reporting to the PIU coordinator and supported by seven finance staff. The PIU/MoH finance staff arrangements seem to be adequate as they have been able to perform their duties and obligations so far. In addition, the project will recruit two experienced accountants to be part of the FM team.

11. **Accounting.** The implementing agency will account for all project funds, expenditures, and resources using a computerized accounting software and the basis of accounting will be financial reporting under cash basis. The computerized accounting package will be purchased and installed within four months after the effectiveness date. Throughout project implementation the implementing agency should maintain a sound computerized accounting software that enables key controls, records project transactions correctly, and can produce timely and reliable financial information.

12. **Internal control.** The Inspectorate General of Finance (*Inspecção Geral das Finanças*), based at the Ministry of Finance, is responsible for the internal audit functions across the entire government. However, the inspectorate general of finance has limited capacity (in terms of number and skills of its staff), and therefore, the project may not benefit from its review of this operation. To mitigate risks, in addition to the regular supervisions through desk review and field visits (that include expenditures and asset reviews) to be carried out by the Bank, the PIU has an internal auditor who will review the internal control systems in place and provide quarterly reports. The internal auditor will make use of the real-time vaccine registration and monitoring system used by the MOH and incorporate the data into its report quarterly reports. In addition, the PIU will engage a third-party monitoring, e.g., an external auditor, to check on compliance with required COVID-19 vaccines, procedures and controls. The finance and administrative procedures to be employed by the implementing agency will be documented in the PIM to be finalized and adopted by effectiveness. The FM procedures should include: institutional arrangements, budget and budgetary control, disbursement procedures and banking arrangements, receipt of goods and payment of invoices, internal control procedures, accounting system and transaction records, reporting requirement, and audit arrangement.

13. **Disbursement arrangements.** Disbursement of IBRD funds will be report-based (quarterly interim unaudited financial reports). These reports will include a statement of sources and uses of funds, an updated six-month forecast, Designated Account Activity statement and statements of eligible expenditure under contracts subject to and not subject to prior review. An initial advance will be made into the Designated Account upon the effectiveness of the Loan Agreement and at the request of MoH/PIU. The advances will be the estimated cash requirements to meet the project expenditures. After every subsequent quarter, MoH/PIU will submit the IFRs. And, the cash requests at the reporting date will be the amount required for the forecast period as shown in the approved IFRs less the balances in the Designated Account at the end of the quarter. Provincial Bank accounts will be used to receive funds from the DA to implement some activities at municipal and provincial levels, and these will provide monthly reports to the PIU. The option of disbursing the funds through direct payments from IBRD on contracts above a pre-determined threshold will also be available. The reimbursement and special commitments disbursement methods will be also available. The Bank will issue the Disbursement Letter that will specify additional instructions for withdrawal of the proceeds of the Loan.

14. **Auditing.** The project will be audited annually by a private qualified audit firm on a basis of ToR acceptable to the Bank. The report should be submitted to the Bank within six months following the end of the fiscal year. The audit will be conducted in accordance with International Standards on Auditing (ISA) as issued by the International Auditing and Assurance Standards Board (IAASB).

15. **Effectiveness condition.** There is no FM condition for effectiveness of this project.

16. **Supervision plan**. The project will be supervised on a risk-based approach. The FM supervision will be carried out by the World Bank FM Specialist. The initial supervision will focus on review of implementation progress of the agreed FM action plan including review of internal auditor's report which will incorporate a section on vaccines deployment. The FM supervision missions will also include a review of quarterly progress reports and audit reports and follow up on material accountability issues by engaging with the task team leader (TTL), client, and/or auditors. Based on the assessment, the FM current risk is Substantial and field visit supervision will be twice during the fiscal year and adjust when the need arises.

17. **Governance.** The country has a Multisectoral Commission for Prevention and Response to the COVID-19 Pandemic which will oversee this project.