



FOR OFFICIAL USE ONLY

Report No: PAD4591

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON

A PROPOSED INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT LOAN
IN THE AMOUNT OF US\$98 MILLION

AND

A PROPOSED GRANT FROM A MULTI-DONOR TRUST FUND FOR THE IRAQ REFORM, RECOVERY
AND RECONSTRUCTION
IN THE AMOUNT OF US\$2 MILLION

TO THE
REPUBLIC OF IRAQ

FOR AN
IRAQ COVID-19 VACCINATION PROJECT

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 and Population Global Practice
Middle East and North Africa Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective August 20, 2021)

Currency Unit = Iraqi Dinar (IQD)

IQD 1,459.0 = US\$1

FISCAL YEAR

January 1 - December 31

Regional Vice President: Ferid Belhaj

Country Director: Saroj Kumar Jha

Regional Director: Keiko Miwa

Practice Manager: Rekha Menon

Task Team Leader(s): Iryna Postolovska, Amr Elshalakani



ABBREVIATIONS AND ACRONYMS

AEFI	Adverse Events Following Immunization
AF	Additional Financing
ACG	Anti-Corruption Guidelines
BFP	Bank Facilitated Procurement
CERC	Contingent Emergency Response Component
COVAX Facility	COVID-19 Vaccines Global Access Facility
COVID-19	Coronavirus Disease 2019
CT	Computed Tomography
DA	Designated Account
DO	Development Objective
EHS	Environment, Health and Safety
EOC	Emergency Operations Center
EODP	Emergency Operation for Development Project
EPI	Expanded Program for Immunization
EPRP	Emergency Preparedness and Response Plan
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
EUA	Emergency Use Authorization
EUL	Emergency Use Listing
FM	Financial Management
FTCF	Fast Track COVID-19 Facility
GAVI	Global Alliance for Vaccines and Immunization
GDP	Gross Domestic Product
GOI	Government of Iraq
GHG	Greenhouse Gas
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
HEIS	Hands-on Enhanced Implementation Support
HNP	Health, Nutrition, and Population
I3RF	Iraq Reform, Recovery and Reconstruction Fund
IBM	Iterative Beneficiary Monitoring
IBRD	International Bank for Reconstruction and Development
ICU	Intensive Care Unit
IDA	International Development Association
IDP	Internally Displaced Persons
IFC	International Finance Corporation
IHR	International Health Regulation
IPF	Investment Project Financing
ISR	Implementation Status and Results Report
LMIS	Logistics Management Information System



M&E	Monitoring and Evaluation
MIS	Management Information System
MOHE	Ministry of Health and Environment
MPA	Multiphase Programmatic Approach
MWMP	Medical Waste Management Plan
NCC	National Coordinating Committee
NCD	Non-communicable Disease
NDVP	National Deployment and Vaccination Plan
NGO	Non-Government Organization
NTWG	National Technical Working Group
OHS	Occupational Health and Safety
OOP	Out-of-Pocket
PAD	Project Appraisal Document
PDO	Project Development Objective
PHC	Primary Health Care
PMU	Project Management Unit
POM	Project Operational Manual
PQ	Prequalification
PPE	Personal Protective Equipment
R&D	Research and Development
RFQ	Request for Quotation
RT-PCR	Reverse Transcription Polymerase Chain Reaction
SAGE	Strategic Advisory Group of Experts on Immunization
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SMS	Short Message Service
SRA	Stringent Regulatory Authorities
STEP	Systematic Tracking of Exchanges in Procurement
TA	Technical Assistance
UHC	Universal Health Coverage
ULT	Ultra Low Temperature
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
VAC	Vaccine Approval Criteria
VIRAT	Vaccine Introduction Readiness Assessment Tool
VRAF	Vaccine Readiness Assessment Framework
WBG	World Bank Group
WHO	World Health Organization



TABLE OF CONTENTS

DATASHEET	1
I. PROGRAM CONTEXT	6
A. Introduction	6
B. MPA Program Context	7
C. Updated MPA Program Framework.....	8
D. Learning Agenda	9
II. CONTEXT AND RELEVANCE	9
A. Country Context.....	9
B. Sectoral and Institutional Context	9
C. Relevance to Higher Level Objectives.....	18
III. PROJECT DESCRIPTION.....	19
A. Development Objectives.....	19
B. Project Components	19
C. Project Beneficiaries	23
IV. IMPLEMENTATION ARRANGEMENTS	24
A. Institutional and Implementation Arrangements.....	24
B. Results Monitoring and Evaluation Arrangements.....	25
C. Sustainability.....	25
V. PROJECT APPRAISAL SUMMARY	25
A. Technical, Economic and Financial Analysis.....	25
B. Financial Management.....	26
C. Procurement	27
D. Legal Operational Policies.....	29
E. Environmental and Social Standards	29
F. Climate Co-Benefits.....	31
G. Citizen Engagement	32
H. Gender	33
I. Grievance redress mechanisms	35
VI. GRIEVANCE REDRESS SERVICES	35
VII. KEY RISKS	35
VIII. RESULTS FRAMEWORK AND MONITORING	39
ANNEX 1: Status of Vaccines as of 09/15/2021	47



ANNEX 2: Financial Management Assessment Report	48
ANNEX 3: Implementation Arrangements and Support Plan.....	53



DATASHEET

BASIC INFORMATION		
Country(ies)	Project Name	
Iraq	Iraq COVID-19 Vaccination Project	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P177038	Investment Project Financing	Substantial
Financing & Implementation Modalities		
<input checked="" type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)	
<input type="checkbox"/> Series of Projects (SOP)	<input checked="" type="checkbox"/> Fragile State(s)	
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)	
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country	
<input type="checkbox"/> Project-Based Guarantee	<input checked="" type="checkbox"/> Conflict	
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster	
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)	
Expected Project Approval Date	Expected Project Closing Date	Expected Program Closing Date
24-Sep-2021	30-Jun-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 development objective is to support the Government of Iraq in the acquisition and deployment of COVID-19 vaccines.

Components

Component Name	Cost (US\$, millions)
COVID-19 Vaccines and Deployment	97.00
Project Management and Monitoring and Evaluation	3.00

Organizations

Borrower: Republic of Iraq
 Implementing Agency: Ministry of Health and Environment

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	100.00
Total Financing	100.00
of which IBRD/IDA	98.00
Financing Gap	0.00



DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	98.00
--	-------

Non-World Bank Group Financing

Trust Funds	2.00
Reform and Reconstruction in Iraq MDTF	2.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2022	2023	2024
Annual	75.00	22.00	1.00
Cumulative	75.00	97.00	98.00

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	● High
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



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

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

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

Legal Covenants

Conditions

Type	Financing source	Description
Effectiveness	Trust Funds	The Borrower, through MOHE, appoints TPMA for purposes of carrying out a technical audit.



I. PROGRAM CONTEXT

A. Introduction

1. This Project Appraisal Document (PAD) seeks the approval to provide financing for the proposed Iraq COVID-19 Vaccination Project comprised of a loan in the amount of US\$98 million from the International Bank of Reconstruction and Development (IBRD) and a grant in the amount of US\$2 million from the Multi-Donor Trust Fund for Iraq Reform, Recovery and Reconstruction Fund (I3RF) to the Republic of Iraq. The project financing will be extended under the COVID-19 Strategic Preparedness and Response Program (SPRP) using the Multiphase Programmatic Approach (MPA) approved by the World Bank's Board of Executive Directors on April 2, 2020 and the additional financing (AF) to the SPRP approved on October 13, 2020.¹ The Government of Iraq (GOI) has formally requested the World Bank's support for Iraq's COVID-19 vaccination efforts on May 26, 2021. The project builds on the ongoing support to the Government of Iraq's (GOI) COVID-19 response and health system strengthening by the World Bank as well as other development partners.

2. The project will provide upfront financing to help the government purchase and deploy COVID-19 vaccines from a range of sources that meet the World Bank's Vaccine Approval Criteria (VAC). The financing will enable affordable and equitable access to COVID-19 vaccines for approximately 7 percent of the country's population and help ensure effective vaccine deployment in Iraq through vaccination system strengthening. In particular, it will support the country in procuring additional doses through direct supply agreements with vaccine manufacturers in order to build a portfolio of options to expand Iraq's access to vaccines under the right conditions (e.g., of value-for-money, regulatory approvals, and delivery time among other key features). As of April 16, 2021, the World Bank will accept as threshold for eligibility of IBRD/IDA resources in COVID-19 vaccine acquisition and/or deployment under all World Bank-financed projects: (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 COVID-19 Vaccines Global Access (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). As vaccine development is rapidly evolving, the World Bank's VAC may be revised. All vaccines financed by the World Bank will be provided free of charge, and no user fees will be levied. The project financing enables a portfolio approach that will be adjusted during implementation in response to developments in the country's pandemic situation and the global market for vaccines.

3. Iraq is one of the countries hardest hit by COVID-19 in the Middle East and North Africa (MENA) region. As of September 19, 2021, Iraq has recorded a total of 1,975,220 confirmed cases and 21,822 deaths. A total of 7,161,754 COVID-19 vaccine doses have been administered. Of the total number of vaccinated people, 4,444,542 received one dose (approximately 11 percent of the total population), while 2,717,212 have been fully immunized with two doses (approximately 7 percent of the total population).

¹ The World Bank approved a US\$12 billion WBG Fast Track COVID-19 Facility (FTCF or "the Facility") to assist IBRD and IDA countries in addressing the global pandemic and its impacts. Of this amount, US\$6 billion came from IBRD/IDA ("the World Bank") 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 AF 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.



B. MPA Program Context

4. **The Additional Financing (AF) to the SPRP approved by the World Bank’s Board of Executive Directors on October 13, 2020 to the existing COVID-19 SPRP utilizing the MPA (“Global COVID-19 MPA”) will significantly expand the World Bank support to client countries for COVID-19 vaccination, with the aim to support vaccination of one billion people globally.** An effective and safe COVID-19 vaccine is the most promising path forward for the world to reopen safely, building on global efforts to develop treatments and to expand testing capacity. The timing of potential vaccine development was not known when the Global COVID-19 MPA was approved, but global vaccine development efforts have progressed rapidly. Production is underway of several vaccines that have been approved for use since the end of 2020. Many high-income countries have made large-scale advance purchases to reserve supply for their populations and have the systems in place to get people vaccinated efficiently. The approval of an envelope of US\$12 billion (US\$6 billion from IDA and US\$6 billion from IBRD) in financing was critical to expand affordable and equitable financing for vaccine purchase and deployment. It also sent a signal to potential suppliers that World Bank financing is available for the demand of vaccines from low- and middle-income countries (LMICs), providing an incentive for production capacity at levels that can also supply developing economies at affordable prices, not only high-income countries. The World Bank’s Global COVID-19 MPA AF is expected to enable vaccination for up to 750 million people, with potential surge capacity for an additional 250 million people in the poorest countries (depending on the delivered price of approved vaccines) while scaling up support to strengthen immunization delivery, with design flexibility at the country level. The Iraq COVID-19 Vaccination Project will enable support to the GOI’s COVID-19 vaccination efforts and will be a key contribution to the World Bank Group’s (WBG) overall COVID-19 response.

5. **The COVID-19 pandemic has had massive global impact and continues to spread.** Since December 2019, following the diagnosis of the initial cases in Wuhan, Hubei Province, China, the number of COVID-19 cases has increased rapidly. On March 11, 2020, the WHO declared a global pandemic. As of September 20, 2021, more than 228 million people have been infected with COVID-19 and 4.7 million have died. The pandemic has caused the largest global economic contraction since the Great Depression in 1929, driving millions of people into poverty. The economic recovery is expected to be slow. Furthermore, many countries are seeing a ‘third wave’ with the spread of the Delta variant.

6. **The World Bank’s response to the pandemic was quick.** On March 3, 2020, the World Bank’s Board of Executive Directors endorsed urgent actions supporting client countries’ response to the COVID-19 pandemic. Subsequently, the Board approved the establishment of a US\$12 billion WBG Fast Track COVID-19 Facility (FTCF or “the Facility”) to assist 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 (“the Bank”) 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. On March 17, 2020, the World Bank’s Board granted approval of specific waivers and exceptions required to enable the rapid preparation and implementation of country operations under the FTCF. On April 2, 2020, the World Bank’s Board approved the SPRP with a US\$6 billion financing envelope of which up to US\$4 billion for health financing (up to US\$1.3 billion IDA and up to US\$2.7 billion under IBRD). The SPRP utilizes MPA, to be supported by the FTCF. On April 2, 2020, the World Bank’s Board also approved the first 25 country projects.

7. **Since the initial FTCF response, the WBG has significantly expanded its support for countries as they respond to the COVID-19 pandemic and its overall impacts.** In March 2020, the WBG announced that the institution has the capacity to provide up to US\$160 billion in total financial support through June 2021 to help countries address the social



and economic impacts of the pandemic. On June 16, 2020, the World Bank’s Board endorsed the COVID-19 Crisis Response Approach Paper, outlining priorities for supporting countries in the longer term, including: a continued focus on saving lives; protecting the poor and vulnerable; ensuring sustainable business growth and job creation; and strengthening policies, institutions, and investments for rebuilding better. By September 30, 2020, the World Bank had committed nearly US\$22 billion in new financing for the overall COVID-19 response, of which more than 50 percent has disbursed. In addition to new financing, the World Bank restructured funds in existing projects in at least 68 countries to focus on COVID-19 response, many of these using the contingent emergency response component (CERC). By September 30, 2020, the IFC had committed nearly US\$6 billion in new financing, reflecting new investments in more than 300 companies as well as extending trade finance and working capital lines to clients. As of September 17, 2021, 87 MPA operations have been approved with a total commitment of US\$4.2 billion, and the Bank has approved 56 operations to support vaccine procurement and rollout in 54 countries amounting to \$4.6 billion.

8. **The Global COVID-19 MPA provides a critical and highly effective operational programmatic framework for the World Bank’s emergency health response to COVID-19 with FTCF resources.** The Program development objective of the Global MPA is “to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness.” At the time of the approval of the Global MPA, and in the absence of a safe and effective COVID-19 vaccine, immediate needs were focused on early detection, diagnosis, confirmation, and treatment of patients (including those afflicted with other chronic conditions that increase the risk of COVID-19 severity and mortality). The Global MPA provided a common operational framework to support individual countries’ specific needs in preventing the spread of the disease and limiting immediate socioeconomic losses, as well as strengthening public health and essential medical care structures and operations to build resilience and reduce the risk from emerging and re-emerging pathogens.

