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Report No: PAD2596

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

IN THE AMOUNT OF SDR17.2 MILLION

(US$ 25 MILLION EQUIVALENT)

TO THE

REPUBLIC OF GUINEA-BISSAU

FOR THE

STRENGTHENING MATERNAL AND CHILD HEALTH SERVICE DELIVERY IN GUINEA-BISSAU PROJECT

MAY 9, 2018

Health, Nutrition & Population Global Practice
Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2018)

Currency Unit =	CFA Franc (FCFA)
FCFA532 =	US$1
US$0.6916 =	SDR 1

FISCAL YEAR
January 1 - December 31

ABBREVIATIONS AND ACRONYMS

ADPP	From People-to-People Development Aid (*Ajuda de Desenvolvimento de Povo para Povo)*
AfDB	African Development Bank
AIFO	Italian Association "*Amici di Raoul Follereau*"
AMI	International Medical Assistance *(Assistência Médica Internacional)*
ASC	Community Health Agents (*Agentes de Saúde Comunitária*)
BHP	Bandim Health Project
CBA	Cost-Benefit Analysis
CDC	Center for Disease Control and Prevention
CG-PNDS	Management Unit of the National Health Development *Plan (Célula de Gestão do Plano Nacional de Desenvolvimento Sanitário)*
CPF	Country Partnership Framework
DA	Designated Account
DALYs	Disability-Adjusted Life Years
DGASS	General Directorate of Administration of the Health System (*Direção Geral de Administração do Sistema de Saúde*)
DHIS2	District Health Information System
DRS	Regional Health Directorates (*Direção Regional de Saúde*)
EMI	International Medical Assistance *(Entraide Médicale Internacionale*)
EU	European Union
FCV	Fragility, Conflict and Violence
FGM	Female Genital Mutilation
FM	Financial Management
FY	Fiscal Year

GAVI	Global Alliance for Vaccines and Immunization
IGAS	General health inspectorate (*Inspeção-Geral para Assuntos de Saúde)*
GDP	Gross Domestic Product
GNI	Gross National Income
GRS	Grievance Redress Service
HDI	Human Development Index
HDSS	Health and Demographic Surveillance System
IDA	International Development Association
IMR	Infant Mortality Rate
IVA	Independent Verification Agent
IMVF	Marques Valle Flor Institute (*Instituto Marques Valle Flor)*
ILAP II	Poverty Assessment Survey II (*Inquérito Ligeiro para Avaliação de Pobreza II*)
MICS	Multiple Indicator Cluster Survey
MINSAP	Ministry of Public Health (*Ministerio da Saúde Pública*)
NGOs	Non-Governmental Organizations
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MMR	Maternal Mortality Rate
MWMP	Medical Waste Management Plan
MWFSC	The Ministry of Women, Family and Social Cohesion
NMR	Neonatal Mortality Rate
OOP	Out of Pocket
PBF	Performance Based Financing
PEPFAR	President's Emergency Plan for AIDS Relief
PIMI	The Integrated Mother and Child Health Program (*Programa para a Redução da Mortalidade Materno Infantil*)
PCU	Project Coordination Unit
PDO	Project Development Objective
PHC	Primary Health Care
PHCPI	Primary Health Care Performance Initiative
PNDS	National Health Development Plan (*Plano Nacional de Desenolvimento Sanitário*)
PPP	Purchasing Power Parity
PFM	Public Financial Management
REDISSE II	Regional Disease Surveillance Systems Enhancement II
R4D	Research for Development
RMNCH	Reproductive, Maternal, Newborn, and Child Health
SDI	Service Delivery Indicator
SDG	Sustainable Development Goal
SIDA	Swedish International Development Cooperation Agency

SPL	Social Protection and Labor
STEP	Systematic Tracking of Exchanges in Procurement
SYSCOHADA	Organization for the Harmonization of Business Law in Africa (*Organisation pour l'Harmonisation en Afrique du Droit des Affaires*)
THE	Total Health Expenditure
USAID	United States Agency for International Development
UNDP	United Nations Development Program
U5MR	Under-Five Mortality Rate
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
UNWFP	United Nations World Food Program
VIDA	International Volunteering for African Development (*Voluntariado Internacional for o Desenvolvimento Africano)*
WAEMU	West African Economic and Monetary Union
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

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BASIC INFORMATION

Country(ies)	Project Name	
Guinea-Bissau	Strengthening Maternal and Child Health Service Delivery in Guinea-Bissau	
Project ID	Financing Instrument	Environmental Assessment Category
P163954	Investment Project Financing	B-Partial Assessment

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[✓] Fragile State(s)
[ ] Disbursement-linked Indicators (DLIs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
31-May-2018	31-Dec-2023

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To improve coverage of essential maternal and child health services in the Recipient's territory.

Components

Component Name	Cost (US$, millions)
1. Institutional Strengthening of MINSAP	2.86
2 - Health Workforce Development	3.23

3. Performance-Based financing to deliver a package of essential maternal and child health and community health services	10.09
4 - Community Health and Social Mobilization	8.82
5. Contingent Emergency Response	0.00

Organizations

Borrower:	Republic of Guinea-Bissau
Implementing Agency:	Ministry of Public Health

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	25.00
Total Financing	25.00
of which IBRD/IDA	25.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	25.00
IDA Grant	25.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	Total Amount
National PBA	0.00	25.00	25.00
Total	**0.00**	**25.00**	**25.00**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2018	2019	2020	2021	2022	2023
Annual	0.07	3.35	6.13	6.69	5.62	3.13

Cumulative	0.07	3.42	9.55	16.24	21.87	25.00

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

Climate Change and Disaster Screening

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

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

9. Other	
10. Overall	Substantial

COMPLIANCE

Policy

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

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

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 in Disputed Areas OP/BP 7.60		✓

Legal Covenants

Sections and Description

1.Project Steering Committee (“PSC”)

(a) Without limitation upon the provisions of Section I.A.1 of the Financing Agreement Schedule 2, the Recipient shall create not later than three months after the Effective Date and thereafter operate and maintain, at all times until the completion of the Project, a Project Steering Committee, chaired by MINSAP and with a composition, mandate and resources satisfactory to the Association, including representatives from, inter alia, the Recipient’s Ministry of Economy and Finance, the Recipient’s Ministry of Education, the Recipient’s Ministry of Women, Family

and Social Cohesion, and civil society.
.
(Schedule 2, Section I.A 2(a) of the Financing Agreement)

Sections and Description

1. The Recipient shall update not later than three months after the Effective Date and thereafter maintain the Project Implementation Manual (PIM) in form and substance satisfactory to the Association.

(Schedule 2, Section I.B of the Financing Agreement)

Sections and Description

1. To facilitate the carrying out of Part 3.2 of the Project, the Recipient, through MINSAP, shall sign Performance Agreements with the health facilities and Regional Health Directorates, under terms and conditions approved by the Association, as further described in the PIM.

2. In case of any conflict between the terms of the Performance Agreements and the terms of this Agreement, the terms of this Agreement shall prevail.

3. The Recipient shall:
(a) hire under a service contract with terms and conditions and in form and substance satisfactory to the Association (including the obligation to present regular Verification Reports, as further described in the PIM) and thereafter maintain the Independent Verification Agency in charge of verifying quantity and quality of services provided under Part 3.2 of the Project.
(b) exercise its rights under said service contract with the Independent Verification Agency in such manner as to protect its interests and those of the Association to accomplish the purposes of the Financing. Except as the Association shall otherwise agree, the Recipient shall not assign, amend, abrogate or waive the service contract with the Independent Verification - Agency or any of its provisions.

(Schedule 2, Section I.D of the Financing Agreement)

Sections and Description

The Recipient shall, not later than twenty-four (24) months after the Effective Date furnish to the Association the Institutional Reform Action Plan for MINSAP, in form and substance satisfactory to the Association.

(Schedule 2, Section IV.3 of the Financing Agreement)

Sections and Description

1. To facilitate the carrying out of selected activities under Part 4 of the Project, the Recipient shall, not later than three months after the Effective Date, enter into an agreement (the Agreement for the Provision of Technical

Assistance) with UNICEF, and thereafter maintain said Agreement for the Provision of Technical Assistance during the implementation of the Project, on terms and conditions acceptable to the Association, including, inter alia: the Recipient's obligation to make part of the proceeds of the Financing allocated to Category (1) available to UNICEF in order to assist the Recipient in the carrying out selected activities under Part 4 of the Project in accordance with the Anti-Corruption Guidelines, the Procurement Regulations, the Safeguard Documents and the Project Implementation Manual.

