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Report No: PAD3055

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A PROPOSED GRANT

IN THE AMOUNT OF SDR 35.7 MILLION (US\$50 MILLION EQUIVALENT)

TO THE

REPUBLIC OF MALI

FOR A

MALI ACCELERATING PROGRESS TOWARDS UNIVERSAL HEALTH COVERAGE PROJECT

FEBRUARY 26, 2019

Health, Nutrition & Population Global Practice Africa Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2019)

Currency Unit = CFAF

CFAF 571 = US\$1.00

US\$1.00 = SDR 0.71

FISCAL YEAR January 1 - December 31

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ABBREVIATIONS AND ACRONYMS

AMO Assurance Maladie Obligatoire (Compulsory Health Insurance)

ANAM Agence Nationale d'Assistance Médicale (National Medical Assistance Agency)

ANC Antenatal Care

ASA Advisory Services and Analytics
AWPB Annual Work Plan and Budget

BP Bank Procedure

CANAM Caisse Nationale d'Assurance Maladie (National Health Insurance Fund)

CBA Cost-Benefit Analysis

CDVA Contract Development and Verification Agency

CEA Cost-Effectiveness Analysis

CERC Contingent Emergency Response Component

CFAF Communauté Financière Africaine Franc (African Financial Community Franc)

CHWs Community Health Workers

CoD Cause of Death

CPA Complementary Package of Activities
CPF Country Partnership Framework

CPS Cellule de Planification et de Statistique (Planification and Statistical Agency)

CScom Centre de Santé Communautaire (Community Health Center)
CSRef Centres de Santé de Référence (Referral Facilities Centers)

CRI Corporate Results Indicator

CRVS Civil Registration and Vital Statistics

CYP Couple-Year Protections

C4D Communication for Development

DA Designated Account

DFM Direction des Finances et du Matériel (Material and Finances Department)

DHS Demographic and Health Survey
DHIS2 District Health Information System 2
DLI Disbursement-Linked Indicator

ECD Équipes Cadre de District (District Health Services)

EMOP Enquête Modulaire Permanente Auprès des Ménages (Permanent Modular

Household Survey)

EPH Établissements Publics Hospitaliers (Public hospitals)

FCV Fragility, Conflict and Violence FGM Female Genital Mutilation FM Financial Management

FP Family Planning

GAVI Global Alliance for Vaccines and Immunization

GBV Gender-Based Violence GDP Gross Domestic Product

GEMS Geo-Enabling initiative for Monitoring and Supervision

GFF Global Financing Facility
GNI Gross National Income

GRD Geospatial Reference Database
GRS Grievance Redress Service
HCI Human Capital Index

HF Health Facility

HIV-AIDS Human Immunodeficiency Virus infection and Acquired Immune Deficiency

Syndrome

HNP Health Nutrition and Population IBM Iterative Beneficiary Monitoring

IBRD International Bank for Reconstruction and Development

ICER Incremental Cost-Effectiveness Ratios
IDA International Development Association

IFR Interim Financial Report

IHME Institute for Health Metrics and Evaluation
IMAM Integrated Management of Acute Malnutrition

IMF International Monetary Fund
IPF Investment Project Financing
IT Information Technology

LiST Lives Saved Tool

MDTF Multi-Donor Trust Fund M&E Monitoring and Evaluation

MICS Multiple Indicator Cluster Surveys
M/NTD Malaria Neglected Tropical Diseases

MOH Ministry of Health

MPAs Minimum Package of Activities
NGO Non-Governmental Organization
NPF New Procurement Framework
NTD Neglected Tropical Diseases

OM Operations Manual
OP Operations Policy
OOP Out-of-Pocket

PBF Performance Based Financing

PBF - NU PBF National Unit

PCIMA Protocol Inside Health Facilities

PDDSS Plan Décennal de Développement Sanitaire et Social (Health and Social

Development Ten-year plan)

PDO Project Development Objective
PIM Project Implementation Manual
PIU Project Implementation Unit

PMNTD Malaria and Neglected Tropical Diseases Project

PPA Project Preparation Advance

PPM Pharmacie Populaire du Mali (Mali Popular Pharmacy)

PPN Politique Pharmaceutique Nationale (National Pharmaceutical Policy)

PPP Public-Private Partnership

PPSD Project Procurement Strategy for Development

PRODESS Programme de Développement Socio-Sanitaire (Social Health Development

Program)

RAMED Régime d'Assistance Médicale (Medical Assistance Plan)

RAMU Régime d'Assurance Maladie Universelle (Universal Health Insurance Scheme)

REDISSE Regional Disease Surveillance Systems Enhancement Program

RMNCAH+N Reproductive, Maternal, Neonatal, Child, Adolescent Health and Nutrition

RMS Results Measurement System SCD Systematic Country Diagnostic

SDGs Sustainable Development Goals

SDI Service Delivery Indicator SDR Special Drawing Right

SEC Soins Essentiels Communautaires (Community Essential Care)

SLIS Système Local d'Information Sanitaire (Local Health Information System)

SMEs Small and Medium Enterprises

SNIS Système National d'Information Sanitaire (National Health Information System)

SRS Sample Registration System

SWEDD Sahel Women Empowerment and Demographic Dividend

UHC Universal Health Coverage

UN United Nations

UNFPA United Nations Fund for Population Activities

UNICEF United Nations International Children's Emergency Fund USAID United States Agency for International Development

UTM Union Technique de la Mutualité (Union of Community Based Health Insurance

Schemes)

VA Verbal Autopsy
VfM Value for Money
VSL Value of Statistical Life
WA Withdrawal Applications
WHO World Health Organization



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DATASHEET

BASIC INFORMATION					
Country(ies)	ntry(ies) Project Name				
Mali	Mali - Accelerating Progress Towards Universal Health Coverage				
Project ID	Financing Instrument	Environmental Assessment Category	У		
P165534	Investment Project Financing	R-Partial Accessment			
Financing & Implementa	tion Modalities				
[] Multiphase Programm	natic Approach (MPA)	[√] Contingent Emergency Respo	nse Component (CERC)		
[] Series of Projects (SOF	P)	[√] Fragile State(s)			
[] Disbursement-linked I	ndicators (DLIs)	[] Small State(s)	[] Small State(s)		
[] Financial Intermediari	es (FI)	[] Fragile within a non-fragile Country			
[] Project-Based Guaran	tee	[√] Conflict			
[] Deferred Drawdown		[] Responding to Natural or Man	[] Responding to Natural or Man-made Disaster		
[] Alternate Procuremen	it Arrangements (APA)				
Expected Approval Date	Expected Closing Date				
19-Mar-2019	31-Dec-2023				
Bank/IFC Collaboration					
No					
	eject is to improve the utiliza	ation and quality of reproductive, mand the poorest households, in targe			
Strengthening Health Ser	vice Delivery through Perform	nance Based Financing	67.40		

Strengthening Community Health Activities	13.00
Strengthening Stewardship for Improved Health System Performance	9.00
Contingent Emergency Response (CERC)	0.00

Organizations

Borrower: Republic of Mali

Implementing Agency: Ministère de la Santé

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	89.40
Total Financing	89.40
of which IBRD/IDA	50.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)

IDA Grant	50.00
Non-World Bank Group Financing	
Trust Funds	10.00
Global Financing Facility	10.00
Other Sources	29.40
NETHERLANDS: Netherlands Development Association	29.40

50.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
National PBA	0.00	50.00	0.00	50.00

Total	0.00	50.00	•		0.00		50.00
Expected Disbursements (in	US\$, Millions)						
WB Fiscal Year		2019	2020	2021	2022	2023	2024
Annual		2.90	12.30	18.00	21.10	21.70	13.40
Cumulative		2.90	15.20	33.20	54.30	76.00	89.40

INSTITUTIONAL DATA

Practice Area (Lead)

Contributing Practice Areas

Health, Nutrition & Population

Climate Change and Disaster Screening

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

Gender Tag

Does the project plan to undertake any of the following?		
a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF	Yes	
b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment	Yes	
c. Include Indicators in results framework to monitor outcomes from actions identified in (b)	Yes	

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	• High
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial

5. Institutional Capacity for Implementation and Sustainability	Substantial	
6. Fiduciary	Substantial	
7. Environment and Social	Moderate	
8. Stakeholders	Moderate	
9. Other	High	
10. Overall	Substantial	
COMPLIANCE		
Policy Does the project depart from the CPF in content or in other significant respects? [] Yes [√] No Does the project require any waivers of Bank policies? [] Yes [√] No		
Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Performance Standards for Private Sector Activities OP/BP 4.03		✓
Natural Habitats OP/BP 4.04		✓
Forests OP/BP 4.36		✓
Pest Management OP 4.09		✓
Physical Cultural Resources OP/BP 4.11		✓
Indigenous Peoples OP/BP 4.10		✓
Involuntary Resettlement OP/BP 4.12		✓
Safety of Dams OP/BP 4.37		✓
Projects on International Waterways OP/BP 7.50		✓
Projects on International Waterways OP/BP 7.50 Projects in Disputed Areas OP/BP 7.60		√ √

Sections and Description

Schedule 2, Section I.A.1 (from FA and GA): The Recipient shall, not later than one (1) month after the Effective Date, establish, and thereafter maintain, throughout the Project implementation period, with composition, mandate and resources satisfactory to the Association, a steering committee, to be chaired by the MoH and comprised of representatives of key ministries and stakeholders including inter alia the private sector to be responsible for providing overall guidance and strategic support to the Project, including, inter alia, endorsing the proposed Annual Work Plan and Budget for the Project (the "Steering Committee").

Sections and Description

Schedule 2, Section I.A.2 (from FA and GA): The Recipient shall, not later than one (1) month after the Effective Date, establish and thereafter maintain, throughout the Project implementation period, with composition, mandate and resources satisfactory to the Association, a technical working group, comprising technical managers of the Recipient's line ministries represented in the Steering Committee ("Technical Working Group"). To this end, the Technical Working Group shall be responsible for providing technical oversight of the Project and the review of the Project's Annual Work Plans and Budgets.

Sections and Description

Schedule 2, Section IV.B (from FA) and Schedule 2, Section V.B (from GA): The Recipient shall, not later than three (3) months after the Effective Date, (a) establish a coordination platform comprised of key ministries representatives, development partners involved in the health sector, private sector and civil society representatives to facilitate coordination in the health sector; and (b) develop a roadmap for investment in the health sector.

Sections and Description

Schedule 2, Section I.A.3 (a) (ii) (from FA and GA): The Recipient shall, not later than three (3) months after the Effective Date recruit, and thereafter maintain throughout the Project implementation period, an accountant for the Project with experience, qualifications and on terms of reference acceptable to the Association.

Sections and Description

Schedule 2, Section I.A.3 (b) (from FA and GA): The recipient shall, not later than six (6) months after the Effective Date recruit, and thereafter maintain throughout the Project implementation period, an external auditor for the Project with experience, qualifications and on terms of reference acceptable to the Association.

Sections and Description

Schedule 2, Section I.A.3 (c) (from FA and GA): The Recipient shall, not later than five (5) months after the Effective Date, install and thereafter maintain throughout the Project implementation period, an accounting software for the Project acceptable to the Association.

Conditions

Type Description

Effectiveness Article IV, 4.01 (a) (from FA): The Project Implementation Unit has been established in

accordance with Section I.A.3 of Schedule 2 to this Agreement.



Type Effectiveness	Description Article IV, 4.01 (b) (from FA): The Project Implementation Manual has been adopted in
T	accordance with Section I.B of Schedule 2 to this Agreement.
Type Effectiveness	Description Article IV, 4.01 (c) (from FA): The GFF Grant Agreement and the Mali Universal Health Coverage Grant Agreement have been executed and delivered and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals thereunder (other than the effectiveness of this Agreement) have been fulfilled.
Type Disbursement	Description Schedule 2, Section III.B.1 (a) (from FA): No withdrawal shall be made for payments made prior to the Signature Date, except that withdrawals up to an aggregate amount not to exceed \$10,000,000 may be made for payments made prior to this date but on or after February 1, 2019, for Eligible Expenditures under Category (1) and (2).
Type Disbursement	Description Schedule 2, Section III.B.1 (b) (from FA) and Schedule 2, Section IV.B.1 (b) (from GA): No withdrawal shall be made under Category (2), unless and until the Recipient has appointed the Independent Verifiers in accordance with Section I.E.1 of Schedule 2 to this Agreement.
Type Disbursement	Description Schedule 2, Section III.B.1 (c) (from FA): No withdrawal shall be made under Category (3), for Emergency Expenditures under Part D of the Project, unless and until the Association is satisfied, and notified the Recipient of its satisfaction, that all of the CER Conditions have been met in respect of said activities.
Type Disbursement	Description Schedule 2, Section IV.B.1 (a) (from GA): No withdrawal shall be made for payments made prior to the date of this Agreement; except that withdrawals up to an aggregate amount not to exceed \$ 2,000,000 may be made for payments made prior to this date but on or after February 1, 2019, for Eligible Expenditures under Category (1) and (2).
Type Disbursement	Description Schedule 2, Section IV.B.1 (c) (from GA): No withdrawal shall be made under Category (3), fo Emergency Expenditures under Part D of the Project, unless and until: (a) the Emergency Expenditures are eligible under the GFF and (b) the Association is satisfied, and notified the Recipient of its satisfaction, that all of the CER Conditions have been met in respect of said activities.

I. STRATEGIC CONTEXT

A. Country Context

- 1. Mali is a semi-arid, landlocked, low-income country with high demographic growth. With an annual per capita income of about US\$750 in 2016,¹ Mali is in the group of the 25 poorest countries in the world. The country's economy is predominantly rural and informal: agriculture and natural resource rents represent about 45 percent of Gross Domestic Product (GDP), 75 percent of the population resides in rural areas, and 80 percent of the jobs are in the informal sector. Mali's population is estimated at 19 million (2018) with a high average growth rate at around 3 percent per year and a median age of 16 years. Most of the Malian population lives in the South of the country, and the Northern regions of Tombouctou, Gao and Kidal represent less than 10 percent of total population. With an average population density of about 16 inhabitants per square kilometers (55 in the South and 2 in the North), Mali is one of the least densely populated countries in the world.²
- 2. Human capital in Mali is among the lowest in the world, and low health outcomes are a key driver of the country's underperformance in the Human Capital Index (HCI). Human capital consists of the knowledge, skills, and health that people accumulate over their lives, enabling them to realize their potential as productive members of society. Health is a key component of human capital as people are more productive when they are healthier. Mali is currently the 4th lowest scoring (32 out of 100) country in the world against the Human Capital Index recently released by the World Bank.³ Mali is also underperforming in terms of human capital achievement in proportion to its GDP per capita (Figure 1). Probability of survival at age 5, adult survival rates, and to a lesser degree, the proportion of children not stunted are key drivers of the HCI. Figure 2 shows how Mali compares to the world in terms of its overall HCI score, and in terms of the key components of HCI.

Figure 1: Human Capital Index and income per capita

¹ GNI per capita, Atlas Method.

² World Bank, World Development Indicators.

³ World Bank (2019) World Development Report: The Changing Nature of Work.

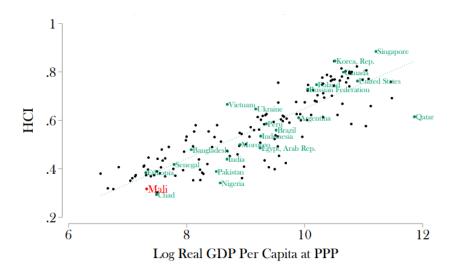
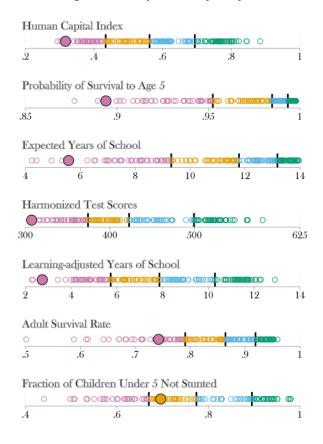


Figure 2: Components of HCI for Mali



3. In 2016,⁴ about 8.6 million Malians lived below the poverty line (46.8 percent of the population). The average poverty headcount has remained relatively stable (around 47 percent) since 2011, but the population living below the national poverty line increased due to population growth (

⁴ INSTAT (2017) Enquête Modulaire Permanente Auprès des Ménages (EMOP).

- 4. 5.
- Table 1). In 2016, the regions of Sikasso, Mopti, Ségou and Koulikoro concentrate most of the 6. poor population (representing over 80 percent of the 8.6 million poor in Mali).
- 7. Climate Change Vulnerability. Mali's physical condition, along with factors of social, economic, political, and environmental vulnerability leave the country at risk to several climate related hazards; most notably droughts, floods, and locust invasion. Climate change is expected to exacerbate the impact of droughts and floods, as these hazards are likely to become more intense and severe. With more than 80 percent of Mali's population dependent on predominantly rainfed agriculture for their livelihood, the country is extremely vulnerable to the impacts of climate change. The potential adverse impacts of rising temperature and rainfall variations in Mali are significant and include enhanced stress on food systems, and enhanced occurrence of malaria and diarrheal disease. By strengthening the primary care system and supporting the performance of community health workers, the project will help mitigate the adverse impact of climate change on health in targeted areas.

Table 1: Poverty trends

	2011		2013		2014		2015		2016	
	Population	Poverty rate								
	(million)	(%)								
Kayes	2.2	40.0%	2.3	43.3%	2.4	34.9%	2.4	35.1%	2.5	31.3%
Koulikoro	2.6	46.6%	2.8	42.6%	2.9	47.7%	3.0	44.1%	3.1	51.5%
Sikasso	2.9	58.1%	3.1	61.5%	3.1	65.8%	3.2	65.1%	3.3	66.2%
Ségou	2.5	52.2%	2.7	52.4%	2.8	56.8%	2.9	59.1%	3.0	55.5%
Mopti	2.2	60.7%	2.4	67.2%	2.4	60.4%	2.5	63.6%	2.6	64.6%
Tombouctou	0.7	47.0%	0.8	NA	0.8	26.7%	0.8	3 26.4%	0.9	16.9%
Gao	0.6	34.3%	0.6	NA	0.6	43.2%	0.7	47.7%	0.7	52.5%
Kidal	0.1	4.4%	0.1	NA	0.1	NA	0.1	L NA	0.1	NA
Bamako	2.0	10.7%	2.1	10.3%	2.2	11.1%	2.2	11.2%	2.3	7.4%
MALI	15.8	45.4%	16.8	47.1%	17.3	46.9%	17.8	3 47.2%	18.3	46.8%

Note: Poverty incidence are from EMOP 2011, 2013, 2014, 2015 and 2016

Population numbers are official Malian estimates from the National Population Division (Direction Nationale de la PopulationDNP) based on the 2009 census (RGPH)

- Non-income indicators of poverty and welfare, particularly for education and health, are among the lowest in the world, and most Sustainable Development Goals (SDGs) appear hard to reach. Mali ranked 175 out of 188 countries on the 2015 UN Human Development Index. Literacy rates have slightly improved over the past decade, but with 34 percent of literate adults, Mali remains one of the countries with the lowest literacy rates in the world. Moreover, gender inequalities persist with adult male literacy rates being about twice as high as for adult women.
- 9. The political and security situation in Mali has been volatile since the 2012 coup d'état and following the implementation of the Algiers Peace Agreement in 2015. Particularly, the northern half and central areas of the country have faced significantly Fragility, Conflict and Violence (FCV). Mali is classified by the World bank as an FCV country since 2014 due to the establishment of a UN peace keeping mission (United Nations Multidimensional Integrated Stabilization Mission in Mali) in the country since April 2013. In May and June 2015, a peace agreement was signed by the Government and two armed groups to end the conflict in the north of the country. The peace agreement has created the minimum conditions for the Malian authorities to address the challenges of poverty reduction, including in the



North. However, implementation remains challenging as the security situation in North Mali remains volatile – and has also spread to Center Mali.

B. Sectoral and Institutional Context

Health system

- 10. Health care in Mali is organized in three levels. The first level has two layers. Primary care is provided by the 1,294 Community Health Centers (Centres de Santé Communautaires, CScom) which are private non-profit entities owned by the communes to provide basic health care. The basic benefit package (Paquet Minimum d'Activités, PMA) is also provided by semipublic, confessional facilities by rural maternities, and by private for-profit facilities (alongside of existing traditional medicine). A second layer of care is covered by 63 first referral facilities (Centres de Santé de Référence, CSRef or district hospitals). The second level of care is provided by the seven regional hospitals (Établissements Publics Hospitaliers, EPH). At the third level, specialized care is provided by five EPHs. The geographical distribution of health facilities in Mali is depicted in
- 11. Figure 3 below.

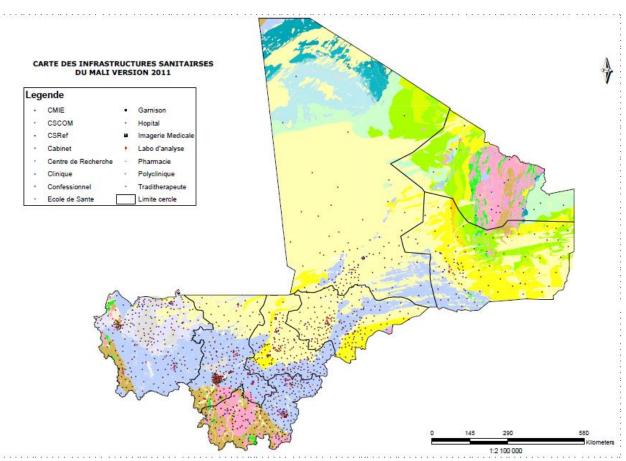


Figure 3: Sanitary Map of Mali (2011)

- 12. The private sector plays an important role in the delivery of health goods and services in Mali.⁵ However, the contribution of the private sector to improving health outcomes is constrained by several bottlenecks:
 - Inadequate regulation, leading to poor and uneven quality of goods and services. It takes on average between 3-12 months to obtain a health business license in Mali, and this leads health businesses to operate informally without proper license.
 - The modalities of public-private partnership in financing health services, such as contracting, are non-existent. The private sector in Mali is not systematically integrated into the provision of essential public health services. One reason behind this lack of integration is the fact that health entrepreneurs (mostly health professionals) seldom have the necessary skills to develop and manage business projects, and as a result, financial institutions tend to be very cautious in their lending decisions.
 - Mali has no official policy on collaboration with health Small and Medium Enterprises (SMEs). The private sector has a unified body called the private sector alliance and is now engaged with the public sector on expanding access to quality health care, conduct a dialogue with the MoH, commercial banks, and other financing and technical partners. However, a slow and limited public-private dialogue platform undermines the level of policy engagement by the private sector, thus perpetuating their exclusion from the policy making processes and structures in the country.

Low health outcomes and slow progress towards Universal Health Coverage (UHC)

- 13. **Mali is among the five countries in the world with the largest burden of disease.** About 65,000 disability adjusted life years per 100,000 population are lost every year. While the share of non-communicable diseases has been increasing since the 1990s, communicable, neonatal, maternal and nutritional disease still account for about 73 percent of the overall burden.
- 14. On average, about 160,000 women and children under the age of 5 die every year. Despite improvement in recent years on key health outcome indicators, trends in progression remain slow and insufficient in relation to investments and expected targets. The maternal mortality ratio dropped from 1,010 per 100,000 live births in 1990 to 587 in 2015 (with an SDG target of 70 for 2030), while the underfive mortality rate fell from 254 per 1,000 live births in 1990 to 114 in 2015 (with an SDG target of 25 by 2030). Mali had the world's sixth highest national under-five child mortality rate in 2015 (

⁵ According to the 2017 EMOP, it represents about 30 percent of the contact of the population with health facilities.

⁶ Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Seattle, WA: IHME, University of Washington, 2017. Available from http://vizhub.healthdata.org/gbd-compare. (Accessed March 18th, 2018).

15. **Figure 4**).

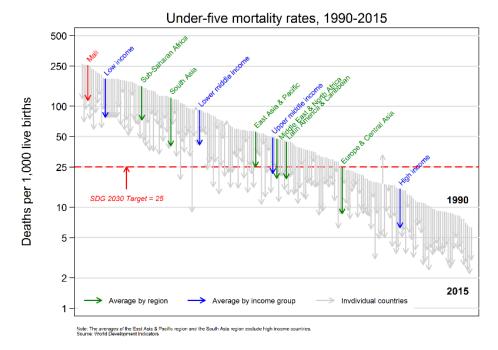


Figure 4: Trends in under-5 mortality

16. **Nutrition outcome indicators have not improved since 2009.** The percentage of stunted children increased from 28 percent in 2009 (Multiple Indicator Cluster Surveys, MICS) to 38 percent in 2012 (Demographic and Health Survey, DHS) and 30 percent in 2015 (MICS). Stunting rates are especially high (above 30 percent) in Tombouctou, Mopti, Ségou and Gao, as well as among the poorest children (40 percent among the poorest quintile). Acute malnutrition rates also remain high and constant since 2009 around 10 percent of all children under 5. Malnutrition in the early years is known to impair cognitive, physiological and socioemotional development, thereby undermining educational performance during school age, health, and earning potential as an adult. In sum, child malnutrition remains a major impediment to ensuring optimal accumulation of human capital in Mali, and one of the key markers of poverty and vulnerability.