C. Updated MPA Program Framework

Table 1. MPA Program Framework

Phase #	Project ID	Sequential or Simultaneous	Phase’s Proposed DO*	IPF, DPF or PforR	Estimated IBRD Amount (\$ million)	Estimated IDA Amount (\$ million)	Estimated Other Amount (\$ million)	Estimated Approval Date	Estimated Environmental & Social Risk Rating
2	P177038	Simultaneous	To prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness.	IPF	\$98 million	--	\$2 million	September 24, 2021	Substantial

9. All projects under SPRP are assessed for Environmental and Social Framework (ESF) risk classification following the World Bank procedures and the flexibility provided for COVID-19 operations.

For Official Use Only



D. Learning Agenda

10. The country project under the MPA Program will support adaptive learning throughout implementation, as well as from international organizations including the WHO, International Monetary Fund (IMF), Centers for Disease Control (CDC), United Nations Children's Fund (UNICEF), and others. It will adjust to emerging technical, social, and economic evidence, as applicable, and incorporate lessons learned from the ongoing global vaccine rollout and COVID-19-related service delivery. In Iraq, this learning agenda involves a continuation of on-going work supported through the World Bank technical assistance (TA) under the I3RF and the ongoing COVID-19 response supported through interventions outside of the MPA, including:

- **Technical:** Vaccine deployment readiness assessments; rapid assessment of infection prevention and control measures and patient flow; and application of digital tools for contact tracing.
- **Social behaviors:** Studies to assess vaccine hesitancy and A/B message testing to improve uptake of COVID-19 vaccines.

II. CONTEXT AND RELEVANCE

A. Country Context

11. **Iraq is a large upper-middle income country with a gross national income (GNI) per capita of US\$4,660 and a population of 40.15 million in 2020.** Almost two decades after the Iraq war began, the country remains caught in a fragility trap and faces increasing political instability and fragmentation, geopolitical risks, growing social unrest, and a deepening divide between the state and its citizens. Oil price volatility and COVID-19 have amplified Iraq's economic woes, reversing two years of steady recovery. These twin shocks have deepened existing economic and social fragilities, adding further to public grievances that existed pre-COVID-19. The absence of fiscal space has limited the ability of the GOI to provide a stimulus to an economy highly dependent on oil exports for growth and fiscal revenues. As a result, the country experienced the largest contraction of its economy since 2003, with gross domestic product (GDP) contracting by 15 percent in 2020. Budget rigidities have constrained the GOI's ability to respond to COVID-19 and offer a stimulus package to restart the economy.

12. **The economic downturn has worsened the welfare of Iraqis, especially informal workers and the self-employed.** Unemployment is more than 10 percentage points higher than the pre-pandemic level. Unemployment and underemployment are likely to rise, particularly among youth and internally displaced persons (IDPs). The loss of household income and social assistance has increased vulnerability to food insecurity. COVID-19 has also severely limited child learning as evidenced by the small proportion of students engaged in learning activities during school closure. These impacts coupled with reduced access to market and health care services undermined human capital accumulation and economic mobility.

13. **An additional 2.7 to 5.5 million Iraqis could become poor due to the COVID-19 crisis.** This is in addition to the 6.9 million Iraqis already living in poverty. A large vaccination campaign is a key element for future recovery from the health and economic impact of the COVID-19 pandemic.

B. Sectoral and Institutional Context

14. **While Iraq has made progress with some health outcomes, the significant negative impact of conflicts and**



political instability is apparent in the poor performance of the health system. Iraq's life expectancy has increased by 2.3 years over the past decade, rising from 68.3 years in 2009 to 70.6 in 2019. There has been progress in child health and nutrition indicators; with under-5 mortality decreasing by more than 40 percent over the past two decades, falling from 44.9 deaths per 1,000 live births in 1999 to 25.9 deaths in 2019. Despite such progress, Iraq still has some of the worst health outcomes among its peers, mostly driven by the continued conflict. The under-5 mortality rate is 1.4 times higher than the average for upper-middle income countries of 18.5 deaths per 1,000 live births. While Iraq is undergoing a demographic transition, with an increase in the working age share of the population, it still has one of the highest total fertility rates in the MENA region at 3.7. Maternal mortality ratio has been persistently high over the past two decades (75 in 2009, 92 in 2014, and 79 in 2019, deaths per 10,000 live births respectively). There are also regional and socio-economic inequities in terms of fertility, early childbirth, and family planning outcomes. Utilization of health services has decreased over the years, particularly at the primary care level, and inequities remain. For example, women in the poorest quintile are only 66 percent as likely to receive four or more antenatal care visits during their last pregnancy compared to those in the richest quintile. Child immunization rates in Iraq have not improved over the past decade and have remained significantly lower than those of peer countries. Due to conflict and instability, Iraq faces a significant challenge of delivering care to a large number of refugees and IDPs. In summary, Iraq performs poorly across most universal health coverage (UHC) index indicators, and the UHC effective coverage index stands at only 57.7.² Iraq's Human Capital Index is one of the lowest in the MENA region at 0.41 in 2020.³

15. **Non-communicable diseases (NCDs) have become the most significant cause of mortality and morbidity,** representing 77.1 percent of deaths and 65.8 percent of disability-adjusted life years (DALYs) in 2019. In 2019, ischemic heart disease, stroke, diabetes, and chronic kidney disease were the top four causes of mortality in the country. The prevalence of the main NCD risks remains high: 21 percent of the population uses tobacco, 14 percent of the population has diabetes, 35.6 percent of the population has high blood pressure, 65 percent are overweight or obese, and 39.6 percent have elevated cholesterol.

16. **Health infrastructure was severely damaged by conflicts.** With the exception of Tal Afar, Al-Muqadaya (Ibid) and Al-Ramadi, all cities for which data were available have at least half of their facilities either partially or fully damaged. Service delivery is also affected by the functionality of facilities. Data show high rates of nonfunctional health facilities in cities with high levels of damages. According to the Damage and Needs Assessment conducted by the World Bank in 2018,⁴ the estimated damages to Iraq's health system in the seven governorates directly affected by the prolonged conflict total US\$2.3 billion. Out of this amount, damages to hospitals in the 16 assessed cities are approximately US\$1 billion, while damages to health centers and health offices are around US\$12.6 million.

17. **The Iraqi health system is primarily financed by general government revenues and direct payments by households, and fiscal space has remained constrained.** Over the past decade, per capita health spending in Iraq has fluctuated from a low of US\$150.5 in 2010 to a high of US\$239.4 in 2018. Despite recent increases, Iraq spends considerably less than peer countries per capita. Compared to its peers, Iraq also spends the lowest share of total

² Collaborators, G. 2. (2020, October 17). Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet*, 396(10258), 1250–1284. Retrieved from [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30750-9/fulltext#%20](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30750-9/fulltext#%20)

³ World Bank (2020).. Iraq Human Capital Index 2020 Brief. The World Bank Group: Washington, D.C. https://databank.worldbank.org/data/download/hci/HCI_2pager_IRQ.pdf?cid=GGH_e_hcpxternal_en_ext

⁴ World Bank (2018). Iraq Reconstruction and Investment: Damage and Needs Assessment of Affected Governorates. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/29438>



government budget on health (about 4.3 percent in 2019), a figure that has not changed considerably over the past decade. This results in an overreliance on out-of-pocket (OOP) expenditures (representing 51.4 percent of current health spending in 2018) and limited financial protection for the population. In 2017, about a third of the population incurred catastrophic health expenditures (i.e., spending more than 10 percent of their household expenditure on health), and 15 percent of households were pushed into poverty due to OOP health spending.⁵

18. **Against this backdrop, Iraq is one of the most significantly impacted countries by COVID-19 in the MENA region.** Iraq remains susceptible to a high risk of morbidity and mortality due to COVID-19, not only through its direct effects but also through the indirect effects on the burden to be imposed on the health system. This risk is attributable to a high and growing burden of NCDs, a diverse range of vulnerable and at-risk populations due to poverty, inequality and displacement, as well as a weak health system with low and inequitable levels of financing, fragmented and inflexible service delivery, limited human and physical resources, and weak surveillance and health information systems.

19. **The GOI launched the national COVID-19 response in March 2020.** This included non-pharmaceutical interventions such as bans on gatherings, closure of businesses, and use of work shifts in public administration buildings. The measures were successful in limiting the first wave of the pandemic, but their subsequent premature easing contributed to a large second wave of COVID-19 cases. As a result, movement restrictions and a curfew were reinstated from January 14 until March 7, 2021. The GOI reduced spending in non-essential areas and safeguarded budgetary allocations to the Ministry of Health and Environment (MOHE). The GOI also invested in expanding testing and case management capacity. From May 1, 2020 through March 31, 2021, the daily number of reverse transcription and polymerase chain reaction (RT-PCR) tests increased 13-fold (from 3,338 to 44,649 RT-PCR tests per day). Although the number of RT-PCR tests has increased, the number of tests performed per one new confirmed case has declined (below 10 tests per confirmed case).

20. **The World Bank has been providing both financial and technical support for the GOI's COVID-19 response.** In April 2020, US\$7.8 million in uncommitted funds under the Health Component of the ongoing Emergency Operation for Development Project (EODP) was mobilized to purchase essential medical equipment for the COVID-19 response, including 136 intensive care beds, 100 ventilators, 17 mobile x-ray machines, and 17 defibrillators. The project was restructured in May 2020 to reallocate US\$25.825 million for the procurement of fixed and mobile computed tomography scanners for COVID-19 case management. The World Bank has also been providing TA for COVID-19 response to the MOHE under the I3RF. This includes support to the MOHE in the: (i) assessment of COVID-19 testing, contact tracing, surveillance, infection prevention and control and patient flow; (ii) development of the National Deployment and Vaccination Plan (NDVP) for COVID-19; (iii) design and implementation of a Facebook survey on COVID-19 vaccine hesitancy - a first study of its kind in Iraq; and (iv) development of a COVID-19 Vaccination Communication Action Plan, incorporating the results from the survey. Per MOHE's request, I3RF is also funding additional TA for a social media-based communication campaign to address vaccine hesitancy.

21. **The project will play a critical role in enabling affordable and equitable access to COVID-19 vaccines in Iraq.** Improved access to vaccination is needed to limit the spread of the disease and lessen the burden on the already weak health system. COVID-19 vaccination, along with improved diagnostics and therapeutics, is essential to protect lives and enable the country to reopen safely. The global economy will not recover fully until people feel they can live, socialize,

⁵ World Bank (2021). Addressing the Human Capital Crisis: A Public Expenditure Review for Human Development Sectors in Iraq. The World Bank: Washington, D.C. <http://documents.worldbank.org/curated/en/568141622306648034/Iraq-HD-PER-Final>



work, and travel with confidence. Given the importance of limiting the spread of COVID-19 for both health and economic recovery, providing access to COVID-19 vaccines will be critical to accelerate economic and social recovery. The project activities will build on the ongoing World Bank’s COVID-19 response and health sector support, as well as the support of other development partners (Box 1). Under I3RF, the World Bank has coordinated closely with the WHO and UNICEF on supporting the GOI’s COVID-19 vaccination efforts. WHO and UNICEF have provided technical support for vaccine introduction and deployment, including support for training of health workers for vaccination, communication activities, and monitoring and evaluation (e.g., establishing dashboards to track COVID-19 transmission and vaccination). UNICEF is also the procurement agent for COVID-19 vaccines through the COVAX Facility and has provided support for the procurement of some cold chain equipment. The World Bank’s financing will build on the activities conducted by other development partners, filling the critical gaps to ensure successful deployment of the vaccines. Most importantly, it will provide the needed financing to expand COVID-19 vaccination coverage.

Box 1: Roles of Partner Agencies in COVID-19 Vaccination in Iraq

WHO	Financing amount (if known)
<ul style="list-style-type: none"> Providing technical support for vaccine introduction and deployment, including strategies, vaccine safety issues, development guidelines, conducting of training on Adverse Events Following Immunization (AEFI) surveillance for COVID-19 vaccine related issues and other issues of vaccine pharmacovigilance 	N/A
UNICEF	Financing amount (US\$)
<ul style="list-style-type: none"> Supporting the development of a roadmap for integration of COVID-19 vaccine deployment with Expanded Program on Immunization (EPI) and other primary health care (PHC) services; quantification and forecasting of supply needs; cold chain assessment, procurement and maintenance Acting as the procurement agent for the COVID 19 vaccine through the COVAX facility and facilitating the procurement and delivery of vaccines Supporting the communication strategy and community engagement Supporting the establishment of a robust information system for data management, monitoring and reporting, etc. 	US\$1,000,000 (for procurement and to fund various PHC services and supplies; cold chain; training of personnel etc.) US\$150,000 (communications) US\$100,000 (Management Information System (MIS))

22. **The project is being introduced at a crucial juncture in the GOI’s response to COVID-19.** A critically important change in the state of science since the early stages of the pandemic has been the emergence of new therapies, as well as the successful development and expanding production of COVID-19 vaccines (see Annex 1). A key rationale for the project is to provide upfront financing for safe and effective vaccine acquisition and deployment in Iraq thus enabling the country to acquire the vaccine at the earliest, recognizing that there are currently supply constraints and excess demand for vaccines from both high-income and lower-income countries.

23. **The GOI, with the support of the World Bank, WHO, and UNICEF, has conducted the COVID-19 vaccine readiness assessment using the integrated Vaccine Introduction Readiness Assessment Tool (VIRAT)/Vaccine Readiness Assessment Framework (VRAF 2.0) instrument and prepared a comprehensive NDVP (dated February 2021 and amended on August 8, 2021).** Key findings of the VIRAT/VRAF 2.0 Assessment are summarized in Table 2.



Table 2: Summary of Vaccination Readiness Findings of the VIRAT/VRAF 2.0 Assessment⁶

Readiness domain	Readiness of government	Key gaps to address during deployment
Planning, coordination, and regulation	<ul style="list-style-type: none"> A National Coordinating Committee (NCC) and a National Technical Working Group (NTWG) have been established. The NCC is chaired by the Deputy Minister of Health for Technical Affairs. The National Authority for Drug Selection issued Emergency Use Authorization (EUA) for the Pfizer vaccine on December 27, 2020, for AstraZeneca and Sinopharm vaccines on January 19, 2021, and for Sputnik vaccine on March 8, 2021. The Council of Ministers issued a decree on February 20, 2021 authorizing the MOHE to sign contracts with vaccine manufacturers waiving liability. The Parliament adopted the Law on the Response to the COVID-19 Pandemic on March 8, 2021. The Law includes provisions for indemnity. 	<ul style="list-style-type: none"> Establishment of a mechanism for subnational level coordination.
Costing, budgeting, and financial sustainability	<ul style="list-style-type: none"> High level costing of NDVP has been completed for four different scenarios based on population coverage targets. The GOI is exploring other funding sources to secure required doses to increase coverage (including World Bank support). 	<ul style="list-style-type: none"> The costing is expected to be updated periodically to reflect subsequent developments in additional vaccine purchase(s) and deployment.