(Schedule 2, Section I.G of the Financing Agreement)

Sections and Description

The Recipient shall, not later than six (6) months after the Effective Date, hire the external auditors for the Project, with adequate qualification and terms of reference and in form and substance satisfactory to the Association. (Schedule 2, Section IV.2 of the Financing Agreement)

Conditions

Type	Description
Effectiveness	the Recipient has confirmed that the PCU is in charge of the implementation of the Project in form and substance satisfactory to the Association (Article IV, 4.01)
Type	Description
Disbursement	No withdrawal shall be made under Category (2) until and unless the Association has received adequate evidence that at least two Health Facility Grant Agreements have been signed in form and substance satisfactory to the Association. (Schedule 2, Section III, B.1 (b))
Type	Description
Disbursement	No withdrawal shall be made under Category (3) until and unless the Association has received adequate evidence that: (i) the contract with the Independent Verification Agency has been signed; (ii) the first Verification Report has been completed; both in form and substance satisfactory to the Association and as further detailed in the PIM. (Schedule 2, Section III, B.1 (c))
Type	Description
Disbursement	No withdrawal shall be made under Category (4), for Emergency Expenditures under Part 5 of the Project, unless and until the Association is satisfied, and has notified the Recipient of its satisfaction, that all of the following conditions have been met in respect of said activities: (i) the Recipient has determined that an Eligible Emergency has occurred, has furnished to the Association a request to include said activities in the CERC Part in order to respond to said Eligible Emergency, and the Association has agreed with such determination, accepted said request and notified the Recipient thereof; (ii) the Recipient has prepared and disclosed all safeguards instruments required for said

	activities, and the Recipient has implemented any actions which are required to be taken under said instruments, all in accordance with the provisions of Section I.I.3(b) of the Financing Agreement; (iii) the Recipient's Coordinating Authority has adequate staff and resources, in accordance with the provisions of Section I.I.2 of the Financing Agreement, for the purposes of said activities; and (iv) the Recipient has adopted the CERC Manual in form, substance and manner acceptable to the Association and the provisions of the CERC Manual remain, or have been updated in accordance with the provisions of Section I.I.1 of the Financing Agreement so as to be appropriate for the inclusion and implementation of said activities under the CERC Part. (Schedule 2, Section III, B.1 (d))

GUINEA-BISSAU
STRENGTHENING MATERNAL AND CHILD HEALTH SERVICE DELIVERY IN GUINEA-BISSAU

TABLE OF CONTENTS

1. STRATEGIC CONTEXT

A. Country Context

1. Guinea-Bissau, the 12th poorest country in the world, has faced continuous political instability, poverty and poor human development outcomes since its independence in 1973. With a Gross National Income (GNI) per capita of US$620 (2016), around 70 percent of the population lives in moderate poverty (Purchasing Power Parity, PPP, US$2 per day) and about 33 percent in extreme poverty (PPP US$1 per day).[1] Guinea-Bissau ranks 178th out of 188 countries in the 2016 Human Development Report. The country's Human Development Index (HDI) is 0.420, which is below the average among countries in the low human development category (0.497) and well below the average among countries in Sub-Saharan Africa (0.523).[2] The population of Guinea-Bissau is estimated at 1.8 million (2016) of which around 50 percent lives in urban areas, most in the capital Bissau.[3] The majority of the population, particularly the rural poor, has limited access to basic goods and services that directly influence the wellbeing of households. Poverty rates are higher in rural Guinea-Bissau (76 percent) than in the capital Bissau (51 percent).

2. The economy is dominated by agriculture, accounting for over 40 percent of gross domestic product (GDP) and employing about 80 percent of the workforce. The production and export of raw cashew nuts constitute the main source of income for more than two thirds of households (and for virtually all small farmers) and represent over 85 percent of the country's total export earnings. In contrast with the trends in most of the countries in the region, manufacturing contributes to approximately 16 percent of GDP. The country has experienced strong economic growth in the recent years with an average GDP growth of 4.3 percent between 2014 and 2016 (5.6 percent in 2016), influenced by increased prices and demand for cashew on the international markets. Despite the good economic prospects and the associated increase in tax revenues, the fiscal deficit continues to be a challenge at 4.2 percent of GDP in 2016. Tax revenues as a proportion of GDP amounts to only 10 percent (2016), ranking among the lowest performers in Sub-Saharan Africa. The economy is characterized by a high level of vulnerability to external developments due to the dependence on a single export (cashew). Binding constraints on growth include, among others, chronic underinvestment in infrastructure and human capital.[4]

3. Ongoing political instability imposes large costs on economic and social development in the country. Since its independence in 1973, there have been many coups attempts including four successful ones. Following the most recent *coup d'état* in 2012, Guinea-Bissau underwent a period of political transition, with general elections successfully held in 2014. A short-lived period of political stability after the elections fostered important steps toward a set of reforms. However, political tensions emerged again in mid-2015 and continue until today. Political instability and fragility is also manifested in the frequent government turnovers. Between 1999 and 2009, there was a change of government every year and in the last 18 months the country has had four governments. Instability has led to a weak State and weak institutions and Guinea-Bissau scores in the bottom 10th percentile on all indicators measuring public sector capacity in the World Bank's Worldwide Governance Indicator. Fragility has led to weak governance, which results in limited provision of basic public goods and services and high economic costs

[1] World Bank, 2015. Poverty Mapping Report.
[2] UNDP, 2016. Human Development Report 2016. Briefing note for countries (Guinea-Bissau).
[3] World Development Indicators, 2016.
[4] Guinea-Bissau - Country Economic Memorandum: Terra Ranca! A Fresh Start. Washington: DC: World Bank Group, 2015.

– after the last coup, the economy contracted by 1.8 percent in 2012 and barely recovered in 2013.

B. Sectoral and Institutional Context

4. Guinea-Bissau meets many if not all the criteria that characterize health systems in fragile states. The country's health system faces persistent challenges related to low public spending, poor infrastructure, inadequate supply of health workers, inadequate clinical and managerial training systems, malfunctioning referral system, non-operational health-information systems, weak governance and inadequate management capacity and systems (such as budgeting, public financial management and human resources management). Public spending accounts for about 20 percent of total health spending and is mostly used to pay staff salaries, while donors finance nearly 90 percent of the recurrent costs of the sector, including medicines and other critical health inputs.

5. The country faces persistent challenges in the health sector with a high burden of infectious diseases and high rates of child mortality. The country's life expectancy is 55 years, which is lower than the average for Guinea-Bissau's regional (59) and income peers (60). Malaria is the single biggest cause of deaths, followed by HIV/AIDS, neonatal disorders, lower respiratory infections, diarrheal diseases and nutritional deficiencies. The burden of HIV in Guinea-Bissau is the highest in West Africa and it disproportionately affects more women than men (female adults with HIV represent 58.6 percent of the population above 15 years old with HIV).[5] Progress has been made to reduce infant mortality, but both the infant mortality rate (IMR) and under-five mortality rate (U5MR) remain among the highest in the world, 60 and 88.8 per 1,000 live births, respectively.

6. Guinea-Bissau has one of the highest maternal mortality rates in the world. According to the last Multi Indicators Cluster Survey (MICS) the maternal mortality rate (MMR) is estimated at 900 maternal deaths per 100,000 live births, which is higher than the average among West Africa countries (579), among other low-income countries (542) and in Sub-Saharan Africa (494). The country did not achieve the Millennium Development Goal (MDG) for maternal health, set to lower MMR to 229 per 100,000 live births and is unlikely to achieve the Sustainable Development Goals (SDGs) target for 2030 along the current trend.[6]

7. Neonatal mortality rate (NMR), 35.8 per 1,000 live births, is higher than the average for West Africa and is strongly associated with birth spacing and birth order, indicating a lack of access to reproductive health services. The rate of NMR is comparable for any of the first six children born to a woman (approximately 36 per 1000 live births), but is 2.5 times higher for children born seventh or later in the birth order. This pattern is also true for birth spacing; children born less than two years after their previous sibling are almost twice as likely to die than if they were born at least three years after their previous sibling. These same patterns hold true for U5MR, currently at 89 per 1000 live births.[5] Given constraints in the access pointed out above, birth spacing and maternal knowledge seem to be more important factors influencing child health outcomes. Unsurprisingly, only 16 percent of women ages 15-49 who are married or in a stable union report using any contraceptive method,[7] and the adolescent pregnancy rate is estimated at 28 percent.

[5] World Bank, 2016. Guinea-Bissau Health Sector Diagnostic. World Bank, Washington, DC.
[6] World Development Indicators, 2016.
[7] Guinea-Bissau Multiple Indicator Cluster Survey (MICS5), 2015.

8. The utilization of obstetric services by expecting mothers in Guinea-Bissau is significantly low. Only 45 percent of the deliveries take place within health facilities.[5] A recent assessment by a European Union (EU) funded health project showed only 38 percent of women met the standard four antenatal consultations and that out of every 100 women having at least one antenatal care visit, only 37 percent delivered their babies in a health facility.[8] In addition, there is large variation in the burden of maternal and child health deaths distribution within Guinea-Bissau. U5MR, for example, varies from 41.8 per 1,000 in the region of Biombo to 158.9 per 1,000 in Gabú and 125.6 per 1,000 in Bafatá (Table 1). When looking across regions, Gabú and Bafatá consistently underperform in nearly all potential factors affecting child health outcomes.

Table 1: Extreme Poverty and Maternal and Child Health Indicators, Guinea-Bissau regions (2014)

Region	Extreme Pov. Rate*	NMR**	U5MR**
Bissau	0.17	33.5	68.7
Bolama	0.23	36.4	75
Biombo	0.37	11.5	41.8
Tombali	0.41	38.3	82.4
Bafatá	0.41	45.7	125.6
Gabú	0.43	49.5	158.9
Cacheu	0.45	43	95.7
Oio	0.5	30.4	63.7
Quinara	0.51	19.9	76.8
Guinea-Bissau	**0.33**	**35.8**	**88.8**

Source: World Bank, 2016 and MICS, 2015.
* Extreme Poverty Rate is the proportion of people who live on < $1 per day (PPP);
** NMR and U5MR are per 1,000 live births.