Fertility and demographic trends are an important policy concern in Mali

The demographic transition (the shift from high to low mortality and fertility levels) and demographic dividend are central to the discussion on both health and economic growth in Mali. While Mali has started its demographic transition, the pace is too slow and is at high risk of not harvesting the demographic dividend. The demographic dividend is characterized by a period in a country's demographic transition when the proportion of working age population is higher compared to the number of dependents. This period corresponds to an extra economic boost through increased savings and private investments. Triggering such a demographic dividend requires two ingredients: (i) a decreased dependency ratio which is made possible only when fertility is declining more rapidly than mortality, and (ii) adequate policies to foster human capital, employment and investments to ensure that the additional working-age population can get good jobs. According to the 2015/2016 Global Monitoring Report classification, Mali is a pre-demographic dividend country.

18. Mali has the highest adolescent age-specific fertility rate in the world with 17 births per 1,000 women aged 10-14, and with 15.1 percent of female adolescents aged 15 to 19 who already had given birth in 2015. The regional disparities are significant: in Kayes and Koulikoro, respectively, 20 percent and 18 percent of young women 15 to 19 years of age had already had a child in 2015, while in Bamako this rate was only 7.4 percent. Here too, education and poverty are determining factors: nearly 44 percent of women aged 20 to 24 without any education had a live birth before the age of 18 years old, versus 28 percent among girls with a secondary education. Similarly, 34.4 percent of young women aged 15 to 19 in the poorest quintiles had begun their reproductive life, while 18.8 percent of young women in the richest quintile had done so.

Insufficient coverage of essential quality RMNCAH+N services

19. Mali has achieved some improvements in specific RMNCAH+N services, but these are insufficient and important coverage gaps remain to accelerate progress towards achieving UHC. Important progress in terms of family planning coverage, coverage of Insecticide-Treated Bed Nets, infacility deliveries and births assisted by skilled attendants have been observed between 2009 and 2015. Unmet need for family planning dropped from 30 percent to 17 percent. Despite these observed improvements, there has been a lack of improvement in early (adolescent) childbearing, in the percentage of pregnant women having completed 4 antenatal care visits, a decrease in the percentage of children benefiting from an adequately diversified diet, and in the percentage of children treated for fever or malaria (Error! Reference source not found.).



Table 2: Levels, trends and inequalities in selected health, nutrition and population indicators (2009-2015)

	2009	2012	2015	Change between 2009 and 2015	2015	
	National	National	National	National	Urban	Rural
Health outcomes						
Infant mortality rate (per 1,000 live births)	81.8	75.1	69.6	++	-	-
Under five mortality rate (per 1,000 live births)	141.7	126.6	114.2	++	-	-
Maternal mortality ratio (per 100,000 live births)	652	617	587	++	-	-
Total fertility rate	6.6	6.1	6.0	NC	-	-
Stunting (%)	27.8	38.3	30.4	NC	16.7	33.8
Anemia (% 6-59 months old)	71.9	81.7	NA		-	-
Service coverage						
% Unmet demand for FP	30.8	26.0	17.2	++	14.8	17.8
% Women in union using modern contraceptive methods	8.0	9.9	15.1	++	27.6	12
% Adolescent having started childbearing	33.4	39.3	31.6	NC	19.3	36.6
% Women receiving at least 4 ANC	34.9	41.2	38.0	NC	64.7	31.8
% Deliveries in facilities	55.5	55.0	64.5	++	95	57.3
% Skilled birth attendance	29.1	58.6	43.7	++	91.3	53.1
% Full immunization	20.4	31.4	24.0	++	32.5	22
% Exclusive breastfeeding (children 6 months old or younger)	20.4	32.9	32.6	++	32.2	32.6
% Households using adequately iodized salt	64.4	91.7	77.5	++	81.3	76.3
% Treated for diarrhea	32.3	34.4	28.7		36.1	27.2
% Treated for ARI	55.9	31.2	23.0		8.7	26
% Children 6-23 months with adequately diversified diet	NA	21.6	13.5		22.2	11.3
% Children under 5 sleeping under ITN	45.6	69.0	79.3	++	83	78.4
% Pregnant women sleeping under ITN	45.8	73.2	66.2	++	70.7	65.1
Water and sanitation						
% households with access to improved water sources	56.7	66.0	69.2	++	93.2	62.7
% households with access to improved sanitation	27.1	22.0	33.3	++	53.0	28.0

Note: (-) relative deterioration by 10% or more; (++) relative improvement by 10% or more; NC: no change.

Source: WHO estimates, DHS 2012, and MICS 2009, 2015.

- 20. A national public pharmaceutical supply system exists but performs suboptimally. Mali has adopted its national pharmaceutical policy in 1998 (Politique Pharmaceutique Nationale, PPN) which provides a legal framework for the organization of the whole pharmaceutical sector, including the definition of the whole distribution chain. The PPN sets the establishment of a public contract between the Government of Mali and the principal public drug provider (Pharmacie Populaire du Mali, PPM). Essential drugs are available through PPM and private providers. Despite the existence of a legal framework, bottlenecks exist due to governance issues, weak logistical planning capacity and suboptimal drug inventory management. These bottlenecks are accentuated by shortages in human resources, material, and financial resources, especially at the level of drug certification and import control. Overall, these bottlenecks translate in delays and shortages in the supply chain. Drug stock-outs exist and are principally specific to some drugs. Vaccines are procured by UNICEF.
- Important inequalities persist for some essential health service coverage indicators. In 2015, 21. women in union are more than 6 times more likely to have access to modern contraceptive methods if they are better off compared to the poorest 20 percent, and pregnant women are twice more likely to benefit from 4 antenatal care visits in urban areas, and three times more likely to benefit from it if they come from the richest 20 percent compared to the poorest quintile. Skilled attendance at birth is also five

almost times higher among the urban compared to the rural population (Error! Reference source not found.).

- 22. Providing access to quality essential RMNCAH+N services remain challenging in the North and Center of the country where the humanitarian assistance approach still dominates longer term development objectives. The northern crisis has had significant health, social and economic consequences. The inadequacy of medical personnel, the unavailability of drugs and products and other basic inputs have contributed to the decline in the functioning of health services. Attendance at the centers as well as the quality of perinatal referral-evacuation significantly reduced the availability of emergency obstetric and neonatal care. The Ministry of Health has established free care schemes for specific populations implemented by international Non-Governmental Organizations (NGOs). Since the outbreak of the crisis, acute malnutrition rates have reached critical levels in the conflict-affected regions of Timbuktu (17.7 percent), Gao (15.2 percent) and Taoudenit (14.3 percent).
- 23. Zooming in on gender issues in accelerating access to universal health coverage. Mali's gender issues pose a threat to stability despite the many attempts by the Government to address gender disparities, social and traditional practices remain anchored in the social fabric. Gender based violence is an added dimension which is exacerbated by the conflict in the North and the inability of the Government to determine clear and implementable policies. Young girls and women are subjected to early marriage and early pregnancies which in turn increases the risks for complications at birth, fistulae and low birthweight in children. In addition to early marriage, female genital mutilation is still prevalent in Mali. With an estimated 94.1 percent of girls and women ages 15-34 having been mutilated (cut), the country ranks among the population with the highest number of victims. This phenomenon is partially due to a lack of legislation, cultural and social beliefs and the absence of social measures to curb the practice. The project will give special provision to women who have undergone the practice by putting in place support groups to care for women suffering from the consequences of Female Genital Mutilation (FGM), women suffering from the consequences of Gender-Based Violence (GBV) and women in prison.
- 24. **Equity in access to health services**: The gender gaps have increased in Mali, despite hopes raised by the 2009 discussions around the Family Code; discussions were unsuccessful and in 2012, the president withdrew the law from parliament. This action was daunting as the code was set to raise the age of marriage (now officially 16 for girls) and 18 for boys and represented a way to preventing more maternal and child mortality. The code was also set to give women in the younger generation 15-34 age group increased access to land and thus paved the way for women to acquire an income and to be able to afford much needed health services and improve the overall health status of their families.

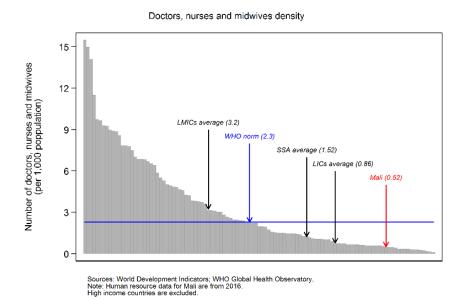
Low, inefficient and fragmented health financing

25. Coverage of quality essential health services is low partly because of a low volume of financing resources for health. With less than US\$50 per capita per year available for current health expenditures, Mali is one of the 25 countries in the world for which health financing per capita is the lowest (US\$42 per capita according to WHO in 2015). Domestic public health expenditures (US\$7 per capita) represent less than 1 percent of GDP, 4.5 percent of total government expenditures, and 16 percent of current health expenditures. By contrast, external health expenditures represent about 36 percent of current health expenditures, and out-of-pocket about 46 percent. Cost recovery through user fees often represent up to half of the revenues in primary health care facilities (CScom). Low domestic revenue mobilization and low

prioritization of public health funding, high dependence on external funding and on out-of-pocket payments inevitably lead to, reduced coverage, delayed access, poor quality of care, problems of predictability and sustainability of funding, and increasing inequity in financial access to healthcare.

- 26. The devolution of responsibilities for health functions from the central level to the local collectivity level has had mixed results. The decentralization policies put in place in 2005 have translated in a devolution of responsibilities for health functions from the central level to the commune level. However, this decentralization process has had mixed results in the health sector, because: (i) local authorities are still often unaware of the details of the responsibilities transferred by law; (ii) low capacity at the local collectivity level for resource planning and management; and (iii) the transfer of fiscal resources to local governments is still insufficient. While the government committed to transfer 30 percent of fiscal revenues to local and regional authorities, the actual amounts transferred are below target. Public funding for health remains low at the decentralized level with local collectivities contributing to less than 0.2 percent of overall current expenditures.
- 27. Because of low domestic revenue mobilization for health, inputs into the health system are below international norms and constitute a major constraint for the provision of quality health services. On average, less than half of the Malian population lives within a 5-km distance of a health facility, and close to 30 percent of the population are not within a 15-km reach of a health facility. Moreover, Mali counts on average about 0.52 doctors, nurses and midwives per 1,000 population, which is below the World Health Organization (WHO) norm (2.3) and below the average low-income countries (0.9) and in Sub-Saharan countries (1.5) (Figure 5). Moreover, the geographic distribution of health personnel in Mali is uneven, with higher densities in urban areas and in some regions (Bamako has almost 2 personnel per 1,000 population while Taoudenit, Gao, Sikasso and Mopti count less than 0.3 personnel per 1,000).

Figure 5: Health personnel density



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- 28. Services are also underutilized because prepayment schemes have so far been fragmented and only cover about 13 percent of the population. Formal sector employees and civil servants are covered by a mandatory health insurance scheme administered by a semi-autonomous public insurance agency (Caisse Nationale d'Assurance Maladie, CANAM) in charge of managing the contributory insurance scheme (Assurance Maladie Obligatoire, AMO). By 2016, about 1,143,437 individuals were registered with the AMO, representing about 6.2 percent of the population, and about a third of the target population. Funding for the CANAM and the AMO comes from employer and employee contributions. The Régime d'Assistance Médicale (RAMED) is a non-contributory scheme for the indigents administered by the Agence Nationale d'Assistance Médicale (ANAM). The status of indigence is considered temporary and the insured members' cards are renewed annually. Identification of beneficiaries is conducted by social services using means and proxy-means testing. In 2016, about 134,875 individuals were registered as RAMED beneficiaries, which represents less than 1 percent of the population, with a target of 5 percent of the total population. Moreover, 193 community-based health insurance schemes (Mutuelles) target the informal sector with ability to pay and offer voluntary health insurance to the population. In 2016, these Mutuelles cover less than 5 percent of total population (or 6.3 percent of the target population). Pooling of funds among the various schemes is currently not done systematically, only about 30 of these schemes are pooling funds through the Union Technique de la Mutualité (UTM). Finally, in addition to these prepayment schemes, the government support free care schemes (gratuités) by subsidizing specific services (e.g., caesarian-section, malaria treatment, HIV-AIDS).
- 29. In July 2018, the Government of Mali has adopted a law to consolidate these different schemes under a unique universal health insurance regime (*Régime d'Assurance Maladie Universelle*, RAMU) to be managed by the CANAM. The law will establish a unique universal health insurance regime to cover the provision of a basic benefit package to the Malian resident population. Affiliation to the new regime will be partly contributory, and partly non-contributory. Full coverage will be provided for RAMED beneficiaries. The new regime will integrate the AMO, the community-based health insurance schemes, and the RAMED under one umbrella. The CANAM will oversee the management of the RAMU and with a delegation of management to: (i) the *Institut National de Prévoyance Sociale*; (ii) the *Caisse Malienne de Sécurité Sociale*; (iii) the UTM; and (iv) the ANAM. The Ministry of Health (MoH) is associated in the reform for the definition of the package of services and for aspects related to the regulation and control of the service provided. Conventions will be established between the CANAM and the service providers to define the tariffs and the services covered. Financing will come from public resources (central and decentralized), contributions, generated revenues, and innovative financing sources.
- 30. External agents contribute to 36 percent of current health expenditures in Mali. There are 13 main development partners financing health in Mali. There is also an important number of emergency donors and NGOs which are important actors in the field, especially in the North of the country where they deliver 80 to 90 percent of health services. Donors finance different health areas from basic health care and nutrition, reproductive health, to infectious and non-infectious diseases. They also support institutional reforms, human resources training and administrative management. Though, there is a great diversity of donors, a lot of projects are pilot projects or target specific regions or population. There was a concentration of financing in 2014 and 2015, with four donors (USAID, The Netherlands, Canada, and UNICEF) providing 77 percent of all partners funds disbursed in health sector in Mali. From 2016 to 2019, twelve donors have planned to intervene in the health sector for a total amount of US\$667 million. The largest contributors to this sector would be UNICEF (US\$152 million) and USAID (US\$148 million) while

other donors like Global Alliance for Vaccines and Immunization (GAVI, US\$69 million) or France (US\$55 million) will increase their contributions.

- 31. Low public health expenditures imply a heavy reliance on private out-of-pocket (OOP) expenditures for health financing. In 2015, household OOP health payments represent 46 percent of current health expenditures in Mali. Cost recovery through user fees often represent up to half of the revenues in primary health care facilities (CScom). This represent a major financial barrier to health care access and often translates into high forgone care for economic reason. According to the 2017 Enquête Modulaire Permanente Auprès des Ménages (Permanent Modular Household Survey, EMOP) survey, 46 percent of the population in need of health care said they did not use health services because it was too expensive. High financial barriers also frequently result in auto medication.
- 32. In addition to deterring use of services, OOP also impose an important financial burden on the Malian families and contribute to pushing people in poverty. For those who can afford to pay for health services, OOP can impose a heavy burden on household budget, and it can push vulnerable households below the absolute poverty line (US\$1.90 per capita/day). According to the Enquête Légère Intégrée auprès des Ménages (Integrated Light Household Survey) and EMOP surveys conducted in Mali, the number of people pushed below the poverty line has increased steadily since 2006. In 2015, more than 400,000 individuals were impoverished because of OOP health expenditures, this corresponds to an increase in the national poverty headcount of 2.3 percentage points. This rising trend is due both to an increase in the percentage of people being impoverished, and to population dynamics.
- 33. In summary, financial governance is a main bottleneck in the health sector: low mobilization of public domestic resources, high reliance on out-of-pocket private payments, input-based financing, fragmentation of prepayment schemes, and rigidity of public spending procedures are prevalent. This contributes to significant geographic and socio-economic inequities in access to essential health services and to low quality of service provision. Consequently, there is a need to increase efficiency and prioritization in public spending to improve health outcomes.

Sectoral strategy

- 34. In 2014, Mali adopted a 10 years multisectoral development plan (*Plan Décennal de Développement Sanitaire et Social*, PDDSS) to develop its population, health and social strategies for 2014-2023. The PDDSS was developed under the joint leadership of the Ministry of Health, the Ministry of Social Affairs, and the Ministry for the Promotion of Women, Family and Children, with the Planification and Statistical Agency (*Cellule de Planification et de Statistique*, CPS) coordinating the effort. The PDDSS defined 11 strategic objectives including the promotion of women and child health (objective #1), strengthening health service provision and quality of health services (objective #6), health financing (objective #9), strengthening the health information system (objective #10), and supporting decentralized governance (objective #11).
- 35. The implementation of specific social and health policies to achieve the PDDSS objectives was articulated in a 5 years plan (*Programme de Développement Socio-Sanitaire*, PRODESS III 2014-2018 which was recently evaluated. Within the first component of the PRODESS dedicated to public health policies, the following have been identified as key strategic sectoral priorities: (i) strengthening community health services; (ii) introducing PBF; (iii) improving governance; and (iv) strengthening the health information system. The evaluation of the PRODESS III highlights important bottlenecks related to

low performance, fragmented financing, and weak governance of the health system which hindered the achievement of some of the key objectives set in 2014. The next 5-year plan (PRODESS IV) is currently in development and is expected to be finalized in the second half of 2019.

- 36. Mali's health information system is fragmented. Mali's health information system comprises a system for local (site-based) health information, the hospital information system, and the epidemiological surveillance system. These systems are managed by different governing bodies and were previously housed on a variety of platforms that were not able to communicate or share data. The local health information system had limitations preventing it from producing disease-specific information. These limitations led to the creation of additional parallel information systems. These multiple reporting systems and duplicative indicators have resulted in a heavy burden of data collection for healthcare providers. Recently however, there has been some donor supported efforts to strengthen the health information system by harmonizing routine indicators and by rolling out the integrated DHIS (District Health Information System 2) platform. The rollout of the DHIS 2 platform nationally, along with the streamlining of reporting requirements and improvements to data quality assurance practices, have improved the information generation areas of Mali's HIS. The roll out of DHIS2 is however not yet complete at the CScom level, and it does not take into account the private health facilities.
- 37. Mali has made important efforts to support the delivery of community health services. In 2009, The Malian Ministry of Health adopted a national policy for "Essential Community Care" (Soins Essentials Communautaires, SEC) and created a package of services delivered by the community health workers (CHWs). The SEC package of services includes: (i) community management of simple cases; (ii) diagnosis and treatment; (iii) distribution of vitamin A; (iv) growth promotion and monitoring; (v) treatment of moderate malnutrition; (vi) adapted postnatal care for the mother and the newborn; (vii) integrated disease surveillance and response; (viii) referral of severe cases; and (ix) correct and regular completion of data management tools and submission to the CScom. During the period 2009-2014, the SEC program was introduced in five regions in the south of Mali. By 2014, about 2,200 CHWs were trained to assist an estimated population of about 3.2 million (or about 20 percent of the total population). The analysis of routine data, coupled with the results of a lot quality assurance sampling survey in 2014 showed a good level of CHW availability, but disappointing rates of service utilization. Low performance of CHWs was attributed to weak relations and low degree of training and supervision with the CScom, lack basic equipment, and low financial incentives. Currently, over 2,700 CHWs have been recruited, trained, and deployed across the nation thus far, with the support of multiple NGO partners, and co-funding from the Global Fund, USAID, and others. In 2015, a new SEC strategic plan was elaborated with the objective of scaling up the number of CHWs deployed in the country to 5,000 by 2020. These CHWs would reach a target population of about 3.5 million beneficiaries (targeting the most remote and vulnerable communities), 7 and would cost about US\$3.50 per beneficiary covered per year.
- 38. Additionally, Mali has recently joined (June 2018) the Global Financing Facility in support of Every Women and Every Child (GFF). The GFF Trust Fund acts as a catalyst for financing, with countries using modest GFF Trust Fund grants to significantly increase their domestic resources alongside the World Bank's financing, aligned external financing, and private sector resources. Each relatively small external investment is multiplied by countries' own commitments generating a large return on investment, contributing to lives saved and to the accumulation of human capital. A governance structure

⁷ It is estimated that a full scale up to cover the total population in Mali would imply the deployment of 23,000 CHWs.

spearheaded by the Malian government will be established to oversee the preparation of an Investment Case for reproductive, maternal, newborn, child, adolescent health and nutrition (RMNCAH+N). The GFF presents considerable opportunities for the country, on several fronts. First, the country's response to RMNCAH+N has been fragmented, with separate analytical work and strategies for various aspects of the RMNCAH+N continuum. Second, some key technical elements that the GFF emphasizes – such as frontline service delivery, equity, financial protection and efficiency – have been under-addressed in Mali. Third, progress on health financing and on achieving value for investment in health has been limited. With the creation of a GFF coordination platform a governance structure composed of representatives from the ministries of health, solidarity, and gender (PRODESS line ministries), as well as ministries of finance, and planning, and representation from civil society and development partners will be established in 2019 to oversee the preparation of an Investment Case for RMNCAH+N, and of a health financing strategy.

- 39. Very recently, the Ministry of Health launched a national consultation to prepare a bold and ambitious health reform agenda. The proposed phased reform agenda for the Malian health care sector was elevated as a Presidential Initiative launched in Bamako on February 25, 2019. The proposed reforms have the potential to accelerate progress towards UHC, by expanding innovative and high impact interventions and strengthening health system stewardship and financing governance. The initiative itself is focused on the amelioration of childhood and maternal mortality and to achieve these impacts, fundamental primary healthcare restructuring is seen as a key ingredient which will be the focus of the first phase of the reform agenda. Many of the sectoral partners are eager to change course and assist in a newly orchestrated and more efficient mobilization of resources. The reforms are envisaged to rest on four main streams of activity:
 - Strengthening and amplification of MoH management capacity including strategy formation and operational capability.
 - Reorganization and creation of a fit for purpose integrated network of frontline community health workers (CHW) cadre and PHC centers (CScom) including HR, management, financial and IT resources.
- Reorganization and capitalization of CScom structure.
- Policy and legislative changes with regard to CScom structure, to health financing schemes and the creation of fiscal space through innovative financing for health.
- 40. **PBF** is a disruptive health system strengthening reform which has been introduced in many low, lower-middle income countries, and in fragile and conflict-affected settings. The foundation of PBF is based on a contractual relationship between the different actors of the health system. PBF is implemented to address critical impediments confronting the delivery of services at frontline health facilities. These challenges include the: (i) shortage of funds to meet operating expenses; (ii) lack of autonomy to manage resources to procure drugs and attract and motivate qualified human resources; (iii) lack of focus on results and limited use of performance data at all levels (health facility, district; regional and national); (iv) lack of accountability and transparency of the health system; and (v) weak managerial capacity at all levels. Instead of allocating physical and human resources (physical inputs) through central planning, PBF

⁸ Dimitri Renmans et al. (2016) Opening the 'black box' of performance-based financing in low- and lower middle-income countries: a review of the literature. *Health Policy and planning*, 31, 1297-1309.

⁹ Maria Paola Bertone et al. (2018) Context matters (but how and why?) A hypothesis-led literature review of performance-based financing in fragile and conflict-affected health systems. *PLoS ONE* 13(4).

is addressing the above-mentioned challenges by allocating financial resources to frontline health facilities based on results achieved to enhance the availability, the accessibility and the quality of essential services. In addition, PBF leverages existing sunken investments (building, equipment, and centrally planned human resources), vertical program investments and other resources. PBF has been associated with improvements in both the quantity, 10,11 and the quality of services provided. 12 Pragmatic adaptation of the textbook PBF model is however important, to maximize the likelihood of sustainable success. 13,14

PBF was piloted in Koulikoro "à la Malienne" and has been identified as a central strategy for 41. health system strengthening that will contribute towards addressing the above-mentioned health sector challenges and towards achieving UHC. The PBF experience in Koulikoro was implemented within a short timeframe (8 months) but the endline assessment of the pilot has suggested a promising impact on: (i) health service utilization; (ii) quality of services; (iii) motivation of personnel; (iv) coordination of health services; and (v) strengthening of the health information system. The PBF operation was piloted in all the 10 health districts of the region of Koulikoro with US\$1.8 million support through the previous Bank lending operation, and it targeted 60,000 women of reproductive age. MoH contracted a consortium of international NGOs to: (i) pass performance-based contracts with CScoms; (ii) to verify the services reported at the facility level; (iii) to provide coaching and training services at different levels of the PBF implementation chain; (iv) to contract NGOs for counter-verification of services; and (v) to develop and update the different PBF management tools. At the end of the pilot, structured interviews and focus group discussions were conducted by the PBF agency and suggested a range of positive results despite the short implementation period. After the experience of the Koulikoro pilot, the government has identified PBF as a key strategy to improve the efficiency of the allocation and use of resources, to improve health worker performance through increased motivation, satisfaction and autonomy for decision-making at the point of service delivery, and to increase the population's use of essential health services through an increase in the quality of health services and reduction in the out-of-pocket costs for these services. Expanding PBF was explicitly adopted as one of the strategic priorities¹⁵ in the PRODESS III (2014-2018).