⁶ 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.



<p>Prioritization, targeting, and surveillance</p>	<ul style="list-style-type: none"> • Priority groups have been identified to ensure just, efficient, and timely vaccination of all eligible populations willing to be immunized based on the following principles adapted for the Iraq situation: <ul style="list-style-type: none"> ○ The WHO Strategic Advisory Group of Experts on Immunization (SAGE) values framework; ○ The WHO SAGE prioritization roadmap; ○ The fair allocation mechanism for COVID-19 vaccines through the COVAX Facility. • Displaced individuals residing in camps are included. • The MOHE has developed a digital registry for vaccination. • Vaccine access was expanded to the entire adult population due to the short shelf-life of some received vaccines and vaccine hesitancy. 	<ul style="list-style-type: none"> • Prioritization of beneficiaries will be a dynamic process based on multiple factors specific to context in Iraq (feasibility, expiration of available vaccine doses, groups at risk, and vaccine hesitancy among eligible groups).
<p>Service delivery</p>	<ul style="list-style-type: none"> • Fifty vaccination sites in hospitals (often teaching hospitals), which meet ultra-cold chain requirements, were initially identified for the Pfizer vaccine. • As of September 9, 2021, there were 1,301 vaccination sites. With the revised guidance for safe storage temperatures for Pfizer vaccine (up to 30 days from +2 to +8 degrees C), the Pfizer vaccine is now delivered at most vaccination sites. The number of sites can be expanded. • Plans for site readiness assessments are outlined. 	<ul style="list-style-type: none"> • Microplanning for vaccination rollout is underway. • The GOI is considering the use of large public venues (e.g., sports halls) as vaccination sites.
<p>Training and supervision</p>	<ul style="list-style-type: none"> • Descriptions, roles, and broad estimates of staff and health workers for the campaign are outlined (including vaccination, supervision, communications and community engagement, supply chain, logistics, monitoring, pharmacovigilance, and disease surveillance). • A training manual has been developed. The MOHE has conducted training for managers in all health departments, cold chain officials, and health workers at the designated vaccination sites with support from the WHO and UNICEF. • Mix of different staff and health workers that is required by each site for deployment specified. 	<ul style="list-style-type: none"> • The preliminary estimates of vaccinators required may need to be updated. • A well-defined plan to mobilize human resources to ensure adequate numbers of health care workers at vaccination sites, including through task shifting, adoption of multiple shifts, volunteers, needs to be developed.

For Official Use Only



Monitoring and evaluation and grievance redressal	<ul style="list-style-type: none"> • Data collection systems and tools to collect COVID-19 immunization data are outlined. • A vaccination record card has been developed and will include a hotline number for reporting adverse events. 	<ul style="list-style-type: none"> • As part of the M&E framework, an information system including a vaccine registry and dashboard will be enhanced to monitor vaccine coverage, facilitate follow-up, issue vaccine certificates, and ensure data privacy. • The existing hotline for receiving grievances and addressing queries of beneficiaries will be enhanced further for the vaccination campaign.
Vaccine, cold chain, logistics, infrastructure	<ul style="list-style-type: none"> • The GOI has secured and distributed the required Ultra Low Temperature (ULT) freezers to the initial 50 designated sites for the Pfizer vaccine. • The estimated needs for ancillary supplies and Personal Protective Equipment (PPEs) are outlined and covered by KIMADIA. KIMADIA has contracted for 18 million syringes for the Pfizer vaccine (of which 6 million syringes have already been delivered). • High level vaccine distribution and transportation networks are outlined in the NDVP. 	<ul style="list-style-type: none"> • Detailed distribution plans are currently being developed.
Safety surveillance	<ul style="list-style-type: none"> • Vaccine safety surveillance approach is aligned with WHO recommendations to detect serious AEFIs to provide timely data that can be shared with relevant stakeholders for rapid action. 	<ul style="list-style-type: none"> • AEFI plan is currently being finalized with preparations for training and implementation activities underway.
Demand generation and communication	<ul style="list-style-type: none"> • A demand generation and community engagement plan for optimizing the uptake of the COVID-19 vaccine has been developed in collaboration with the World Bank, UNICEF, and WHO and is included as an annex in the NDVP. • The communication and demand generation plan incorporates social and behavioral data from a national Facebook survey, which gathered data on vaccine hesitancy in the population, and is aimed at 	<ul style="list-style-type: none"> • Adoption of the communication by the high-level government bodies is instrumental in ensuring its successful implementation.

For Official Use Only



	generating demand and improving acceptance of COVID-19 vaccines.	
--	--	--

24. **The NDVP has all the key elements recommended by the World Health Organization and represents the blueprint for Iraq’s vaccination efforts.** According to the NDVP, Iraq seeks to vaccinate 40 percent of the total population by the end of 2021 and 70 percent coverage by the end of 2022. The NDVP identifies seven categories of prioritized population groups, regardless of their citizenship status. The WHO SAGE Allocation Framework was used for the prioritization process, with modifications based on Iraq’s context (i.e., significantly younger population and FCV status).

25. **The GOI signed a Committed Purchase Agreement with the COVAX Facility to procure 16 million doses of COVID-19 vaccines for 8 million individuals (with a two-dose regimen), covering almost 20 percent of the total population.** The total amount due to the COVAX Facility was paid in full by the MOHE. As of August 16, 2021, the MOHE received 1,085,000 doses of the AstraZeneca vaccine, with the next shipment expected by the end of September 2021. Amid the global shortage, Iraq has received the vaccines from the COVAX Facility with delays. The first shipment of the AstraZeneca vaccine also arrived with an impending expiration date, causing the government to expand vaccination eligibility to the entire adult population to ensure that the vaccines would not be wasted.

26. **The GOI also signed a Manufacturing and Supply Agreement with Pfizer on March 21, 2021 to purchase 1,500,525 doses for 750,000 individuals.** The agreement was subsequently amended to include additional doses and modify the delivery schedule. In total, as of June 17, 2021, the GOI has contracted 12 million doses from Pfizer to be delivered by the end of 2021, of which 6 million doses are expected to be financed by the project under retroactive financing.⁷ The Manufacturing and Supply Agreement was reviewed and cleared, retroactively, by the World Bank on June 21, 2021.

27. The GOI will finance vaccines for: (i) 20 percent of the population through the COVAX self-financing arm (Committed Purchase Agreement); and (ii) 10 percent through direct procurement. The World Bank financing will cover an additional 7 percent of the population with 6 million doses of the Pfizer-BioNTech vaccine. Table 3 describes the number of secured and received doses of COVID-19 vaccines by financing source.

⁷ The retroactive financing of up to US\$72 million will be available for the eligible expenditures paid by the GOI during a period of 12 months before the signing of the Loan Agreement for COVID-19 vaccines meeting the World Bank’s VAC that have been purchased but have not been deployed prior to the disclosure of the Environmental and Social Management Framework.



Table 3: Overview of Iraq's Vaccine Coverage and Purchase Plan
Based on the current available estimates as of September 20, 2021

Source of financing	Population Targeted		Vaccines ^a		Number of doses	World Bank's VAC Status of the Vaccine	Contract status	Vaccines already arrived in the country	
	%	Number	Source	Name(s)				Name	Doses
GOI	20.0%	8 million	COVAX	AstraZeneca	16 million	Eligible	Signed	AstraZeneca	1,085,000
Other	0.1%	0.05 million	Donation	AstraZeneca	0.1 million	Eligible	Received in full	AstraZeneca	100,800
GOI	2.4%	1 million	Direct procurement	Sinopharm	2.0 million	Eligible	Received in full	Sinopharm	2,000,000
Other	0.8%	0.325 million	Donation	Sinopharm	0.75 million	Eligible	Received in full	Sinopharm	750,000
GOI	7.0%	3 million	Direct procurement	Pfizer	6 million	Eligible	Signed	Pfizer	5,625,360
IBRD	7.0%	3 million	Direct procurement	Pfizer	6 million	Eligible	Signed	Pfizer	0
Other	0.6%	0.25 million	Donation	Pfizer	0.5 million	Eligible	Received in full	Pfizer	503,100
National Total	37.9%	15.625 million			31.35 million				10,064,260



C. Relevance to Higher Level Objectives

28. **The project is aligned with WBG’s strategic priorities, particularly the WBG’s twin goals to end extreme poverty and boost shared prosperity in a sustainable manner.** The project is focused on pandemic preparedness which is also critical to achieving Universal Health Coverage. It is also aligned with the World Bank’s support for national plans and global commitments to strengthen pandemic preparedness through three key actions under preparedness: (i) improving national preparedness plans including organizational structure of the government; (ii) promoting adherence to the International Health Regulations (IHR); and (iii) utilizing international framework for monitoring and evaluation of IHR. The economic rationale for investing in the MPA interventions is strong, given that success can reduce the economic burden suffered both by individuals and countries. The project contributes to the implementation of the WBG MENA Strategy by providing support to building human capital and strengthening resilience. The project complements both WBG and development partner investments in health systems strengthening, disease control and surveillance, attention to changing individual and institutional behavior, and citizen engagement. The project contributes to the implementation of IHR (2005), Integrated Disease Surveillance and Response (IDSR), and the Office International des Epizooties (OIE) international standards, the Global Health Security Agenda, the Paris Climate Agreement, the attainment of Universal Health Coverage and of the Sustainable Development Goals (SDGs), and the promotion of a One Health approach.

29. **The WBG remains committed to providing a fast and flexible response to the COVID-19 epidemic, utilizing all WBG operational and policy instruments and working in close partnership with government and other agencies.** Grounded in One-Health, which provides for an integrated approach across sectors and disciplines, the proposed WBG response to COVID-19 will include emergency financing, policy advice, and technical assistance, building on existing instruments to support IDA/IBRD-eligible countries in addressing the health sector and broader development impacts of COVID-19. The WBG COVID-19 response will be anchored in the WHO’s COVID-19 global SPRP outlining the public health measures for all countries to prepare for and respond to COVID-19 and sustain their efforts to prevent future outbreaks of emerging infectious diseases.

30. **The project is consistent with the Iraq Country Partnership Framework (CPF) for FY22-26, discussed on August 3, 2021 (Report #153633-IQ) and contributes directly to CPF Objective 2.1. (Effective and Efficient Deployment of COVID-19 Vaccines and Health Systems Strengthening).** Similarly, the Strategic Country Diagnostic dated February 8, 2017 (Report #112333-IQ) identified “Rebuilding the Social Contract and State Legitimacy” as a priority through, *inter alia*, improving the delivery of public services to fortify trust and legitimacy between citizens and the state. The need to invest in health systems to ensure the productive capabilities of the population is recognized, as is the challenge of overcoming a legacy of limited investment in human capital and social resilience systems. The project will be an important step towards building the strength of the health system and its resilience to shocks. The project is also aligned with both global health priorities and World Bank priorities in pandemic preparedness. In addition, the project complements activities being implemented through other existing World Bank-financed projects in the country.



III. PROJECT DESCRIPTION

A. Development Objectives

31. The project development objective (PDO) is to support the GOI in the acquisition and deployment of COVID-19 vaccines.
32. **PDO level indicators:**
- i. Percentage of specific priority⁸ populations fully vaccinated (total and disaggregated by sex).
 - ii. Number of project-supported COVID-19 vaccination sites with adequate healthcare waste management for vaccination.
 - iii. Number of COVID-19 vaccine doses acquired through project financing.
33. **Intermediate results indicators:**
- i. Percentage of administered COVID-19 vaccine doses captured in the national vaccination digital registry;
 - ii. Percentage of vaccination sites which publicized detailed performance data on a regular basis in the last quarter;
 - iii. Percentage of vaccination sites with functional cold chain;
 - iv. Percentage of reported serious AEFI cases for which investigations were initiated within 48 hours;
 - v. Number of health workers who received training in vaccination with gender-based violence (GBV) related content;
 - vi. Percentage of feedback cases registered in the project's grievance redress mechanism (GRM) in the last quarter addressed within a timeframe specified by the project;
 - vii. Number of communication initiatives supported by the project to address vaccine hesitancy;
 - viii. Percentage of vaccination sites visited by the project third-party monitoring agency (TPMA) in the last quarter;
 - ix. Number of public discussion meetings conducted on the results of the TPMA.

B. Project Components

34. The project comprises two components.
35. **Component 1: COVID-19 Vaccines and Deployment (US\$97 million IBRD).** The component will support the purchase of COVID-19 vaccines and related deployment activities.
36. **Sub-component 1.1: COVID-19 Vaccine Support (US\$72 million IBRD).** This sub-component will support COVID-19 vaccine acquisition. Specifically, this will include the purchase of approximately 6 million doses of the COVID-19 vaccines that meet the World Bank's VAC. This is expected to cover 3 million individuals or approximately 7 percent of the population in Iraq. The vaccines financed under the project will be prioritized for groups most at risk as defined in the NDVP. This will be supported by awareness raising campaigns targeting the priority groups and encouraging

⁸ As listed in Table 4, priority groups include health care workers, elderly, social care workers, people with chronic disease and displaced populations.



them to register for vaccination.

37. **Sub-component 1.2: Support for Deployment of COVID-19 Vaccines (US\$25 million IBRD).** This subcomponent will support institutional system strengthening to enable safe and effective deployment of COVID-19 vaccines at scale. This will include, inter alia: (i) procurement of equipment for health care waste management, (ii) development and support for refining the electronic registration system for vaccination, (iii) vaccine logistics and supply chain management; (iv) communication initiatives to address vaccine hesitancy, (v) monitoring and management of adverse effects following immunization (AEFI), and (vi) technical assistance associated with vaccine rollout. The project will prioritize supporting Iraq to address the key gaps identified by the readiness assessment, in close coordination with WHO, UNICEF, and other development partners. Given the uncertainties surrounding COVID-19 vaccination, the activities will be updated throughout project implementation through time-bound work plans agreed with the MOHE. To the extent possible, sustainable, and high efficiency energy solutions will be defined to improve the deployment of vaccines. Technical assistance can be provided to ensure that energy efficiency standards for upgraded cold chain are applied for COVID-19 vaccines and beyond, including through the development of micro-plans to integrate climate-related considerations (e.g., energy efficiency or promotion of hybrid energy source consumption for cold chain). The project will also support the procurement of effective and low-emissions health care waste management equipment that will contribute to improving the resilience of health care waste management systems to extreme precipitation. In addition, the financing will support the implementation of the COVID-19 communication action plan by the MOHE and hired firms. Communication campaigns will be tailored where necessary to specific groups (e.g., women in rural groups, IDPs) and include information on procedures/plans in case of extreme weather or other climate-change-induced events.