9. Guinea-Bissau has a very high burden of malnutrition, which directly correlates with maternal and child mortality. Per a national food security assessment conducted by the United Nations World Food Program (UNWFP) in 2013, only 7 percent of the population in Guinea-Bissau is food secure. The level of food insecurity is particularly high in rural areas at 93 percent and requires immediate assistance.[9] Food insecurity leads to malnutrition, which is a public health challenge of major concern. Indeed, the national prevalence of acute malnutrition (wasting, defined as weight for height lower than two standard deviations below the mean) is 6 percent overall, reaching approximately 8 percent in some areas, while the prevalence of stunting among children under five years is 27.6 percent.[10] Moreover, Guinea-Bissau has a higher burden of deaths and Disability-Adjusted Life Years (DALYs) due to nutritional deficiencies compared to structural and regional peers. There is strong evidence showing that malnutrition is perhaps the single greatest cause of child mortality in developing countries, as malnutrition weakens a child's

[8] PIMI Report. European Union, 2016.
[9] World Food Programme, 2013. Synthesis of Rapid Food Security Assessment. Bissau, Guinea-Bissau.
[10] UNICEF, 2015. Multi Indicators Cluster Survey.

ability to recover from a disease that would otherwise not kill a well-nourished child.[11] Malnutrition also contributes to the high-rates of anemia among women, which put pregnant women at increased risk for hemorrhage and other birth complications.

Health Financing

10. As a percentage of GDP, the level of health spending in Guinea-Bissau is comparable to its regional and economic peers, but the composition of its spending is highly problematic. Total health expenditure (THE) in Guinea-Bissau represents 5.6 percent of its GDP, which is close to the average of its regional (5.8 percent) and economic peers (5.7 percent). However, the country relies more on out-of-pocket (OOP) payments and external resources to fund health services. Neither of these is a desirable means to secure financial protection and of revenue collection: high OOP payments increases the risk of exposing households to financial shocks associated with ill health, and a continuous dependence on external resources has implications for sustainable health financing, while it also limits Guinea-Bissau's ability to plan systematically for the long term. In per capita terms, health spending (US$37) is well below the per capita average among West African countries (US$65.3) and approximately a third of the Sub-Saharan African countries average (US$97). This is largely driven by low public health spending, which accounts for only 20 percent of THE, or 7.8 percent of total government spending (2014 figures).

11. Despite the limited public health spending, the Ministry of Public Health (MINSAP) has not been able to entirely execute its budget. The MINSAP budget execution was approximately 50 percent in 2014 and decreased to 42 percent in 2015. The only category with high execution was staff costs (93 percent in 2014 and 79 percent in 2015). The low execution rates indicate the limited government capacity to strategically plan and implement health policy actions. Additionally, no Public Financial Management (PFM) System is in place. Comprehensive data on resources received by health facilities are lacking. Patients generally pay for consultations, drugs and other medical procedures. Most of these OOP payments are managed at the facility level for maintenance of the facility and purchase health care goods (mostly drugs). There is little data to indicate the true volume of these payments and the use to which these are being put, given that the entire system is essentially informal. Even in respect of use of central health care funds, there is no record of all health care expenditures, particularly the funds that are not used to pay staff salaries.[12]

12. Households bear a high proportion of THE in Guinea-Bissau. A recent World Bank report shows that households spend on average 15 percent of their non-food expenditures on health care, with lower income groups spending a larger proportion of their household income on health than the highest income group.[13] OOP payments are not associated with improved access to health services: households in Gabú and Bafatá spend more on health care through OOP payments and face higher-than-average rates of neonatal and child mortality. Approximately 12 percent of the households incurred catastrophic health expenditures. The incidence of catastrophic payments is higher in Gabú, Bolama and Biombo, and catastrophic payments are more common among households in rural areas (16 percent) than in urban areas (11.3 percent). Payments for health care increase the absolute and extreme poverty headcount

[11] Benson T and Shekar M, 2006. Trends and Issues in Child Undernutrition. Chapter 8. In: Jamison DT, Feachem RG, Makgoba MW, et al., editors. Disease and Mortality in Sub-Saharan Africa. 2nd edition. Washington (DC).
[12] UNIOGBIS, 2017.Thematic report on the right to health in Guinea-Bissau. UN HR, Bissau, Guinea-Bissau.
[13] World Bank, 2016. Guinea-Bissau Health Sector Diagnostic. World Bank, Washington, DC.

ratio by 1.4 and 1.1 percentage points. It means health care payments push more households into poverty and deepen the poverty of the already poor.[14] Every year in Guinea-Bissau approximately 15,000 people are pushed into extreme poverty due to health care payments.

Health Service Delivery

13. Health service delivery in Guinea-Bissau is structured around 11 sanitary regions, and organized in local, regional and central levels.[15] The local level is divided between 114 sanitary areas, which are the primary locus for implementation of primary health care (PHC) activities through 132 health centers. The regional level provides technical support and coordination for the sanitary areas. This level contains an administrative structure, the regional health directorates (DRS, *Direção Regional de Saude*), and technical units such as drugs warehouses, diagnostic centers, and secondary level regional hospitals. The central level is responsible for setting health policies, strategies and regulations. At this level are the National Hospital (*Hospital Nacional Simão Mendes*), specialized hospitals (for conditions such as tuberculosis and mental health) and satellite health centers. PHC facilities are classified into three types of health centers (A, B, and C), distinguished by their capacity to deliver complex health interventions. Health centers type A, for example, are defined by the capacity to perform surgeries, and they are in sanitary regions where there are no regional health hospitals. The PHC centers are responsible for the implementation of the minimum benefits package (*Pacote Minimo de Atividades)*, defined by the MINSAP, which is composed of five groups of activities: curative, preventive, population health (communication and health promotion), outreach activities, and support services (diagnostics, referral).

Table 2: Organization of Guinea-Bissau Public Health Care Delivery System

Regions	Population (2017)	Health Centers						
		Regional Hospital	MCH Center	Type A	Type B	Type C	Total Health facility	ASCs (Estimate)
Bafata	217,045	1	1	-	1	12	13	574
Gabu	259,570	1	1	-	1	17	18	587
Cacheu	229,204	1	2	1	1	17	19	529
Bolama	11,510	-	-	1	-	4	5	29
Bijagos	24,007	-	-	1	-	10	11	68
Oio	180,428	1	-	-	1	8	9	615
SAB	513,846	-	1	-	3	6	9	1,043
Farim	58,060	-	-	1	1	4	6	141
Quinara	77,465	-	-	1	3	10	14	174
Tombali	116,994	1	-	-	2	19	21	260
Biombo	54,507	-	-	-	1	6	7	267
Total	**1,742,636**	**5**	**5**	**5**	**14**	**113**	**132**	**4,287**

Source: MINSAP, 2017.

[14] The headcount ratio is the proportion of a population that exists, or lives, below the poverty line.
[15] Republica da Guinea-Bissau, 2008. Plano Nacional de Desenvolvimento Sanitário. Ministerio da Saúde Publica. Bissau, Guinea-Bissau.

Access to health care

14. Health care costs and distance to health providers were reported as the main reasons for not seeking health care when needed. On average, 44 percent of the Poverty Assessment Survey II (*Inquérito Ligeiro para Avaliação de Pobreza,* ILAP II) respondents were discouraged to seek treatment due to health care costs when falling ill. Surprisingly, the percentage of those reporting costs as the main barrier is higher for the richest group (39 percent) than for the poorest group (35 percent). Across regions, there was no evidence that relatively better-off regions have more affordable healthcare. The percentage of those reporting health care costs as the main barrier to seeking care was higher than the national average in Cacheu (58 percent), Bissau (51 percent) and Gabú (51 percent). The second main reason for not seeking care was distance of health care providers (10.5 percent). Approximately 52 percent of Bissau-Guineans travel for over an hour to reach the nearest health care facility, which is usually a 'type C' facility providing only the most basic health care interventions.[16] The regions of Quinara (26 percent), Oio (21 percent), and Bolama (20 percent) have the highest percentage of people not seeking care due to distance. A recent qualitative assessment conducted by the World Bank showed that these concerns can be translated in two words: roads and vehicles. Respondents reported that health centers usually don't have ambulances to transport pregnant women to facilities when needed; additionally roads are usually in a precarious condition which makes it difficult to travel to health facilities.[17]

Health Workforce

15. The country's health system faces persistent challenges related to the inadequate supply and maldistribution of health workers. The public health sector currently officially employs 2,173 workers in Guinea Bissau, of which 264 are physicians and 1,027 are nurses. In relation to the served population, there were 1.7 physicians and 11.5 health workers per 10,000 inhabitants in 2016. Over the recent years, the impact of the war-related diaspora on the workforce has been noticeable, particularly in terms of the loss of skilled cadres between 1996 and 2007 (Table). Although on balance the health workforce has been relatively stable during the last two decades, progress has been registered in terms of the upgrade of auxiliary health personnel, and of the reduction of support staff in favor of training general nurses and physicians.[18] In 2016, 60 percent of all health workers were female, although women represented only 31 percent of physicians.

[16] UNIOGBIS, 2017.Thematic report on the right to health in Guinea-Bissau. UN HR, Bissau, Guinea-Bissau.
[17] World Bank - Qualitative Assessment of Demand Side Constraints to Access Maternal and Child Health Services in Guinea-Bissau (forthcoming).
[18] MINSAP. "Plano Nacional de Desenvolvimento Sanitário 1997-2001"

Table 3: Evolution of the health workforce between 1996 and 2016, by categories

Category	1996	2007	2016
Physicians	165	104	264
Nurses	357	300	1,027
Midwives	67	177	141
Technical staff	276	199	244
Support	417	642	98
Other (aux.)	1,043	696	399
Total	**2,325**	**2,118**	**2,173**

Sources: PNDS I (1997); PNDS II (2008); MINSAP (2016)

16. The available health workers are concentrated in urban areas, and vast, remote regions are left without a minimum health team. Fifty-one percent of all physicians, and 40 percent of all nurses are based in the Bissau Autonomous Area (SAB), home to just 25 percent of the country's population. Populous regions such as Bafatá and Gabú show a systematic disadvantage in the deployment of all types of health personnel in favour of the Bissau and neighbouring Biombo areas. Medical specialists are all concentrated in the Bissau area – home to the country's level 3 hospital, and of a few private practices. When crossed with output indicators, it becomes apparent that workloads are extremely low across the country, with most health centres hosting around 20 birth deliveries per month, and regional hospitals carrying out fewer than 15 C-sections for the same period.