C. Relevance to Higher Level Objectives

42. Through strengthening health service delivery performance and improving financial protection, the proposed project will directly address some of the binding constraints identified in the Systematic Country Diagnostic (SCD, Report N. 94191-ML - June 22, 2015), especially the exposure to uninsured risks. As indicated in the SCD, health shocks are the main risks affecting poor households in Mali along with exposure to conflict for those living in the North. This exposure to uninsured shocks takes a big toll on

¹⁰ Paul Gertler and Giovagnoli, P.I. (2014) Rewarding provider performance to enable a healthy start to life: evidence from Argentina's Plan Nacer. *World Bank Policy Research Working Paper* #6884.

¹¹ Maria Steenland et al. (2017) Performance-based financing to increase utilization of maternal health services: Evidence from Burkina Faso. *SSM – Population Health*.

¹² Omer Zang et al. (2015) Impact of performance-based financing on health care quality and utilization in urban areas of Cameroon. *African Health Monitor*

¹³ Maria Paola Bertone et al. (2018) Performance-based financing in three humanitarian settings: principles and pragmatism. *Conflict and Health*, 12:28.

¹⁴ Elisabeth Paul et al. (2018) Performance-based financing to strengthen the health system in Benin: challenging the mainstream approach.

¹⁵ Programme de Développement Sanitaire et Social 2014-2018, Priority 3.3.1.4.

poverty reduction and pushes households into poverty traps. Public investment in health contributes to increasing resilience, to larger accumulation of human capital, and to the creation of long-term opportunities for economic transformation.

- 43. Building on the SCD, the interventions under the project remain consistent with, and aligned to, the strategic areas of the Country Partnership Framework (CPF, Report N. 94005-ML Nov. 3, 2015) (FY16-FY19), which focus on: (i) building resilience through improvements in Mali's low human capital and strengthening safety nets for the poor and the vulnerable; and (ii) improving governance through increased involvement of citizens in public affairs. More particularly, in line with the CPF, this project will support the World Bank's two-pronged approach to human capital improvement in education and health and will focus on improving access to quality health care (including reproductive health and family planning) and nutrition services, with a specific attention to the poorest and to women and girls, while supporting improving financial protection to the poor. It also aims to improve the ability of citizens to demand accountability to improve public service delivery, especially among the poor through citizen engagement and grievance redress mechanisms.
- 44. The proposed project is also fully in line with the World Bank Group's (WBG) twin objectives of reducing poverty and promoting shared prosperity and with the SDGs, in particular Goal 3: Ensure healthy lives and promote well-being for all at all ages. Goal 3 of the SDGs has several targets for which the proposed project directly supports: reduction of maternal mortality (Target 3.1); reduction of under-5 and neonatal mortality (Target 3.2); achieving universal access to sexual and reproductive health-care services (Target 3.7); achieving Universal Health Coverage (Target 3.8); and increasing health financing and the recruitment, development, training and retention of the health workforce (Target 3.c). The project also supports achievement of Goal 1: End poverty in all its forms everywhere through its links with social safety nets programs and improved financial protection from health expenditures among the poor and vulnerable; and Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture, through its activities related to supporting high impact nutrition interventions.
- 45. The proposed Project seeks complementarities with other ongoing operations in Mali. The Project will target health facilities recently rehabilitated by the Mali Reconstruction and Economic Recovery Project (P144442) in the north and the center of the country. Health districts covered by the Emergency Safety Net Project, Jigiséméjiri, (P127328) are also prioritized in the targeting process. The Jigiséméjiri project's objective is to increase access to targeted cash transfers for poor and vulnerable households and building an adaptive social safety net system in the country. The proposed Project will rely on the same targeting mechanisms (mixed geographic and community-based targeting) developed by the Emergency Safety Nets Project (Jigisémériji, P127328) to identify poor and vulnerable households. The Project will also be complementary to the Mali Fiscal Decentralization Project under preparation (P164561) whose objective is to strengthen fiscal management in local government for better service delivery. The local collectivities will be part of the PBF contracting mechanism and will be involved in the setting of health facilities objectives and in the validation of reported results. The Project is also aligned with the development objectives of the Sahel Women Empowerment and Demographic Dividend (SWEDD, P150080) project, which seeks to increase women and adolescent girls' empowerment and access to quality RMNCAH+N services. Finally, the proposed Project will complement the second Poverty Reduction and Inclusive Growth DPO under preparation (P161619), which will support the

implementation of the national plan for community health workers and the provision of essential social services at the decentralized level.

- 46. **Multi-Donor Effort with the Sahel Alliance.** This Project will contribute to the operationalization of the Sahel Alliance (*Alliance Sahel*) in Mali. The *Alliance Sahel* was launched as a Regional program in July 2017 by France, Germany and the EU, with the WBG, the United Nations Development Program and the African Development Bank as founding partners, now joined by Italy, Spain, United Kingdom and Luxembourg. The intent of the *Alliance Sahel* is to strengthen the peace, security and development nexus by a) speeding up delivery of development projects; b) crowding in resources, including from the private sector; and c) measuring results. The Alliance presents a new way of working in a more coordinated and focused manner. More precisely, this operation will contribute to the multi-donor efforts to restore and improve the delivery of essential health services in fragile and vulnerable areas of Mali.
- 47. Finally, the proposed Project is also fully aligned with the Human Capital Project and will directly support improving some of the key building blocks of the Human Capital Index. The Project will contribute to improving the three health outcomes indicators (probability of survival to age 5, stunting and adult survival rate to age 60) included in the World Bank HCI. Furthermore, the Project will also contribute to strengthen the measurement agenda related to the Human Capital Project by supporting two rounds of Service Delivery Indicators (SDI) surveys which are designed to assess the performance and quality of service delivery in the health and education sector.

II. PROJECT DESCRIPTION

- 48. The proposed project will seek to support Mali in accelerating progress towards UHC by expanding innovative and high impact interventions, and by strengthening health system stewardship and financial governance. The innovations supported by the proposed project will affect the health financing mechanisms (moving from input-based to PBF), the delivery of community health services, and the data systems.
- 49. The lessons learned from the previous Strengthening Reproductive Health Project (P124054) are embedded in the design of the current project. The Implementation Completion and Result report of the previous project highlighted the successful and transformative role of PBF and of Communication for Development activities (C4D), and these interventions will be further strengthened by the proposed Project. Further lessons related to project design and to implementation arrangements were also considered during project preparation.
- 50. The project intends to achieve its objective through interventions at the community, primary, and central level that are organized into four complementary components: 1) strengthening health service delivery through PBF at facility level; 2) strengthening community health activities to support demand for RMNCAH+N service; 3) institutional strengthening for improved stewardship and health system performance; and 4) a Contingency Emergency Response Component (CERC) to allow for rapid reallocation of project proceeds in the event of a natural or man-made disaster or crisis.

A. Project Development Objective (PDO)

PDO Statement

51. The objective of the project is to improve the utilization and quality of reproductive, maternal, neonatal, child, adolescent health and nutrition services, especially among the poorest households, in targeted areas.

PDO Level Indicators

- 52. The proposed PDO indicators are the following:
 - (a) To measure increased utilization of reproductive, maternal, neonatal, child, adolescent health and nutrition services:
- (1) Number of people who have received essential health, nutrition, and population (HNP) services.
 - (2) Percentage of girls, aged 15-19, who are currently using any method of contraception.
 - (b) To measure improvement in the quality of health services in targeted areas:
 - (1) Percentage of pregnant women receiving at least 4 antenatal care visits from health provider.
 - (2) Average score of the quality of care checklist.
 - (c) To measure utilization of essential health services for the poorest households:
 - (1) Number of RAMED beneficiaries receiving free care for essential health services
- 53. The list of PDO and Intermediate Outcome indicators is summarized in the table below:



PDO	Project Outcome Indicators	Use of Project Outcome Information
PDO: improve the utilization and quality of RMNCAH+N services, especially among the poorest households, in targeted areas.	 Number of people who have received essential HNPservices (CRI) (1.a) Number of people who have received essential HNP services - Female (Results Management System, RMS) requirement). (1.b) Number of children who received routine immunization. (1.c) Number of women and children who have received basic nutrition services. (1.d) Number of deliveries attended by skilled health personnel. Percentage of girls, aged 15-19, who are currently using any method of contraception. 	Assessing whether utilization of RMNCAH+N services has improved in the targeted areas.
	3. Percentage of pregnant women receiving at least 4 antenatal care visits from health provider.4. Average score of the quality of care checklist.	Assessing whether the quality of RMNCAH+N services has improved in the targeted areas.
	 Number of RAMED beneficiary households receiving free care for essential health services. 	Assessing whether utilization of essential health services for the poorest households has improved in the targeted areas.

Component 1: Strengthening Health Service Delivery through Performance Based Financing at Facility Level	 Percentage of health facilities receiving PBF grants on time. New curative consultations per capita/year. Percentage stock outs of tracer drugs in healt centers. Percentage of health facilities benefiting from quarterly technical supervision visits by district health services (ECD). Number of CHWs benefitting from dedicated supervision. 	1
Component 2: Strengthening Community Health Activities	 Number of households receiving proactive community case management visits. Percentage of children under 5 with confirme malaria who received antimalarial treatment within 24 hours of symptom onset. Number of Couple-Year Protections (CYP) reached through project interventions. Percentage of children aged 6-59 months screened by community health workers for acute malnutrition. 	Measuring the impact of strengthening community health services
Component 3: Strengthening Stewardship and Health System Performance	 15. Completion rate of health facilities DHIS2 reports. 16. Percentage of maternal and child deaths with determined cause of death (CoD). 17. Number of private health facilities assessed for accreditation by MoH 18. Percentage of CScoms producing annual micro-plans validated by district health services (ECD). 	Tracking improvement in the health information system Tracking improvement in Civil Registration and Vital Statistics (CRVS) Tracking improvement in accreditation of health facilities Measure the local capacity to monitor and implement health policies

B. Project Components

54. The proposed Project components are aligned with the strategic priorities of the national sectoral plans PRODESS III (2014-2018) and PRODESS IV (2019-2023, under preparation). The Project intends to achieve the PDO by: (i) shifting from input to output and results-based financing at the health facility level; (ii) strengthening the impact of community health workers to respond to the immediate needs of the population for essential health services, including nutrition; and (iii) supporting government health system stewardship for improved performance. A fourth component for this project consists of a CERC which will allow for rapid reallocation of project proceeds in the event of a natural or man-made disaster or crisis. Table 4 below provides an overview of the financing distribution proposed for each components and sub-components.

Table 4: Overview of components and financing by component in US\$ million

Project Components	Total	IDA	GFF TF	UHC TF
1. Strengthening Health Service Delivery through Performance	67.4	34.0	4.0	29.4
Based Financing				
1.1 Performance-based payments	52.0	26.0	3.0	23.0
1.2 Support to the implementation and supervision of	15.4	8.0	1.0	6.4
Performance-Based Financing				
2. Strengthening Community Health Activities	13.0	10.0	3.0	ı
2.1 Strengthening the performance of community health workers	11.0	8.0	3.0	ı
2.2 Supporting the implementation of integrated management of	2.0	2.0	-	-
acute malnutrition				
3. Strengthening stewardship for improved health system	9.0	6.0	3.0	-
performance				
3.1 Strengthening HMIS and CRVS for precision public health	3.5	2.0	1.5	1
3.2 Strengthening stewardship and financial governance	2.5	1.0	1.5	ı
3.3 Project management, and monitoring	3.0	3.0	-	-
4. CERC	0.0	0.0	0.0	-
Total Project Cost	89.4	50.0	10.0	29.4

Component 1: Strengthening Health Service Delivery through Performance Based Financing (US\$67.4 million: SDR 24.3 million (US\$34 million equivalent) IDA, US\$4 million GFF TF, and EUR 25.7 million (US\$29.4 million equivalent) UHC TF)

- 55. Component 1 will provide output-based financing to strengthen the provision of quality services at health facility level and at the level of community health workers.
- A PBF approach will be developed whereby PBF Grant Agreements will be signed between an independent Contract Development and Verification Agency (CDVA) and the health facilities. PBF Grants will be paid based on results achieved and verified. The PBF Grants will be introduced at the level of community health centers (CScoms) and at first level referral hospitals (CSRefs). Grassroots organizations will be engaged to measure service use and client satisfaction. Component 1 will also strengthen public-private engagements in the health sector via PBF whereby accredited private for-profit facilities will be contracted out for the provision of quality health services.

- 57. Component 1 will cover all health districts in the region of Koulikoro, which have previous experience with PBF pilots, and three additional health districts in the regions of Mopti and Ségou. The prioritization of health districts to target was conducted during a technical PBF workshop in Bamako. Prioritization criteria included but were not limited to: (i) previous experience with PBF pilot, (ii) poverty incidence, (iii) safety net project coverage (Jigisèjèmiri), (iv) ongoing or planned rehabilitation of CScoms and CSRefs and (v) synergy with the decentralization projects supported by the Netherlands (*Programme de Gouvernance Locale Redevable*) and by the World Bank. The targeted health districts cover about 4.5 million Malian, or about 25 percent of the estimated population. In addition to the targeted health districts of Koulikoro, Ségou and Mopti, 10 CScoms recently constructed or rehabilitated in the northern regions will be selected to receive PBF payments. Overall, component 1 will cover about 731,000 children under the age of 5, and 1 million women of reproductive age.
- 58. The Netherlands have pledged an amount of approximately US\$29.4 million equivalent to support Component 1 of the Project through a contribution to a recipient-executed World Bank-administered multi-donor trust fund (Mali Universal Health Coverage Trust Fund, UHC TF). This amount is based on the estimated US\$ equivalent of the total donor contribution, net of trust fund administration fees, and a Bank-executed TF of approximately US\$3.4 million, expected to be pledged for Component 1 recipient-executed activities under the UHC TF at the time of appraisal. The Project scope and Results Framework which have been appraised are inclusive of this total estimated amount of multi-donor trust fund (MDTF) contributions. The Grand Agreement between the World Bank and Mali will include the total amount of the initial installments deposited by the donor in the MDTF account, and this amount will be amended as and when the donors deposit additional installments of their total pledged contributions in accordance with the schedule of payments specified in the MDTF Administration Agreement between the World Bank and the respective donors. The funding is expected to be available (at the grant level) in April 2019.

Subcomponent 1.1. Performance-based payments (US\$52.0 million: SDR 18.6 million (US\$26 million equivalent) IDA, US\$3 million GFF TF, and EUR 20.1 million (US\$23.0 million equivalent) UHC TF)

- 59. This subcomponent will provide performance-based payments to health facilities (CScoms, CSRefs and accredited private facilities) conditional on the quantity and quality of services delivered to the population. The services offered will be via in-clinic activities and via health-outreach activities delivered by Community Health Workers (CHWs) for basic preventative and referral health services. The package of services covered will focus on cost-effective RMNCAH+N interventions selected by the MoH. Payments will be made on monthly basis after verification and validation of quantity and quality of services by an independent agency (CDVA) and the regulator (district level medical team for CScom (Équipes Cadre de District, ECD) and regional medical teams for CSRefs). Contracted health facilities will use PBF payments to (i) increase the quality and the quantity of health services provided at the facility and community levels; and (ii) provide financial incentives to health facility staff and community health workers based on performance achieved, measured, and verified.
- 60. **PBF payments will be made to health facilities based on the quantity and the quality of services provided.** Two health service packages will be defined for health center level (Minimum Package of Activities, MPA), and for first referral hospital level (Complementary Package of Activities, CPA). The health service packages will focus on reproductive, maternal, neonatal, child and adolescent health, and

nutritional service (RMNCAH+N) with an emphasis on services provided by community health workers, including proactive approaches. In addition, indicators related to the provision of basic health services by the CScom staff and the CHW in schools will also be purchased. A quantified quality checklist will be designed for each level of the service package and will provide the foundation for measuring the quality of services provided. The quality checklist will introduce measures related to: (i) management and governance of health facilities, including the availability and competence of medical staff; (ii) clinical indicators (rational prescribing of generic drugs, essential drug management and availability of tracer drugs); and (iii) user satisfaction. Facility payments will be made quarterly, based on a set of incentivized indicators (defined by the MoH) emphasizing, and after quantity and quality of services have been declared and verified (ex-ante and ex post). The selection of the health services packages, the level of subsidies for each service and their relative weight, and the service quality indicators will be defined following a modified Delphi method¹⁶.

- 61. The project will also introduce financial mechanisms to improve access among poor and vulnerable households to essential health services at community and health facility levels. The mechanism used to identify the poor and vulnerable households will be aligned with the targeting mechanisms used by the Emergency Safety Net Project (Jigisèjèmiri, P165064, IDA Grant H8350-ML) and with the national targeting mechanisms used by the RAMED and defined under Government Secretary General Decree N°2011-723/P-RM (November 2, 2011). Currently Jiqisèjèmiri is implemented in 19 districts and 119 communes in Mali covering about 62,000 poor and food insecure households, and a recent additional financing was approved by the World bank to increase coverage to 100,000 households, including in the northern region. Jigisèjèmiri beneficiaries are identified based on a mix of geographic and community-based targeting. Identification of RAMED beneficiaries is conducted by social services using means and proxy-means testing. In 2018, about 290,000 beneficiaries are registered under RAMED, this represents about 1.6% percent of the population for a target of 5 percent of total population. While the targeting mechanisms used are slightly different, there is substantial overlap in the definition of the beneficiary population under Jigisèjèmiri and RAMED. Administrative data show that about 80 percent of all Jigisèjèmiri beneficiaries are also RAMED beneficiaries.
- locentives to provide effective health care to poor and vulnerable households at health facility levels will be introduced through PBF. Two levels of PBF subsidies will be introduced, a basic subsidy for services provided to regular patients, and, for a subset of selected services, a higher subsidy (basic subsidy multiplied by a multiple factor) for patients identified as poor or vulnerable. In addition, another equity bonus will be introduced to increase the basic subsidy for facilities that are negatively affected by factors such as: (i) lower density of population in catchment area; (ii) higher poverty incidence in the catchment area; (iii) average distance between facility and population; and (iv) security risk.
- 63. **Service provision in insecure areas**. Adjustments to the standard PBF contracting model will be introduced for more flexibility to adapt to areas where service delivery is challenging as the security situation remains volatile in the North and in the Center of the country. First, *in case of emergency when health facilities are still functioning*, PBF subsidies will be increased by a factor up to four times the standard subsidies during the crisis period. The proportion of patients fully exempted of fees will also be

¹⁶ The Delphi method is a consensus building approach recommended for use in healthcare settings. This method is an iterative process that uses a systematic progression of repeated rounds of voting and is an effective process for determining expert group consensus where there is little definitive evidence and where opinion is important.

increased to 50 percent, 75 percent, or 100 percent of the patients received, depending on the severity of the crisis. Second, *in insecure areas where CScoms are not functioning*, innovative approaches to address these challenges will involve greater mobility of providers and service points and greater connectivity between users and providers.¹⁷ In these situations, NGOs could be subcontracted by the Government of Mali to deliver basic health services to its population. In the norther regions of Mali for example, NGOs have already partnered with the MoH to deploy *mobile health teams* to provide a package of basic services for hard-to-reach communities and *nomadic health teams* to follow nomadic communities to provide both animal and human health services. These teams are composed by medical staff from the NGOs and from the local district hospital (CSREf). The package of services provided usually includes vaccination, diagnostic and treatment for basic illnesses, prenatal checkup for pregnant women, nutritional screening, micronutrient supplementation, growth monitoring, de-worming and inoculation of animals against common diseases.

- 64. Subcomponent 1.2. Support to the implementation and supervision of Performance-Based Financing US\$15.4 million: SDR 5.7 million (US\$8.0 million equivalent) IDA, US\$1.0 million GFF, and EUR 5.6 million (US\$6.4 million equivalent) UHC TF). This subcomponent will support PBF implementation and supervision (capacity building, verification and counter verification, IT system, etc.). The Project will support the establishment and functioning of CDVAs in each region covered, using either the CANAM services or NGOs as verification agents. A contractual agreement will be signed between the Ministry of health and CANAM or NGOs to establish CDVA team in each region. Given the large size of Koulikoro region (both in terms of geography and population), which will be completely covered, agency annexes will be established in each district (or batches of districts, depending on the size of each district and logistical considerations). The contract management and verification for PBF implementation is estimated to be no more than 19 percent of the total PBF budget, which is in-line with international experience.
- 65. Capacity building, training programs and technical assistance will be supported under sub-component 1.2. Given the need of well-trained people for the successful implementation of PBF, this sub-component will also support capacity building activities related to PBF through training and technical assistance. Training workshops will be organized in Mali to train more people on PBF. Senior level staff will participate to international PBF training abroad and study tours will be organized in selected countries where PBF is successfully implemented or at scale. Consultants will be recruited for technical assistance to the National Technical Unit as well as Contract Development and Verification Agency in regions.
- 66. Bank-Executed Trust Fund resources (US\$ 3.0 million) from the Netherlands Development Association will also be contributed into the UHC TF to finance analytic and advisory work, research, and systemic diagnostic activities to support the implementation of PBF in Mali. These Bank-executed activities will be complementary to the Project activities by providing detailed analytical understanding of bottlenecks related to (i) service delivery, (ii) health financing, and (iii) information and M&E systems.

Component 2: Strengthening Community Health Activities (US\$13.0 million: SDR 7.14 million (US\$10.0 million equivalent) IDA and US\$3.0 million GFF)

¹⁷ Chambers et al. (2013) Innovations in Service Delivery: International Experience in Low Density Countries. ODI report.

- 67. Component 2 will provide input-based financing to strengthen the performance of CHWs, to support short term financing needs for the implementation of integrated management of acute malnutrition (IMAM), and to support the delivery of basic services in the north of the country.
- 68. Subcomponent 2.1. Strengthening the performance of community health workers (US\$11.0 million: SDR 5.7 million (US\$8.0 million equivalent) IDA and US\$3.0 million GFF). This subcomponent will provide additional support to reinforce the services delivered by the CHWs to ensure that services supported through PBF payments are of high quality and impact. The scope of activities supported will include expanding high impact interventions such as proactive CHW visits with dedicated supervision, building on successful C4D programs and developing activities to reduce disparities between men and women in accessing health services.
- A proactive CHW home visit model has been piloted by the MoH and was associated with dramatic reduction in under 5 mortality rates. The approach relies, among other factors, on: (i) proactive case detection by the CHWs to the population (at least two hours per day for every CHW); (ii) doorstep care with CHWs providing health and family planning counselling, diagnosis, treatment, and referral according to standard protocols for integrated community case management; and (iii) dedicated supervision with CHWs receiving monthly individual supervision sessions and weekly group supervision sessions from a CHW supervisors. Proactive CHW visits will be supported through Component 1 and in the targeted health districts for PBF, through the definition of indicators to purchase at the CScom level related to the CHWs key activity under this model (proactive case detection, doorstep care, and dedicated supervision). Proactive community case management will also be stimulated through subcomponent 2.1 by financing the acquisition of the CHWs equipment to perform these activities (digital equipment such as mobile phones and tablets with task management software, basic medical and family planning commodities).
- 70. Intense C4D activities were highlighted as one of the most important drivers of impact in the previous Strengthening Reproductive Health Project. C4D involves understanding people, their beliefs and values, and the social and cultural norms that shape their lives. It involves engaging communities and listening to adults and children as they identify problems, propose solutions and act upon them. C4D activities will target women, youth, men, local authorities, health personnel, community health agents, and community leaders across the same targeted health districts as under Component 1 to influence the enabling environment, attitudes and acceptance of reproductive health (RH) use, as well as actual use of RMNCAH+N services by women and adolescents. It will include radio and television emissions, video from religious leaders, songs by famous musicians, peer education, community advocacy and dialogue. The communication strategy will be to undertake social marketing and behavior change communication with the objective of increasing the utilization of RMNCAH+N services and address key traditional practices such as early marriage and female genital mutilation. Community health workers will be trained in recognizing GBV and victims of FGM and supporting them in obtaining help. C4D activities will also address issues of GBV including FGM. The development of strategic communication plans as well as monthly community discussions will target both men and women to address FGM and its impact on the health of women and young girls. The Project will also help increase the demand for youth health services,

¹⁸ The 360-supervision model consists of: (i) group supervision sessions between the supervisor and a group of CHWs; (ii) patient feedback audit where supervisors conduct monthly home visits without the CHW present; (iii) monthly CHW shadowing where the supervisor directly observes the CHW during home visits; and (iv) one-on-one feedback between the supervisor and the CHW using a Performance Dashboard.

particularly among young girls and adolescent. The MoH will call for NGO proposals and the NGOs will be selected in accordance with the World Bank Procurement Regulations for Investment Project Financing (IPF) Borrowers-Consulting Services. The cycle of calls for proposals, submission, review, approval, evaluation and payments will be included in the Project Implementation Manual to be approved by the World Bank.