38. **Component 2: Project Management and Monitoring and Evaluation (M&E) (US\$3 million, including IBRD and I3RF).** This component will support the coordination, implementation, and management of project activities, including third party monitoring.

39. **Sub-component 2.1. Project Management and M&E (US\$1 million IBRD)** will support the coordination, implementation, monitoring and evaluation, and management of project activities, including through: (i) development of a system for project monitoring and evaluation; and (ii) provision of relevant technical assistance to support the MOHE in the implementation, management, monitoring and evaluation of the project, including through operating costs and ensuring compliance with the Environmental and Social Commitment Plan. Specifically, this may include support for: (i) the supervision by MOHE teams of the deployment of COVID-19 vaccines and installation, functionality, and use of equipment and supplies acquired under the project; (ii) development of a system for project monitoring and evaluation by the PMU team; (iii) hiring of an external auditor for the project; (iv) hiring of a media production company to assist with the production of relevant materials for dissemination to project beneficiaries. This component will monitor COVID-19 vaccines deployment and therefore improve data collection, analysis, reporting and use of data for action and decision-making. Climate and gender-specific activities supported by the project will also be monitored.

40. **Sub-component 2.2. Third Party Monitoring (US\$2 million I3RF).** A third-party monitoring agency (TPMA) will be contracted by the MOHE using grant financing from I3RF. The TPMA will be responsible for monitoring compliance of the vaccination efforts with Iraq's NDVP and WHO standards, as well as World Bank technical, environmental, and social requirements. A draft terms of reference (TOR) has already been prepared. The final TOR will be subject to World Bank technical approval, defining the specific roles and responsibilities of the TPMA. The TPMA role can be fulfilled by a United Nations (UN) agency (or agencies), international or local non-governmental organizations (NGO), or consulting firms that meet the criteria agreed upon between the World Bank and MOHE.



41. The WHO SAGE Allocation Framework was used to determine the priority groups for COVID-19 vaccination of populations in the early phases, and the prioritization was modified based on Iraq’s context (i.e., significantly younger population and fragility, conflict, and violence). Table 4 presents the priority groups outlined in the NDVP. Targeting criteria and implementation plans are described below. Efforts are being made by the government to ensure equitable access to vaccines for people with disabilities and other vulnerable groups. Vaccinations take place at fixed health points and through mobile units. Displaced individuals and refugees living in camps are explicitly prioritized for vaccination under phase 2. According to the NDVP, they will be vaccinated by vaccination teams within the nearest health district or the nearest health center after providing proof that they are displaced or have refugee status. The central committees in the health district can also use fixed or mobile MOHE medical clinics located within the camps, or health institutions or the sites of supporting organizations and non-governmental organizations (NGOs) located inside the camps provided that all the logistical requirements for vaccination are available according to the type of vaccine. Vaccination for this population group will be conducted under direct supervision of the health district or the health directorate and in coordination with camp directors.

Table 4. Priority Groups for Vaccination in Iraq

Phase	Category/population group	Population number	Risk category	Percentage of population
Phase 1 A	Health workers ¹	100,000	High risk	0.2%
	Elderly	450,000	≥70 years old	1.1%
	People with chronic disease	750,000	>2 chronic diseases	1.7%
	Cancer and immune-deficiency patients	30,000		0.07%
Phase 1 B	Health workers	300,000	Moderate risk	0.7%
	Elderly	1,350,000	≥60 and < 70 years old	3.2%
	People with chronic disease	1,250,000	2 chronic diseases	3.0%
	Patients with hereditary blood diseases	20,000		0.03%
Phase 2	Health workers	100,000	Low risk	0.2%
	Elderly	2,700,000	≥50 and < 60 years old	6.5%
	People with chronic disease	2,000,000	1 chronic disease	4.8%
	Security personnel ² at high risk of exposure to cases	100,000	High risk	0.2%
	Displaced populations/refugees living in camps	500,000	Moderate risk	1.2%
	Social care staff and residents, prisons staff and prisoners	200,000		0.5%
Phase 3	Security personnel at moderate risk of exposure to cases	900,000	Moderate risk	2.2%
	People working in professions at risk of exposure	300,000	≥40 and <50 years old	0.7%
Phase 4	Security personnel at low risk of exposure	500,000	Low risk	1.2%
	People working in professions at low risk of exposure ³	1,000,000	< 40 years old	2.4%
		12,550,000	TOTAL	30%



¹ MOHE will categorize its staff into these three categories and that high risk will come in phase 1A, moderate in phase 1B, and low in phase 2.

² Security personnel are classified into three categories: i) high risk are those in direct contact with people (e.g., security of governmental facilities, at check points, traffic police); ii) intermediate risk (e.g., in barracks, working in groups); and iii) low risk, including administrative staff.

³ Including employees of border points and train stations, educational staff, butchers, barbers, restaurants and bakeries workers, prisoners and State bodies staff).

Note: Total population in 2021 is estimated at 41,190,700 (Iraq Central Statistics Agency).

42. **The government initially faced low uptake of COVID-19 vaccines.** In addition, the first shipment of the AstraZeneca vaccine through COVAX arrived with a short shelf life. To overcome vaccine hesitancy and avoid wastage of vaccines, the GOI expanded the vaccination eligibility to the entire adult population, while continuing to prioritize health workers and those above the age of 60 years. Having started this policy, the GOI is not able to reverse it, and, as such, the vaccination is currently open to all individuals ages 18 or older residing in Iraq. While eligibility is open to all individuals in Iraq 18 years or older, the MOHE continues to prioritize groups pre-defined in the NDVP, including through the use of mobile vaccination sites.

43. **The MOHE developed a digital registry for COVID-19 vaccination,** which includes four components: (i) preregistration; (ii) appointment scheduling; (iii) vaccination; and (iv) tracking AEFI. Online preregistration is encouraged for vaccination. All residents of Iraq are eligible to pre-register.⁹ To ensure universal access, staff at vaccination centers will also be able to register on behalf of the recipient, and individuals can also register directly at the vaccination sites.

Box 2: Liability and Indemnification Issues in Vaccine Acquisition

The rapid development of vaccines increases manufacturers' potential liability for AEFI. 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. Iraq has signed indemnity agreements that were satisfactory to providers (e.g., Pfizer) and has introduced corresponding legislation. On February 20, 2021 the Council of Ministers issued a decree authorizing the MOHE to sign contracts with vaccine manufacturers waiving liability. The Parliament subsequently adopted the Law on the Response to the COVID-19 Pandemic (Law No. 9) on March 8, 2021. The Law includes provisions to provide statutory immunity for manufacturers and calls for an establishment of a national no fault compensation scheme. The GOI, however, has not taken any actions yet to establish the no fault compensation scheme system. Possible World Bank support to Iraq, depending on needs, may include information sharing on lessons from other countries in implementing a national no fault compensation scheme and Hand-on Expanded Implementation Support. The project operation documents (for example, POM) will clarify 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 vaccines in the country.

⁹ <https://cov19reg.phd.iq/>



B. Project Cost and Financing

44. The overall project cost will be US\$100 million. Component 1 for vaccine acquisition, planning and distribution has an allocation of US\$97 million from IBRD (97 percent of the project financing) (see Table 5 below). Component 2, which will support project management and monitoring of activities, will be allotted US\$3 million (US\$1 million from IBRD and US\$2 million from I3RF) (3 percent of the project financing). Table 6 provides a summary of vaccine sourcing and World Bank financing.

Table 5: Project Cost and Financing

Project Components	IBRD Financing (US\$ million)	Trust Fund (US\$ million)
Component 1: COVID-19 Vaccines and Deployment	97.0	0
<i>Subcomponent 1.1: COVID-19 Vaccine Support</i>	72.0	0
<i>Subcomponent 1.2: Support for Deployment of COVID-19 Vaccines</i>	25.0	0
Component 2: Project Management and Monitoring and Evaluation (M&E)	1.0	2.0
<i>Subcomponent 2.1 Project Management and M&E</i>	1.0	0
<i>Subcomponent 2.2 Third party monitoring agency</i>	0	2.0
Total Costs	98.0	2.0

Table 6: Summary of Vaccine Sourcing and Bank Financing

National plan target (population %)	Source of vaccine financing and population coverage				Specific vaccines and sourcing plans	Doses purchased with Bank finance (2 doses assumed)	Estimated allocation of Bank financing (US\$)
	COVAX grant	Bank-financed		Other*			
		Through COVAX	Through direct purchase				
Stage 1: 40%			7%	29.4% government-financed and 1.5% from donations	COVAX, direct purchase (Pfizer and Sinopharm), and donations	6 million Pfizer doses	Purchase: US\$72 million Deployment: US\$25 million Other: US\$3 million* <i>*Project management and monitoring & evaluation.</i>

45. **Retroactive Financing.** At the Borrower’s request, the project will include retroactive financing of up to 74 percent (i.e., US\$72 million) of the IBRD loan related to COVID-19 vaccine purchase. The retroactive financing will be available for the eligible expenditures paid by the GOI using their own resources during the period of 12 months before the signing of the Loan Agreement for COVID-19 vaccines meeting the World Bank’s VAC that have been purchased but have not been deployed prior to the disclosure of the ESMF. The objective of including retroactive financing is to ensure that the GOI can lock in the price and secure enough doses to expand coverage to achieve the vaccination target of 70 percent of the adult population by the end of 2022.

C. Project Beneficiaries

46. The expected project beneficiaries will be at least 7 percent of Iraq’s population. It is expected that the entire population of Iraq will also benefit from project activities given the nature of the disease. Benefits from COVID-19 vaccination are direct for those included in the priority groups of population that will receive COVID-19 vaccines,



including staff of health care facilities (medical and non-medical), social workers, age groups deemed to be at high risk as per the NDVP prioritization, teachers and education workers, and adults with comorbidities. As the project will invest in systems strengthening for deployment of the COVID-19 vaccines, other population groups eligible for COVID-19 vaccines will also directly benefit from project investments. The population at large would also benefit through the potential slowdown in transmission due to a reduction in cases among the vaccinated.

IV. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

47. **The MOHE will be the implementing agency for the project.** The GOI has established a new Project Management Unit (PMU) headed by the Deputy Minister of Health to oversee project implementation. The PMU will be responsible for the day-to-day project management, including fiduciary management (procurement and financial management (FM)), and will: (i) coordinate implementation of project activities; (ii) ensure the technical, environmental and social, procurement and financial management of the project activities in both components; (iii) prepare consolidated annual work plans and budgets; (iv) conduct monitoring and evaluation of project activities; and (v) prepare the implementation reports of the project to be submitted to the World Bank on a quarterly basis. The PMU has been established and is fully staffed with environmental/social, financial management, procurement, and monitoring and evaluation staff (from the MOHE and other government agencies). Additional personnel will be recruited if needed to ensure sufficient capacity to implement the project.

48. **A Project Operational Manual (POM), which will guide project implementation, will be developed no later than 30 days after loan effectiveness, in a manner satisfactory to the Bank.** The POM will describe detailed arrangements and procedures for the implementation of the project, such as responsibilities of the PMU operational systems and procedures, project organization structure, office operations and procedures, financial and accounting procedures (including funds flow and disbursement arrangements), procurement procedures, and implementation arrangements. The POM will include: (i) description of COVID-19 vaccine deployment activities to ensure inclusive, safe, efficient and effective deployment following a ‘whole of Iraq’ approach; (ii) environmental and social requirements; (iii) personal data protection measures; and (iv) fiduciary (procurement and financial management) requirements. The project will be carried out in accordance with the arrangements and procedures set out in the POM, which can be amended from time to time, provided all modifications are agreed upon with the World Bank in writing prior to any changes taking effect. The POM will also include a Vaccine Delivery and Distribution Manual (VDDM) to define the operational aspects of vaccine deployment, including the details related to the distribution of vaccines eligible for retroactive financing that have already been deployed to enable third-party verification.

49. 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, the project will incorporate best international practices for data privacy in such circumstances. The PMU will ensure that these principles apply through assessments of existing or development of new data governance mechanisms and data standards for emergency and routine health care, 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.



50. **A TPMA will be contracted by the MOHE using grant financing from I3RF.** The TPMA will be responsible for monitoring compliance of the vaccination efforts with Iraq’s NDVP and WHO standards, as well as World Bank requirements on technical, environmental, and social issues. The work of the TPMA will therefore contribute to ensuring safe, effective, efficient, and equitable vaccine rollout and maximizing its population benefits. This will also contribute to the GOI’s efforts to increase the demand for and build trust in COVID-19 vaccination among the population. The TPMA will prepare regular reports covering a period of three months and will share the draft report simultaneously with the Bank upon its delivery to the MOHE. A draft TOR has already been prepared. The final TOR will be subject to World Bank technical approval, defining the specific roles and responsibilities of the TPMA. Appointment of the TPMA is a condition of loan effectiveness. The TPMA role can be fulfilled by a United Nations (UN) agency (or agencies), international or local non-governmental organizations (NGO), or consulting firms that meet the criteria agreed upon between the World Bank and MOHE.

B. Results Monitoring and Evaluation Arrangements

51. **Progress towards project objectives and results indicators will be monitored by the PMU.** The PMU will include monitoring and evaluation specialists who will be responsible for collecting and processing relevant data, working closely with the Directorate of Public Health. The MOHE has established a system for monitoring the implementation of the vaccination campaign in line with the NDVP according to which the Inspection Directorate at the MOHE and its branches in all health directorates will be responsible for monitoring vaccination activities.

C. Sustainability

52. **There is strong political commitment in Iraq to mobilize financial resources for COVID-19 response, including for vaccine purchase and deployment.** By supporting vaccine purchase and deployment, the project will establish an enabling environment for other development partners, including multilateral development banks and UN agencies, to contribute to supporting vaccination efforts in the country. Investments under the project are expected to strengthen the health system in the country, ensuring institutional sustainability to deal with infectious diseases.

V. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

53. **The World Bank conducted a technical review of Iraq’s NDVP.** While readiness gaps exist, it is critical to note that such gaps need to be put into perspective. First, globally, no country can claim or should aim for full readiness before COVID-19 vaccine rollout. Second, based on the findings of the Effective Vaccine Management (EVM) 2.0, which was implemented in July 2019, the overall rating for Iraq was 82 percent, indicating that Iraq’s vaccine supply chains and supply chain performance are slightly above WHO recommended minimum score of 80 percent. Third, one of the biggest concerns with messenger ribonucleic acid (mRNA) vaccines like Pfizer’s is the ultracold chain requirement. Such ultracold chain already exists in Iraq for the currently planned Pfizer doses with the government’s procurement of 75 ultra-low temperature freezers. Based on the lessons learned with the initial vaccine delivery, the GOI will continuously adapt the NDVP for subsequent rollout of vaccines.