17. Scarcity of funds, political instability, and commercialization from within, emerge as the three key forces shaping human resources for health in Guinea Bissau. Noticeably little is currently allocated to health salaries by the state budget; the total wage bill for the health sector in 2015 was FCFA 216 million per month (US$393,392) for the 2,173 health workers employed in the public sector. Remarkably, the State only pays for healthcare-related salaries, with all other expenses (medicines, goods and services, investments) being partially covered by external funds and by health facilities' own revenues. Incomplete data on external assistance combine with absent information on paid user fees to obscure true financing levels. 'Commercialization from within' means that most of the services and goods dispensed through the public national health system are paid for OOP, through a multiplicity of statutory legal charges, and a myriad of illegal ones, some used to pay for health facilities expenses, but the majority pocketed by the health workers. As no financial system seems to be in place to truly recover the facilities' non-drugs costs, revenues from charges are likely to be entirely captured and managed by health workers acting as managers.[19]

18. This system of informal charges appears to be so institutionalized among health professionals and users alike, that it seems to be taken for granted as the official way of supplementing meagre and irregular salaries. The health workers appear to see the issue of charges as intimately related to their low and erratic remuneration, with many declaring feeling "abandoned" by the State, which barely and irregularly pays for salaries, and leaves health professionals fending for themselves for the facilities' recurrent expenses. As no effective inspection system is in place for the health sector, the nature and

[19] Russo, Giuliano, Enrico Pavignani, Catia Sá Guerreiro, and Clotilde Neves. 2017. 'Can We Halt Health Workforce Deterioration in Failed States? Insights from Guinea-Bissau on the Nature, Persistence and Evolution of Its HRH Crisis'. *Human Resources for Health* 15 (1): 12.

extent of illegal charges seem to depend exclusively on the goodwill (and creativity) of the most senior officials in charge, on their ability to enforce those charges, and on consumers' ability to pay for the price.

19. The huge accountability deficit in the public health sector reflects the overall weak governance in the public sector. There is widespread impunity at all levels of the national health system and very few mechanisms to hold staff accountable for their actions.[20] Guinea-Bissau provides an extreme example of an ungoverned health workforce. Indeed, with little supervision, health workers have gradually become the de facto operators of the health system. They run the system in their favor, charging under the table fees and setting quality standards according to their will, which resulted in the creation of a private sector within the public health system.[21] The prospects of a stable public health sector job, with the potential to engage in additional profit-making activities within the system, resulted in the increased demand for health workers' training in the country and, consequently, a rapid expansion of private sector training (widely perceived as low quality).

20. Health personnel training increased dramatically between 2009 and 2015, but quality of training remains a concern. Cuban doctors run the public medical school, as part of a cooperation agreement between the governments of Cuba and Guinea-Bissau. However, medical students are taught by only a small number of Cuban doctors, often not per se specialists in the field they teach, such as pediatrics and obstetrics. It has been reported that teaching facilities lack basic infrastructure such as electricity, computers and textbooks, and a lack of specialty staff to supervise and conduct on-the-job training of junior medical staff. The training of nurses was expanded between 2009 and 2015, recurrent expenditures for nurses' courses have been supported exclusively by student fees - despite the relatively high fees (approximately US$500 over the two-year course), such courses were reported to be routinely oversubscribed. Additionally, there is no official accredited specialty training, nor policy on continuing clinical education.[22] Recently, two private medical schools started operating in Bissau, although programmes and facilities are still to receive accreditation from the MINSAP, and one of the schools was shut down for irregularities in 2016-17. Factors like (a) applicants' education level, (b) poor competence of teachers, (c) teachers to student ratios,[23] and (d) sub-optimal clinical practice were identified as key constrains to quality training.

Health Sector Partnerships

21. The main international partners supporting the health sector include EU, Global Fund, Global Alliance for Vaccines and Immunization (GAVI), World Health Organization (WHO), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), African Development Bank (AfDB), UNWFP, and a several non-governmental organizations (NGOs). The AfDB supported health sector funding for activities such as infrastructure for the national hospital through 2015. GAVI has provided support to the Pentavalent and Yellow Fever vaccine programs since 2009, and added support to Pneumococcal vaccine in 2014, Rotavirus in 2015 and HPV and Meningitis in 2016. The Global Fund has

[20] UNIOGBIS, 2017.Thematic report on the right to health in Guinea-Bissau. UN HR, Bissau, Guinea-Bissau.
[21] Russo et al., 2017. Can we halt health workforce deterioration in failed states? Insights from Guinea-Bissau on the nature, persistence and evolution of its HRH crisis. Human Resources for Health Journal.
[22] UNIOGBIS, 2017. Thematic report on the right to health in Guinea-Bissau. UN HR, Bissau, Guinea-Bissau.
[23] The National School of Public Health has 14 students per teacher (15 full time professors and 59 contracted part-time professors), and the School of Medicine has 13.8 students per teacher (32 medical doctors, all teaching in Bissau through an agreement with the Cuban government)

been supporting the sector since 2005, and contributed US$10 million in 2016 for programs to fight HIV/AIDS, Malaria and Tuberculosis. The Global Fund is expected to continue supporting the health sector through 2020. Significant bilateral support is provided by the Swedish International Development Cooperation Agency (SIDA), the Portuguese Cooperation and the governments of Brazil and French.

22. Since 2013, the EU and the SIDA have been supporting the delivery of a basic package of maternal and child health (MCH) services. The EU funded the Integrated Mother and Child Health Program (PIMI I, PIMI-Gabu and PIMI II) and the EU-Saude. The SIDA, together with other partners, funded the H4+ in the country since 2013.[24] Through a combination of interventions, these projects covered all 11 regions of Guinea-Bissau at different times (see table 4). The interventions included in these projects were: (i) gratuity (user fees waiver) of selected MCH services (including diagnostic, transfers/referrals, and drugs); (ii) in-service training for health professionals in key MCH practices; (iii) payment of incentives to health facility administrators and health workers to reward good management practices and the delivery of selected medical interventions, respectively; (iv) support the community health strategy through the provision of equipment, training, supervision and payments of incentives to community health workers; and (v) facility maintenance and rehabilitation, supply chain, and purchase of equipment.

23. These projects were implemented by international NGOs and UNICEF. The French NGO *Entraide Médicale Internacionale* (EMI) implemented the payment of gratuity, payment of incentives to health facilities (management incentives), verification and monitoring, capacity building on management practices. The *Instituto Marques Valle Flor* (IMVF), a Portuguese NGO, provided in-service training (on Emergency Obstetric Neonatal Care, Integrated Management of Childhood Illnesses, and hematology), purchase and distribution of drugs, and the payment of incentives to health workers (clinical incentives). The community health component in all these projects was implemented by UNICEF, which contracted NGOs (*Voluntariado Internacional for o Desenvolvimento Africano* – VIDA, Italian Association "*Amici di Raoul Follereau*" – AIFO, *Ajuda de Desenvolvimento de Povo para Povo* – ADPP, *Assistência Médica Internacional – AMI*, Plan-International, and *Médicos da Comunidade*) to select, train, equip, supervise, and pay incentives to the community health agents (*Agentes de Saúde Comunitária, ASC*). The PIMI II, launched in October 2017, will cover all regions and keep the same implementation arrangements with EMI, IMVF, UNICEF and its collaborating NGOs.

[24] H4+, currently H6+, The partnership comprises six United Nations agencies: UNAIDS, UNFPA, UNICEF, UN Women, WHO and the World Bank, with the objective to provide support to countries to improve women's and children's health.

Table 4: Key Maternal and Child Health Initiatives in Guinea-Bissau, 2013-2021

	PIMI	H4+	EU-Saúde	PIMI II
Coverage	Farim, Oio, Cacheu, Biombo, Gabu*	Bafata, Quinara, Tombali, Bijagos, Bolama, SAB	Bafata, Bolama, SAB, Bijagos, Quinara, Tombali	National (all 11 health regions)
Funding agency	European Union (90%) and partners (10% - UNICEF, Cooperação Portuguesa, NGOs)	European Union, Swedish International Development Agency	European Union (80%) and partners (20% - UNICEF, UNFPA, WHO, EMI)	European Union (80%) and partners (20% - UNICEF, Cooperação Portuguesa, NGOs)
Budget	8,877,904 €	6,900,000 USD	10,000,000 €	22,000,000 €
Timeline	July 2013 – July 2016	July 2013 – August 2015	February 2016 - May 2018	November 2017 – October 2021
Activities (Implementing agencies)	• Gratuity (EMI) • P4P (EMI & IMVF) • Community Health (UNICEF and NGOs)[25] • Supply Chain/Drugs (IMVF & UNICEF) • In-service training (IMVF) • Rehabilitation of health centers/hospitals (IMVF)	• Gratuity (EMI) • P4P (EMI, UNFPA) • Community Health (UNICEF and NGOs)[26] • Supply Chain/Drugs (UNFPA e UNICEF) • In-service training (UNFPA, UN-Aids, WHO) • Rehabilitation of health centers/hospitals (UNFPA, UNICEF)	• Gratuity (EMI) • Community Health (UNICEF and NGOs)[27] • Rehabilitation of health centers/hospitals (electricity and water – UNICEF)	• Gratuity (EMI) • P4P (EMI & IMVF) • Community Health (UNICEF and NGOs)[28] • Drugs (IMVF & UNICEF) • In-service training (IMVF) • Rehabilitation of health centers/hospitals (IMVF)

** PIMI Gabu started implementation in 2014*

24. The private sector is small and largely unregulated. In 2016, only two of the 28 private health clinics visited by the General Health Inspectorate (*Inspeção-Geral para Assuntos de Saúde*, IGAS) had adequate working conditions, yet they lacked the required documentation. No information is available on the condition of private health facilities outside Bissau. In 2014, there was an estimated 138 private pharmacies and medication sales facilities in the country. Of 111 inspected by IGAS, five were considered acceptable, and 70 were recommended to be closed. In 2016, a MINSAP decree established the principles to develop an accreditation process of health care providers.