- 71. Subcomponent 2.2. Supporting the implementation of integrated management of acute malnutrition (SDR 1. Million (US\$2.0 million equivalent) IDA). The Malian protocol for IMAM has recently been revised (2018), and the revision highlighted the need to reinforce the frontline and community service delivery agents. Under this subcomponent, the Project will finance (i) nutritional inputs, (ii) workshops, consultants, and trainings to support the implementation of the revised IMAM protocol through community-based services. Nutritional inputs will be procured and distributed through UNICEF in accordance with the national nutrition strategy.
- 72. Bank Executed Trust Fund resources (US\$0.2 million) from the GFF will also be used to finance analytic and advisory work, research, and systemic diagnostic activities to support the implementation of component 2. These Bank-executed activities will be complementary to the Project activities by providing detailed analytical understanding of bottlenecks related to (i) service delivery, (ii) health financing, and (iii) information and M&E systems.

Component 3: Strengthening stewardship for improved health system performance (US\$9.0 million: US\$6.0 million IDA and US\$3.0 million GFF)

- 73. Subcomponent 3.1: Strengthening the HMIS and CRVS for precision public health (US\$3.5 million: US\$2.0 million IDA and US\$1.5 million GFF). The Project will finance the development of an integrated HMIS platform to monitor the implementation of the GFF Investment Case and of the PRODESS IV. Significant gaps are noted in the quality of RMNACH information. Timeliness, completeness and data quality remain a challenge for the information system through the DHIS2 (District Health Information System 2) platform. Moreover, Mali does not have sufficient data on civil registration and vital statistics (CRVS). While Malian researchers have participated in creating some of the most important infectious disease research in the world, there is a serious lack of underlying data on which to base the burden of disease estimates for the country. Mali received only 1 out of 5 stars for mortality data quality, ¹⁹ with only 4.3 percent of deaths registered. Routine surveillance based on case reports from CSRefs and hospitals is virtually non-functioning. Periodic DHS and MICS do exist in Mali, but they do not report on cause of death.
- 74. Under this subcomponent the Project will support the: (i) the development and integration of existing data platforms at health facility and, CHW level, as well as data collected from private health facilities, into DHIS2; (ii) two rounds of SDIs (health module); (iii) the digitalization of a health sanitary facilities map, including private facilities into a Geospatial Reference Database (GRD); and (iv) the development of a Sample Registration System (SRS). The GRD system will create the sampling frame and other supporting information, upon which SDI and SRS will be conducted. Death registrations and other

¹⁹ GBD 2016 Causes of Death Collaborators M, Abajobir AA, Abbafati C, et al. Global, regional, and national age-sex specific mortality for 264 causes of death, 1980-2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet (London, England) 2017; 390: 1151–210.

information from hospital information systems, if of sufficient quality and completeness, will be incorporated into the SRS through the enumeration areas.

- Data platforms to support computerized (mobile and connected) system in health facilities seek to improve the quality of health care provided in rural areas in Mali, fostering team work around prevention and curative activities. A system of computerized individual health records is currently implemented in 13 health facilities directed by community general practitioners. This initiative enables rural and isolated populations, as well as health professionals working in those areas, to benefit from the use of new information and communication technologies applied to the health sector. The individual health record enables the personalized follow-up of each patient (diagnosis and treatments history, family planning, immunization, nutrition, chronic diseases and pregnancy follow-up), with quantitative and qualitative data disaggregated by sex and age for women, men, children under five and persons living with chronic or serious diseases. An alert system inserted in the database enables health professionals to list and contact all patients who need a follow-up consultation. Disaggregating quantitative and qualitative data by age and sex allows studying women and children access to health services. The initiative also provides health professionals with diagnostic and prescription assistance, gravity alarms and continuing education tools. Sensitization and communication activities towards local communities, leaders, health professionals and traditional health providers intend to foster behavior changes in terms of nutritional care and reproductive health and to improve early access to health services. This subcomponent will finance (i) the development of such data platforms in facilities that are not yet equipped including health SMEs, and (ii) the integration of this data platform into DHIS2.
- SDI surveys provide a set of metrics to act as benchmarks for the performance of health facilities. The overarching objective of the SDI is to ascertain the quality of service delivery in basic health services (including availability of basic inputs, presence/absenteeism of medical staff in health facility, service provider knowledge and competence). SDI survey teams visit a representative sample of health facilities. The surveys they produce are intended to be representative of rural and urban areas, public and private providers, and at the regional level. Visiting unannounced, SDI teams assess the levels of absenteeism among health workers. Health workers are assessed with patient case simulation or vignettes. The results enable governments and service providers alike to identify gaps and bottlenecks, as well as track progress over time, and across countries. The broad availability, high public awareness, and a persistent focus on the indicators that SDI provide, will help mobilize policymakers, citizens, service providers, donors and other stakeholders to take the necessary steps to improve the quality of service delivery, and thereby improve development outcomes. This subcomponent will finance two rounds of SDI-Health surveys (design, data collection, analysis and dissemination of results) one before the Projects starts, and one at the end of the Project.
- The GRD project will produce validated, basic reference layers (including settlement names, and locations, administrative boundaries, and population level estimates) that are available for the Government of Mali and that can be made available to in-country stakeholders. This subcomponent will finance the digitalization of the health sanitary map (public and private facilities) and its integration to GRD.
- Pioneered in China and India, SRS are the best way to obtain CRVS data in low and middle-income

settings.²⁰ SRS systems work by identifying representative enumeration areas across a country. Field workers go to those areas on a regular basis, asking about recent births and deaths. If a death is detected, they administer a questionnaire to determine the cause of death. This system then gives the government current data on the birth rates, mortality rates and causes of death in all regions of the country. Importantly, it also allows to update population numbers, so that the demographic profile (age, gender), the location and number of citizens can be reliably estimated on a continuous basis. This subcomponent will support the development of a Sample Registration System in Mali by supporting systematic CRVS assessment with a focus on SRS, technical workshops and technical assistance.

- 75. The project will support private data collection efforts as well as digitization of data by complying with the legal provision regarding personal data protection in Mali. A law has been adopted by the Malian National Assembly in 2013 (Law N° 2013-015) to provide a legal framework offering a protection to the Malian population regarding privacy and misuse of personal digitized data.
- 76. Subcomponent 3.2: Strengthening stewardship and financial governance (US\$2.5 million: US\$1.0 million IDA and US\$1.5 million GFF): This subcomponent will focus on providing support in the areas of planning, budgeting, and program execution at central level and at the level of local collectivities. Activities financed under this subcomponent will consist of analytical work and technical assistance to support: (i) strengthening the capacity of the ANAM to target and enroll the indigents in the noncontributory health financing scheme (RAMED) and into the RAMU; (ii) the establishment of public-private partnerships, by expanding the accreditation of private health facilities, and by building managerial capacities for health SMEs; (iii) the production of annual National Health Accounts; and (iv) the development of a detailed plan for investment in the health sector. The detailed investment plan will be developed to support the national health financing strategy policy and the implementation of PRODESS IV.
- 77. **Subcomponent 3.3:** Project management and monitoring and evaluation (US\$3.0 million IDA): The objective of this subcomponent is to ensure an effective and efficient technical and fiduciary management and implementation of the project. This includes day-to-day management of project activities including recruitment of necessary staff to ensure an effective coordination and implementation of the Project (coordinator, financial management specialist, PBF focal point, monitoring and evaluation specialist) and related expenses. Expenses related to this sub-component will include technical assistance, consultants, workshops, formal trainings, on the job trainings, study tours, surveys and other types of evaluation tools, as well as coordination and communication activities. Equipment required for staff involved in project implementation (e.g. IT, cars, utilities) will also be included. Activities related to monitoring and evaluation of the Project component (facility and household surveys, iterative beneficiary monitoring).
- 78. Bank Executed Trust Fund resources (US\$0.8 million) from the GFF will also be used to finance analytic and advisory work, research, and systemic diagnostic activities to support the implementation of component 3. These Bank-executed activities will be complementary to the Project activities by providing

²⁰ Jha P. Reliable direct measurement of causes of death in low- and middle-income countries. BMC Med 2014; 12: 19.

detailed analytical understanding of bottlenecks related to (i) service delivery, (ii) health financing, and (iii) information and M&E systems.

Component 4: Contingent Emergency Response Component (CERC) US\$0

- 79. The objective of this component is to improve the Government's response capacity in the event of an emergency, following the procedures governed by IPF Bank Policy paragraph 12 and 13 (*Projects in Situations of Urgent Need of Assistance or Capacity Constraints*). There is a moderate to high probability that during the life of the project the country will experience an epidemic or outbreak of public health importance or other disaster which causes a major adverse economic and/or social impact (e.g. Ebola), which would result in a request from the country to the World Bank to support mitigation, response, and recovery in the region(s) affected by such an emergency. In anticipation of such an event, this CERC provides for a request from the country to the World Bank to support mitigation, response, and recovery in the district(s) affected by such an epidemic. The CERC will serve as a first line financing option during an emergency response, IDA funding that hasn't been used will be allocated to this component in the case of an emergency.
- 80. An immediate CERC Operations Manual (OM) will be prepared by the country in complement to the Project Implementation Manual (PIM) as a condition of disbursement as soon as possible after project effectiveness. Triggers for the CERC will be clearly outlined in the PIM and the CERC OM acceptable to the World Bank. Disbursements will be made against an approved list of goods, works, and services required to support crisis mitigation, response and recovery.

C. Project Beneficiaries

- 81. The primary beneficiaries of the project will be women of reproductive age, and adolescents and children through increased utilization of quality RMNCAH+N services in the health districts targeted for PBF, and in the areas of intervention in the north of the country (10 CScoms). The Project will target the following areas:
 - All the 10 sanitary districts in the region of Koulikoro
 - 3 sanitary districts in the region of **Mopti** (Bandiagara, Bankass, Mopti)
 - 3 sanitary districts in the region of **Segou** (Baraouéli, Bla, Ségou)
 - 10 CScoms in the region of Gao
- 82. These targeted areas represent about 4.5 million Malians, including 731 thousand children under five years of age and about 1 million women between the age of 15 and 49 years old. By strengthening the overall quality of services provided at the health facility level, the Project will also indirectly positively affect the larger population set in the intervention areas.

D. Results Chain

83. **The general theory of change is illustrated in Figure 6 below.** Component 1 will contribute to the PDO by increasing the volume and quality of health service provision through performance-based financing and by increasing the degree of financial risk protection of the poorest through the user-fee

exemption for the poorest households. Component 2 will contribute to achieving the PDO through improved performance and efficiency of human resources in the health sector, especially the CHWs, and through more equitable health financing by supporting the delivery of essential health services in the North of the country. Finally, component 3 will contribute to strengthening the efficiency of public fund allocation to the health sector by supporting precision public health instruments and by reinforcing the capacity of MoH to coordinate donor efforts and to implement evidence-based health financing strategies.

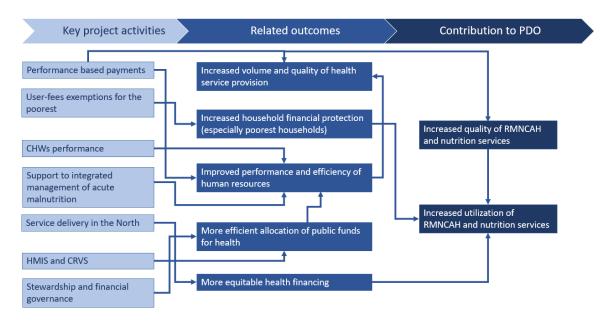


Figure 6: Theory of change

E. Rationale for Bank Involvement and Role of Partners

- 84. The Bank's comparative advantage and technical expertise is crucial to supporting Mali's health sector. Health sector interventions and experience from other sectors such as social protection, private sector, energy, decentralization all contribute to improving health outcomes. The Mali Reconstruction and Economic Recovery project (P144442) has rehabilitated several community health centers and the energy department seeks to equip community health centers with solar panels. Mali's weak political environment and ongoing conflict in the North, have hampered the MoH's ability to efficiently address financial and social shocks. The country's burden of disease, weak capacity and low health purchasing power are reasons for the Bank's contribution to partners' ongoing support.
- Sectoral partners have together developed synergies of interventions and have rallied around the country's health strategy. The Programme de Développement Socio Sanitaire (PRODESS) which is now in the third five-year implementation phase and the fourth phase (2019-2024) is under development. Health sector partners have a thematic group which convenes once and month. The chairmanship of the health thematic group is selected every two years. The group discusses key issues affecting the health sector as well as individual partners contribution to the country's health system and concerns associated with implementation of their individual support. The French Development Agency, UNICEF and NGOs have

interventions in the North which address gender-based violence, human rights and health service delivery. The Netherlands interventions in health focus mainly on Sexual and Reproductive Health and Rights with specific attention for full information and access to family planning (FP) for adolescents. In the regions of Mopti and Segou, the Dutch intervene on increasing the demand through the *Debbo Alafia* program, support UNFPA in reaching the last mile with contraceptive products and support coordination). Canada's focus is mostly on gender issues and equity in accessing health services. WHO also plays a role in the traditional advisory capacity to the Ministry of Health and epidemiological surveillance. The Global Fund has contributed over \$262 million for TB, HIV and Malaria. In addition to development partners, the project is expected to attract private sector investments through potential public private partnerships for improving the quality of services. An updated and comprehensive donor mapping will be conducted to prepare and inform the GFF investment case.

86. Some partners have expressed interest in co-financing the project, and discussions to formalize the co-financing agreement are underway. Ongoing discussions have taken place with GAVI to co-finance the PBF component by covering the purchase of immunization coverage indicators in priority districts through a US\$4 to 5 million equity window under the Resources for System Strengthening. A co-financing grant from the Dutch Cooperation is currently being processed for the PBF component of this Project for EUR 30 million over the period 2019-2022. The co-financing by the Netherlands will be provided through an MDTF. This contribution will support the implementation of activities under component 1 in the regions of Mopti and Ségou.

F. Lessons Learned and Reflected in the Project Design

- 87. The Project design builds on lessons from previous and ongoing World Bank operations as well as interventions from other donors working on the health sector. The Project has also drawn lessons from other programs being implemented in other FCV countries. Key projects which have influenced the design of this current project are: SWEDD, the Regional Disease Surveillance Project (REDISSE), the Regional Malaria and Neglected Tropical Disease, which show that putting an emphasis on community interventions which target women and children are crucial to improving key health outcomes. Key lessons from the FY12 Strengthening Reproductive Health project's ICR were incorporated in the design of this project (successful C4D activities and PBF, implementation arrangements, and monitoring and evaluation). In addition to health-related projects, the current design seeks to strengthen the health sector by expanding grassroot collaboration between social protection programs and health SMEs. Indeed, regional and global trends show that integrating health SMEs in the delivery of essential services strengthens the overall health system, and Mali's long-standing experience in using private health providers at the community level informed the design of key activities particularly in the conflict-ridden Northern part of the country. A recent assessment of social insurance for the indigent also provided key lessons in fine tuning indicators to address gender gaps. This project has made sure that indicators are selected in a participatory manner and are adapted to the social context. Project design was also shaped by lessons from other projects in the areas of:
 - a) Harmonization of interventions: Several donors focus on RMNCAH+N; both traditional partners (UNICEF, UNFPA) and bilateral, Canada, USAID, the Dutch cooperation, France (strong presence in the North and at the decentralized level supporting communes), GAVI are energized by the

World Bank's involvement and have been key players in shaping the implementation arrangements for this current operation.

- b) Complementarity with other stakeholders working in areas covered by the project to deliver services in hard to reach areas such as the North of Mali. The project will rely on partners operating in those areas for supervision and to conduct key interventions through contracting with those entities operating under security constraints.
- c) Strengthening the overall health system which is key to improving accessibility of services. The project seeks to consistently monitor progress, strengthen different levels of the Malian health pyramid and work very closely with health SMEs to deliver effective services at the community level.
- d) Addressing gender-based violence: Experience from projects in FCV contexts is clear that addressing gender-based violence such as female genital mutilation, domestic violence, negative traditional customs through strong, systematic and well-defined communication for development activities, have been instrumental in reducing based violence. The project has put emphasis on well-defined C4D activities that will seek to curb gender -based violence and give women a voice for making choices about their reproductive health.
- 88. The Project also builds on the recent 2018 Advisory Services and Analytics (ASA) on Health Service Delivery in Fragile States: Options for Mali (P163400). In terms of design aspects, the ASA recommended focusing on: (i) contracting approaches, especially in areas of high fragility; (ii) performance -based financing; (iii) demand side interventions such as C4D; (iv) maximizing alignment with other technical and financial partners; and (v) strengthening community outreach approaches. In terms of institutional arrangements, the ASA recommended the recruitment and establishment of dedicated project coordination staff at central and regional level, sub-contracting of specific technical and managerial functions to capable agencies and non-governmental organizations (NGOs), and focused investment in capacity building over the initial years of project implementation. In terms of financing instrument selection, the ASA recommended using classic IPF instruments either combined with outputbased financing approaches such as PBF, or with disbursement-linked indicators. Discussions took place on whether IPF-DLI and PBF could be combined, but the combined design was deemed too complex given the environment and given the fact that the previous PBF pilot has not been given enough time to mature. Between IPF-DLI and IPF-PBF, the team favored the latter option as it sets the performance incentives closer to the service providers. Moreover, the governance team is currently preparing a fiscal decentralization project which could include DLI financing at the level of the communes to improve management capacity for education and health expenditures. The IPF-PBF approach for the health project was deemed as a better complement to the fiscal decentralization project. In the future, there can be a natural transition from process and input intensity of a regular IPF to greater results orientation of a program-for-results, as the client acquires stronger capacity in managing fiduciary and other risks.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

- 89. At the highest level, the Project will be coordinated by a Steering Committee headed by the Minister of Health or his designee. The Director of the CPS, as well as representatives from key ministerial lines (including MEF, Ministry of Solidarity, Ministry of Women, Children and Family) and relevant technical and financial partners will also be part of the Project Steering Committee. The Steering Committee will provide high level strategic and technical guidance and will participate in the evaluation of the progress of the Project. The Steering Committee will convene bi-annually to evaluate and monitor the implementation of the costed annual action plan.
- 90. To support the oversight of the Project Steering Committee, a Technical Working Group will be created. The Technical Working Group will be headed by the CPS and will be composed of technical managers of the line ministries represented in the Steering Committee. The Technical Working Group will define the project's work program and budget and provide technical support to all levels of implementation. A PBF National Technical Unit (*Cellule Technique Nationale FBR*) will also be created to oversee day to day implementation of the PBF component and for informing the Technical Working Group and the Steering Committee of the progress achieved in implementing the PBF model. The Director of the PBF National Technical Unit will be part of the Technical Working Group. The Technical Working Group will convene quarterly to monitor activities agreed upon for implementation set forth in the costed action plan. Allocation of funds for activities and monitoring of expenses will be further detailed in the Project Implementation Manual.
- 91. A dedicated Project Implementation Unit (PIU) will be created to manage day to day implementation and coordination of Project activities. The APUHC-PIU will be staffed by a multidisciplinary team including a dedicated coordinator, a financial management specialist, a Monitoring and Evaluation (M&E) specialist, a data specialist, a safeguard specialist, an accountant, a procurement specialist, an internal auditor, a communication specialist, and administrative assistants. Day-to-day project coordination, implementation and management at the central level will be handled by the project implementation unit (PIU) reporting to the Technical Working Group. To ensure strategic alignment, maximize synergies and avoid financing duplication, the APUHC-PIU will also report to the current sectoral coordination unit managed by the Ministry of Health for the other two ongoing regional projects (Malaria and Neglected Tropical Disease Project (M/NTD), and REDISSE). The APUHC-PIU will assume, among others, complete fiduciary management responsibilities, overall planning, internal auditing and M&E. The project aims as much as possible to align with Government systems and integrate into existing structures rather than creating parallel systems. The recruitment of PIU staff will be supported through the Project Preparation Advance (PPA and the establishment of the PIU is an effectiveness condition. The overall institutional arrangements are summarized in Figure 7.

Key function Structure Chaired by Minister of Health or designee High level strategic oversight **Project Steering Committee** Min Solidarity Min Women/Children/Family CPS Relevant partners Multisectoral coordination Technical Working Group Alignment with national sectoral MoH technical directions Min. Solidarity technical directions Min. Women and Children technical directions policy (PRODESS) Sectoral Coordination Unit (Malaria/NTD and REDISSE) PIU Coordinator Overall project management **Project Implementation Unit** Data specialist Internal auditor Safeguard Communication

Figure 7: Institutional arrangements

- 92. The Project will rely on regional and district health authorities to supervise and coordinate the activities at decentralized levels, including management of inputs, oversight of health facilities to supervise and verify the quality of services provided under PBF contracts; they will also be responsible for data collection at decentralized levels. CScom workers will be responsible for delivering the PBF and community services as presented under the project description. In addition, they will support the mobilization of communities and their selection in relation with the NGO.
- 93. Performance frameworks will also be introduced at all levels of the health system. These contracting mechanisms will hold regional health directorates (DRS - Direction Régionale de la Santé), Health Zone Teams (ECD- Équipes Cadre de District) accountable for their results through strong incentive mechanisms. Internal performance frameworks will clearly outline the expected performance of the different DRSs and ECDs vis-à-vis their roles in the health system and lead to successfully scaled up PBF approaches. Results from the organizational performance will be benchmarked on a publicly visible website.
- A PPA (amounting to US\$ 2 million) has been requested and obtained by the Ministry of Health (MoH) to conduct the following project preparation activities: (i) evaluation of health center's needs; (ii) finance a technical workshop to define the package of PBF services, their subsidy level and relative weights; (iii) conducting an implementation analysis of the new nutrition Protocol Inside Health Facilities (PCIMA); (iv) supporting technical assistance and recruitment of PIU staff, of the National PBF Unit staff, and of the CDVA for the PBF implementation; (v) conducting analytical work to prepare the GFF

investment case; (vi) baseline impact evaluation survey; (vii) first round of SDI survey and (vii) preparation of project documents such as safeguards instruments, medical waste management plans and bidding documents related to the rehabilitation of health center and hospitals (completed); (ix) preparation of procurement documents (Project Procurement Strategy for Development, PPSD and Procurement Plan, PPM, both completed); (x) mapping of health SMEs; (xi) a gender analysis.

B. Results Monitoring and Evaluation Arrangements

- 95. The Results Framework focuses on accountability for results in the delivery of RMNCAH +N services. The project approach to results monitoring aims at extending beyond tracking of inputs and outputs by placing a strong emphasis on intermediate outcomes. When possible, the proposed results framework will use existing indicators and data to measure the progress of both the project and its contribution to the national sectoral strategy (PRODESS IV); this will benefit the program by strengthening and increasing the efficiency of existing data collection mechanisms.
- 96. Routine monthly and quarterly data collected via the web-based PBF system will be aggregated for the project's quarterly and annual indicators and be linked to the national HMIS system (currently being reinforced by the scale-up of DHIS-2). The project monitoring system will include (i) identification and consolidation of M&E indicators; (ii) training and capacity building initiatives at the national, regional, and local levels; (iii) standardized methods and tools to facilitate systematic collection and sharing of information; (iv) an independent review by external technical consultants (External Evaluation Agency); (v) annual program evaluations and strategic planning exercises for each component, and (vi) lighter and more frequent data collection instruments such as Surveys of Well-being via Instant and Frequent Tracking (SWIFT) surveys and Iterative Beneficiary Monitoring (IBM).
- 97. **Enhanced Monitoring and Evaluation.** Over the last few years, supervision of operations supported by the WBG in Mali has been constrained by protracted insecurity particularly on project areas directly affected by the conflict that erupted since 2012. The Project will rely on approaches that the WB teams have piloted. The enhanced monitoring and evaluation approach was piloted in the region of Gao in North Mali where the risk to conduct field visits in insecure and remote areas is high. Under this approach, reporting on project activities is transferred to third party monitoring firms which conduct field visits to monitor and verify project implementation. All collected data on the ground by TPM actors is geoenabled. Proactive discussions based on the Enhanced M&E reports then take place with the PIU to identify needed actions to be undertaken as needed. In addition, the project will follow the Geo-Enabling initiative for Monitoring and Supervision (GEMS) approach which is rolled out across WB operations in Mali. The GEMSmethod, ²¹ enables project teams to use simple open-source tools for in-field collection of structured digital data that automatically feeds into a centralized M&E system. Finally, more focused follow up enquiries with Project beneficiaries will be conducted using the less costly Iterative Beneficiary Monitoring Approach.
- 98. **Iterative Beneficiary Monitoring.** This activity will monitor beneficiaries (direct, indirect and intermediaries) of the project starting at the beginning of the implementation with the objective to improve project efficiency and increase beneficiary satisfaction and beneficiary engagement. Iterative

 $^{^{21}\,}https://worldbankgroup.sharepoint.com/sites/news/WhoWeAre/pages/Whats-the-GeoEnabling-Monitoring-and-Supervision-Initiative-GEMS-21102018-104315.aspx.$

Beneficiary Monitoring is implemented by the Poverty GP team in the Bamako World Bank country office to collect information on project implementation across all sectors, even in insecure settings. It is light, low-cost, and rapid and complements project supervision. The approach is problem oriented and provides feedback to project teams through different iterations with the aim of catalyzing improvements in project implementation. IBM collects data directly from beneficiaries but keeps data collection efforts to a minimum by relying on few research questions and small samples. IBM will be used to collect data to identify shortcoming that can hinder implementation of the project. While traditional M&E system will be used to continuously monitor overall implementation progress and produce voluminous progress reports every six months, IBM will produce short reports, will be repeated as often as needed and focusing on diagnosing specific barriers to effective implementation. The PBF counter-verification mechanism will include a community survey as a means of citizen engagement and feedback. The questionnaires will be administered through IBM and will be tailored to capture the key domains of satisfaction and perceived quality of facility-based and community-based services, with a focus on identifying key bottlenecks for prompt course-correction.