54. **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 September 20, 2021, over 228 million COVID-19 cases and 4.7 million deaths have been confirmed worldwide. Global output is projected to have declined by 4.9 percent in 2020, with cumulative losses across 2020 and 2021 exceeding US\$12 trillion. The primary benefit of



successful vaccination will be avoiding further human health costs from death and sickness. Global deployment of a COVID-19 vaccine will also generate economic benefits by enabling economic recovery and an increase in productive activity. Ensuring vaccine purchase and delivery in developing economies will also achieve significant distributive benefits and contribute to poverty reduction.

55. **The successful development, production, and delivery of a vaccine has the best potential to reverse these trends, generating benefits that will far exceed vaccine-related costs.** Indeed, a rapid and well-targeted deployment of a COVID-19 vaccine would help reduce the increases in poverty and accelerate economic recovery. Even at levels of imperfect effectiveness, a COVID-19 vaccine that is introduced and deployed effectively to priority populations would assist in significantly reducing mortality and the spread of the coronavirus and accelerating a safe reopening of key sectors that are impacted. It would also reverse human capital losses by ensuring schools are reopened. 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 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 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 childcare services, routine immunization services have been affected, threatening polio eradication and potentially leading to new outbreaks of preventable diseases, with associated 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 also been disrupted.

56. **While the uncertainty around the costs and effectiveness of a COVID-19 vaccine makes 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 is at US\$50 for a non-severe case and US\$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. Even if the vaccine averts 2 million non-severe cases and no other benefits are considered, the investment will break even. Further, 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 would have spillover effects to effective delivery of other services, helping close the significant urban-rural gap. Second, as the COVID-19 vaccine is introduced and lockdowns and movement restrictions are eased, patients would continue to access care for other conditions. Third, the economic benefits of slowing down the economic downturn are likely to significantly exceed the US\$100 million needed to vaccinate 7 percent of the population, leaving aside the immediate health benefits. Given both the economic and health system benefits, an effectively deployed COVID-19 vaccine presents significant benefits.

B. Financial Management

57. The World Bank undertook an assessment of the financial management (FM) system within the MOHE, during the preparation of the ongoing Iraq EODP (P155732). The FM assessment was updated for the purpose of the project



in accordance with the World Bank Policy on the Investment Project Financing (IPF) and in line with paragraph 12 of section III of the IPF policy, as the project is in situation of urgent need of assistance or capacity constraints. The assessment was updated remotely considering the nationwide movement restriction due to the COVID-19 pandemic. The FM assessment of MOHE concluded that with the implementation of agreed actions, the FM arrangements will satisfy the Bank requirements.

58. Due to the nature of this project and the urgent need of assistance, the FM approach was streamlined and based on more simplified ex-ante requirements, while relying more heavily on ex-post requirements as additional fiduciary controls and review.

59. Annex 3 provides additional information on the FM assessment and the agreed mitigation measures.

60. The schedule of loan disbursements will be significantly influenced by the availability of vaccines. The World Bank will provide financial and risk assurances to manufacturers under advance purchase mechanisms.

61. The deployment of vaccines funded by the project (including retroactive financing) will be subject to tight controls to mitigate risks. The supply chain will be closely monitored by a TPMA and a robust internal control framework (including for the supply chain) will be designed and established prior to the receipt and deployment of any project-funded vaccines.

C. Procurement

62. **Applicable procurement regulations.** Procurement will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers, dated November 2020, and is subject to the World Bank's "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. Procurement under this project is also being processed under paragraph 20 of OP 11.00 "*Procurement under Situations of Urgent Need of Assistance or Capacity Constraints*", where "*Simplified Procurement Procedures*" may apply in accordance with paragraph 12 of the IPF policy. This will enable the delivery of early visible results in a context of extreme needs and high expectations in the targeted project areas. The project will use the Systematic Tracking of Exchanges in Procurement (STEP) to plan, record, and track procurement transactions.

63. **The major planned procurement include:** (i) purchase of approximately 6 million doses of the COVID-19 vaccines, (ii) procurement of equipment for health care waste management, (iii) refining the electronic registration system for vaccination, (iv) procurement of vaccine logistics and supply chain management; (v) communication initiatives to address vaccine hesitancy, (vi) hiring a TPMA, and (vii) other technical assistance needed for vaccine rollout. The GOI has contracted 12 million doses from Pfizer to be delivered by the end of 2021, of which 6 million doses are expected to be financed under retroactive financing. The Manufacturing and Supply Agreement was reviewed and cleared retroactively by the World Bank. In addition, advance procurement will be used for the selection of the TPMA to ensure the project becomes effective in a timely manner and third-party monitoring can be initiated at the start of project implementation. The draft request for proposal (RFP) including the TOR has been prepared and the selection process will be prior reviewed by the Bank under advance procurement.

64. The proposed procurement approach for other non-vaccine purchases prioritizes fast-track emergency



procurement for required emergency goods and services. Key measures to fast track procurement include among others: (i) direct contracting of United Nations (UN) Agencies to supply goods and services as specified in Section VI (Para 6.47 and 6.48) and Section VII (Para 7.27 and 7.28) of the applicable Procurement Regulations, respectively; (ii) limited bidding where justified; (iii) Request for Quotations (RFQ) as appropriate; (iv) streamlined competitive procedures with shorter bidding time; and (v) use of framework agreements including existing ones procured in a satisfactory manner to the Bank.

65. Assessment of MOHE's procurement capacity. The assessment of the procurement system within the MOHE was carried out during the preparation of the ongoing Iraq EODP (P155732) and recorded in the Procurement Risk Assessment and Management System (PRAM). It was noted that MOHE through the PMU has limited experience in World Bank Procurement Regulations and limited experience in procurement planning, monitoring, and contract management. In addition, procurement of COVID-19 vaccines is subject to high level of uncertainties in terms of prices and quantities. The major issue facing Iraq public procurement is the current uncertainty of public procurement law and regulations and their enforcement, including outdated practices. Additionally, Iraq's ability to manage public resources is undermined by poor security. Iraq ranks among the lowest in the region on Transparency International's Corruption Perception Index. This is further compounded by limited human capital for procurement and contract management, as commonly evidenced by delays in decision making. In addition, there is a general lack of emphasis on procurement, including principles in areas such as transparency, conflict of interest, independent complaint mechanism, value for money, fit for purpose, among others. Based on the above, **the residual procurement risk for this project is High.**

66. Hands-on Expanded Implementation Support (HEIS). At the Borrower's request, the Bank may provide Hands on Expanded Implementation Support (HEIS) to support and build the capacity of staff directly involved in the project in drafting procurement documents and agreements with UN agencies/NGOs to speed up implementation. However, the MOHE will remain fully responsible for signing and entering into contracts and implementation, including assuring relevant logistics with suppliers (e.g., arranging the necessary freight/shipment of the goods to their destination, receiving and inspecting goods).

67. Project Procurement Strategy for Development (PPSD) defines how the identified procurement arrangements will enable delivery of value-for-money in achieving the PDO by supporting a fit-for-purpose reconstruction and enhancement of services, where bidding will be done with no substantial delays and no rebidding, and cost and time overruns will be prevented. The preparation of the PPSD is deferred to the project implementation phase.

68. Systematic Tracking of Exchanges in Procurement (STEP). The PMU at MOHE will use the World Bank online procurement planning and tracking tool to prepare, clear and update its procurement plans and conduct procurement transactions as referred to in the Procurement Regulations Section V, article 5.9. Any contract not uploaded in STEP, with award notification not being uploaded prior to signing of contracts, will not be eligible for financing. The World Bank will organize training on STEP before project effectiveness to register the PMU users and familiarize them with the STEP system. An initial procurement plan for the first six months has been agreed on with the MOHE and will be updated during implementation using STEP.

69. Complaint mechanism. The complaint handling mechanism specified in the World Bank's Procurement Regulations and included in the World Bank's Standard Procurement Documents (SPDs) will be followed when Bank SPDs are used irrespective of the situation within the country. For the national procedures, Regulation No. 2 of 2014 of "Executing Public Contracting" in Iraq, establishes the right of bidder to raise a complaint to a centralized committee



at each procuring entity. However, bidders do not have adequate access to independent administrative review and appeal processes and access to civil courts is perceived as inadequate. To enhance the administrative bidders' complaints review system, the POM will include a section on how to handle complaints that includes the initial submission of complaint by the bidders to the contracting authority, formal requirements for a complaint, establishment of a complaint committee, decision on the complaints, standard response time to decision on complaints, etc.

70. **Dispute resolution systems.** When the Bank's SPDs are used, the conditions of the contracts in the Bank's SPDs apply. When national procedures are used, the condition of contracts in the national documents would apply through amicable resolution, dispute resolution board, and arbitration.

71. **Frequency of supervision.** World Bank implementation support missions and post-procurement reviews will be undertaken at least twice and once a year, respectively. The post-procurement reviews will cover all project-related contracts eligible for post review.

D. Legal Operational Policies

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

E. Environmental and Social Standards

71. **Environmental risk rating.** The environmental risk associated with the project is substantial. The main environmental risks identified at this stage are: (i) the Occupational Health and Safety (OHS) issues related to testing and handling of supplies during vaccination; (ii) the logistical challenges in transporting vaccines across the country in a timely manner, adhering to the recommended temperature and transportation requirements; (iii) generation and management of medical health care waste; (iv) community health and safety issues related to unforeseen effects of vaccination, traffic/road safety risks associated with transporting vaccines as well as with handling, transportation, disposal of hazardous and infectious health care waste and further spread of COVID-19 during the vaccination process due to gatherings and close proximity; and (v) increase of water and energy use. Infectious waste from vaccination campaigns such as used sharps (needles), specimen cultures and biological waste pose a high risk to human health and the environment, if inadequately managed.

72. **Social risk rating.** It is anticipated that the project will have positive social impacts both at the individual and community levels. However, the social risk associated with activities under this component is substantial. The anticipated risks include: (i) inequitable access for marginalized and vulnerable social groups including disabled, elderly, internally displaced populations and refugees to access vaccines, (ii) social conflict, and risks to human security resulting from limited availability of vaccines and social tensions related to the challenges of a pandemic situation; (iii) gender inequalities and social norms to access critical health services such as vaccinations; (iv) Sexual Exploitation and Abuse/ Sexual Harassment (SEA/SH) risks among patients and health care providers, especially in relation to distribution of lifesaving vaccines; (v) inappropriate data protection measures and insufficient/not effective stakeholder communication on the vaccine rollout strategy; (vi) risks associated with adverse events following



immunization, (vii) the risk of elite capture and/or corruption as the COVID-19 vaccine will be in short supply relative to the demand; and (viii) the potential social risks due to the security risks including the engagement of security personnel for the transportation of vaccines and the protection of vaccination sites .

73. To manage these risks, the MOHE has prepared an Environmental and Social Management Framework (ESMF), a Stakeholder Engagement Plan (SEP), and an Environmental and Social Commitment Plan (ESCP). The ESMF covers the procedures for screening and identification of the environmental and social risks as well as the mitigation measures to be implemented for the project activities. It includes an Infection Control and Waste Management Plan, which describes in detail appropriate waste management practices to be utilized under the project. The ESMF also includes an elaboration of roles and responsibilities within the PMU and the MOHE, training requirements, timing of implementation and budgets. The ESMF includes a chapter on Labor Management Procedures (LMP) to manage risks associated with labor and working conditions of project workers, including proper working conditions and management of worker relationships; occupational health and safety (OHS) and mitigations to COVID-19 specific risks; grievance redress mechanism; and capacity strengthening for social, environment, health, and safety management. The ESMF also includes security risk management. It includes mitigation measures to address GBV risks. The Code of Conduct attached to the ESMF will establish a framework of ethical standards and rules, which is binding for relevant project workers. The Code of Conduct lays down provisions that help to deal with GBV-related risks. The ESMF has been disclosed on the MOHE website and on the World Bank website on September 21, 2021.

74. On June 24, 2021, the MOHE conducted a virtual consultation session with different stakeholders (e.g., environmental directorates in governorates, health directorates in governorates, NGOs, CSOs, academics, research centers, etc.). Based on the outcome of the consultations, the SEP has been prepared and the MOHE will implement inclusive stakeholder engagement activities throughout the project life. The SEP has been disclosed on the MOHE website and the World Bank website on September 7, 2021.

75. The MOHE has developed the ESFP to ensure project compliance with the Environmental and Social Standards, the World Bank Environmental, Health and Safety (EHS) Guidelines and the environmental and social instruments of the project. The ESFP has been disclosed on September 7, 2021. The MOHE has assigned six environmental and social specialists (including two environmental specialists, two social specialists, one communications specialist, and one GRM officer) to support management of environmental, social, health and safety (ESHS) risks and impacts of the project in accordance with the ESF requirements.

76. Role of the military. Due to ongoing conflict and instability in the country, the project will require appropriate security arrangements for the safe deployment of vaccines. Upon request by Pfizer, the National Coordination Committee issued a decision for the security forces to accompany the distribution of Pfizer's shipments. The Iraq national army, reporting to the Joint Operations Command under the Ministry of Defense, accompanies the cold trucks to secure transportation of the vaccine shipments from the airport to the place of destination. In addition, security forces under the Facilities Protection Directorate of the Ministry of Interior are present outside vaccination sites to provide protection. The security forces are represented at the high-level multi-sectoral committee for COVID-19 (established by Decree no. 217 issued by the General Secretariat of the Council of Ministers), chaired by the Minister of Health. Based on the nature of roles of security forces in this project, the security personnel will have very limited direct interaction with communities and project workers. The potential social risks of engaging security forces are therefore assessed as insignificant. The ESMF includes appropriate security risk mitigation measures, including the proportionate use of force, code of conduct for security personnel, and grievance redress.



77. Rapid Environmental and Social Assessment. A baseline assessment is currently being undertaken by the Bank to measure the environmental and social impacts of the vaccination program at the national and local levels to: (i) assess the environmental and social (E&S) systems, guidelines and institutional capacity put in place by GOI for COVID-19 vaccine procurement and deployment against the requirements of the E&S Standards, World Bank Group (WBG) EHS General Guidelines, WBG EHS Health Guidelines for Health Care Facilities and relevant WHO guidelines; and (ii) assess the E&S aspects of ongoing vaccine deployment activities implemented by the GOI. The findings of the assessment will be used to further enhance the project's environmental and social risk management. The project's environmental and social instruments will be updated following completion of the assessment, as appropriate.