Maternal and Child Health Challenges

25. The Guinean-Bissau health system faces structural challenges to provide essential services to its population. Low levels of public spending on health, high dependency on external financing, high household OOP payments, mal-distribution of the existing health workforce and acute shortages of key specialties of health personal, are the main challenges. Despite the obstacles, Guinea-Bissau, with the support of the international community, managed to make progress in extending coverage of basic MCH

[25] VIDA, ADPP and AIFO.
[26] AIFO, AMI.
[27] AIDA, AMI, PLAN, VIDA, and Médicos da Comunidade.
[28] AIDA, AMI, PLAN, VIDA, AIFO, and Médicos da Comunidade.

services, immunization coverage and reducing infant and child mortality. On the other side, the extremely high rate of maternal mortality, the low uptake of antenatal services and limited percentage of assisted deliveries, mean that some of the recent interventions have not yet achieved the full potential. An Assessment conducted by the World Bank team identified both supply side and demand-side factors that influence the low uptake of services and the persistent low outcomes:

(a) **Lack of functional surgical capacity in the field**. Despite the observed presence of surgeons and surgical equipment, operation theatres may not be able to function and effectively provide services, because of lack of support personnel (anesthetists were reported to be particularly in scarce supply), or basic conditions, such as electricity, water or medical supplies;

(b) **Geographical barriers to accessing surgical services**. Either because of considerable geographical distance, and often difficult access between *tabancas* and regional hospitals, or the lack of effective reference (transportation) between health centers and hospitals;

(c) **Financial barriers to services**. Surgical operations may be unaffordable because of the combination of formal (official user charges by health facilities) and informal charges (requested by health staff). There is anecdotal evidence on this (with reports of a C-section in SMH costing FCFA 75,000 in addition to all the surgical supplies), although the PIMI program, in principle, guarantees free access through gratuity. Additionally, indirect costs with transportation and food are relatively high, particularly in rural areas;

(d) **Presence of alternative services and poor reputation of public services.** Women may prefer to follow traditional ways of assisted birth, and only resort to public services in case of complications during delivery. Perceived poor quality of services may also discourage seeking care at health centers and hospitals;

(e) **Lack of accountability**: There is also a large accountability deficit in the Guinean-Bissau health system. The MINSAP has recognized the "widespread impunity at all levels" of the national health system; even where managers try to enforce technical and financial standards, they face a lack of support and inevitably become frustrated and demotivated. A recent UN-report concludes that important deficits in accountability are among the key factors stymying progress in the health care system.

C. Higher Level Objectives to which the Project Contributes

26. The proposed project is aligned with the Country Partnership Framework (CPF) for the period of 2018-2021 and the World Bank Health, Nutrition and Population Global Practice (HNP GP) objectives and priority directions. More specifically, the proposed project is directly linked with the CPF Objective 2 (increased access to quality maternal and child health services) and the HNP GP Priority Direction #2 (Ensuring equitable access to affordable, quality HNP services). This includes improving access to basic maternal and child health services, particularly in the context of high mortality rates among pregnant women, mothers, and children in Guinea-Bissau. Improving health outcomes, through improved access to quality care and increased accountability within the public health system, is a priority to help improve productivity, especially among the poorest, and to build the human capital of the next generation. The project will provide financial and technical support to the government of Guinea-Bissau to strengthen and expand its community-based primary healthcare service delivery system, which is directly linked with the HNP GP Priority Direction of 'Establishing systems for fair, efficient and sustainable financing for HNP outcomes.'

27. The proposed project activities are intrinsically linked to the CPF for the period of 2018-2021 crosscutting themes: gender and governance. The current Guinea-Bissauan health system penalizes women disproportionally, impacting their economic and social well-being. Improving utilization of reproductive and maternal health care services is key to promoting gender equality in Guinea-Bissau. Additionally, 45 percent of women aged 15 to 49 years and 30 percent of girls under 14 years, are affected by female genital mutilation (FGM) in the country.[29] The project will have a strong focus on improving governance and accountability within the Guinea-Bissauan public health system by combining interventions targeted at improving demand-side (community health, citizen engagement) and supply side issues (results-based financing, improved MINSAP capacity to manage human resources, financial management, and monitoring and evaluation).

28. The proposed project is aligned with the new National Sanitary Development Plan (*Plano Nacional de Desenvolvimento Sanitário 2018-2022* – PNDS III). PNDS III defines three pillars through which to achieve eight strategic objectives: better access and quality of care, reduced inequality in access to and use of services among the population, a better distributed, educated and motivated health workforce, more efficiency, better management of resources, increased transparency and accountability as well as a stronger relation and coordination between health partners (NGOs, international donors, etc.). These objectives are to be supported by three pillars, namely: (i) Governance and mobilization of resources; (ii) Prioritized programs; and (iii) Provision of essential services.

29. The project is part of a wider World Bank program, building synergies with other World Bank financed operations in Health, Transport, and Social Protection and Labor (SPL) Global Practices. In the health sector, the proposed project will have strong synergies with the Regional Disease Surveillance Systems Enhancement Phase II Project (P159040) to strengthen health information systems and disease surveillance in the country. In addition, the Health, Transport and SPL teams are working to target investments for the refurbishment of feeder roads leading to health facilities in the regions of Oio, Cacheu, and Bafatá, which will contribute to improving access of women, especially pregnant ones, and children to health care services. Improvement of feeder roads will be financed both through the Guinea-Bissau Rural Transport Project (P161923) and through the Rural Community-Driven Development Project (P090712), which allocates grants for community-proposed activities that can include refurbishment of roads. The Health and SPL teams collaborated in the design of community-level nutrition interventions that will serve as accompanying measures for the cash-transfer program of the Guinea-Bissau Safety Nets and Basic Services Project (P163901). The Safety Nets project will also finance an impact evaluation (IE) of the cash transfer program and accompanying measures (including training on nutrition, safe delivery, and sensitization on FGM).

2. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

30. To improve coverage of essential maternal and child health services in the Recipient's territory.

[29] UNICEF, 2016. Female Genital Mutilation/Cutting: A Global Concern.

B. Project Beneficiaries

31. The immediate project beneficiaries are women and children who rely on public primary and secondary care for their health care needs, particularly pregnant women and children under five. The number of women at reproductive age is estimated at 383,380 (with an estimate of 78,500 pregnancies per year) and 296,000 children are under five, thus the project will benefit a total of 649,800 beneficiaries per year. Given the focus of the first two components of the projects on strengthening institutional capacity of the Ministry of Public Health and on health workforce development, actions related to these components will potentially benefit the entire population in the medium and long terms.

C. PDO-Level Results Indicators

32. PDO-level indicators:

(a) Pregnant women attending at least four prenatal care consultations during pregnancy (Number);
(b) Institutional deliveries (Number);
(c) Use of modern contraceptive methods among women of reproductive age (Number);
(d) Number of children (0-11 months) fully vaccinated.