- 99. The GFF Investment Case will include both a Results Framework with key indicators to track progress in achieving objectives as well as a clearly defined learning agenda. The content of the learning agenda, which may include impact evaluations, qualitative research, specific surveys, process evaluations, will be defined in early 2019 during the process of developing the Investment Case.
- 100. **Finally, the Project will also include a prospective evaluation for the PBF intervention,** plus two rounds of SDI surveys.

C. Sustainability

- 101. Technical sustainability will be ensured by knowledge transfer activities throughout the Project. Capacity already exists with the experience of the previous PBF pilot in Koulikoro and the pre-pilot supported by the Dutch Cooperation. Moreover, an extensive training program will be supported to build in-country capacity, and to establish national technical entities such as the National PBF Unit within MoH, or the national CDVA to take over the functions of the international NGO consortium (Koninklijk Instituut voor de Tropen, KIT- Stichting Nederlandse Vrijwilligers, SNV) which managed the PBF contracts under the previous pilot experience. This unit will benefit from capacity building activities during project implementation through trainings and on-the-job coaching. A training of trainers' program for Strategic purchasing will be developed and will create a pool of knowledgeable Strategic purchasing trainers who will then train additional trainers using cascade training to ensure capacity at all levels of the health system.
- 102. **Financial sustainability of PBF can be reasonably achieved given the limited cost of this mechanism** (around an additional US\$3 per capita/year in the targeted areas, and between US\$0.50 and US\$0.75 per capita nationwide) and despite the current low level of public financing in the health sector (around US\$7 per capita/year out of total health expenditures around US\$42 per capita/year. The project will contribute to improving the efficiency of health spending shifting from input based to output based financing, and by allowing some degree of strategic purchasing. By spending US\$3 per capita per year and around US\$13.5 million per year to cover a population of about 4.5 million Malians, the overall cost of the project is likely to be affordable and sustainable in the long term. Additionally, by integrating an ongoing

policy dialogue on reforming the financing structure of the MoH with budget lines for PBF subsidies (with which health facilities have autonomy to plan and use) and making sure PBF is embedded in the broader health sector national financing strategy (including the ongoing RAMU), the project is expected to institutionalize these PBF reforms.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis (if applicable)

Project development impact

103. The proposed Project will seek to improve the health status of the Malian population with a specific focus on women and children, and on the poor population. Project investments will contribute to strengthening the performance of the health system by supporting high impact community health services and PBF which has been piloted in Mali. The implementation of PBF mechanisms will increase the coverage and the quality of an essential package of services delivered at the primary care level. The set of interventions proposed in the essential package of services has been demonstrated to be cost-effective in a variety of surveys conducted across different countries and in FCV settings. In addition, support for the scale-up, strengthening and rationalization of the RAMU is likely to decrease the incidence of impoverishing and catastrophic health expenditure, hence freeing-up household resources for other essential goods and assets and increasing their well-being.

Rationale for public sector provision and financing

104. The rationale for public intervention in the health sector in Mali is strong. There are three arguments for public intervention in the health sector: (1) equity, (2) externalities, and (3) market failures. First, the poor cannot always afford health care to restore their level of welfare after experiencing a health shock, or to improve their productivity and wellbeing. Therefore, public investments in the health of the poor can reduce poverty or alleviate its consequences. Second, many health promoting activities carry large positive externalities. This is the case of immunization for example, or for communicable disease control. In the case of goods characterized by positive externalities, private market supply results in a suboptimal provision from a societal perspective. Finally, market failures, and non-rational behavior, provide a third rationale for public interventions to improve efficiency and equity. Both adverse selection and moral hazard would distort the optimal allocation of health insurance if the market is only influenced by private agents. Information asymmetries between patients and health care providers can also translate into conflicts of interest in which the care providers have incentives to over supply health services. Hyperbolic discounting can account for the fact that private agents choose to underinvest in health goods or overinvest in health bads (such as smoking or adopting risky behaviors).

World Bank's value added

105. The value added of the World Bank support to Mali lies in addressing both critical demand and supply side bottlenecks to the delivery of essential services. The comparative advantage of the Bank includes its technical input based on international experience on health systems strengthening, including on performance-based financing, and capacity to mobilize a wide-range of technical expertise to support key strategies and reforms (e.g. Health financing system assessments, health financing strategy,

RMNCAH+N investment case). In this specific project, an important value added of the World Bank support is to enhance the intended development impact by leveraging synergies with ongoing projects in non-health sectors. The proposed project will seek to exploit synergies with: (i) social protection (cash transfer and safety net project); (ii) infrastructure; and (iii) governance.

Economic Analysis

- 106. The economic analysis of the Project draws on empirical evidence to demonstrate that the expected benefits outweigh the costs of the proposed interventions and that the Project is financially sustainable. Detailed economic and financial analyses have been conducted and include: (i) a cost-effectiveness analysis (CEA) of the project (what is the incremental cost effectiveness ratio?); (ii) a cost-benefit analysis (CBA) of the project (how much does the project cost per saved life/year?); and (iii) a financial analysis (how financially sustainable is the project?). The details of the economic analysis are presented in Annex 3.
- 107. The CEA conducted suggests that the proposed Project is cost-effective with incremental cost-effectiveness ratios (ICERs) ranging between US\$2,500 and US\$3,600 per death averted. According to our parameters and calibration, the number of deaths averted ranges between 3,020 and 5,880 per year, 22 and the ICERs for the proposed project varies between US\$2,500 and US\$2,800 under a US\$90 million financing envelope, and between US\$3,300 and US\$3,600 under the US\$60 million financing envelope. Comparing these values with a GDP per capita of US\$2,211 (at Public-Private Partnership, PPP factors) suggest that the ICERs are comprised between 1.1 and 1.6, and thus the proposed Project can be deemed as cost-effective. Cost-effectiveness is highest under the US\$90 million financing scenario (ICERs between 1.1- and 1.3-times GDP per capita).
- 108. The CBA is conducted using a benefit-transfer value of statistical life (VSL) approach and it also suggests that the proposed Project is cost-effective. We follow the latest best-practice guidelines developed to conduct the cost-benefit analysis in the health sector in low and middle-income country settings.²³ Estimated benefits-costs ratios (BCRs) all range above 10, whichever the financing scenario, the discount rate, or the chosen VSL valuation parameter.

²² Estimates obtained using the Lives Saved Tool (LiST) and the Project results framework for baseline and target coverage of RMMNCAH and nutrition services.

²³ The material and references for the BCA guidelines are available here: https://sites.sph.harvard.edu/bcaguidelines/. See Lisa A. Robinson, James K. Hammit, and Lucy O'Keefe (2018) Valuing Mortality Risk Reduction in Global Benefit-Costs Analysis. Guidelines for Benefit-Cost Analysis Project, Working Paper #7.

Table 5: Cost-benefit analysis summary

Scenario	Annual benefits from mortality avoided (lower bound VSL)	Annual costs (NPV)	Benefit to cost ratio	Net yearly benefit
	(USD million)	(USD million)		(USD million)
\$60 million; 2% discount	165.2	10.9	15.2	154.3
\$60 million; 4% discount	149.9	9.9	15.2	140.0
\$90 million; 2% discount	321.6	16.3	19.7	305.3
\$90 million; 4% discount	291.8	14.8	19.7	277.0

Financial analysis

109. A broad fiscal sustainability analysis of the Project suggests that the proposed activities are financially sustainable. Indeed, investments of the Project consist mostly in strengthening the performance of the health system (strengthening service delivery and efficiency) by supporting a PBF mechanism which has proven its impact to improve utilization and quality of health services. Moreover, funding for interventions under the Project represents a limited share of the national budget dedicated by the country for health (and even if the public expenditures for health are low in the general budget).

Table 6: Financial sustainability

	Mali	Source
GDP (current USD million)	14,035	WDI, 2016
GDP per capita (current USD)	780	WDI, 2016
General government final consumption expenditure (% of GDP)	16.3%	WDI, 2016
General government final consumption expenditure (USD per capita)	127	WDI, 2016
Health expenditure per capita (current USD)	47.8	WDI, 2014
Health expenditure, public (% of GDP)	1.6%	WDI, 2014
Health expenditure, public (% of government expenditure)	5.6%	WDI, 2014
Health expenditure, public (USD per capita)	12.2	WDI, 2014
Total Project investment (scenario 1, annual million USD)	12.0	
Total Project investment (scenario 2, annual million USD)	18.0	
Share of Project investment in public health outlays (scenario 1)	5.5%	
Share of Project investment in public health outlays (scenario 2)	8.2%	

Climate and Disaster Risk Screening

110. Climate change adaptation and mitigation measures. This project has been screened for climate change and the overall assessment of potential risks is "high". Climate related hazards in Mali include very high temperatures during the dry season, persistent droughts, erratic rainfalls and floods in the southern regions. The intensity and frequency of these hazards, particularly increased heat and drought conditions, are likely to escalate under the changing climate and the more frequent El Niño events. These

hazards pose potential serious risks to the health of project beneficiaries, particularly for women and children, including risks to food and nutrition insecurity. The intensified heat and droughts also present challenges to health providers in terms of their ability to ensure uninterrupted services, including their vulnerability to potential losses/damages to vaccines and other critical medicines, as a result of lacking access to cooling.

- The project intends to address these vulnerabilities by building resilience of health service 111. providers, and by extension of beneficiaries. Through the performance-based payments under Component 1, the project will incentivize investments in climate smart equipment at the primary care facility level (512 facilities - CScoms) and at the district level (22 hospitals - CSRefs). The management and governance of health facilities, including essential drug management, is one of the measures which the quantified quality checklist will include in order for each facility to get funding under the project. The total funding for these facilities under the PBF is estimated at US\$50 million and each facility would allocate approximately 5-30% of its PBF payments to equipment and infrastructure upgrades. Each facility, depending on its needs and the funding envelope, would be able to adopt a number of climate-smart mitigation interventions to improve its climate resilience, such as: energy efficient appliances, cooling technologies and innovations (including tree planting to increase shade around facilities), water-efficient fixtures to improve water safety and leakage, solar photovoltaic energy generation, advanced autoclaving of infectious health care waste, on-site wastewater pretreatment and sanitation improvements, onsite water treatment and safe water storage, rainwater harvesting, gray water recapture/recycling, and better procurement and management of pharmaceuticals, medical devices, business products and services (reducing energy footprint in production and transport of unused pharmaceuticals and products).
- 112. In addition, the project will support the expansion of community health activities, including intensive communication and outreach to beneficiaries to improve utilization of RMNCAH+N services. This communication strategy will also entail raising climate awareness and building resilience of communities to increasing heat and drought events and embracing innovative adaptation measures. The project would also incentivize more effective health and community worker collaboration using mobile phones which would reduce unnecessary travel to and from facilities.

B. Fiduciary

(i) Financial Management (FM)

113. FM assessment of the sectoral coordination unit of the ongoing Sahel Malaria and Neglected Tropical Diseases Project (PMNTD) was conducted in October 2018. The objective of the assessment was to determine: (a) whether this unit have adequate FM arrangements (planning, budgeting, accounting, internal control, funds flow, financial reporting, and auditing arrangements) to ensure that project funds will be used for purposes intended in an efficient and economical way; (b) project financial reports will be prepared in an accurate, reliable and timely manner; and (c) the project's assets will be safeguarded. The FM assessment was carried out in accordance with the FM Manual for World Bank IPF operations that became effective on March 1, 2010 but was issued (retrofitted) on February 10, 2017. In this regard, a review of the FM arrangements has been conducted for the above entities. Annex 1 "Implementation Arrangements" contains details with respect to country FM and assessments.



Table 7: FM action plan

Action		Responsible party	Deadline and conditionality
1.	Elaborate Implementation manual including fiduciary procedures	PIU	Before effectiveness
2.	Recruit a Financial Management Officer and accountant with qualifications and experience satisfactory for the Bank	PIU	Three (3) months after effectiveness
3.	Upgrade accounting software taking account new project component	PIU	Five (5) months after effectiveness
4.	Recruit an external auditor	PIU	Six (6) months after effectiveness

The conclusion of the assessment is that the FM arrangements in place meet the Bank's minimum FM requirements under Bank Policy and Directive for Investment Project Financing operations, and subject to the implementation the FM action plan as highlighted below further detailed in Annex 2, are therefore adequate to provide, with reasonable assurance, accurate and timely information on the status of the project required by World Bank. The overall FM residual risk rating is Substantial.

(ii) Procurement

- The Recipient will carry out procurement for the proposed project in accordance with the World Bank's "Procurement Regulations for IPF Borrowers" (Procurement Regulations) dated July 2016 and revised in November 2017 and in August 2018 under the "New Procurement Framework (NPF)," and the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants," dated October 15, 2006 and revised in January 2011 and as of July 1, 2016.
- Goods, works and non-consulting services will be procured in accordance with the requirements set forth or referred to in the Section VI-Approved Methods: Goods, Works and Non-Consulting Services of the Procurement Regulations. The Consulting Services will be procured in accordance with the requirements set fort or referred to in the Section VII-Approved Selection Methods: Consulting Services of the Procurement Regulations, the Project Procurement Strategy for Development (PPSD) and Procurement Plan respectively reviewed and approved by the World Bank. The Procurement Plan, including its updates, shall include for each contract: (i) a brief description of the activities/contracts; (ii) selection methods to be applied; (iii) cost estimates; (iv) time schedules; (v) the Bank's review requirements; (vi) any other relevant procurement information. The Procurement Plan covering the first 18 months of the project implementation has been prepared and approved before negotiations date. Any update of the Procurement Plan will be submitted for the Bank's approval. The Recipient shall use the Bank's online procurement planning and tracking tools to prepare, clear and update its Procurement Plans and conduct all procurement transactions.
- All procuring entities as well as bidders, and service providers, i.e. suppliers, contractors and 117. consultants shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraph 3.32 and Annex IV of the Procurement Regulations.

Requirements and Actions for National Open Competitive Procurement

118. When procurement is done on the national market, as agreed in the Procurement Plan, the country's own procurement procedures may be used with the requirements set forth or referred to in paragraphs 5.3 to 5.6 related to National Procurement Procedures. The requirements for national open competitive procurement are presented in Annex 1 Implementation Arrangements.

Project Procurement Strategy for Development (PPSD)

- 119. The Recipient has prepared the PPSD which describes how procurement activities will support project operations for the achievement of project development objective and deliver Value for Money (VfM). The procurement strategy is linked to the project implementation strategy at country, regional and international levels ensuring proper sequencing of the activities. It considers institutional arrangements for procurement, roles and responsibilities, thresholds, procurement methods, and prior review, and the requirements for carrying out procurement. It also includes a detailed assessment and description of Ministry of Health directorates in charge of procurement and government capacity for carrying out procurement and managing contracts implementation, within an acceptable governance structure and accountability framework. Other issues considered include the behaviors, trends and capabilities of the market (i.e. Market Analysis) to respond to the procurement plan. The strategy includes a summary on: Procurement Risk, Mitigation Action Plan, Market Analysis, Procurement Approaches. The PPSD (including procurement plan) has been reviewed by the Bank.
- 120. Project design provides a window to enable the Recipient to carry out Advance Contracting and Retroactive Financing in accordance with Section V (5.1 & 5.2) of the WB Procurement Regulations for IPF Borrowers. The retroactive financing is allowed up to US\$12 million (US\$ 10 million for the IDA grant, and US\$ 2 million for the GFF TF grant) covering the expenditures incurred by the Project for payments made between February 1, 2019 and signature date of the Legal Agreements for the WB Grant.
- 121. A detailed procurement description and institutional arrangements can be found in Annex 1 (Implementation Arrangements).

C. Safeguards

(i) Environmental Safeguards

122. As the Project objective is to improve the utilization and quality of reproductive, maternal, neonatal, child, adolescent health and nutrition services, especially among the poorest households, in targeted areas, it is expected to generate a positive social impact. Through the PBF mechanism, the Project will provide incentives for health facilities to increase the quantity and quality of health services provided. Even though the Project will not finance civil works, the improvement of the service quality might entail an increased production of hospital waste. To ensure that this potential increase of hospital wastes will be well mitigated, Environmental Assessment (OP/BP 4.01) policy was triggered and the project has been assigned in Category "B". The mitigation measures to address these adverse impacts can be easily designed and implemented at the level of each health care center. Possible environmental risks include the inappropriate handling and disposal of hazardous hospital medical waste, including sharp

needles, and especially the inadequate management of disposal sites, poor management of obsolete, increase of nosocomial diseases. The Project will also enhance community ownership for monitoring the quality of basic health services.

- 123. The Government has prepared in September 2018 a Hospital Waste Management Plan which will be implemented during the Project implementation. In addition, health centers will report on hospital waste management since that action will be included as an indicator to be evaluated and purchased in PBF. In fact, the quantified quality checklist used by PBF to pay for performance on the quality the center performance will measure the level of hospital waste management. The weighting for this aspect will be increased, and the adherence to the guidelines will be checked, and paid for, quarterly.
- 124. To deal with all environmental and social potential negative impacts related mainly to the hospital waste management, the project implementation unit will include an Environmental and Social specialist who will be responsible for following up the implementation of all environmental and social mitigation measures included in plan. The Environmental and Social Specialist will work closely with the relevant ministries and coordinate with the ministry of Environment, NGOs and local administrative authorities. Each health center involved in the project will prepare a specific hospital action plan that will be part of its performance indicators package. Relevant hospital wastes management awareness campaigns will be organized for local communities and health centers involved in the project.
- 125. **Document disclosure:** The Hospital Waste Management Plan was completed, during preparation and disclosed in-country, and at the World Bank website at appraisal.

(ii) Social Safeguards

- 126. The project objective is to improve the utilization and quality of services related to health. The project did not trigger any social safeguards policy; because the planned activities will not lead to land acquisition or resettlement that would lead to economic or physical displacement of people and are unlikely to affect physical cultural resources. The project does not have construction but includes rehabilitation of social health centers which will be supported only on public lands held by the Government. If new constructions are planned during the implementation, the team will recommend preparing the relevant instrument.
- 127. However, based on project actual configuration, during the implementation, the project will put in place measures for: (i) mobilization, information and involvement in project activities of appropriate stakeholders; (ii) transparency and equity during the identification of beneficiaries; and (iii) the setup of a functioning grievance mechanism to allow project beneficiaries, and stakeholders to raise any complaint related to project.
- 128. To handle the project social and environmental potential negative impacts the Project will hire a social and environmental safeguard specialist who will be included in the Project management team. He/she will be responsible for the follow up of project implementation and social impact mitigation measures. The social and environmental Specialist will work with project management, local and traditional authorities, local Association and NGOs.

(iii) Grievance Redress Mechanisms

- Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints World Bank's corporate Grievance Redress Service (GRS), please http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service.
- 130. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.
- 131. In addition to the World Bank grievance redress described above, the Project will insure that efficient mechanisms for citizens' engagement and feedback are readily available. These mechanisms will be outlined in detail in the Project implementation manual and are a condition of project effectiveness. Given the nature and the complexity of the topic, a structured feedback mechanism will also be developed to address female genital mutilation in the community. In addition, community health centers will be prohibited from performing harmful traditional practices such as FGM. Anonymous information will be collected from community members who suspect that FGM is about to be performed and measures including law enforcement assistance will be sought. Moreover, the Project will make available a toll-free number for communities to report suspected GBV victims and perpetrators and necessary corrective measure will be applied. Finally, during supervisions and independent verification visits a confidential questionnaire will be administered to health professionals reporting all cases of abuse and the way those were handled. As part of the minimum package of interventions for CScom efficient handling of GBV including FGM will be added.

V. KEY RISKS

- 132. Based on the World Bank experience in other FCV countries, the overall risks identified by the team are outlined below:
 - Political and overnance risk is considered high due to political instability which has prevailed in
 the country since 2012. There are substantiated concerns of governance issues in the health
 sector. The Project will mitigate these shortcomings through the establishment of a dedicated
 project management unit. Technical and fiduciary staff will be recruited through a competitive
 bidding process based on qualification and experience. This coordinating unit will be independent
 to carry out day to day fiduciary responsibilities and to disburse funding.
 - Technical Design of Project or Program: This risk is substantial as the security situation in the
 North of the country remains volatile and has also spread to Center Mali. Mitigating measures
 include an adaptive PBF approach depending on the security situation and on whether health

facilities are functioning or not. In insecure situations where health facilities are still functioning, PBF subsidies and the share of users benefiting from fee exemption will be increased. In insecure situations where health facilities are not functioning, NGOs will be subcontracted by the Government to provide a package of essential health services.

- Institutional Capacity for Implementation and Sustainability: The risk is substantial. There is a high turnover in Ministry of Health officials and technical staff. The Project will build the capacity of a critical mass of technical expertise to support efficient implementation of activities. Moreover, the performance contract to be signed by staff at the central level as well as at the decentralized level will help increase quality and efficiency of the implementation. The partnership with private providers will give a new dimension to efficacy in conducting activities. All concerns are being addressed by project activities to increase chances of sustainability.
- Fiduciary risks are high. Fiduciary risks have a high probability of impacting the PDO in an adverse way. Overall the fiduciary environment of the country is weak. Despite making progress during the last decade, the Mali's governance ratings are below the Sub-Saharan African average. The Bank's principal concern is to ensure that project funds are used economically and efficiently for the intended purpose. Fiduciary risks include: a) inherent risk of lack of coordination and consolidation of actions and information among stakeholders; b) poor governance and slow pace of implementation of PFM reforms that might hamper the overall PFM environment; and c) weak FM capacity at different stakeholder levels and risk of fraud and corruption. Mitigation measures include: a) the establishment of a dedicated APUHC PIU which will ensure adequate coordination of the project with the collaboration of other stakeholders; b) the development of a Project Implementation Manual (PIM) which will clarify the roles and responsibilities of the various stakeholders and provide clear definitions of implementation procedures in line with the Bank's fiduciary requirements; c) from inception, the necessity for seamless coordination will be integrated into the protocols/agreements between the APUHC PIU and other external stakeholders respectively; d) regular internal audit missions (technical and financial audit) will be conducted during the project period with a focus on fraud and corruption risk in the implementation of project operations; e) the FM staff will help stakeholders in preparing realistic budgets consistent with the work program; and f) the Project will acquire management accounting software and its customization to generate the financial reports for the project.
- Social, cultural constraints and gender-based violence risks (other risks) are high. The country struggles to address key issues such as female genital mutilation, high obstetric fistulae and child marriage (the law has set 16 for the age of marriage for girls and 18 for boys). These practices considerably increase the vulnerability of women to experience ill health. Most women are poor and the consequences of female genital mutilation on health increases the financial burden of families. Mitigation measures include: (i) training of community health workers will in recognizing GBV and victims of FGM and supporting them in obtaining help, (ii) C4D activities will also address issues of GBV including FGM, (iii) the development of strategic communication plans as well as monthly community discussions will target both men and women to address FGM and its impact on the health of women and young girls.

VI. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Mali

Mali - Accelerating Progress Towards Universal Health Coverage

Project Development Objectives(s)

The objective of the project is to improve the utilization and quality of reproductive, maternal, neonatal, child, adolescent health and nutrition services, especially among the poorest households, in targeted areas.