F. Climate Co-Benefits

78. The effects of climate change are large and exacerbate the already significant environmental, security, political and economic challenges in Iraq. It is thus critical to increase Iraq's resilience capacity for current and future crises. Over 40 percent of the country is desert and is sparsely populated due to harsh weather conditions. In many parts of the country, good quality water is sparse due to salinity. Desertification and water scarcity due to river flow fluctuations render Iraq vulnerable to the adverse effects of climate change. Forecasts suggest that the average annual temperature will increase by 2 degrees Celsius by 2050, with a higher frequency of heat waves. Among others, this will negatively impact agricultural productivity, increase water scarcity, and intensify epidemics. Increase in temperatures is also known to be a direct cause of death, especially among the elderly who may suffer from strokes or heart attacks in extreme heat environments and who are also highly vulnerable to COVID-19.

79. The project has been screened for climate change and disaster risks and is highly exposed to extreme temperature and drought. The most at-risk groups from climate-related exposures coincide with those vulnerable to COVID-19. These include women, who form a large proportion of frontline workers in Iraq including health workers, caregivers, and teachers; the elderly; individuals who are ill, including with chronic diseases; the poor, displaced and marginalized who mostly reside in crowded locations with poor access to water and sanitation. However, the risk to project activities and outcomes is categorized as moderate due to several adaptation measures. Relevant mitigation measures have also been integrated in project design and will reduce the impact of the project's activities on the environment and reduce greenhouse gases (GHG) emissions. Dust storms which are common in Iraq and correlate with dry/arid climatic conditions contribute to vulnerability of population to climate change and to COVID-19 vulnerability. The project will help improve survival rates in patients who are vulnerable to climate change and dust storms. Therefore, vaccination could be viewed as a climate change adaptation measure.

80. The project intends to address climate change, address vulnerabilities, enhance climate resilience and adaptation, and mitigate GHG emissions through several activities. The nationwide vaccination efforts supported by this project considerably reduce the need for energy-intensive treatment in hospital critical care units, that would have otherwise been required, thus preventing adverse climate change consequences. Deployment of COVID-19 vaccines is key to climate resilience for several reasons. Firstly, the population group to first receive the vaccines are those vital to supporting the health care system (medical professions and support staff) and ensuring the continuity of essential public services, including to populations affected by climate change. Secondly, the project ensures that those most at risk from both the virus as well as from the health impacts of climate change are effectively targeted for COVID-19 vaccination. The GOI aims to cover almost two thirds of its population to achieve herd immunity thereby reducing the health risks of these climate vulnerable groups. Further, the communications strategy will inform the general population on the GOI vaccine deployment strategy during extraordinary events including natural disasters. This will



contribute to increasing the preparedness of the population in the event of a climate-related disaster. Finally, the widespread loss of power may seriously threaten the COVID-19 vaccine cold chain as vaccine conservation standards will be impacted. Therefore, as an adaptation measure, some of the cold chain equipment purchased will be off-grid solar equipment/supplies such as solar powered fridges and freezers that will provide reliable 24/7 power and efficient cooling. The NDVP includes measures to deal with any unexpected disruptions to the vaccine supply chain, distribution and storage from climate change impacts and other unexpected disasters (i.e., power outages from flooding and extreme heat).

81. The project includes activities from which adaptation co-benefits are expected. These activities include technical assistance to update the national deployment and vaccination plans; support to integration of vaccination database with other health information systems; and a communication campaign to provide information to climate-vulnerable populations on vaccine delivery and contingency plans in case of extreme weather.

82. Climate change mitigation co-benefits will be generated under the project through: (i) support for effective health care waste management, such as use of non-burn technologies; and (ii) support for the development of micro-plans that promote the use of high energy efficiency or hybrid energy consumption.

83. The project will support the procurement and deployment of approximately 170 integrated sterilization-shredding machines in the amount of US\$24 million to provide for instant and safe disposal of medical waste arising from the COVID-19 vaccine deployment. The machines can shred and disinfect medicine bottles, tubes, blister packs, catheters, syringes, glucose bottles, blood bags, ampoule bottles, and used needles. Utilizing only water and electricity, the machines using newer technology do not require any chemicals to operate and produce shredded disinfected waste that can be disposed of through regular municipal waste channels. The machines do not produce any emissions and provide a safer alternative for operators and the surrounding environment through minimizing human interference and/or contact with raw medical waste or the final by product. Further, owing to the slow and minimal nature of its internal mechanical parts, the machines provide anywhere from 20 to 40 percent less consumption in electricity. In addition, the average life span of the machines is 12-15 full years of operational functionality. This comes in contrast to the regular separate autoclave and shredder machines, which have 8-10 years of productive service, on average. Finally, the introduction of such machines will minimize the environmental, medical, and social hazards associated with the process of collection, storage, transportation, and disposal through regular incineration process of medical waste management.

G. Citizen Engagement

84. A key part of the COVID-19 vaccination campaign is the community engagement and outreach element of the overall framework and implementation plan put in place by the GOI to tackle the pandemic during its various stages. The engagement of communities is critical to build community knowledge and confidence, establish trust, ensure governments respond to community needs (including vulnerable groups), and is thus a critical component of the COVID-19 response. The GOI recognizes the importance of citizen engagement in the COVID-19 vaccination campaign. This is clearly demonstrated in the Demand Generation and Community Engagement Plan for COVID-19 Vaccines in Iraq developed under I3RF, which seeks to: (i) effectively communicate with the Iraqi population about COVID-19 vaccination to ensure vaccine acceptance and encourage uptake; and (ii) empower communities in feedback and accountability measures to improve decision making and service delivery related to vaccination.



85. To support the equitable implementation of subcomponent 1.2 on Support for Deployment of COVID-19 Vaccines and Component 2 on Project Management and M&E, the project will support the implementation of the Demand General and Community Engagement Plan through the development of:

- communication strategies, mass campaigns and information, education and awareness building to disseminate official information to communities and sensitize citizens of the risks related to COVID-19, supported by tailored awareness raising on preventative actions and the GOI's COVID-19 response;
- participatory platforms to engage communities in assessing needs and prioritizing solutions and ensure community members, vulnerable groups (elderly, disabled, large households), and community-based organizations are able to articulate local needs (for immediate emergency needs or for reestablishing livelihoods).
- a participatory monitoring and reporting mechanism to enable communities to help monitor the COVID-19 response at the local level. At the outset this might include identification of gaps at the point of service delivery (information availability, access to testing, access to relevant care, equal treatment etc.) to ensure inclusivity and identify improvements for GRM.

86. While these processes ensure that communities can provide informed feedback and play a role in local monitoring, the challenge of implementation lies in social distancing policies. To ensure that communities can engage nevertheless, the project will actively engage with citizens to collect feedback on project performance, including through the use of the Iterative Beneficiary Monitoring (IBM) survey and social media surveys. Findings from such surveys will be used to improve the communication campaign and citizen engagement. Through the IBM, as well as social media surveys, engagement with community and religious leaders, especially in remote areas, will ensure the inclusion of their ongoing feedback in the rollout and implementation of the COVID-19 vaccination campaign to strengthen targeting accuracy and increase uptake. To ensure citizen engagement, the project will: (a) ensure community engagement teams are gender-balanced; (b) target messages to areas where vulnerable groups, including refugees and IDPs, reside to inform them about safety measures and benefits; (c) tailor messages to the elderly and those with medical risks including their target family members and health care providers; and (d) provide information for disabled people in accessible formats, like Braille, large print; text captioning; videos etc. The project will also explore the possibility of including NGO representation in oversight bodies established to oversee transparent and inclusive administration of vaccines.

H. Gender

87. Gender inequities and norms influence access to critical health services, as well as risk of exposure to disease, particularly in emergency situations and pandemics. Factors that constrain access to and use of health services by women in Iraq include limited mobility and financial capacity, competing demands of paid and unpaid work, and limited access to information.¹⁰ The reported incidence of COVID-19 is higher among men than women – 59 percent of registered COVID-19 cases in Iraq to date were among men. Moreover, women have also been impacted by the discontinuity of essential RMNCAH-N services, including for maternal and sexual and reproductive health, and GBV.¹¹ The GBV Information Management System (GBVIMS) has recorded a marked rise in the number of reported incidents of violence in 2020.¹²

¹⁰ UN Women (2018), Gender Profile- Iraq, A situation analysis on gender equality and women empowerment in Iraq.

¹¹ UN Women (2020). Report on the Impact of COVID-19 on Women.

¹² Gender Based Violence Information Management System Annual Narrative Report. January – December 2020.

https://iraq.unfpa.org/sites/default/files/resource-pdf/gbvims_narrative_report_of_2020.pdf



88. COVID-19 vaccine uptake is lower among women in Iraq. According to the findings of the Facebook survey conducted under I3RF, only 25 percent of female respondents indicated they would get vaccinated when the COVID-19 vaccine is made available compared to 40 percent of male respondents. Actual vaccination coverage shows more stark gender differences in uptake, with men receiving approximately 65 percent of vaccines delivered to date.¹³ Until recently, nursing mothers and pregnant women were not eligible to receive COVID-19 vaccines. This can also partly explain the lower vaccination rates among women.

89. Lack of understanding of the benefits and importance of the vaccine could have serious repercussions in the uptake among priority population groups, especially women who have more limited options to access information than men. For example, 67 percent of women in Iraq use the Internet compared to 84 percent of men. These gender dimensions intersect with other inequities, particularly for populations that are poor, with limited access to formal education, living in hard-to-reach areas, temporary or informal settlements, or living with disabilities.

90. Specific considerations in terms of media tools and messaging will be made when targeting women, men, and vulnerable populations in rural areas who are much more likely to have limited access to information. The project aims to do this by training female workers in community-based organizations and women-led NGOs to help with the dissemination of vaccine information and ensure that the targeted messaging will resonate and lead to vaccination awareness and uptake among women and men. The communication plan will ensure registration/vaccination sites be made accessible to women by taking into account timing and locations convenient for them and that female workers will be available at sites to answer questions. Additional details will be included in the POM. All data collection, monitoring, and analysis will be done in a sex-disaggregated way to the extent possible.

91. The project components also address gender dimensions with targeted interventions including: (i) positive discrimination in vaccine registration and targeting activities to increase the proportion of women receiving the vaccine to discontinue the trend of male preferencing; (ii) integration of gender-responsive approaches in communication strategies with the public, including use of multiple accessible mediums in local languages; (iii) 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; and (iv) support for promotion of awareness and use of gender-based violence services, including the expanded network of integrated services at health facilities that offer medical, legal, psychosocial support and referrals. These services are offered by health facility staff that received GBV counselling and messaging as part of their regular on-the-job training to support and direct vulnerable women to specific support channels and resources. MOHE, supported by UN agencies, developed a remote and face-to-face GBV counseling flowchart targeting primary health care workers to clarify management methods and referral pathways. These service adaptations were informed by a rapid assessment of available health care options for survivors of GBV during the COVID-19 outbreak. The survey included health care workers from primary health care centers, hospitals, and mobile medical clinics from 16 districts in Iraq. Of those surveyed, 69 percent of health facilities reported that their staff have already been trained on GBV. Following the COVID-19 outbreak, 81 percent of health facilities surveyed have already updated their referral pathways. Among those health facilities, 95 percent included GBV services in their updates. These interventions will be monitored and measured through the project's results framework, TPMA reports, and through ESF instruments.

¹³ Sex-disaggregated data by priority group on vaccination uptake is not available, however, the gender gap in uptake among these groups is likely to be similar to the overall trend. This project will contribute to collection of sex-disaggregated data across priority groups whenever possible.



I. Grievance redress mechanisms

92. The MOHE has established a GRM system with a dedicated hotline (07901939809 and 07726180982) and an email address for grievances and feedback. The project will further strengthen the GRM system to enable stakeholders to raise their concerns, comments, and suggestions. The hotline number will be publicized throughout the country using broadcast, print, and social media. The GRM also includes an appeal process for unresolved grievances. The MOHE PMU will assign a communication specialist and a dedicated GRM officer to closely monitor the implementation of the environmental and social mitigation measures as per the relevant ESF instruments to ensure adequate implementation of the GRM dedicated to the vaccination deployment. The GRM will be equipped to handle cases of SEA/SH following a survivor-centered approach and guidance on how to respond to these cases will be developed and shared with operators. Individuals will be able to use the GRM to submit anonymous and non-anonymous feedback (e.g., complaints, suggestions, and queries) regarding the project.

VI. GRIEVANCE REDRESS SERVICES

92. 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.

VII. KEY RISKS

93. **The overall risk to achieving the PDO is high**, with political and governance, macroeconomic, institutional capacity for implementation, and fiduciary residual risks rated high. Specific risk assessments and associated mitigation measures related to planned vaccination are informed by the findings of relevant assessments in Iraq, including the VIRAT/VRAF 2.0, and are described below.

94. **Risk associated with the technical design of the project is substantial.** The large-scale acquisition and deployment of COVID-19 vaccines entails significant risks. First, the GOI has only secured access to 31.35 million vaccines to date, covering 38 percent of the population. Second, the vaccines may not be purchased in a timely manner. Third, a mass vaccination effort stretches capacity, particularly in low-capacity environments such as Iraq, entailing risks. The Bank support for Iraq to develop vaccination acquisition strategies and investment in deployment system capacity specifically aim to mitigate these risks. Fourth, there remains a possibility that health facilities will be simultaneously using vaccines that do not meet Bank's VAC and are not supported by the project. This risk will be mitigated through vaccine traceability efforts to monitor vaccine deployment and associated side effects. These risks must be considered against the risk of the



country having less timely and effective deployment of vaccines, potentially exacerbating development gaps and eroding past development gains.

95. **Political and governance risks are high.** The political and governance risks are 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 the project will support, such as the enhancement of the digital registry platform for targeting and monitoring of vaccine rollout. There are also risks related to governance of vaccine purchase and deployment, such as potential fraudulent attempts to gain access to vaccines without following the prioritization criteria for vaccination. This includes the risk of elite capture and corruption in the implementation of the vaccination program. 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 section.

96. **Macroeconomic risk for Iraq is rated high.** Overall macroeconomic risk is high given the spread of the pandemic, high oil dependence as well as budget rigidities linked to public wage bill and pension. These have led to severe external and fiscal pressures that limits the availability of the government to secure financing. As such it faces the risk of not having sufficient additional fiscal space for the purchase of vaccines at scale and other COVID-19 related response interventions. Lower oil receipts could severely impact service delivery and wage bill payments and have knock-on effects on social and political stability. Fiscal policy could remain expansionary and not address rigidities in recurrent expenditures due to parliamentary election dynamics (scheduled in October 2021). The continuation of reforms will also depend on the policy stance of the elected government. On the upside, a faster pickup in non-oil activity together with implementation of fiscal reforms could improve Iraq's fiscal outlook. This risk is mitigated through the prioritization of vaccine acquisition and deployment activities by the GOI, as national priority. Donor-funded resources will complement nationally budgeted funds that have been allocated for COVID-19 vaccination activities.