3. PROJECT DESCRIPTION

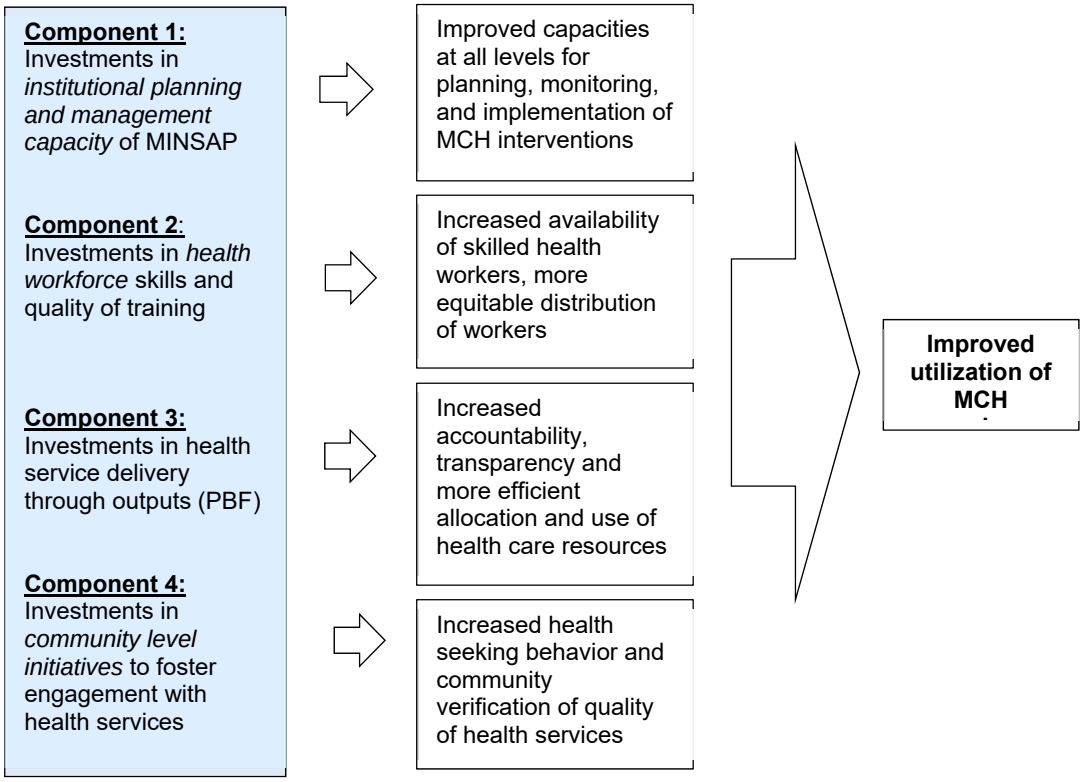
A. Project Components

33. The Project comprises four components that together will address the key challenges to improve maternal and child health outcomes in the country. The first two aiming at strengthening national MINSAP capacity to perform key health systems functions and to improve the availability, quality and distribution of the health personnel. Components 3 and 4 aim at improving the access to and quality of maternal and child health services and increase accountability within the health care system through a performance-based financing (PBF) and community health interventions. The four components are as follows: (i) Institutional strengthening of MINSAP; (ii) Health workforce development; (iii) Performance-Based Financing to deliver a package of essential maternal and child health and community health services; and (iv) Community health and social mobilization. A fifth component, the Contingent emergency response component (CERC), is added to allow funds to be quickly reallocated to emergency activities in the event of a natural or man-made disaster or crisis that has caused.

34. These components seek to combine supply and demand sides interventions to address the challenges laid out in the sectoral context. On the supply-side, the Project will support the rehabilitation of health facilities, improving the skills of existing and future health personnel, increasing accountability within the health care system and decreasing the widespread practice of informal charges through the introduction of a PBF scheme and strengthening governance at all levels of the MINSAP. The fourth component will support strategies that address demand-side challenges, including supporting the existing community health agents program, and social mobilization to stimulate citizen engagement to bring about behavioral change. Although the Project will indirectly contribute to improvements in the quality of health services, due to constraints in the availability of data in the country, the PDO and PDO indicators will largely capture improvements in the utilization of MCH services. Nonetheless, the combined action of all

project components will improve both quality of care and utilization of MCH services and, ultimately, improve health outcomes, as described in the project theory of change (Figure 1).

Figure 1: Theory of Change between interventions and project development outcome



35. Component 1: Institutional Strengthening of MINSAP (US$2.9 million). This component will support institutional strengthening at the national, regional, and local levels to increase transparency and accountability across the health system. This component will also support analytical work and policy dialogue to facilitate the implementation of key institutional reforms. This component includes two main subcomponents.

36. *Subcomponent 1.1: Institutional reform of MINSAP (US$0.8 million)*: This subcomponent will focus on strengthening the MINSAP's management capacity at all levels. It will support technical assistance to review the current organizational structure of the MINSAP and to provide recommendations for reform. The review of the organizational structure entails a thorough revision of the terms of reference, roles, and responsibilities of units and roles across all levels of the ministry. The goal of the MINSAP institutional reform is to establish roles and responsibilities within the ministry, to strengthen accountability between actors at the national, regional and local levels, and to improve the distribution and management of human resources management across all levels of the public health system. Activities under this subcomponent include: (i) A comprehensive assessment of the MINSAP organization, revising units and staff positions terms of reference; (ii) Support the implementation of an institutional reform of the MINSAP based on the findings and recommendations of the institutional assessment; (iii) Review and strengthen human resources management (HRM) practices at all levels of the public health system; (iv)

Support health workforce regulatory reforms needed to improve availability of skilled health professionals, particularly in rural areas; and (v) Support MINSAP staff development by building capacity in areas such as HRM, public financial management (PFM), and monitoring and evaluation.

37. ***Subcomponent 1.2: Project Management and Monitoring & Evaluation (US$2.1 million).*** This sub-component will provide support to the operation of the project coordination unit (PCU), which will be the same PCU as the REDISSE II Project (P159040). The PCU will support the day-to-day project management, fiduciary tasks, M&E, and other logistical support to the implementation of Project activities. The sub-component will also support the IE of the PBF pilot, which will inform the scale up strategy of the PBF program, and fund the implementation of a Service Delivery Indicators (SDI) survey during the final year of the project (one wave of the SDI was implemented, during the first semester of 2018, by the National Statistical Office (INE) in collaboration with the MINSAP and the World Bank).

38. Component 2: Health workforce development (US$3.2 million). This component aims to address key health workforce shortcomings that limit the country's capacity to improve service delivery to its population. The health workforce challenges include low quality of training, insufficient skills and competencies from clinical cadres, acute shortages of key clinical cadres (such as pediatricians, obstetricians, and gynecologists), absence of quality assurance mechanisms to guarantee minimum standards of training and practice, and the uneven distribution of health workers across the country (concentrated in the capital Bissau). Given the sub-component 1.1 support to improving HRM practices and procedures, component 2 will focus on health workforce challenges through strategic investments to improve the country's training capacity, support decentralized training, improve competencies of existing health workers, and implementing mechanisms to enforce minimum standards of training and practice. This component has two sub-components, as follows:

39. ***Sub-component 2.1: In-service training (US$1.4 million).*** This sub-component will target health workers currently employed in the public health system with the goal of upgrading specific competencies related to MCH service delivery. These competencies include but are not limited to emergency obstetric and neonatal care skills, obstetric surgical skills, anesthesia, echography, and provision of routine care for mothers, neonates and infants. The sub-component will also support the development of training curricula related to healthcare services that will be incentivized through the PBF mechanism, thus supporting the delivery of sexual and reproductive health, maternal and adolescent health, and prevention services. Furthermore, the sub-component will support training of health personnel on clinical management of FGM, and identification of FGM-related obstetric complications (such as obstructed labor and obstetric fistula). Activities under this subcomponent include the development and implementation of in-service training modules across all sanitary regions. This sub-component will also support, in collaboration with UNICEF and the EU, the development of continuing education plans and materials for health personnel and community health agents.

40. ***Sub-component 2.2: Pre-service training (US$1.8 million).*** This sub-component will support the National School of Public Health and the National School of Medicine to improve the quality of nursing, midwifery and medical education. This sub-component will support activities such as faculty development, curriculum reform (to implement competency-based training), the development of training capacity to produce basic medical specialties in the country, introduction of mechanisms to assess and control quality at entry and at graduation, development of standards to measure quality of training (in public and private schools), and purchase and installation of didactic equipment for the National School of Public Health and the National School of Medicine, including the creation of the National Public Health

Library. In line with the CPF 2018-21, the subcomponent will support improvements in the physical and training capacity in the three regional campuses of the National School of Public Health with the goal of increasing the availability of skilled professionals, nurses and midwives, at the local level.

41. Component 3: Performance-based financing to deliver a package of essential maternal and child health and community health services (US$10.1 million). This component will focus on strengthening PHC service delivery in the entire country. Such a model would involve coordination and care provision by integrated frontline PHC teams including nurses, midwives, physicians within health centers, regional hospitals and the national hospital, linked to community and outreach services provided by community health agents. This component will combine investments to improve health facilities conditions and incentives to boost health workers' performance, accountability and transparency within the health service delivery chain. Three sub-components are envisioned under this component:

42. ***Sub-component 3.1: Health facility grants (US$2.9 million).*** The sub-component will provide grants to health facilities to improve health service delivery capacity. These grants could be used for small repairs inside health facilities (painting, electricity and equipment installation, etc.), to improve surgical capacity, and to purchase essential equipment and supplies. At the beginning of the PBF scheme health facilities will be invited to submit grant proposals which will be assessed and approved by the PCU within pre-defined parameters for investments. These proposals would include a detailed description of how the facilities would manage and use the PBF funds, including how communities will participate in the decision of use the grant and PBF funds. These grants would ensure that all facilities entering the PBF scheme would have adequate operating conditions.

43. ***Sub-component 3.2: Performance-based payment (US$5.9 million).*** This subcomponent will provide performance bonuses to: (i) health facilities, conditional on list of quantity and quality indicators linked to the delivery of a package of MCH services; and (ii) the 11 Regional Health Directorates (DRS) for verifying the quantity and quality of services provided at both community and health facility levels. Contracted health facilities will use PBF payments to provide financial incentives to health personnel to increase the quality and the quantity of health services provided at the facility and through outreach strategies, and to fund facility operating costs. The PBF scheme will channel financial resources to health facilities that are severely underfunded by the Government, which will improve fiscal decentralization. The ultimate objective of the PBF program is to change health personnel behavior to improve accountability in service delivery. The introduction of PBF in Guinea-Bissau would rest on the assumption that, through its sub-components, the intervention would have a direct effect on the supply-side barriers hampering the provision of services that can reduce maternal and infant mortality.