Project Development Objective Indicators

Indicator Name	DLI	Baseline		Intermediate Targets				
			1	2	3	4		
Increased utilization of materi	nal, chi	ld, neonatal, and ado	lescent services					
People who have received essential health, nutrition, and population (HNP) services (CRI Number)		0.00	530,000.00	1,330,000.00	2,170,000.00	3,000,000.00	3,300,000.00	
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement) (CRI, Number)		0.00	120,000.00	300,000.00	480,000.00	670,000.00	710,000.00	
Number of children immunized (CRI, Number)		0.00	100,000.00	170,000.00	210,000.00	230,000.00	250,000.00	
Number of women and children who have received basic nutrition services (CRI,		0.00	700,000.00	1,000,000.00	1,265,000.00	1,330,000.00	1,400,000.00	

Indicator Name	DLI	Baseline		Inte	rmediate Targets		End Target
			1	2	3	4	
Number)							
Number of deliveries attended by skilled health personnel (CRI, Number)		0.00	130,000.00	170,000.00	190,000.00	205,000.00	225,000.00
Percentage of girls, aged 15- 19, who are currently using any method of contraception. (Percentage)		5.80	9.00	12.00	15.00	18.00	20.00
Improve the quality of health	service	es in targeted areas.					
Percentage of pregnant women receiving at least 4 antenatal care visits from health provider (Percentage)		13.30	15.00	18.00	21.00	23.00	25.00
Average score of the quality of care checklist (Percentage)		0.00					70.00
Increased utilization of essent	al hea	Ith services among	the poorest households.				
Number of RAMED beneficiary households receiving free care for essential health services. (Number)		30,000.00	35,000.00	40,000.00	50,000.00	55,000.00	60,000.00

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline		Intermediate Targets						
			1							
Strengthening Health Service Delivery through Performance Based Financing at Facility Level										

Indicator Name	DLI	Baseline		Intermediate Targets				
			1	2	3	4		
Health facilities receiving PBF grants on time. (Percentage)		0.00	30.00	50.00	65.00	75.00	80.00	
Percentage of new curative consultations per capita/year. (Number)		0.20	0.22	0.25	0.30	0.35	0.40	
Percentage of facilities with 100% tracer drugs available in targeted health facilities on the day of the visit. (Percentage)		0.00	20.00	25.00	30.00	35.00	40.00	
Percentage of health facilities benefiting from quarterly technical supervision visits by district health services (ECD). (Percentage)		50.00	55.00	60.00	70.00	75.00	80.00	
Number of CHWs benefiting from dedicated supervision. (Number)		0.00	500.00	1,000.00	2,000.00	2,500.00	3,000.00	
Percentage of beneficiaries satisfied with quality of services provided in health facilities (Percentage)		0.00	35.00	45.00	55.00	65.00	75.00	
Strengthening Community Hea	lth Ac	tivities						
Number of households receiving proactive CHW visits. (Number (Thousand))		0.00	150.00	350.00	500.00	650.00	750.00	
Percentage of children under 5 with confirmed malaria who received antimalarial treatment within 24 hours of symptom onset. (Percentage)		0.00	20.00	35.00	50.00	60.00	70.00	
Number of Couple-Year Protections (CYP) reached		0.00	200.00	400.00	600.00	800.00	1,000.00	

Indicator Name	DLI	Baseline		Intermediate Targets				
			1	2	3	4		
through project interventions. (Number (Thousand))								
Percentage of children aged 6- 59 months screened by community health workers for acute malnutrition. (Percentage)		50.00	55.00	60.00	75.00	85.00	90.00	
Institutional strengthening for	impro	ved stewardship an	d health system perfo	rmance				
Completion rate of health facilities DHIS2 reports. (Number (Thousand))		50.00	60.00	70.00	80.00	85.00	90.00	
Percentage of maternal and child deaths with determined cause of death (CoD). (Percentage)		0.00	10.00	20.00	30.00	40.00	50.00	
Number of private health facilities assessed for accreditation by MoH. (Number)		0.00	30.00	75.00	120.00	180.00	250.00	
Percentage of health facilities producing annual micro-plans validated by district health services (ECD). (Percentage)		0.00	25.00	50.00	75.00	85.00	95.00	

	Monitoring & E	Evaluation Plan	: PDO Indicators	3	
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
People who have received essential health, nutrition, and population (HNP) services		Annual.	SNIS, SLIS; PBF Portal.	Routine monitoring system.	DNS.
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement)		Annual.	SNIS, SLIS, PBF Portal.	Routine monitoring system.	DNS.
Number of children immunized		Annual.	SNIS, SLIS, PBF Portal.	Routine monitoring system.	DNS.
Number of women and children who have received basic nutrition services		Annual.	SNIS, SLIS.	DHS: Household survey with face-to-face interview of respondent (frequency: every 5 years) IBM: Household survey with mobile phone interview of respondent (frequency: quarterly)	DHS: DNS and CPS IBM: World Bank
Number of deliveries attended by skilled health personnel		Annual.	SNIS, SLIS; PBF Portal.	Routine monitoring system.	DNS.
Percentage of girls, aged 15-19, who are currently using any method of contraception.	Percentage of girls, aged 15- 19 who are currently using any method of contraception.	Annual.	SNIS, SLIS; PBF Portal.	Routine monitoring system.	DNS.

Percentage of pregnant women receiving at least 4 antenatal care visits from health provider	Percentage of pregnant women receiving at least 4 antenatal care visits from health provider in 14 targeted health districts.	Annual	Health Management Information System, PBF Portal.	Routine monitoring system.	DNS.
Average score of the quality of care checklist	Average of the quarterly quality score (%) of all the PBF facilities.	Annual.	PBF Portal.	Routine monitoring system.	DNS.
Number of RAMED beneficiary households receiving free care for essential health services.	Number of RAMED beneficiary households receiving free care for essential health services in the targeted health districts.	Annual	CANAM/ANA M registries, PBF Portal, IBM.	Routine monitoring system and iterative beneficiary monitoring (IBM).	CANAM/ANAM.

Monitoring & Evaluation Plan: Intermediate Results Indicators									
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection				
Health facilities receiving PBF grants on time.	Percentage of targeted health facilities receiving PBF grants on time.	Annual	PBF Portal.	Routine monitoring system.	DNS.				
Percentage of new curative consultations per capita/year.	New curative consultations per capita/year.	Annual.	SNIS, SLIS; PBF Portal.	Routine monitoring system.	DNS.				
Percentage of facilities with 100% tracer drugs available in targeted health facilities on the day of the visit.	Percentage of facilities with 100% tracer drugs available in targeted health facilities on the day of the visit.	Annual.	SNIS, SLIS; PBF Portal.	Routine monitoring system.	DNS.				
Percentage of health facilities benefiting from quarterly technical supervision visits	Percentage of health facilities benefiting from	Annual.	SNIS, SLIS; PBF	Routine monitoring system.	DNS.				

by district health services (ECD).	quarterly technical supervision visits by district health services (ECD).		Portal.		
Number of CHWs benefiting from dedicated supervision.	Number of CHWs benefiting from dedicated supervision.	Annual.	SNIS, SLIS; PBF Portal.	Routine monitoring system.	DNS.
Percentage of beneficiaries satisfied with quality of services provided in health facilities	Beneficiaries satisfied with quality of services provided in health facilities (%). Numerator: number of health facility users (over past 12 months) satisfied with the quality of services provided in health facility Denominator: number of health facility users (over past 12 months)	Annual	Beneficiary surveys	Iterative Beneficiary Monitoring (IBM)	World Bank
Number of households receiving proactive CHW visits.	Number of households receiving proactive CHW visits.	Annual.	SNIS, SLIS; PBF Portal and IBM.	Routine monitoring system and IBM.	DNS and WB for IBM.
Percentage of children under 5 with confirmed malaria who received antimalarial treatment within 24 hours of symptom onset.	Percentage of children under 5 with confirmed malaria who received antimalarial treatment within 24 hours of symptom onset.	Annual.	SNIS, SLIS; PBF Portal.	Routine monitoring system.	DNS
Number of Couple-Year Protections (CYP) reached through project interventions.	A couple year of protection (CYP) measures the estimated protection provided by family planning	Annual.	SNIS, SLIS; PBF Portal.	Routine monitoring system.	DNS.

Completion rate of health facilities DHIS2 reports.	Completion rate of health facilities DHIS2 reports in targeted districts. Numerator: number of health facilities under PBF contract reporting complete DHIS2 reports in targeted districts.	Annual.	Health Management Information System, PBF Portal.	Routine monitoring system.	DNS.
Percentage of children aged 6-59 months screened by community health workers for acute malnutrition.	Percentage of children aged 6-59 months screened by community health workers for acute malnutrition.	Annual.	SNIS, SLIS.	Routine monitoring system.	DNS.
	services during a one-year period, based upon the volume of all contraceptives sold or distributed to beneficiaries during that period. CYP is calculated by multiplying the quantity of each method distributed to clients by a standard conversion factor (which estimates the duration of contraceptive protection provided per unit of that method) to yield an estimate of the duration of protection provided by that method. CYP for each method is then summed for all methods to obtain a total CYP figure.				

	Denominator: total number of health facilities under PBF contract in targeted districts.				
Percentage of maternal and child deaths with determined cause of death (CoD).	Percentage of maternal and child deaths with determined cause of death (CoD). Numerator: Number of maternal and child deaths with cause of death (CoD). Denominator: Total number of maternal and child deaths reported.	Annual.	Death registries, Sample Registration System (SRS).	Routine monitoring system.	DNS.
Number of private health facilities assessed for accreditation by MoH.	Number of private health facilities assessed for accreditation by MoH.	Annual.	SNIS, SLIS.	Routine monitoring system.	DNS.
Percentage of health facilities producing annual micro-plans validated by district health services (ECD).	Percentage of health facilities producing annual micro-plans validated by district health services (ECD) in targeted districts.	Annual.	SNIS, SLIS; PBF Portal.	Routine monitoring system.	DNS.

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Mali

Mali - Accelerating Progress Towards Universal Health Coverage

- 1. Accelerating progress towards Universal Health Coverage is a multisectoral endeavor which requires the participation of multiple stakeholders and different ministerial lines. The proposed Project is designed to be fully aligned with the social development national policy (PRODESS) which is piloted by CPS covering the following three ministerial lines: (i) Ministry of Public Health and Hygiene; (ii) Ministry of Solidarity, Humanitarian Action, and Reconstruction in the North; and (iii) Ministry of Women, Children and Family.
- 2. At the highest level, the Project will be coordinated by a steering committee headed by the Minister of Health or his designee. The Director of the CPS, as well as representatives from key ministerial lines (including MEF, Ministry of Solidarity, Ministry of Women, Children and Family, and relevant technical and financial partners will also be part of the Project Steering Committee. The steering committee will provide high level strategic and technical guidance and will participate in the evaluation of the progress of the Project. The steering committee will convene bi-annually to evaluate and monitor the implementation of the costed annual action plan.
- 3. To support the oversight of the project steering committee, a technical working group will be created. The technical working group will be headed by the CPS and will be composed of technical managers of the line ministries represented in the steering committee. The technical working group will define the project's work program and budget and provide technical support to all levels of implementation. A PBF National Technical Unit (Cellule Technique Nationale FBR) will also be created to oversee day to day implementation of the PBF component and for informing the technical working group and the steering committee of the progress achieved in implementing the PBF model. The Director of the PBF National Technical Unit will be part of the technical working group. The technical working group will convene quarterly to monitor activities agreed upon for implementation set forth in the costed action plan. Allocation funds for activities and monitoring of expenses will be further detailed in the Project Implementation Manual.
- 4. A dedicated Project Implementation Unit (PIU) will be created to manage day to day implementation and coordination of Project activities. The APUHC-PIU will be staffed by a multidisciplinary team including a dedicated coordinator, a financial management specialist, an M&E specialist, a data specialist, a safeguard specialist, an accountant, a procurement specialist, an internal auditor, a communication specialist, and administrative assistants. Day-to-day project coordination, implementation and management at the central level will be handled by the PIU reporting to the technical working group. To ensure strategic alignment, maximize synergies and avoid financing duplication, the APUHC-PIU will also report to the current sectoral coordination unit managed by the Ministry of Health for the other two ongoing regional projects (Malaria and Neglected Tropical Disease Project (M/NTD), and REDISSE). The APUHC-PIU will assume, among others, complete fiduciary management responsibilities, overall planning, internal auditing and M&E. The project aims as much as possible to align with Government systems and integrate into existing structures rather than creating parallel systems. The recruitment of PIU staff will be supported through the PPA and the establishment of the PIU is an effectiveness condition.

- 5. The Project will rely on regional and district health authorities to supervise and coordinate the activities at decentralized levels, including management of inputs, oversight of health facilities to supervise and verify the quality of services provided under PBF contracts; they will also be responsible for data collection at decentralized levels. CScom workers will be responsible for delivering the PBF and community services as presented under the project description. In addition, they will support the mobilization of communities and their selection in relation with the NGO.
- 6. Before the effective date, the Government will prepare a Project Implementation Manual (PIM), containing detailed arrangements and procedures for: (i) institutional coordination and Project implementation; (ii) the roles and responsibilities of all involved stakeholders; (iii) Project budgeting, accounting, disbursement and financial management; (iv) procurement; (v) monitoring, evaluation, reporting and communication; (vi) the selection criteria of health facilities and communes; (vii) the hiring process of lead NGOs; and (viii) other such administrative, financial, technical and organizational arrangements and procedures. The adoption of the Project Implementation Manual (PIM) by the MoH is a condition of effectiveness.

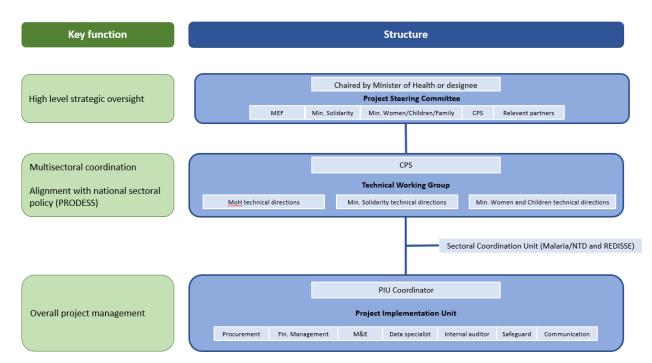
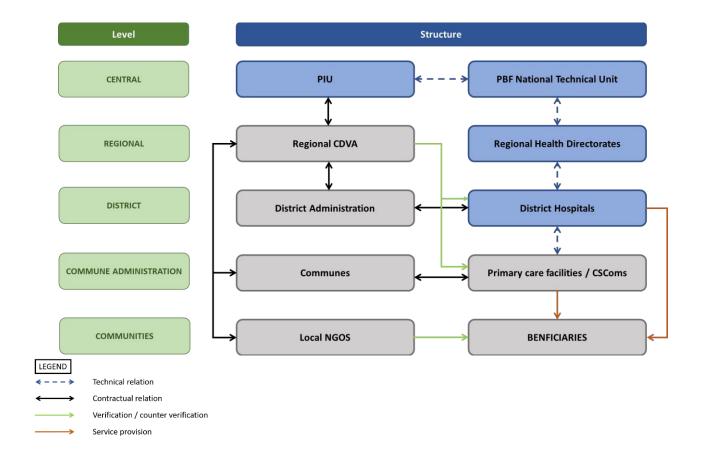


Figure 8: Institutional arrangements (Annex 1)





Financial Management, Disbursements and Procurement

Financial Management

7. See Annex 2 on FM arrangements.

Procurement

- 8. The Recipient will carry out procurement under the project in accordance with the World Bank's "Procurement Regulations for IPF Borrowers" (Procurement Regulations) dated July 2016 and revised in November 2017 and in August 2018 under the "New Procurement Framework (NPF)," and the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants," dated October 15, 2006, and revised in January 2011 and as of July 1, 2016, and other provisions stipulated in the Financing Agreement.
- 9. All procuring entities, as well as bidders and service providers, that is, suppliers, contractors, and consultants, shall observe the highest standard of ethics during the procurement and execution of contracts financed under the Project in accordance with paragraph 3.32 and Annex IV of the Procurement Regulations.

website. The Recipient must also publish it in at least one national newspaper.

- 10. The Recipient shall prepare and submit to the Bank a General Procurement Notice (GPN) and the Bank will arrange for publication of GPN in United Nations Development Business online and on the Bank's external
- 11. The Recipient shall publish the Specific Procurement Notices (SPN) for all goods, works, non-consulting services, and the Requests for Expressions of Interest (REOIs) on their free-access websites, if available, and in at least one newspaper of national circulation in the Recipient's country, and in the official gazette. For open international procurement selection of consultants using an international shortlist, the Recipient shall also publish the SPN in *United Nations Development Business* online and, if possible, in an international newspaper of wide circulation. The Bank arranges for the simultaneous publication of the SPN on its external website.

Institutional Arrangements for Procurement

- 12. The PIU will be responsible for the Project for procurement planning and management. The Coordinator will be responsible for decision making during the procurement process.
- 13. *Filing and record keeping.* The Procurement Procedures Manual will set out detailed procedures for maintaining and providing readily available access to project procurement records, in compliance with the Financing Agreement. Archiving room will be available and the PIU will assign one person responsible for maintaining the records. The logbook of the contracts with a unique numbering system shall be maintained.
- 14. Signed contracts as in the logbook shall be reflected in the commitment control system of the Recipient's accounting system or books of accounts as commitments whose payments should be updated with reference made to the payment voucher. This will put in place a complete record system whereby the contracts and related payments can be corroborated.
- 15. **Project Procurement Strategy for Development.** As part of the preparation of the Project, the Recipient has prepared a PPSD, which describes how fit-for-purpose procurement activities will support project operations for the achievement of project development objectives and deliver value for money. The procurement strategy is linked to the project implementation strategy at the country, regional, and international levels, ensuring proper sequencing of the activities. It considers institutional arrangements for procurement; roles and responsibilities; thresholds, procurement methods, and prior review; and the requirements for carrying out procurement. It also includes a detailed assessment and description of the Direction of Finance and Material of the Ministry of Health and government capacity for carrying out procurement and managing contract implementation, within an acceptable governance structure and accountability framework. Other issues considered include behaviors, trends, and capabilities of the market (that is, market analysis) to inform the procurement plan. Special arrangements like direct contracting, use of UN agencies, use of state-owned enterprises, third-party monitors, local NGOs, force accounts, use of civil servants, results-based arrangements, need for prequalification, if any, are considered and addressed.
- 16. The recruitment of civil servants as individual consultants or as part of the team of consulting firms will abide by the provisions of paragraph 3.23 (d) of the Procurement Regulations.

- 17. Procurement Plan. The Recipient has prepared a detailed 18-month Procurement Plan, which has been agreed by the Bank at negotiation. The Procurement Plan will be updated in agreement with the Bank Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.
- 18. The PIU will carry out procurement to implement the Project as explained below. It will procure goods, works or services for the Project as included in the Procurement Plan and agreed with the Bank.
- 19. The scope of procurement will be described in the Project Procurement Strategy for Development and the Procurement Plan agreed by the Bank and will be summarized in the table below.

Table 8: Summary of the Procurement Strategy for Development

Goods and Non-Consulting Services

Contracts Title, Description and Category	Estimated cost (US\$) and risk rating	Bank Oversight	Procurement approach/ competition	Selection Method	Evaluation method
Acquisition of 10 4-wheel drive vehicles and 26 4-wheel drive pick-ups	1 540 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Acquisition of 7 4-wheel drive pick-ups	260 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Acquisition of 338 motos	1 240 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Acquisition of 381 motos	1 397 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Acquisition of 262 motos	961 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Acquisition of IT material for selected private health facilities.	1 009 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Acquisition IT and communication material for public health facilities and health management units	1 612 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Acquisition-paramétrage de logiciels et formation des utilisateurs Aquisition, calibration and training of users for IT management tools and registration softwares.	300 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
acquisition and installation of incinerators for 20 health facilities	234 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Purchase of solar kits	1 200 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Cold chain equipment acquisition and installation	334 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Acquisition of specialised equipment and meterial for health facilities (equipments for ORL-Ophtalmo-	1 000 000	Post	RFB	National, Open	Most Advantageous Bid



Ondothonstomatology, lab equipments, standard CSCom equipment)	Low risk]		
Equipment acquisition/sanitation equipment, individual protection equipment, sterilization material, equipment to collect and handle bio-medical waste.	223 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Purchase of equipments kits for CHWs and their supervisors	230 000 / Low risk	Post	RFB	National, Open	Most Advantageous Bid
Purchase (purchase service contracts) of nutritional therapeutical inputs	1 000 000 / Moderate risk	Post	Direct Selection (UNICEF)	Direct	Negotiation
Purchase (purchase service contracts) for family planning inputs	1 000 000 / Moderate risk	Post	Direct Selection (UNFPA)	Direct	Negotiation
Purchase of office furniture and supplies for ASP headquartersASP	10 000 / Low risk	Post	RFQ	National, Limited	Most Advantageous Bid
Reproduction of communication support for the prevention of infections in health facilities in relation to bio medical waste management plan.	9 000 / Low risk	Post	RFQ	National, Limited	Most Advantageous Bid
Acquisition of 729 work uniforms (Gilets) for CHWs	13 000 / Low risk	Post	RFQ	National, Limited	Most Advantageous Bid
IT and communication material for PIU	67 000 / Low risk	Post	RFQ	National, Open	Most Advantageous Bid
Office furniture and office supplies for PIU	67 000 / Low risk	Post	RFQ	National, Open	Most Advantageous Bid

Consulting Services

Contract title, Description and category	Estimated cost in US\$ \$US and risk level	Review by WB	Selection Method	Market approach	Evaluation method
NGO services for dedicated supervision of CHWs in the region of de Koulikoro	310 000 / Low risk	Post	Least-cost-based Selection	National, Open, Shortlist	Most Advantageous Proposal
NGO services for dedicated supervision of CHWs in the region of Ségou	110 000 / Low risk	Post	Least-cost-based Selection	National, Open, Shortlist	Most Advantageous Proposal
NGO services for dedicated supervision of CHWs in the region ofMopti	110 000 / Substantial risk	Post	Least-cost-based Selection	National, Open, Shortlist	Most Advantageous Proposal
NGO services for dedicated supervision of CHWs in the region of Gao	67 000 / Substantial risk	Post	Least-cost-based Selection	National, Open, Shortlist	Most Advantageous Proposal
Consultant services for the adaptation of the software « Dossier Médical Partagé »	300 000 / Moderate risk	Post	Direct Selection (CERTES)	Direct	Negotiation
Consultant services for the national survey on gender equity and training of the ASP-PSM in adressing	134 000 / Low risk	Post	Consultant's Qualification Based	National, Open	Most Qualified Proposal



gender equity			Selection		
Contract Development and Verification Agency services in the region of Koulikoro	10 000 000 / Low risk	Prior	Quality Cost Based Selection	International, Open, Shortlist	Most Advantageous Proposal
Contract Development and Verification Agency services in the region of Ségou	3 500 000 / Low risk	Prior	Quality Cost Based Selection	International, Open, Shortlist	Most Advantageous Proposal
Contract Development and Verification Agency services in the region of Mopti	3 500 000 / Substantial risk	Prior	Quality Cost Based Selection	International, Open, Shortlist	Most Advantageous Proposal
CRVS assessment	130 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
Synthesis report for baseline impact evaluation	100 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
Synthesis report for Service Delivery Indicator survey	100 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
Consultant services for the conduct of referential PPPs in health.	50 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
services for the identification of legal and regulatory issues	90 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
Service de consultants pour élaboration manuel pour le secteur privé et formation des utilisateursConsultant services for the production of a private sector manual and training of users	25 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
services to determine the appropriate fiscal regime for the private sector	25 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
Services de consultant pour la mise en place et la dissémination du manuel des Procédures Administratives et Comptables de l'ASPConsultant services for the elaboration and dissemination of administrative and accounting procedures for the ASP.	50 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
Support to the accreditation of private facilities	10 000 / Low risk	Post	Individual Consultant	Open	Most Qualified Proposal
Assessment of the economic and environmental impact of theintroduction of the bio-waste	70 000 / Low risk	Post	Consultant's Qualification Based	National, Open	Most Qualified Proposal



management plan			Selection		
Market analysis for the creation of		Post	Consultant's		
SME to manage bio-medical waste.	34 000 /		Qualification		Most Qualified
	Low risk		Based	National, Open	Proposal
	2011 1.51		Selection		
Assessment of the economic and		Post	Consultant's		
environmental impact of the	67 000 /	1030	Qualification		Most Qualified
introduction of the hospital hygiene	•		· 1	National, Open	· ·
	Low risk		Based		Proposal
management plan in SMEs			Selection		
Market analysis for the creation of		Post	Consultant's		
SME to manage hospital hygiene	34 000 /		Qualification	National, Open	Most Qualified
plan	Low risk		Based	Mational, Open	Proposal
			Selection		
Assessment of the economic and		Post	Consultant's		
environmental impact of the	67 000 /		Qualification		Most Qualified
introduction of sterilization and	Low risk		Based	National, Open	Proposal
medical support plans in SMEs	20 W 113K		Selection		
Market analysis for the creation of		Post	Consultant's		
•	24.000 /	rust			Mant Outlier
SME to manage sterilization and	34 000 /		Qualification	National, Open	Most Qualified Proposal
medical support plans	Low risk		Based	, '	
			Selection		
Study on Community Based Health		Post	Consultant's		
Insurance to complement RAMU	20 000 /		Qualification	National, Open	Most Qualified
	Low risk		Based	ivational, Open	Proposal
			Selection		
Baseline PBF evaluation		Post	Consultant's		
	84 000 /		Qualification		Most Qualified
	Substantial		Based	National, Open	Proposal
	risk				FTOPOSOI
Consultant cont		D	Selection		-
Consultant services to train national		Post	Consultant's		
trainers for PBF	12 000 /		Qualification	National, Open	Most Qualified
	Low risk		Based	. tational, open	Proposal
			Selection		
PBF portal update		Post	Consultant's		
•	70 000 /		Qualification		Most Qualified
	Low risk		Based	National, Open	Proposal
			Selection		
Analytical and operational research		Post	Consultant's		
	100 000 /	rusi			Most Outlifical
on PBF implementation	100 000 /		Qualification	National, Open	Most Qualified
	Low risk		Based	, ,	Proposal
			Selection		
Mid-term evaluation of PBF		Post	Consultant's		
	84 000 /		Qualification	National, Open	Most Qualified
	Low risk		Based	ivational, Open	Proposal
			Selection		
Consultant services to calibrate	8 000 /	Post	Direct Selection	Diversit	Namatistic
tablets and district servers	Low risk		(Société YELEMA)	Direct	Negotiation
Consultant services to develop an		Post	Consultant's		
advocacy strategy for an increased	50 000 /		Qualification		Most Qualified
Domestic Revenue Mobilization for	Low risk		Based	National, Open	Proposal
health	LOWITSK		Selection		i Toposai
	00.000.1	Deet			March O. 1101
Consultant services to support the	80 000 /	Post	Consultant's	Nationale, Open	Most Qualified
identification and registration of	Low risk		Qualification		Proposal

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RAMED beneficiaries			Based		
Tarketal and the constant to		Dt	Selection		
Technical assistance to support the production of National Health Accounts	85 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
Consultant services to support the digitalization of the sanitary map	80 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
External Project audit for the first 3	85 000 /	Post	Least-cost-based	National, Open,	Most Advantageous
exercises External Project audit for 4th and 5th exercises and for the Project closing.	Low risk 49 000 / Low risk	Post	Selection Least-cost-based Selection	Shortlist National, Open, Shortlist	Proposal Most Advantageous Proposal
Project coordinator	350 000 / Low risk	Prior	Individual Consultant	Open	Most Qualified Proposal
PBF specialist within PIU	300 000 / Low risk	Prior	Individual Consultant	Open	Most Qualified Proposal
Accountant within PIU	150 000 / Low risk	Post	Individual Consultant	Open	Most Qualified Proposal
Procurement specialist within PIU	300 000 / Low risk	Prior	Individual Consultant	Open	Most Qualified Proposal
M&E Specialist within PIU	300 000 / Low risk	Prior	Individual Consultant	Open	Most Qualified Proposal
Training management plan for Project implementation structures	17 000 / Low risk	Post	Consultant's Qualification Based Selection	National, Open	Most Qualified Proposal
Consultant services for mid-term evaluation	100 000 / Low risk	Post	Individual Consultant	Open	Most Qualified Proposal
COnsultant services for endline evaluation	100 000 / Low risk	Post	Individual Consultant	Open	Most Qualified Proposal

- Training, Workshops, Study Tours, and Conferences. Training activities would comprise workshops and training, based on individual needs, as well as group requirements, on-the-job training, and hiring consultants for developing training materials and conducting training. Selection of consultants for training services follows the requirements for selection of consultants above. All training and workshop activities (other than consulting services) would be carried out on the basis of approved Annual Work Plans/Training Plans that would identify the general framework of training activities for the year, including (a) the type of training or workshop; (b) the personnel to be trained; (c) the institutions that would conduct the training and reason for selection of this particular institution; (d) the justification for the training, that is, how it would lead to effective performance and implementation of the Project and or sector; (e) the duration of the proposed training; and (f) the cost estimate of the training. Report by the trainee(s), including completion certificate/diploma upon completion of training, shall be provided to the Project Coordinator and will be kept as parts of the records, and will be shared with the Bank if required.
- Detailed training and workshop terms of reference providing the nature of training/workshop, number 21. of trainees/participants, duration, staff months, timing, and estimated cost will be submitted to IDA for review and approval prior to initiating the process. The selection methods will derive from the activity requirement,

schedule, and circumstance. After the training, the beneficiaries will be requested to submit a brief report indicating what skill or skills have been acquired and how these skills will contribute to enhancing their performance and attaining the project objective.