97. **Institutional capacity for implementation and sustainability risks are high.** The project is designed to address key institutional capacity risks related to vaccine deployment and distribution, but residual risks remain high. The key institutional risk remains the MOHE's capacity to carry out the activities and is heightened by the complexity of vaccine acquisition and deployment. Vaccine deployment cold-chain and distribution capacity have increased rapidly but required additional support to meet the anticipated scale and population group coverage for COVID-19 vaccination. This risk will be mitigated through the project's financial and technical support for immunization system strengthening needs, including coordination with partners, such as WHO and UNICEF, in their provision of systems strengthening support. The continuous monitoring by the TPMA will provide regular reports focusing on areas of improvement and course corrections, where applicable.

98. **Sector strategies and policies risks are rated substantial.** Iraq is in the process of introducing social health insurance. The reform implementation should not undermine the ability of the government health system to provide the needed services during the COVID-19 pandemic. Improving access to and quality of health services, including by strengthening primary care, remain key priorities for the health system. Further, the health sector's activities for COVID-19 response require further strengthening (e.g., case detection and reporting, social distancing measures, health system strengthening, communications, multi-sector policy for prevention and preparedness, infrastructure, etc.). The GOI has prioritized COVID-19 vaccination efforts as the best pathway for recovery from the pandemic. This commitment will enable supplementary or emergency measures to support COVID-19 vaccination related activities by all national entities, including financing, negotiations with vaccine suppliers, deployment efforts and leveraging multi-lateral institutions



towards supporting the nationally consolidated plan for vaccination. The NDVP provides the roadmap for the GOI's vaccination efforts.

99. **Fiduciary risks are high.** The procurement and FM risks associated with the procurement and distribution of vaccines include fraud and corruption risks.

100. The residual FM risk for the project is substantial. The key FM risks associated with the project include: (i) limited capacity at the implementing agencies to meet the project's FM requirements; (ii) potential misuse of vaccine doses and inefficiencies in supply chain management and administration including acquisition, storage and distribution due to low capacity and limited accountability; (iii) security conditions and COVID-19 pandemic do not allow visits by the Bank staff to perform physical verification; and (iv) potential delays in developing the POM including the FM chapter that will show in detail the deployment and distribution plan processes, and procedures, thus delaying the vaccination process. These risk will be mitigated by: (i) establishing a centralized FM function within the PMU's authority with FM team consisting of a qualified financial officer, accountant(s), and internal controller(s) seconded from the MOHE own staff who would receive periodic trainings inside and outside the authority to improve and enforce their knowledge; (ii) PMU hiring a part-time FM consultant; (iii) engaging with UN agencies for support in the vaccine supply chain management; and (iv) hiring the TPMA to ensure that the vaccines have been provided to the targeted beneficiaries as per the approved phased selection criteria. The TPMA will ensure transparency in the distribution of vaccines and distribution and consistency with the vaccine deployment plan.

101. Given the significant disruption in the supply chain of health supplies, the overall procurement risk for the project is assessed as high. The key procurement risks associated with COVID-19 vaccines relate to: (i) the complexity of the vaccines market given the significant market power enjoyed by vaccine manufactures and weak bargaining power by low and middle income countries; (ii) limited market access due to advance orders by developed countries; (iii) inability of the market to supply adequate quantities of vaccines to meet the demand; (iv) delays by countries in triggering emergency procurement procedures which could delay procurement and contract implementation including payments, the risk associated with vaccines is failed procurement; (v) limited capacity and lack of knowledge of World Bank Procurement Regulations by the implementing agency, especially under emergency conditions; (vi) lack of proper coordination of and interaction with various stakeholders, which may cause procurement and project implementation delays; (vii) inadequate capacity in supervision of vaccine acquisition contracts and mobile cold chain equipment and supplies; and (ix) lack of responsiveness and anticipation and limited experience in supervising the execution of similar contracts. There are also risks related to governance of vaccine purchase and deployment, such as potential fraud and substandard quality. These risks will be mitigated by: (i) providing options to fast-track procurement through direct or advance purchase; (ii) Bank's prior review of the vaccine contracts to advise on their acceptance; and (iii) information technology systems and smart systems for the traceability of vaccines. Other mitigation measures include: (i) direct contracting of UN agencies by the MOHE to supply major medical equipment and supplies due to the emergency nature of the project and the supply chain constraints as a result of the global pandemic; (ii) further flexibilities, such as Direct Selection, limited bidding where justified, and increased threshold for request for quotations (RFQs), to reduce procurement processing times; and (iii) increased implementation support and provision of HEIS when requested by the Borrower.

102. **Environment and social risks are substantial.** The environmental risk associated with this project is substantial due to the direct impacts related to OHS for health workers in health facilities. In addition, the quantity of health care waste is likely to increase due to the project activities and may affect the capacity of local authorities to manage this waste, resulting in indirect and long-term environmental and public health impacts.



103. The social risk associated with activities under the project is substantial due to the potential unequal access to vaccines, perception of unfair distribution and exclusion of certain vulnerable groups including the disabled, the elderly, and IDPs, potential rising social tensions, and gender inequities. Gender inequities and norms can play an important role for access to critical health services such as vaccinations. Moreover, inappropriate data protection measures and insufficient/ineffective stakeholder communication on the vaccine rollout strategy; risks associated with adverse events following immunization, the risk of elite capture and/or corruption as the Covid-19 vaccine will be in short supply relative to the demand. Section V.E provides more details of the environment and social risks and mitigation measures. The E&S risks will be mitigated through adhering to the relevant mitigation measures under the ESCP, SEP, ESMF and LMP.

104. **Stakeholder risk is rated as substantial.** The project implementation success depends on strong coordination with different stakeholders. Denial of and misinformation associated with COVID-19 vaccination, in addition to mistrust of some government actions, have been documented in the media, social media, and political spheres. This may contribute to individuals rejecting public health interventions and contribute to sustained misinformation in some areas of the country, resulting in difficulties in drawing vaccine beneficiaries to the vaccination centers and vaccine skepticism among the population. To mitigate this risk, the project will support the GOI's efforts in advocacy and coalition building to sensitize key groups including policy makers, media, religious leaders, and community interest groups. This will be complemented by carefully designed mass communication campaigns to build support for response and mitigation measures among the wider population. During project implementation, the MOHE will also coordinate with partners on different technical assistance activities, including communication efforts.

105. **Other.** There are several substantial residual risks associated with data management and privacy. These include risk of inadequate management and storage or inappropriate sharing of personal data from the vaccination digital platform and other databases. Mitigation measures may include legal, institutional, and technical measures, as well as investments in data security and training of staff. To guard against abuse of such data, the project will incorporate best 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.



VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Iraq

Iraq COVID-19 Vaccination Project

Project Development Objective(s)

The development objective is to support the Government of Iraq in the acquisition and deployment of COVID-19 vaccines.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
To support the Government of Iraq in the acquisition and deployment of COVID-19 vaccines									
Percentage of specific priority populations fully vaccinated (Percentage)		5.00	30.00	50.00	60.00	70.00	70.00	70.00	70.00
Percentage of fully vaccinated priority groups who are female (Percentage)		35.00	40.00	50.00	50.00	50.00	50.00	50.00	50.00
Number of project-supported COVID-19 vaccinations sites with adequate health care waste management for vaccination (Number)		0.00	0.00	50.00	90.00	130.00	156.00	156.00	156.00
Number of COVID-19 vaccine doses acquired		0.00	2,000,000.00	5,000,000.00	6,000,000.00	6,000,000.00	6,000,000.00	6,000,000.00	6,000,000.00



Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
through project financing (Number)									

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
COVID-19 Vaccines and Deployment									
Percentage of administered doses which are captured in the national vaccination digital registry (Percentage)		0.00	25.00	40.00	55.00	79.00	85.00	95.00	95.00
Percentage of vaccination sites which publicized detailed performance data on a regular basis in the last quarter (Percentage)		0.00	50.00	70.00	80.00	90.00	90.00	90.00	90.00
Percentage of vaccination sites with functional cold chain (Percentage)		0.00	50.00	90.00	100.00	100.00	100.00	100.00	100.00
Percentage of reported serious AEFI cases for which investigations were initiated within 48 hours (Percentage)		0.00	20.00	50.00	80.00	80.00	80.00	80.00	80.00
Number of health		0.00	200.00	400.00	600.00	800.00	1,000.00	1,000.00	1,000.00



Indicator Name	PBC	Baseline	Intermediate Targets						End Target
			1	2	3	4	5	6	
workers who received training in vaccination with GBV-related content (Number)									
Number of communication initiatives supported by the project to address vaccine hesitancy (Number)		0.00	1.00	2.00	3.00	4.00	5.00	5.00	5.00
Project Management and Monitoring and Evaluation									
Percentage of feedback cases registered in the project's grievance redress mechanism (GRM) in the last quarter addressed within a timeframe specified and publicly communicated by the project (Percentage)		0.00	10.00	40.00	60.00	80.00	90.00	95.00	95.00
Percentage of vaccination sites visited by the project TPMA in the last quarter (Percentage)		0.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Number of public discussion meetings conducted on the results of the TPMA (Number)		0.00	1.00	2.00	3.00	4.00	4.00	4.00	4.00



Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Percentage of specific priority populations fully vaccinated	The indicator will track the number of the eligible people as defined being among a specific set of priority groups in the National Deployment and Vaccination Plan (NDVP)/government prioritization list who are fully vaccinated from COVID-19 using vaccines that meet Bank's vaccine approval criteria.	3 months	NDVP, digital vaccination registry, national paper-based vaccination registry	Administrative data	PMU/MOHE
Percentage of fully vaccinated priority groups who are female	The denominator is the number of people who were in the target groups and were fully vaccinated with 2 doses, and the numerator will be the number of women vaccinated with 2 doses in the target groups.	3 months	NDVP, digital vaccination registry, national paper-based vaccination registry	Administrative data	PMU/MOHE
Number of project-supported COVID-19 vaccinations sites with adequate health care waste management for vaccination	The project will invest in providing adequate waste management equipment at the facility level. Monitoring of the	3 months	TPMA reports	Survey by TPMA	MOHE/TPMA



	continuous availability and adequate functionality of adequate waste-management processes as per established standards will be maintained throughout project implementation.				
Number of COVID-19 vaccine doses acquired through project financing	This indicator will measure the number of COVID-19 vaccines that have been procured by the GOI through World Bank financing support.	3 months	MOHE records	Administrative data	PMU/MOHE

Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Percentage of administered doses which are captured in the national vaccination digital registry	The indicator will track the percentage of administered COVID-19 vaccines which are captured in the national vaccination digital registry.	3 months	Digital vaccination registry, vaccine logistics management information system	Administrative data	PMU/MOHE
Percentage of vaccination sites which publicized detailed performance data on a regular basis in the last quarter	Percentage of vaccination sites which publicize detailed performance data	3 months	National vaccination dashboard	Administrative data	PMU/MOHE



	on a regular basis in the last quarter				
Percentage of vaccination sites with functional cold chain	The project will track the continuous functionality of the cold supply chain to ensure that vaccines are - at all times - maintained at optimal condition until being administered to beneficiaries	3 months	MOHE and TPMA reports	TPM	MOHE/TPMA
Percentage of reported serious AEFI cases for which investigations were initiated within 48 hours	This indicator will measure the percentage of reported serious Adverse Events Following Immunization (AEFI) post COVID-19 vaccinations that have been reported to the Iraqi MOHE surveillance system, GRM and other channels that have been addressed and investigated within 48 hours of reporting to the total number of reported AEFIs. The aim is to measure the adequate and timely response and investigation to the reported AEFIs reported post COVID-19 vaccinations.	3 months	Iraq MOHE surveillance system, GRM data, MOHE incident reporting and media sources.	Administrative and public data	PMU/MOHE and TPMA
Number of health workers who received training in vaccination with GBV-related	This indicator will measure the number of Healthcare	Every 3 months	MOHE and TPM reports	TPM	MOHE/TPMA



content	workers who have received training on Gender Based Violence related content. The training will address the dimensions of : identification of GBV victims, simple counselling and support mechanisms and possible referral pathways for further assessment and management of possible such cases.				
Number of communication initiatives supported by the project to address vaccine hesitancy	This indicator will track the number of communication initiatives that are either conducted or/and substantially supported by MOHE for the public to address the issue of vaccine hesitancy.	Every 3 months	MOHE/TPMA	Administrative data	MOHE/TPMA
Percentage of feedback cases registered in the project's grievance redress mechanism (GRM) in the last quarter addressed within a timeframe specified and publicly communicated by the project	The project will maintain a functioning grievance redress mechanism (GRM). Grievances will be tracked and analyzed, and feedback will be provided to MOHE management for corrective actions, as needed. The project operations manual will include the specific process	3 months	MOHE GRM records	Administrative data	MOHE/TPMA



	to be followed.				
Percentage of vaccination sites visited by the project TPMA in the last quarter	This indicator will monitor the percentage of project supported facilities visited by the Third Party Monitoring Agency in each quarter of the project life-time. This will be calculated by dividing the number of the visited facilities divided by the number of the total number of supported facilities.	3 months	TPMA reports, PMU records	Administrative data	TPMA, PMU/MOHE
Number of public discussion meetings conducted on the results of the TPMA	The indicator will track the number of public meetings/consultations conducted by MOHE on the results of the project's TPMA reports to elicit citizen and public participation on the needed course correction measures.	Every 3 months	meeting minutes, PMU documentation	Administrative data	PMU/MOHE

**ANNEX 1: Status of Vaccines as of 09/15/2021**

Vaccine	Stringent Regulatory Authority 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 Australia: June 25, 2021	WHO EUL: March 12, 2021
BBIBP-CorV - Sinopharm		WHO EUL: May 7, 2021 for vaccines manufactured by Beijing Institute of Biological Products Co Ltd E-Town Vaccine Industry Base No. 6 & 9 Bo'xing 2nd Road Economic-Technological Development Area Beijing, P.R. China
CoronaVac - Sinovac		WHO EUL: June 1, 2021 for vaccines manufactured by Sinovac Life Sciences Co., Ltd. No. 21, Tianfu Street, Daxing Biomedicine Industrial Base of Zhongguancun Science Park, Daxing District, Beijing, P.R. China



ANNEX 2: Financial Management Assessment Report

1. **Project objectives and activities:** The project objectives are aligned with the results chain of the COVID-19 Strategic Preparedness and Response Program (SPRP). Critical interventions are needed to reduce morbidity and mortality rates from COVID-19 in Iraq. The implementation of Iraq's National Deployment and Vaccination Plan (NDVP) will strengthen the capacity of the Government of Iraq (GOI), and more specifically, the Ministry of Health Environment (MOHE) to ensure access to affordable COVID-19 vaccines for the population.