44. ***Sub-component 3.3: Performance-Based Payments Implementation and Supervision (US$1.3 million).*** This subcomponent will support the implementation of Performance-Based Payments by strengthening a dedicated technical unit within the PCU and contracting an Independent Verification Agency (IVA), which will verify the quantity and quality of services provided by health facilities, all in line with the Recipient's national regulations.

45. The implementation of the PBF component will be phased. The PBF will be rolled out in priority regions from the first year of the project alongside the IE that will identify key factors enabling (or disenabling) the successful implementation of the PBF. Implementation of the PBF will start in Gabu, Bafata and Farim, regions with the lowest percentage of assisted delivery, over the first 12 months of the Project implementation. The PBF will be gradually scaled-up, informed by the impact-evaluation, to cover

all regions of the country by the third year of Project implementation.

46. Facility payments will be made quarterly based on a set of incentivized indicators emphasizing reproductive, maternal, adolescent and child health, and nutrition interventions. A list of output indicators will be defined for primary and tertiary care. In addition to the payments based on the quantity of services provided, a quality bonus will be provided and which will increase up to 30 percent of the total payment based on health service quantity. This percentage depends on the health facility quality score. A quality checklist will be designed for each level of the service package and will focus on the availability of medicines and supplies, good maintenance of facilities, listing user charges, privacy, the condition of the waiting area and consultation room, proper documentation of health services, and other aspects of service delivery. A remoteness bonus will be included to health facilities located in hard-to-reach areas of the country. This bonus aims to provide further incentives to health personnel to practice in these areas and to provide financial conditions to these health facilities to implement outreach activities. The sub-component will also support PBF implementation by contracting an IVA and proving technical assistance to support the implementation of the PBF program.

47. Component 4: Community Health and Social Mobilization (US$8.8 million). This component will support the continuation of the community health strategy in the country and will engage communities to promote health-seeking behavior, dissemination of information, and monitoring of service providers. The objectives are to improve the demand of key reproductive, maternal and child health services, and to sensitize the population on health promoting and disease preventing behaviors through community-based interventions. These interventions are particularly relevant for changing behaviors related to reproductive health, family planning, and nutrition, given the ability of community actors to influence social norms – engaging with male and female community members. Activities included in this component will range from recruitment, training, and payment of incentives to community health workers; outreach activities to inform, sensitize and raise awareness about harmful cultural practices such as FGM; facilitate monitoring of health services; and involving communities on planning and execution of improvements of health centers. The component will include the following sub-components.

48. *Sub-component 4.1: Community Health (US$7.6 million).* This sub-component will support the implementation of the community health strategy in the country. The project will provide financial incentives to Community Health Agents (*Agentes de Saude Comunitaria*, ASC) based on the delivery of a package of essential community and preventive services defined by the MINSAP. The package relies on ASCs as liaisons between health services and communities to deliver health education and behavior change communication on key topics such as family planning and reproductive health - working with both male and female community members (as this relates to changing social norms). Payments to ASCs will be made directly through mobile money transfers (already tested for that purpose). Performance payments will be linked to a pre-defined list of 16 activities listed in the National Community Health Plan 2016-2020. These include household visits, health promotion and prevention, referral to health centers, and the distribution of basic health care inputs. The sub-component will finance incentive payments to community health agents (4,287 ASCs in the country with a monthly payment of approximately CFA 15,000), and it will support UNICEF and its associated NGOs in the provision of training and supervision of the ASCs (including verification of service delivery by ASCs).

49. *Subcomponent 4.2: Social Mobilization and Support (US$1.2 million).* Activities under this subcomponent include: (i) support community mobilization and organization for monitoring of health service delivery; (ii) promotion of social and behavior change communication; and (iii) support the

maintenance of maternal waiting homes. The sub-component will support the creation and functioning of women's groups to engage communities in the monitoring of service delivery at facility level and incentivize social accountability. This sub-component will also support the development and implementation of community scorecards to assess health facilities' infrastructure and equipment (including accessibility, staffing, infrastructure, water, electricity, and availability of essential drugs), and quality of services provided (including information exchange, client-provider interaction, and illegal charges). Scorecards will be piloted in PBF pilot regions before scaling-up nationally. Other activities under this component include support to the development and delivery behavior change messages on intersecting topics (reproductive health, nutrition practices, hygiene, safe delivery, and harmful traditional practices such as FGM) that influence MCH outcomes, and maintenance of maternal waiting homes (Casa *das Mães*).

50. Component 5: Contingent Emergency Response Component (CERC) (US$0). This component would allow funds to be quickly reallocated to emergency activities in the event of a natural or man-made disaster or crisis that has caused, or is likely to imminently cause, a major adverse economic and/or social impact.

B. Project Cost and Financing

Table 5: Overview of costs by component in US$ million

Project Components and Subcomponents	Project cost	% IDA Financing
1. Institutional Strengthening of MINSAP	**2.9**	100
1.1 Institutional reforms of MINSAP	0.8	100
1.2 Project management and M&E	2.1	100
2. Health workforce development	**3.2**	**100**
2.1 In-service training	1.4	100
2.2. Pre-service training	1.8	100
3. Performance-Based financing to deliver a package of essential maternal and child health and community health services	**10.1**	**100**
3.1. Health Facility grants	2.9	100
3.2. Performance-Based Payment	5.9	100
3.3 Performance-Based Payments Implementation & Supervision	1.3	100
4. Community Health and Social Mobilization	**8.8**	**100**
4.1 Community Health	7.6	100
4.2 Social Mobilization and Support	1.2	100
5. Contingent Emergency Response	**0.0**	**0.0**
Total Project Costs	**25.0**	**100**

C. Lessons Learned and Reflected in the Project Design

51. The project design builds upon the experiences of ongoing initiatives aiming at strengthening health service delivery and improving MCH outcomes in the country. The European Union PIMI included interventions that focused on user fee waivers for a basic package of MCH services, payments of incentives to health facility administrators and health workers, support to the community health strategy, supply of essential drugs, and functioning of the supply chain. The main lessons are:

(a) **Prior efforts to decrease financial barriers to accessing MCH services in Guinea-Bissau lacked appropriate verification systems.** Even though PIMI guaranteed user fees exemptions, informal payments remain a common practice (either directly for the services, or indirectly for supplies and overnight stays). A more robust verification system, which includes community-led verification, has the potential to reduce these informal payments;

(b) **PIMI offered small performance incentives for health personnel, which did not produce the expected changes in behavior**. PBF experiences have shown that the size of the incentive must be large enough to counteract all other factors, such as the cost and effort required to improve performance;

(c) **Importance of the community-health strategy for maintaining engagement with communities and incentivize the uptake of MCH services.** However, challenges remain in the links between community health workers and PHC facilities and the size and frequency of payments community health agents receive vis-à-vis the number and complexity of tasks they are expected to undertake. The Project will provide support to the continuation of the community-health strategy and will use PBF to improve collaboration between community health agents and PHC facilities. Additionally, the Project will increase the bonuses to community health agents and establish monthly payments of all incentives;

(d) **PBF experience in other countries has shown the importance of continuous monitoring and timely and effective course corrections** (enabling, for example, the revision of performance frameworks and increased value-for-money). Additionally, to be effective PBF needs to be accompanied by demand-side interventions and improved health personnel competencies to improve quality of care;

(e) **The project adopts an adaptive approach that allows flexibility as implementation challenges arise**. This is necessary given the complex context of Guinea-Bissau, particularly as it relates to the limited capacity, frequent political instability, and the high level of fragmentation (which requires close coordination with health sector donors).

Alternative approaches

52. Alternative approaches to PBF, including a focus on demand-side barriers to access services (such as cash transfers), and on the improvement of physical capacity were considered as part of the Project. Although it is well-recognized that demand-side barriers (traditional practices, low levels of education, etc.) are important determinants of the utilization of MCH services, there are also interconnected factors that influence pregnant women and mothers to seek care when needed. For example, in Guinea-Bissau quality of care is widely recognized as low, due limited health workers' competences (lack of training), efforts (lack of incentives), and poor working conditions. Additionally, in the absence of minimal accountability mechanisms to ensure that health personnel are present to work and do not charge under-the-table fees, there is almost no guarantee that services will be available even if demand-side barriers are reduced through cash transfer programs. It has been shown that community interventions can only be effective if the provider is accessible and can be held accountable. Experience in Pakistan demonstrates that interventions such as community driven development (CDD) can only be effective as a

complement to formal provision of services.[30] The project will combine the PBF intervention with community health interventions and workforce development (training) to address these critical bottlenecks and introduce changes that will lead to more responsive and transparent health system in the medium and long terms. Other donors currently support the health sector with equipment and infrastructure (UNFPA, European Union, AfDB, Global Fund), and the MINSAP receives support from bilateral agencies. The Project will complement these investments in physical capacity by strengthening governance at all levels of the public health system. Improved governance will, for example, reduce the probability of equipment not being used appropriately or misused.