- 22. **Operational Cost.** Operational costs financed by the Project would be the incremental expenses incurred on account of Project implementation based on Annual Work Plan and Budget, and consisting of expenditures for office supplies, vehicles operation and maintenance costs, maintenance of equipment, communication and insurance costs, office administration costs, rental expenses, utilities expenses, consumables, accommodation, travel and per diem, supervision costs, and salaries of locally contracted support staff. Such service needs will be procured using the procurement procedures specified in the Project Implementation Manual (PIM) accepted and approved by the Bank.
- 23. **Procurement Manual.** Procurement arrangements, roles and responsibilities, methods, and requirements for carrying out procurement shall be elaborated in detail in the Procurement Manual, which will be a section of the PIM. The PIM, a condition of effectiveness, shall be prepared by the Recipient, and should be submitted and adopted by the Bank before the effectiveness date.
- 24. **Procurement methods.** The Recipient will use the procurement methods and market approach in accordance with the Procurement Regulations.
- 25. **Open National Market Approach** is a competitive bidding procedure normally used for public procurement in the country of the Recipient and may be used to procure goods, works, or non-consultant services provided it meets the requirements of paragraphs 5.3 to 5.6 of the Procurement Regulations (see **Table 9**).

Table 9: Requirements and actions for national open competitive procurement

N°	Requirements	Actions
1	Open advertising of the procurement opportunity at the national level.	The advertising must be extended to all contracts through the inclusion of all contracts in the Procurement Plan and its publication.
2	The procurement is open to eligible firms from any country.	None.
3	The request for bids/request for proposals will require that Bidders/Proposers submitting Bids/Proposals present signed acceptance at the time of bidding to be incorporated in any resulting contracts, confirming application of, and compliance with, the Bank's Anti-Corruption Guidelines, including without limitation the Bank's right to sanction and the Bank's inspection and audit.	Reinforce the related provisions (Public Procurement Code art. 29 / Code of ethics and professional conduct in Public Procurement [art. 8, 11, 12, 13, 28, 38, 39, 40, 41, 42, 44, and 47]) by taking into account the aspects related to the Bank's Anti-Corruption Guidelines (including without limitation the Bank's right to sanction and the Bank's inspection and audit rights). Introducing a template of this acceptance in the bidding documents. A World Bank-approved template will be provided.
4	Contracts with appropriate allocation of responsibilities, risks, and liabilities.	Update and take into account the required new elements (in particular, to strengthen environmental and social performance, health, and safety).
5	Publication of contract award information.	The advertising must be extended to all contracts (the field



		of application of the public procurement code).
6	Rights for the Bank to review procurement documents and activities.	The requirement must be included in the bidding documents in order to grant rights to the Bank to review procurement documentation and activities. The legal agreement may also allow this provision.
7	An effective complaints mechanism.	None.
8	Maintenance of records of the Procurement Process.	The requirement must be included in the bidding documents and in the legal agreement. The PCU must spell out the practical modalities and the appropriate documentation to archive in the procurement manual of procedures.

The thresholds for market approaches and procurement methods and the Bank's prior review requirements are also provided in

26. **Table 10**.

Table 10: Thresholds for procurement methods, and prior review for Substantial risk

Nº	Expenditure Category	Contract (C) Value Threshold* [eq. US\$]	Procurement Method	Contracts Subject to Prior Review /[eq. US\$]
1	Works C≥ 15,000,000		Open Competition International Market Approach and Direct Contracting	≥ 15,00,000 All contracts at or above US\$15 million are subject to international advertising and use of the bidding documents agreed with the Bank
		200,000 < C < 15,000,000	Open Competition National Market Approach	≤ 10,000,000
		C ≤ 200,000	Request for Quotation	None
2	Goods, IT, and non- consulting services	C ≥ 3,000,000	Open Competition International Market Approach and Direct Contracting	≥ 3,000,000 All contracts at or above US\$3 million are subject to international advertising and use of the bidding documents agreed with the Bank
		100,000 < C < 3,000,000	Open Competition National Market Approach	≥ 2,000,000
		C ≤ 100,000	Request for Quotation	None
3	National shortlist for selection of consultant firms	C < 200,000	For Consulting Services	None
	IIIIIIS	C ≤ 400,000	For Engineering and Construction Supervision	None



4	International shortlist for selection of	C ≥ 200,000	For Consulting Services	≥ 1,000,000
	consultant firms	C > 400,000	For Engineering and Construction Supervision	≥ 1,000,000
5	Selection of Individual consultants	All values	All Approaches	≥ 300,000
6	Direct contracting	All values		As agreed in the Procurement Plan
7	Training, workshops, study tours	All values	Based on approved Annual Work Plan & Budgets (AWPB)	

Note: *These thresholds are for the purposes of the initial procurement plan for the first 18 months. The thresholds will be revised periodically based on reassessment of risks. All contracts not subject to prior review will be post-reviewed.

27. **Procurement Risk Rating.** The project procurement risk prior to the mitigation measures is **Substantial**. The risk can be reduced to a residual rating of **Moderate** upon consideration of successful implementation of the mitigation measures contained in the action plan for strengthening procurement capacity provided in **Table 11**.

Table 11: Action plan for strengthening procurement capacity

No.	Key Risks	Mitigation actions	By whom	By when
1	Lack of a procurement procedures manual based on "World Bank Procurement Regulations for IPF Borrowers"	Develop a PIM of procedures with a section on procurement detailing all applicable procedures, instructions, and guidance for handling procurement, the standard bidding documents, and other standard procurement documents to be used. The PIM will outline the interaction between the project stakeholders responsible for procurement	PIU	No later than 3 months after Credit/Grant effectiveness
2	Absence of experienced Procurement staff for the new PIU	Hire a Procurement Specialist proficient in the World Bank procurement procedures and a procurement assistant dedicated to the projects of the PIU, on a competitive basis	PIU	No later than 3 months after Credit/Grant effectiveness
3	The procurement team and technical staff involved in procurement processes have not mastered the World Bank's new Procurement Framework and its tools	Train the procurement team (the Procurement Specialists and the Procurement Assistant), the technical experts, the Department of Finances and Materials (DFM) staff, and the tender committee members in the Bank's new Procurement Framework	PIU/IDA	No later than 3 months after Credit/Grant effectiveness
4	Systematic exceeding deadlines in the implementation of certain activities of the procurement cycle, mainly the awarding and signing of contracts	Closely monitor and exercise quality/control on all aspects of the procurement process, including evaluation, selection, and contract award in line with the provisions of the procurement manual	PIU	Throughout project implementation
5	Lack of a dedicated archiving room with a trained staff for its management	Provide adequate space and equipment for the procurement archive and set up an adequate filling system for project records to ensure easy retrieval of information/data according to Bank requirements for archiving	PIU	No later than 6 months after the beginning of project implementation

Designate or recruit an officer to be responsible for	
data management	

- 28. **Procurement supervision.** In addition to the prior review and implementation support mission carried out by the World Bank, it is recommended that at least two missions be carried out each year, with one visit to the field to carry out post-review of procurement actions.
- 29. **Post-review procurement.** Post-reviews can be done either by World Bank staff or consultants hired by the World Bank. They may also be carried out by third parties such as supreme audit institutions, procurement regulatory authorities, consultancy firms, NGOs, and others, according to procedures acceptable to the World Bank to ascertain compliance with procurement procedures as defined in the legal documents. The procurement post-reviews should cover at least 10 percent of contracts that have not been prior reviewed in a financial year. The sampling is risk based and considers (a) the project procurement risk rating (with the riskier project having a larger sample); and (b) the contract risk rating, to ensure that riskier contracts constitute a higher proportion of the sample. Post-reviews contribute to the overall procurement performance rating of the Project based on the rating of the post-procurement review and provide a basis for updating the project procurement risk and the risk mitigation plan.
- 30. **Oversight and monitoring arrangements for procurement.** The PIM will define the Project's internal organization and its implementation procedures. It will include, among other things, all relevant procedures for calling for bids, selecting consultants, and awarding contracts. The project monitoring arrangements for procurement will be specified. Detailed procurement documentation (namely, the Project Procurement Strategy for Development) may be referenced as such and retained in the project files. The detailed 18-month Procurement Plan will be uploaded to the World Bank website.

Environmental and Social (including safeguards)

- 31. As the Project objective is to improve the utilization and quality of reproductive, maternal, neonatal, child, adolescent health and nutrition services, especially among the poorest households, in targeted areas, it is expected to generate a positive social impact. Through the PBF mechanism, the Project will provide incentives for health facilities to increase the quantity and quality of health services provided. Even though the Project will not finance civil works, the improvement of the service quality might entail an increased production of hospital waste. To ensure that this potential increase of hospital wastes will be well mitigated, Environmental Assessment (OP/BP 4.01) policy was triggered and the project has been assigned in Category "B". The mitigation measures to address these adverse impacts can be easily designed and implemented at the level of each health care center. Possible environmental risks include the inappropriate handling and disposal of hazardous hospital medical waste, including sharp needles, and especially the inadequate management of disposal sites, poor management of obsolete, increase of nosocomial diseases. The Project will also enhance community ownership for monitoring the quality of basic health services.
- 32. The Government has prepared in September 2018 a Hospital Waste Management Plan which will be implemented during the Project implementation. In addition, health centers will report on hospital waste management since that action will be included as an indicator to be evaluated and purchased in PBF. In fact, the quantified quality checklist used by PBF to pay for performance on the quality the center performance will measure the level of hospital waste management. The weighting for this aspect will be increased, and the adherence to the guidelines will be checked, and paid for, quarterly.

- 33. To deal with all environmental and social potential negative impacts related mainly to the hospital waste management, the project implementation unit will include an Environmental and Social specialist who will be responsible for following up the implementation of all environmental and social mitigation measures included in plan. The Environmental and Social Specialist will work closely with the relevant ministries and coordinate with the ministry of Environment, NGOs and local administrative authorities.
- 34. Because the project is classified as Category B for environmental purposes, an Environmental Assessment Report including a Medical Waste Management Plan was prepared, and disclosed in-country, and at the World Bank website.

Monitoring & Evaluation

35. Project processes will be monitored by the Operations Officer, based in Bamako. During the early stages of project implementation, progress monitoring will focus on procurement activities against the agreed procurement plan, implementation of the agreed action plan and Environmental and Social Management Framework (ESMF).



ANNEX 2: FM Arrangements

COUNTRY: Mali

Mali - Accelerating Progress Towards Universal Health Coverage

- An FM assessment of the implementing unit (PIU) of Sahel Malaria and Neglected Tropical Diseases 1. Project (PMNTD), was carried out in October 2018. The objective of the assessment was to determine whether the PIU has acceptable FM arrangements in place to ensure that the project funds will be used only for intended purposes, with due attention to considerations of economy and efficiency. The assessment complied with the Bank Directive Financial Management Manual for World Investment Project Financing operation effective March 1, 2010 and as last revised on February 10, 2017.
- 2. Arrangements are acceptable if they are capable of accurately recording all transactions and balances, supporting the preparation of regular and reliable financial statements, safeguarding the project's assets, and are subject to auditing arrangements acceptable to the Bank. These arrangements should be in place when project implementation starts and be maintained as such during project implementation. The assessment concluded that the financial management of the PIU satisfies the Bank's minimum FM requirements under Bank Policy and Directive for Investment Project Financing, and therefore is adequate to provide, with reasonable assurance, accurate and timely financial management information on the status of the project required by the Bank.
- 3. The overall financial management performance of the PMNTD is Satisfactory (April 2018). The PIU is familiar with the Bank FM requirements. The interim un-audited financial reports for the on-going project are also submitted on time and acceptable to IDA. For 2017, external auditors expressed unqualified opinion.
- The overall fiduciary risk rating is assessed as Substantial and mitigation measures proposed (see FM Action Plan) will strengthen the internal control environment and maintain the continuous timeliness and reliability of information produced by the PCU and an adequate segregation of duties.

Table 12: Risk assessment and mitigation

	Risk	Risk-Mitigating Measures	Residual
Risk	Rating	Incorporated in Project Design	Risk
Inherent risk	Н		Н
Country level: The Public Expenditure and Financial Accountability II, undertaken in 2015, has highlighted several areas of strengths.	Н	The Government is committed to a reform program to improve and Modernization of Public Finance Management and budget program was setup since January 2018. However, it will take time for these reforms to substantially improve the management of public funds.	H
Entity level: The FM capacity assessment of DFM/MoH	Н	MoH's DFM is not familiar with IDA FM procedures. The FM procedures	S
during Project preparation revealed		manual will be prepared; additional	



Risk	Risk Rating	Risk-Mitigating Measures Incorporated in Project Design	Residual Risk
internal control weaknesses and weak fiduciary environment, due mainly to weak compliance with the rules and policies in place. Implementation of this Project will translate into an increase of activity for the DFM. This increase, in turn, will require more sophisticated control systems and adequate staff, an effective internal audit function, developing the procedures manual, an integrated information system, and multi-Project software. Project level: Project resources may not be used for the intended purposes. Delays in the reporting system and auditing due to the additional workload for, and the weak capacity of the FM team, are expected. The numerous stakeholders could negatively impact implementation of the Project. Other concerns are the weakness of the M&E system to support the payment of cash grants and the weak capacity of regional and rural entities.	S	FM staff very familiar with the Bank FM procedures will be recruited to form the FM team of the PIU; the internal audit function will be strengthened; and a multi-Project and multi-site accounting software will be installed. Recruitment of a FM manager (RAF) and the adoption of an FM procedures manual will mitigate internal control weaknesses. Current FM arrangements are not adequate to manage the Project. For efficiency, the RAF will strengthen ex-ante and ex-post control of funds allocated to Partner implementing organizations. The scope of audit will include review of expenditures incurred by implementing entities. Additional FM staff (FM manager, accountant) will be recruited based on ToRs acceptable to IDA to train and advise FM staff. Specific measures are incorporated in the Project design to ensure smooth implementation and mitigate related risks including governance actions.	S
Control Risk	S		S
Budgeting: (i) Weak capacity to prepare and submit accurate work program and budget; (ii) weak consolidation of budgets; (iii) weak budgetary execution and control; (iv) delays in preparing the budget; (v) unreliable lack of comprehensiveness of budget; (vi) cost overrun or underrun and reasons not detected in timely manner.	S	Annual work plan (AWP) and budget required each year and proclaimed. AWP reviewed and approved by Steering Committee (SC). The Project Financial Procedures Manual will define the arrangements for budgeting, budgetary control, and requirements for budgeting revisions. Interim Financial Report (IFR) will provide information on budgetary execution and analysis of variances between actual and budget.	M
Accounting: Poor policies and procedures, lack of qualified accountant staff (staff capacity); no familiarity with SYSCOAHADA system.	S	FM aspects handled by the FM team of the PIU (a) The Project will adopt the SYSCOAHADA accounting system. Accounting procedures will	М



Risk	Risk Rating	Risk-Mitigating Measures Incorporated in Project Design	Residual Risk
Internal Control: Internal control system may be weak due	Н	be documented in the procedures manual; (b) The FM team headed by a RAF will be strengthened by individual consultants recruited competitively; (c) Training on IDA FM procedures will be provided to the staff as needed. (i) Prepare the FM procedures manual and training on the use of	S
to weak FM capacity of the team; or the current FM procedures may not be sufficient for this Project. The lack of a procedures manual may lead to inappropriate use of the funds and delays in financial reporting. The SC may not be effective.		the manual; (ii) Outsource the internal audit function to a consultant who will scrutinize the proclaimed accounting, financial, and operational procedures. The IA will report to the Coordinator and share the report with the SC.	
Funds Flow: Risk of misused of funds and delays in disbursements of funds to IA and beneficiaries; (ii) inefficient use of the funds; (iii) risks of delay in the utilization of advances; (iv) and risks of delays in the justification of the use of advance made to IA.	Н	(i) In line with the FM manual, payment requests are to be prepared prior to disbursement of funds to contractors or consultants and implementing entities. (ii) The ToRs of the internal auditor as well as the external auditors include regular field visits (physical verifications of works, goods, and services acquired). (iii) A ceiling for expenditures that can be handled/paid in cash will be set up in the FM procedures manual. (iv) Replenishment of bank accounts will be made via a simplified IFR (summary report). Supporting documents will be kept on their premises.	S
Financial Reporting: (i)Inaccurate and delayed submission of IFR (ii) Workload leading to some delays in recording of expenditures as well as preparation of periodic financial reports; (iii) Lack of motivation of staff working on IDA-financed project impacting the internal control and quality of the oversight of IDA funds by implementing	S	(i) A computerized accounting system will be used (for example, multi-projects and multi-sites). (ii) IFR and financial statement formats were agreed on at Project negotiations. (iii) One finance manager will lead the FM team of the PIU and one accountant will be recruited for	M
entities. Auditing:	S	Project. (i) Project's institutional	S

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Diel	Risk	Risk-Mitigating Measures	Residual
Risk	Rating	Incorporated in Project Design	Risk
Delays in submission of audit report;		arrangements allow the	
Scope of the mission may not cover		appointment of adequate external	
expenditures incurred at decentralized		auditors. ToRs (to be discussed	
level and other IA; auditors selected may		before the EoI are advertised) will	
not be acceptable to IDA or may not		include field visits and specific	
conduct their assignments professionally.		reports on finding physical controls	
		of goods, services, and works	
		acquired by IAs and beneficiaries.	
		(ii) Annual auditing arrangements	
		will be carried out during Project	
		implementation period; (iii) Audit	
		due dates will be closely monitored	
		by Bank FM team.	
Fraud and Corruption:	S	(i) ToR of external auditor will	S
Possibility of circumventing the internal		comprise a specific chapter on	
control system with colluding practices		corruption auditing; (ii) Internal	
such as bribes, abuse of administrative		auditor will report to the Steering	
positions. Misprocurement is a critical		Committee; (iii) Copies of the IA	
issue.		reports will be submitted to the	
		Bank; (iv) Measures to improve	
		transparency, such as providing	
		information on Project status to the	
		public; and to encourage	
		participation of civil society,	
		beneficiaries, and other	
		stakeholders, are built into Project	
		design (ref. section below on	
		Governance and Anti-Corruption,	
		GAC).	
OVERALL FM RISK			Subst.

It is expected that the financial management will satisfy the Bank's minimum requirements once mitigation measures have been implemented. An FM Action Plan to enhance the FM arrangements for the Project is summarized below (

6. **Table 13**).



Table 13: FM Action Plan

Action		Responsible party	Deadline and conditionality
1.	Elaborate Implementation manual including fiduciary procedures	PIU	Before effectiveness
2.	Recruit a Financial Management Officer and accountant with qualifications and experience satisfactory for the Bank	PIU	Three (3) months after effectiveness
3.	Upgrade accounting software taking account new project component	PIU	Five (5) months after effectiveness
4.	Recruit an external auditor	PIU	Six (6) months after effectiveness

- Internal control system. The internal control system comprises (i) a steering committee to oversee the 7. project activities, and (ii) a Project Implementation Manual including an updated section on Administrative, Financial, Procurement and Accounting Procedures to reflect new project requirements, which will be adopted three months after project effectiveness, and (iii) an internal audit function to carry out ex-post reviews and to evaluate the performance of the overall internal control system. Internal Audit function will be shared between PMNTD, REDISSE III and this current project.
- 8. Planning and budgeting. The PIU will prepare a detailed annual work plan and budget (AWPB), which need to be approved by the project Steering Committee. The PIU will submit the approved AWPB to the Bank, no later than November 30, before the year when the work plan should be implemented.
- 9. Accounting. The SYSCOHADA, assigned accounting system in West African Francophone countries, will be applicable. The existing multi-project accounting software (TOM2PRO, already used by PIU) will be customized to host the book-keeping of this project.
- 10. Financial reporting. Every quarter, the PIU will submit an IFR to the Bank within 45 days after the end of the quarter. The IFRs should provide sufficient pertinent information for a reader to establish whether (i) funds disbursed to the project are being used for the purpose intended, (ii) project implementation is on track, and (iii) budgeted costs will not be exceeded. The PIU will use the IFR format of the ongoing IDA funded projects.
- 11. The report may include:
 - An introductory narrative discussion of project developments and progress during the period, to provide context to (or other explanations of) the financial information reported;
 - A Sources and Uses of Funds Statement, both cumulatively and for the period covered by the report, showing separately funds, provided under the Project (IDA, Borrower, Recipients);
 - A Uses of Funds by Components Statement, cumulatively and for the period covered by the report;
 - The designated account (DA) reconciliation, including bank statements and general ledger of the bank account;
 - Explanation of variances between the actual and planned activities and budget.

- - 12. Annually, the PIU will prepare Project Annual Financial Statements, which will comply with SYSCOHADA and World Bank requirements. Annual Financial Statements may comprise:
 - Project presentation and project developments and progress during the year, to provide context to (or other explanations of) the financial information reported;
 - A Statement of Sources and Uses of Funds which recognizes all cash receipts, cash payments and cash balances:
 - A Statement of Commitments;
 - Accounting policies adopted and explanatory notes;
 - A Management Assertion that project funds have been expended for the intended purposes as specified in the relevant financing agreements.
 - 13. Auditing. The PIU will submit Audited Project Financial Statements (PFS) satisfactory to the World Bank every year within six (6) months after closure of the fiscal year. A single opinion on the Audited Project Financial Statements in compliance with International Federation of Accountant will be required. In addition, a Management Letter will be required, containing auditor observations and comments, and recommendations for improvement in accounting records, systems, controls and compliance with financial covenants in the Financial Agreement.
 - 14. The APUHC-PIU will recruit a technical competent and independent auditor acceptable to the Bank within five (5) months after the project effective date. The recruitment for the external audit of the financial statements of the project should be done through terms of reference agreed by IDA.