2. **Staffing and financial management (FM) implementation arrangements.** The project will be implemented by a Project Management Unit (PMU) established at the MOHE to oversee the project implementation with full day-to-day responsibilities while ensuring that all activities are fully coordinated. Qualified financial officer, accountant(s), and internal controller(s) will be provided from the MOHE own staff and will be dedicated to the project. The World Bank undertook an assessment of the financial management system within the MOHE, during the preparation of the ongoing Iraq Emergency Operation Development Project (P155732). The FM assessment was updated for the purpose of the project in accordance with the World Bank Policy on the Investment Project Financing (IPF) and in line with paragraph 12 of section III of the IPF policy, as the project is in situation of urgent need of assistance or capacity constraints. The assessment was updated remotely considering the nationwide movement restriction due to the COVID-19 pandemic. The FM assessment of MOHE concludes that with the implementation of agreed actions, the proposed FM arrangements will satisfy the Bank policy requirements.

3. Although the MOHE has been implementing the ongoing EODP for almost 4 years, the FM performance rating is Moderately Unsatisfactory. The PMU will be responsible for planning and coordinating specific activities, including FM (payment authorization, disbursement, accounting, and reporting), procurement of goods, consulting services (and related contract management), and monitoring and evaluation (M&E). Due to the limited experience of the MOHE FM team with the World Bank FM policies and guidelines, the World Bank will provide close support to the FM project staff in addition to the MOHE hiring an FM consultant.

4. **Project FM risk.** Based on the results of the assessment, the overall FM risk is High. With mitigation measures in place, the project will have acceptable project FM arrangements and the residual FM risk will be Substantial. The pre-mitigation FM risk is assessed as High mainly due to:

- i) Limited capacity at the implementing agencies to meet the project's financial management requirements;
- ii) Potential misuse of vaccine doses and inefficiencies in supply chain management and administration including acquisition, storage and distribution due to low capacity and limited accountability;
- iii) Security conditions and COVID-19 pandemic do not allow visits by the Bank to perform physical verification;
- iv) Potential delays in developing the POM, including the FM chapter that will show in detail the deployment and distribution plan processes, and procedures, thus delaying the vaccination process.
- v) Overall weaknesses and shortcomings in the control environment;
- vi) Limited accounting and reporting systems in providing timely and comprehensive information; and
- vii) Delays in making payments due to the shortfalls in the Iraqi banking sector;

The following agreed measures will mitigate FM-related risks to Substantial:



- i) Establishing a centralized FM function within the PMU’s authority with FM team consisting of a qualified Financial Officer, Accountant(s), and internal controller(s) seconded from the MOHE own staff who would receive periodic trainings inside and outside the authority to improve and enforce their knowledge;
- ii) Hiring a part-time FM consultant;
- iii) Engaging with United Nations agencies for support in the vaccine supply chain management;
- iv) Engaging with Third Party Monitoring Agent (TPMA) to ensure that the vaccines have been provided to the targeted beneficiaries as per the approved phased selection criteria;
- v) Accounting and reporting arrangements to give timely information on the project financial performance and status; off the shelf accounting software will be used to record project financial transactions and generate simplified Interim Unaudited Financial Reports (IFRs);
- vi) Opening A Designated Account (DA) in US dollars with sufficient advance, to ensure that funds are readily available for project implementation;
- vii) Hiring an independent external auditor acceptable to the Bank to provide an independent opinion of the project financial statements.
- viii) An FM manual for this project documenting the procedures, inter alia, on internal controls, budgeting, financial reporting and auditing, responsibilities and duties, flow of information, and others.

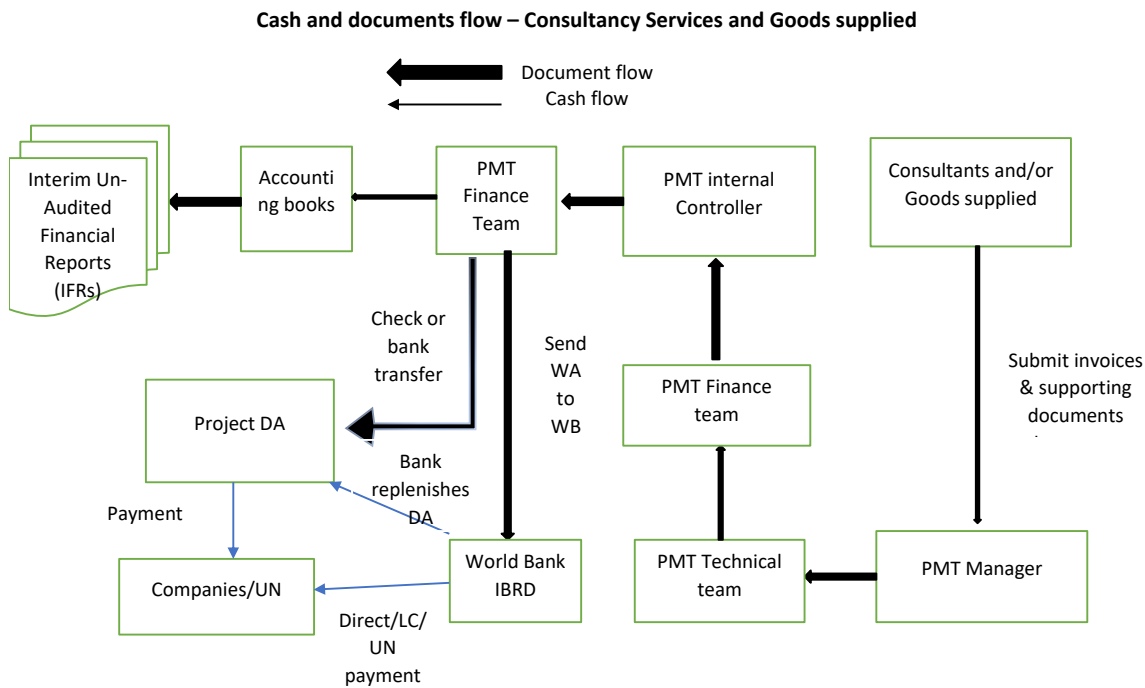
TYPE OF RISKS	CURRENT RISK RATING
INHERENT RISKS (IR)	
Country Level	High
Entity Level	High
Project Level	Substantial
Overall IR	High
CONTROL RISKS (CR)	
Budgeting	Substantial
Accounting	Substantial
Internal Controls	High
Funds Flow	Substantial
Financial Reporting	Substantial
Auditing	Substantial
Overall CR	Substantial
COMPLIANCE RISKS (CoR)	
Overall CoR	Substantial
Overall FM Risk	Substantial



5. **Budgeting and flow of funds.** The PMU will maintain a detailed disbursement plan per quarter. This plan will be developed based on the initial six-month procurement plan or will be based on the schedule of outputs, as defined in the implementation schedule and estimated payments cycles, and revised upon need. It will be used as a monitoring tool to analyze budget variances and manage cash and will feed into the quarterly IFRs.

6. To ensure that funds are readily available for project implementation, a Designated Account (DA) will be opened. The PMU will be responsible of managing its DA, preparing the reconciliations, and submitting monthly replenishment applications with appropriate supporting documentation.

7. The flowchart below depicts the flow of documentation and flow of funds at the PMU:



Note: Cash and document flow of consultancy services will take the same stream of the above chart except there is no role to the “Technical team”.

8. **Accounting and financial reporting.** All government agencies in Iraq follow the accounting cash basis whereas the mixed and private sector are using the unified (accrual) accounting basis Bylaw issued in 2011 by the Iraq Federal Supreme Audit Institute. Since the PMU will have a centralized FM structure, the project will follow its own financial management procedures as demonstrated in the FM manual. The project will follow the cash basis of accounting and key accounting policies and procedures will be documented in the financial procedure manual which will be finalized no later than 30 days after loan effectiveness. MOHE uses very basic accounting software to capture its daily financial transactions. This software, which is developed by the MOHE, is not capable of generating the project’s quarterly Interim Unaudited Financial Reports (IFRs) in accordance with the World Bank FM guidance and record commitments. Adequate accounting and reporting arrangements will be used to give timely information on the project’s financial performance and status. Off the shelf accounting software will be used to record project financial transactions whereas the excel sheet will be used to generate the quarterly IFRs.



9. **The PMU will be responsible for preparing the following:**

i) **Quarterly IFRs** and submitting them to the Bank and through the Bank's digital platform (client Connection) within 45 days from the quarter then ended. These reports will consist of: (i) Statement of Cash Receipts and Payments by each category, (ii) Statement of Comparison between Actual and Budgeted Cash Payments by Component/Category, (iii) Reconciliation Statement for the balance of the Designated Account, (iv) the list of all signed Contracts per category" showing Contract amounts committed, paid, and unpaid under each contract, and physical progress against financial progress of each contract, and (v) list of assets (goods and equipment).

ii) **Annual Project Financial Statements (PFS)** which will be audited by an independent external auditor. The audit report will be submitted to the Bank and through the Bank's digital platform not later than six months after the end of each fiscal year. The PFS include: (i) "Statement of Cash Receipts and Payments by category" and accounting policies and explanatory notes, including a footnote disclosure on schedules; (ii) "the list of all signed Contracts per category" showing Contract amounts committed, paid, and unpaid under each contract; (iii) Reconciliation Statement for the balance of the DA; and (iv) list of assets (good and equipment).

10. **Internal controls:** The project will be implemented through centralized management and disbursement functions within the PMU authority with specific controls and procedures that will be documented in the FM manual. The PMU will follow the FM instructions in the FM manual which will be finalized no later than 30 days after effectiveness. The manual will document the project's implementation of internal control functions and process and describe the responsibilities of the PMU staff, which are summarized in terms of authorization and execution processes. The expenditure cycle will specify the following steps: (a) technical approval for deliverable vaccines, (b) approval by relevant PMU manager, (c) issuance of payments will be made upon receipt of supportive documentation and written requests by authorized officials, and (d) verification by the financial officer of the accuracy and compliance of the payment requests with the Loan Agreement. On a monthly basis, the Financial Officer will reconcile the project account bank statement with the account book balance. Reconciliations will be prepared by the Financial Officer and checked by an independent person. All reconciling items (if any) will be listed, explained, and followed up on. Copies of the reconciliation together with the account bank statement will be kept in the project files and attached to the IFRs.

11. The bulk of the project's expenditures will finance vaccines with some consultancy service contracts and incremental operating costs. Goods contracts will be financed mainly through Letter of Credit (LC) and direct payments. TPMA, financed by the I3RF, will be engaged to ensure that vaccines are deployed as it is agreed in the plan.

12. **Safeguard the purchased vaccines.** The vaccines will be purchased from outside Iraq and will be supplied to special MOHE warehouses located near distribution points. Supply contracts are financed through either LCs or direct payments or special UN payments. All goods shipped are insured. All advances to suppliers (non-UN agencies) are provided against bank guarantees.

13. As agreed with the implementing agency, the following measures are implemented to safeguard project's purchased vaccines/goods/equipment:



- i) The PMU uses a register “spreadsheet” to record the details of purchased vaccines under the project, including among others, description, reference to contract, quantity, location, and the Governorate in which the vaccines were deployed;
- ii) The PMU will prepare a detailed distribution plan, which will include among others the description of all vaccines and beneficiary governorate;
- iii) All items will be traceable;
- iv) Special conditioned warehouse register will be used for the received vaccines;
- v) Special committees will be established to receive the purchased vaccines. The committee will be responsible for vaccine inception upon delivery at the location to confirm quantity and quality as per the signed contract;
- vi) Items will be stored in a designated area that would be easy to differentiate from all other inventory (vaccines) items;
- vii) Warehouses will be maintained to provide the necessary conditions to protect the vaccines from weather, heat, theft, damaged, etc.); and
- viii) Annual stocktaking will be performed by Directorates of Health , and the PMU will compare to its own register of assets.

14. **Financial audit:** The project’s financial statements will be audited annually by an independent auditor acceptable to the World Bank, in accordance with internationally accepted auditing standards and terms of reference cleared by the World Bank. The PMU will be responsible for preparing the TORs for the auditor and will submit them to the World Bank for clearance. The audit scope will cover the activities of the project implemented by the PMU. The audit report will be sent to the Bank no later than 6 months following the end of the project’s fiscal year. The report will include an opinion on the project’s financial statement. The auditor will also be requested to provide an opinion on the project’s effectiveness of internal control system including the vaccines safeguard measures used. Finally, a management letter will accompany the audit report, identifying any deficiencies in the control system the auditor finds pertinent, including recommendations for their improvement. In accordance with the World Bank’s Policy on Access to Information, the World Bank requires that the borrower discloses the audited financial statements in a manner acceptable to the World Bank.

15. **Implementation support.** The project will require close implementation support during the start-up phase to ensure that the PMU’s fiduciary requirements are completed in a timely manner, minimizing project fiduciary risk. During the implementation phase, implementation support will be conducted on semester basis to ensure compliance with Bank’s requirements and to develop internally generated project risk assessment.



ANNEX 3: Implementation Arrangements and Support Plan

1. The World Bank’s implementation support for the MOHE will include providing advice and undertaking analytics to strengthen the technical quality of implementation and assure timely implementation of the project. 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 Project Appraisal Summary. With fiduciary risk rated high, technical assistance to procurement and FM will be prioritized, also with the UN agencies supporting procurement process. The project will use the existing PMU, appropriately staffed, with relevant qualifications. The project would support additional training in the use of the STEP and the World Bank Procurement Framework. Implementation support for FM will be undertaken mainly during, and in response to the findings of, the semiannual FM supervision reviews. For environmental and social aspects, the World Bank will monitor compliance through the reports submitted by the PMU 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; and (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. UNICEF will have both a technical and an operational role with respect to the procurement. 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. World Bank staff based in the country will provide in-depth support for the project set-up, during the first 12 months – from approval to effectiveness, and through early implementation – and after the main activities are completed. Implementation support in the first 12 months will focus on coordinating with development partners and capacity building of the MOHE to support effective preparation and deployment of COVID-19 vaccination plans.

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 implementation support missions. Just-in-time technical assistance.
12–24	Continued institutional capacity	Project management,	Two implementation



months	enhancement, implementation monitoring, operational and technical assistance to support implementation.	operational, technical (including M&E), fiduciary, environment, and social.	support missions; just-in-time technical assistance.
Completion phase	Implementation completion report and final payments	Project management, technical, fiduciary.	Implementation completion report mission