Table 14: Audit reports

Audit Report	Due Date
The Project audit reports (audit report and	• Not later than June 30 (Year N) if effectiveness
management letter)	has occurred before June 30 (Year N-1).
	• Not later than June 30 (N+1) if effectiveness has
	occurred after June 30, (N-1)

Disclosure of the audited financial statements. In line with the access to information policy, the project 15. will comply with the World Bank disclosure policy of audit reports (e.g. make publicly available in a manner acceptable to the World Bank; promptly after receipt of all final financial audit reports), the World Bank will also make available the reports to the public.

Disbursements arrangements

16. Disbursements under this project will be carried out in accordance with the provisions of the Disbursement Guidelines for Investment Project Financing dated February 2017, the Disbursement and Financial Information Letter and the Financing Agreement. IDA and GFF will disburse on a pari passu basis based on a predetermined ratio in the legal agreements.

17. The project will finance 100% of eligible expenditures inclusive of taxes. A new *Communauté Financière Africaine Franc* (CFAF) denominated DA will be opened in a commercial bank under terms and conditions acceptable to IDA. An initial advance up to the ceiling of the DA will be made and subsequent disbursements will be made against submission of Statements of Expenditures (SOE) reporting on the use of the initial/previous advance. The option to disburse against submission of quarterly unaudited Interim Financial Report (also known as the Report-based disbursements) could be considered, as soon as the project meets the criteria. The other methods of disbursing the funds (reimbursement, direct payment and special commitment) will also be available to the project. The minimum value of applications for these methods is 20% of the DA ceiling. The project will sign and submit Withdrawal Applications (WA) electronically using the [eDisbursement] module accessible from the Bank's Client Connection website.

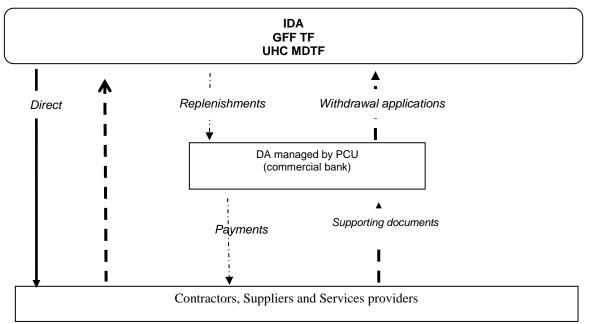


Figure 9: Funds flow chart

Implementation Support Plan

18. Based on the outcome of the FM risk assessment, the following implementation support plan is proposed. The objective of the implementation support plan is to ensure the project maintains a satisfactory FM system throughout its life.



Table 15: FM Implementation support plan

FM Activity	Frequency
Desk reviews	
Interim financial reports review	Semester
Audit report review of the program	Annually
Review of other relevant information such as interim internal control	Continuous as they become available
systems reports	
On-site visits	
Review of overall operation of the FM system (Implementation Support	Twice in the year
Mission)	
Monitoring of actions taken on issues highlighted in audit reports,	As needed
auditors' management letters, internal audits, and other reports	
Transaction reviews	As needed
Capacity-building support	
FM training sessions	During implementation and as and when
	needed

Governance

19. The risk of irregularities and corruption within the project activities is substantial given the country context and health sector performance. In addition, the lack of appropriate or effective oversight mechanisms could jeopardize Project implementation. A strong fiduciary arrangement has been designed and put in place to mitigate these risks; some measures to improve transparency include providing information on the project status (publication of the project and project audited financial statements on its website); and recruitment of a dedicated FM Officer familiar to Bank FM procedures and internal auditor.



ANNEX 3: PBF Design

COUNTRY: Mali

Mali - Accelerating Progress Towards Universal Health Coverage

- 1. In traditional health systems, government authorities play the role of regulator, provider and input distributor at the same time. Mixing these roles often results in conflicts of interest and the results are not satisfactory because conflict of interest may arise when concentrating these key functions in a single public entity. PBF proposes an alternative institutional arrangement that separates the functions of regulation, service delivery, contracting, payment and the voice of the population at the central and peripheral levels with the aim of strengthening good governance. The Figure below summarizes the institutional set up for PBF Project in Mali.
- 2. At the central level of the Ministry of Health, a Steering Committee will be created to oversee the achievement of the project's objectives. The Steering Committee will include: (i) the most pertinent directorates of the Ministry of Health; and (ii) key ministries whose support is needed for successful implementation and sustainability of PBF in Mali. The Steering Committee will be tasked to: (i) validate the overall strategic direction of the PBF program; (ii) ensure that the PBF manual are followed; (iii) examine the different contracts and intervene where necessary to resolve issues; (iv) monitor PBF and other activities' implementation and intervene where problem resolution may require the support of committee members; and (v) disseminate the results of the evaluations with a view toward mobilizing additional resources and expanding the PBF approach in the country.

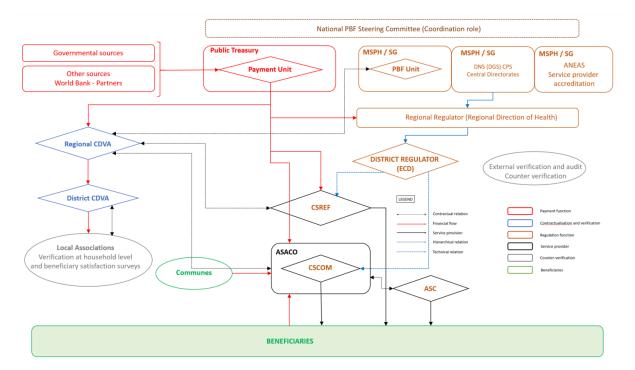


Figure 10: PBF design

- 3. The Ministry of Health, through the PBF National Unit (PBF-NU) and the other departments of the Ministry of Health, defines the healthcare packages that each type of health facility is authorized to offer to the population; MPAs for CScom and other health centers, CPA for district hospitals and other referral hospital, as well as quantity indicators, their prices and equity bonuses that will be used to purchase health facilities performances. Quantitative indicators and their prices are adjustable every year according to the evolution of the indicators, the availability of resources and the evolution of the priorities of the Ministry of Public Health. They also define the quality standards for the provision of care, indicators and the assessment checklist that will be used for quality assessment, as well as the methods for calculating quality bonuses relating thereto. Quality indicators and assessment checklist can be revised in case of need, either to improve their understanding or to adapt it to the evolution of the technical standards of provision of care.
- 4. Through the PBF-NU, the Ministry of Public Health will sign performance contracts with the regional CDVA. CDVA will (i) sign performance contract with health facilities, (ii) do the independent verification of their production, (iii) and do their training and coaching on PBF principles and application of PBF tools (Business plan and Index tools). coaching/training at the regional level. At the end of each quarter, the National Technical Unit and the other departments of the ministry assess the performance of regional CDVAs, prepare invoices for the payment of their performance and forward them to the paymasters who make the payments directly to the bank accounts of the CDVA. The paymaster will be the project implementation unit of the project (PIU).
- 5. Similarly, through the PBF-NU the Ministry of Health will sign a performance contract with regional directions to ensure the regulation at regional level. This includes: (i) organize Peer evaluation of the quality of references hospitals in the region; (ii) Sign the performance contract with of health district in the region and carry out their evaluation quarterly; and (iii) carry out regional pharmaceutical inspections. Assessment of the performance of the different regions is also done quarterly by the PBF-NU and the other departments of the Ministry of Health. Their performance payment invoices are established and forwarded to the paymasters (PIU) who will pay directly into the accounts of regional health directions.
- 6. At the regional level, the CDVA will sign the performance contracts with the health facilities (HFs) to offer the package of care defined by the Ministry of Health. At the end of each month, the CDVA verification agents in the health districts verify the amount of care produced by the HFs and prepare the corresponding invoices.
- 7. Once the monthly verification is completed in a district, a validation meeting will be held in the district to validate the results and invoices of each HF. After validation at the district level, the data will be entered in the PBF portal and forwarded to the PBF-NU which will confirm the validation and forward the invoices through the portal to the paymaster (PIU) who will make the payment directly by transfer into the bank accounts of the HF.
- 8. Furthermore, on a quarterly basis, the CDVA signs contracts with local associations that do community evaluation of the care provided to the populations by the HFs.
- 9. The District Medical team will carry out regulation activities at district level. This includes: (i) quality evaluation of all health facilities offering the MPA in the districts; (ii) district pharmaceutical inspections; and (iii) organizing committee validation meetings and quarterly coordination meetings in the districts. Their

performance contract will be signed by regional director and their evaluation will be carried out by the regional team. Their performance payment invoices will be established after evaluation to the PBF-NU which will confirm validate and forward the invoices to the paymaster (PIU) who will make the payment directly by transfer into the bank accounts of the Health district.

- 10. At the operational level, Autonomous health facilities, in collaboration with their community health workers (CHWs) will be in charge to provide curative, preventive and promotional care as defined in their care packages to the populations covered, both at the health facility and in the community. To this end, each HF with a MPA will sign sub-performance contracts with its community workers. This performance contract defines the performance indicators of the community health workers as well as the prices of these indicators. The PBF performance of the community workers of each HF is integrated into their production and verified by the CDVA.
- 11. A PBF manual defining detail of this design will be elaborated before the beginning of the implementation of the project. The PBF manual will build on the manual elaborated for the Koulikoro PBF pilot.

ANNEX 4: Economic and Financial Analysis

COUNTRY: Mali

Mali - Accelerating Progress Towards Universal Health Coverage

Project development impact

1. The proposed Project will seek to improve the health status of the Malian population with a specific focus on women and children, and on the poor population. Project investments will contribute to strengthening the performance of the health system by supporting high impact community health services and Performance-Based Financing which has been piloted in Mali. The implementation of PBF mechanisms will increase the coverage and the quality of an essential package of services delivered at the primary care level. The set of interventions proposed in the essential package of services has been demonstrated to be cost-effective in a variety of surveys conducted across different countries and in FCV settings. In addition, support for the scale-up, strengthening and rationalization of the RAMU is likely to decrease the incidence of impoverishing and catastrophic health expenditure, hence freeing-up household resources for other essential goods and assets and increasing their well-being.

Rationale for public sector provision and financing

2. The rationale for public intervention in the health sector in Mali is strong. There are three arguments for public intervention in the health sector: (1) equity; (2) externalities; and (3) market failures. First, the poor cannot always afford health care to restore their level of welfare after experiencing a health shock, or to improve their productivity and wellbeing. Therefore, public investments in the health of the poor can reduce poverty or alleviate its consequences. Second, many health promoting activities carry large positive externalities. This is the case of immunization for example, or for communicable disease control. In the case of goods characterized by positive externalities, private market supply results in a suboptimal provision from a societal perspective. Finally, market failures, and non-rational behavior, provide a third rationale for public interventions to improve efficiency and equity. Both adverse selection and moral hazard would distort the optimal allocation of health insurance if the market is only influenced by private agents. Information asymmetries between patients and health care providers can also translate into conflicts of interest in which the care providers have incentives to over supply health services. Hyperbolic discounting can account for the fact that private agents choose to underinvest in health goods or overinvest in health bads (such as smoking or adopting risky behaviors).

World Bank's value added

3. The value added of the World Bank support to Mali lies in addressing both critical demand and supply side bottlenecks to the delivery of essential services. The comparative advantage of the Bank includes its technical input based on international experience on health systems strengthening, including on performance-based financing, and capacity to mobilize a wide-range of technical expertise to support key strategies and reforms (e.g. Health financing system assessments, health financing strategy, RMNCAH+N investment case). In this specific project, an important value added of the World Bank support is to enhance the intended development impact by leveraging synergies with ongoing projects in non-health sectors. The proposed project

will seek to exploit synergies with (i) social protection (cash transfer and safety net project), (ii) infrastructure, and (iii) governance.

Economic Analysis

4. The economic analysis of the Project draws on empirical evidence to demonstrate that the expected benefits outweigh the costs of the proposed interventions and that the Project is financially sustainable. Detailed economic and financial analysis has been conducted and include: (i) a cost-effectiveness analysis of the project (what is the incremental cost effectiveness ratio?); (ii) a cost-benefit analysis of the project (how much does the project cost per saved life year?) and (iii) an analysis (how financially sustainable is the project?).

Cost-effectiveness analysis

5. The methodology for the cost-effectiveness analysis follows Shephard et al. (2015).²⁴ It implies weighting benefits (expressed in terms of effectiveness) and costs (expressed in monetary units). Costs include those related to the interventions included in the three components of the project. Gains will be expressed in terms of lives saved because of the supported interventions. To determine these gains, the expected number of lives saved by the project will be compared to a status-quo scenario. The output of the cost-effectiveness analysis is an ICER, which reflects the change in cost divided by the change in the amount of lives saved because of the implementation of the project. The following figure describes the structure of the cost-effectiveness analysis.

Incremental costs

- 6. The first step of the cost-effectiveness analysis is to determine incremental costs, i.e. costs of the targeted interventions had the project not existed versus cost of the interventions with the actual support of the project. As interventions supported by the project are new, we will take the full cost of the project as the incremental costs. The assumed implementation pace of the project is linear, and the annual cost of the project is \$12-\$18 million per year, over a 5 years implementation period. ²⁵
- 7. We calibrate the discount rates to convert the stream of future costs and benefits into present value by following the 2016 OPSPQ guidance note. ²⁶ Standard welfare analysis implies that the net benefits of a project at different points in time should be valued according to their marginal impact on welfare at the time they occur. The basic underlying assumption is that the marginal value of an additional dollar of net benefits is smaller when the recipients of those benefits are richer. Calibrating the relevant country specific discount rate requires a view on how much richer future beneficiaries of the project will be compared with current beneficiaries. This first needed ingredient is simply an assumption about future growth. Discounting also requires a view on how fast the marginal value of an additional dollar of benefits declines as recipients become richer. This parameter is the elasticity of marginal utility of consumption which is typically assumed to lie between 1 and 2 for standard utility functions.

²⁴ Donald Shephard, Zeng W. and Nguyen H.T.H (2015) Cost-Effectiveness Analysis of Results-Based Financing Programs: A Toolkit. World Bank HNP Discussion Paper.

²⁵ Co-financing of the PBF component by the Netherlands increases the overall budget from \$60 million to \$90 million, and the annual cost thus goes from \$12 million to \$18 million.

²⁶ Aart Kray (2016) Discounting Costs and Benefits in Economic Analysis of World Bank Projects. OPSPQ Guidance Note.



Table 16: Social discount rate calibration

Parameter	Value
Real GDP growth (annual %, IMF projections)	4.7
Population growth	3.0
Real GDP per capita growth	1.7
Implied discount rate (lower bound, MUC = 1)	1.7%
Implied discount rate (upper bound, MUC = 2)	3.4%

8. Given the broad Malian macroeconomic and demographic parameters, we will thus assume a social discount rate spanning 2%-4%. The present value of the project costs is given in the table below where the first scenario refers to a \$60 million financing amount (IDA + GFF) and the second scenario corresponds to a \$90 million financing amount (IDA + GFF + Netherlands).

Table 17: Discounted Project costs (in million US\$)

Vacus	Nominal (1)	Naminal (2)	NP	/ (1)	NPV (2)	
Years	Nominal (1)	Nominal (2)	2% disc.	4% disc.	2% disc.	4% disc.
2019	12	18	12	12	18	18
2020	12	18	11.8	11.5	17.6	17.3
2021	12	18	11.5	11.1	17.3	16.6
2022	12	18	11.3	10.7	17.0	16.0
2023	12	18	11.1	10.3	16.6	15.4
Total	60	90	54.3	49.3	81.5	74.0

Incremental gains

9. To determine the expected incremental gains generated by the Project, we use the Lives Saved Tool (LiST). LiST is a multi-cause model of mortality which predicts changes in mortality using (i) changes in coverage from RMNACH and nutrition interventions, (ii) country specific health status, and (iii) effect sizes of interventions based on best available evidence. Baseline and target values for intervention coverage supported by the Project were imputed in close line with the results framework. Consistently with the approach taken to discount the costs of the Projects, we retained two coverage assumptions, one based on a \$60 million financing envelope, and a second one based on a \$90 million overall envelope. Discount rates were also calibrated between 2% and 4%. The table below summarizes the expected gains in terms of deaths averted.



Table 18: Summary of LiST output (deaths averted)

Deaths averted	Scenario	Scenario 1 (\$60m)		Scenario 2 (\$90m)	
	Total	Annual	Total	Annual	
Neonatal deaths	5,664	1,133	10,525	2,105	
Child deaths	8,584	1,717	17,369	3,474	
Maternal deaths	852	170	1508	302	
Total	15,100	3,020	29,402	5,880	

Incremental cost-effectiveness ratio

10. The final output of the CEA is the ICER. The ICER of the proposed package of interventions is defined as the change in cost (with and without the Project) divided by the change in effectiveness. Table 19 below summarizes discounted costs, incremental gains, and the ICERs calculated with a social discount factor spanning 2%-4% and with two coverage scenarios.

Table 19: ICER summary table

Years	NPV (1)		NPV (2)		Deaths averted	Deaths averted	ICER (1) (1,000 USD)		ICER (2) (1,000 USD)	
	2% disc.	4% disc.	2% disc.	4% disc.	(scenario 1)	(scenario 2)	2% disc.	4% disc.	2% disc.	4% disc.
2019	12	12	18	18	1,582	3,636	7.6	7.6	5.0	5.0
2020	11.8	11.5	17.6	17.3	2,299	4,618	5.1	5.0	3.8	3.7
2021	11.5	11.1	17.3	16.6	2,985	5,822	3.9	3.7	3.0	2.9
2022	11.3	10.7	17.0	16.0	3,754	7,098	3.0	2.8	2.4	2.3
2023	11.1	10.3	16.6	15.4	4,480	8,228	2.5	2.3	2.0	1.9
Total	54.3	49.3	81.5	74.0	15,100	29,402	3.6	3.3	2.8	2.5

11. **The CEA and the ICERs show that the proposed Project is cost-effective.** Shephard et al. (2015), and WHO (2011, 2015)^{27,28} provide guidance to interpret ICERs, this guidance is summarized in

²⁷ World Health Organization (2011) Commission on Macroeconomics in Health. Geneva: World Health Organization.

²⁸ World Health Organization (2015) Cost-effectiveness Thresholds.

12. **Table 20** below. According to our parameters and calibration, the ICER for the proposed project varies between US\$2,500 and 2,800 under a US\$90 million financing envelope, and between US\$3,300 and 3,600 under the US\$60 million financing envelope. Comparing these values with a GDP per capita of 2,211 US\$ (at PPP factors) suggest that the ICERs are comprised between 1.1 and 1.6, and thus the proposed Project can be deemed as cost-effective. Cost-effectiveness is highest under the US\$90 million financing scenario (ICERs between 1.1- and 1.3-times GDP per capita).



Table 20: Cost-effectiveness thresholds

Threshold	Cost-Effectiveness
ICER < GDP per capita	Highly cost-effective
GDP per capita < ICER < 3*(GDP per capita)	Cost-effective
ICER > 3* GDP per capita	Not cost-effective

Cost-benefit analysis

- The CEA and CBA both provide information on the costs and consequences of investments. The primary 13. difference is that in cost-benefit analysis, all outcomes are measured in monetary units. In contrast, in costeffectiveness analysis the health benefits are measured in a nonmonetary unit such as death averted, while costs and other effects are measured in monetary units.
- 14. By using money as a common metric, cost-benefit analysis in principle allows the simultaneous, integrated consideration of multiple consequences, including both health and non-health impacts. Money is not important per se; it is simply a convenient common metric to measure the trade-offs individuals and societies are willing to make. If an individual chooses to purchase a good or service, he or she presumably values that good or service at least as much as the other things he or she could have used that money to buy. More generally, if a country or other funder chooses to spend more on one initiative, it will have fewer resources available to devote to other purposes – including other initiatives that address the same or similar problems.
- 15. We follow the latest best-practice guidelines developed to conduct the cost-benefit analysis for the proposed Project.²⁹ A group of experts led by Harvard School of Public Health researchers and funded by the Bill and Melinda Gates Foundation have recently developed reference cases and best practice guidelines to conduct thorough and consistent economic evaluation of health-related interventions, particularly in low- and middleincome countries. We follow here the cost benefit guidelines of Robinson et al. (2018),³⁰ and Wong (2018).³¹
- As conventionally conducted, cost-benefit analysis is based on respect for individual preferences. Value 16. is derived from the willingness of the individuals affected to exchange money for the benefits each accrues. Spending on mortality risk reductions means that individuals – and the society of which they are a part – will have fewer resources available to spend on other things. Analysts convert estimates of individual willingness-topay (WTP) for a reduction in mortality risk that accrues throughout a population decrease in the expected number of deaths within a timeframe. This central concept in cost-benefit analysis is the value per "statistical" life (VSL). The term "statistical" refers to small changes in the chance of dying. VSL is not the value that the individual, the society, or the government places on averting a death with certainty. Rather, it represents the rate at which individual views a change in money available for spending as equivalent to a small change in their own mortality risk.

²⁹ The material and references for the BCA guidelines are available here: https://sites.sph.harvard.edu/bcaguidelines/.

³⁰ Lisa A. Robinson, James K. Hammit, and Lucy O'Keefe (2018) Valuing Mortality Risk Reduction in Global Benefit-Costs Analysis. Guidelines for Benefit-Cost Analysis Project, Working Paper #7.

³¹ Brad Wong (2018) Benefit-Cost Analysis of a Package of Early Childhood Interventions to Improve Nutrition in Haiti. Guidelines for Benefit-Cost Analysis Project, Working Paper #6.



- 17. When evaluating policies to be implemented in lower income countries, benefit-cost analysts typically rely on one of two approaches: (1) they use the results of studies conducted in the country of concern if available; (2) they extrapolate from values from higher income countries, adjusting for differences in income. While the first option is preferable when studies from the country are of sufficient quality, the paucity of research in many settings means that analysts often follow the second option. There appear to be no stated or revealed preference studies conducted in Mali that would elucidate the willingness to pay for a reduction in mortality risk for diarrhea, lower respiratory infection or any other disease. The review by Robinson, et al. (2018) also did not identify any Mali specific literature.
- 18. Since context-specific analysis of the value of statistical lives (VSL) is not available in Mali, we use a benefit-transfer VSL approach whereby (i) upper bound estimates of VSL are set at 160* Gross National Income (GNI) per capita (at PPP factors), (ii) central estimates are set at 100* GNI per capita, and (iii) lower bound estimates are set at so as to transfer US\$9.4 million (in 2015 US\$) to Mali using an income elasticity of 1.5. This corresponds to a multiplier of 28*GNI per capita. These parameters correspond to (i) US\$345,600, (ii) US\$216,000 and (iii) US\$60,380. We use the lower bound value of the estimated VSL to remain on the conservative side. These VSL values are multiplied by the annual death averted by the intervention to estimate the monetary value of the benefit. The results of the CBA are summarized in Table 21 below.

Annual benefits from mortality Annual costs (NPV) Benefit to cost Net yearly benefit Scenario avoided (lower ratio bound VSL) (USD million) (USD million) (USD million) \$60 million; 2% discount 165.2 15.2 154.3 10.9 \$60 million; 4% discount 9.9 149.9 15.2 140.0 \$90 million; 2% discount 305.3 321.6 16.3 19.7 \$90 million; 4% discount 291.8 14.8 19.7 277.0

Table 21: Cost-benefit analysis summary

- 19. Overall, the estimated benefits incurred by the proposed Project outweigh costs by a factor higher than 15, whichever the financing scenario, the discount rate, or the chosen VSL valuation parameter.
- A broad fiscal sustainability analysis of the Project suggests that the proposed activities are financially 20. sustainable. Indeed, investments of the Project consist mostly in strengthening the performance of the health system (strengthening service delivery and efficiency) by supporting a PBF mechanism which has proven its impact to improve utilization and quality of health services. Moreover, funding for interventions under the Project represents a limited share of the national budget dedicated by the country for health (and even if the public expenditures for health are low in the general budget).



Table 22: Financial sustainability

	Mali	Source
GDP (current USD million)	14,035	WDI, 2016
GDP per capita (current USD)	780	WDI, 2016
General government final consumption expenditure (% of GDP)	16.3%	WDI, 2016
General government final consumption expenditure (USD per capita)	127	WDI, 2016
Health expenditure per capita (current USD)	47.8	WDI, 2014
Health expenditure, public (% of GDP)	1.6%	WDI, 2014
Health expenditure, public (% of government expenditure)	5.6%	WDI, 2014
Health expenditure, public (USD per capita)	12.2	WDI, 2014
Total Project investment (scenario 1, annual million USD)	12.0	
Total Project investment (scenario 2, annual million USD)	18.0	
Share of Project investment in public health outlays (scenario 1)	5.5%	
Share of Project investment in public health outlays (scenario 2)	8.2%	