4. IMPLEMENTATION

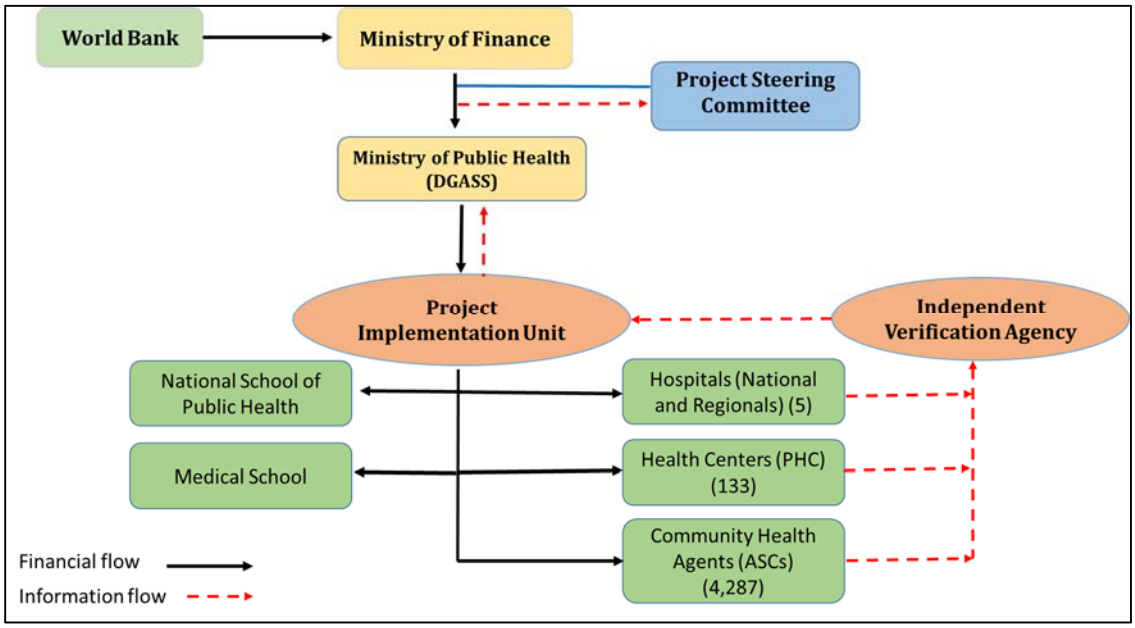
A. Institutional and Implementation Arrangements

53. The General Directorate of Administration of the Health System (DGASS) of the Ministry of Public Health (MINSAP) will be the government unit responsible for the implementation of the proposed project. The Project Coordination Unit (PCU) will be the same PCU that was established for the coordination of the REDISSE II Project, which became effective in September 2017, and works under the coordination of *Célula de Gestao do Plano Nacional de Desenvolvimento Sanitário* (CG-PNDS). The PCU will report directly to the Secretary-General of the MINSAP and will be responsible for the day-to-day management of the project and will: (i) coordinate the project activities; (ii) ensure the financial management of the project activities in all components; (iii) act as "payer" for the incentives under the PBF under component 3; and (iv) prepare consolidated annual work plans, budgets, monitoring and evaluation, and the implementation report of the project to be submitted to the steering committee and the World Bank.

54. A Project Steering Committee (PSC) will be established to provide strategic direction and monitor the overall progress of the project. Membership of the PSC will consist of representatives from MINSAP, Ministry of Finance, Ministry of Education, The Ministry of Women, Family and Social Cohesion (MWFSC), representatives of local, regional and global partners (European Union, UNICEF, UNFPA, WHO, USAID, Global Fund and others), and civil society representatives. The PSC will approve annual work plans and annual reports. It will be chaired by a ranking official of the Ministry of Public Health (possibly the General Secretary of the MINSAP).

[30] Gine, X, Khalid, S, and Mansuri, G. (2018). The Impact of Social Mobilization on Health Service Delivery and Health Outcomes: Evidence from Rural Pakistan. Policy Working Paper 8313, World Bank.

Figure 2: Project Implementation arrangements



B. Results Monitoring and Evaluation

55. A detailed results framework is included in Section VII. The progress and results of project implementation will be monitored on a routine basis throughout the life of the project.

56. The general principle underlying the M&E approach is the alignment with routine health data systems of the Ministry of Public Health. Currently, the World Bank, through the REDISSE II Project, is supporting the strengthening of the health information system in the country. Additionally, as described above, Component 1 of the proposed project (Institutional Strengthening of MINSAP), includes activities that will strengthen MINSAP capacity to collect and process health service delivery and epidemiological data at the local and regional levels. The monitoring of project performance will directly benefit from those activities. Existing information systems include the District Health Information System (DHIS2), which integrates information from vertical programs such as Immunizations, HIV/AIDS, Malaria and Tuberculosis programs, and routine data from health facilities. The M&E specialist of the PCU will compile and report data for all indicators in the results framework based on the DHIS2 routine data collection and on activities carried out by the respective MINSAP units (e.g. Human Resources Directorate regarding training of health personnel).

57. Since selected indicators will also be monitored as part of the Project's PBF scheme, the IVA will collect and report data on the progress towards achievement of indicators. As the PBF program aims to improve service delivery and quality of MCH services, close monitoring of service delivery quantities and quality will be made. These include the record of PHC visits, assisted deliveries, immunizations, and utilization of nutrition services and other MCH related services. It will allow the Project to identify low performing areas and take remedial action during the life of the project. That process is inherent to any PBF program and will ensure that data to assess project impact will be collected in a timely manner.

58. In addition to the routine data, the M&E strategy will also use survey data to measure the Project

implementation progress. The Project will support the implementation of an SDI survey. The SDI is a facility survey aiming to assemble objective and quantitative information to benchmark the performance of frontline service delivery units. Currently, the World Bank is implementing a first SDI survey in partnership with the MINSAP and the National Statistics Office (*Instituto Nacional de Estatisticas*), as part of the Guinea-Bissau Health Sector Diagnostic (P159516). The data collection for the SDI was concluded in April 2018 and will serve as a baseline to monitor progress of the project. One wave of the SDI survey will be carried out during the lifetime of the Project, in 2022.

59. A rigorous impact evaluation is planned to assess the impact of the PBF intervention. The Project will work with the Bandim Health Project (BHP), which monitors mortality, birth outcomes, vaccination coverage, and nutritional status for a nationally representative randomly selected sample of 182 clusters. The BHP has implemented two Health and Demographic Surveillance System (HDSS) sites in Guinea-Bissau. The urban HDSS covers 100,000 individuals in six suburbs of the capital Bissau (corresponding to a one third of the capital) with intensive follow-up and registration of preventive and curative services at the point of care. The rural HDSS covers women and children in a population in a nationally representative sample of villages. Data is collected among the Project's target populations (women of reproductive age and children) from these clusters in six-month intervals, which will be utilized for baseline, midpoint and endpoint results of the pilot interventions. The evidence generated through this evaluation will provide information to inform the scale-up of the PBF program to the other regions of the country.

60. Finally, a process evaluation will be conducted as part of the mid-term review (2021) to understand success and barriers to the implementation and achievement of results under the Project. The findings will inform discussions with key national, regional and global stakeholders and contribute to course corrections as needed.

C. Sustainability

61. Sustainability of any project intervention in Guinea-Bissau is a risk, and external financing is likely to remain a key source of financing in the short- and medium-term. The goal of this project is to support service delivery in the short term where needs are greatest and simultaneously use this support to strengthen capacity and governance within the health system.

62. All service delivery supported through the project is closely linked to activities outlined in the new national health strategies. These were discussed with the government, development partners, non-governmental organization and related stakeholders, which maximizes potential for complementary and subsequent government and partner funding to become available to sustain the interventions. However, all are embedded in the provision of existing public-sector services (e.g., recruitment and remuneration of health personnel, training of new healthcare professionals).

63. Sustainability arguments also largely determined the goal of continuing and strengthening interventions at the primary level (community, health centers and regional hospital levels), for example focusing on frontline health workers and delivering key maternal and child health services by supporting their training and supervision. Primary healthcare workers, including ASCs, are specifically trained for service delivery at the community and primary level. They are less expensive and more likely to be retained and absorbed at that level than higher-level health workers, who are currently trained in urban settings, more expensive to employ, and unlikely to remain in rural areas.

64. The PBF pilot scheme is unlikely to be fully funded through domestic resources in the short-term. The goal is rather to demonstrate how resources can reach primary level facilities and workers, and spur changes in health workers' behaviors to reduce barriers to access and increase utilization of key services. If successful, PBF can become a tool for coordinating external financing for maternal and child health and to introduce a focus on outcomes and results.

65. These efforts will also require continued capacity building at all levels of the system and close collaboration with other development partners. Collaboration with all development partners is key to ensuring alignment in sector strategies and continuity of investments in MCH.

D. Role of Partners

66. The proposed operation will build synergies with other donor-financed projects supporting the health sector in Guinea-Bissau. Currently, other partners are developing new investments in the health sector in the country: The Global Fund is expected to allocate 29 million Euros for the period of 2017-2019, the European Union is expected to expand the current investments by 22 million Euros (2017 – 2020) and GAVI expects to fund 8 million Euros for the next three years (2017-2019). The World Bank's health donor coordination group will serve as a platform to coordinate partners' activities and share information, this group includes UNICEF, UNWFP, UNICEF-Water, Sanitation and Hygiene (WASH), UNDP, UNFPA, the Portuguese Cooperation, European Union, Center for Disease Control and Prevention (CDC), Global Fund, and GAVI.

67. The Project, through its Project Coordination Unit (PCU) will work closely with the implementers of the PIMI II. In addition to the overall donor's coordination, which has been started during the Health Sector donors' coordination group, the most relevant interventions of PIMI II that will complement the proposed Project are: (i) gratuity (user fees waiver) for selected MCH services (including consultations, diagnostic, transfers/referrals, and drugs); (ii) in-service training for health professionals in key MCH practices; (iii) support the community health strategy through the provision of equipment, training, and supervision; and (iv) strengthening of governance and training capacity of the public health system. The implementers of PIMI II are the French NGO EMI (responsible for payment of gratuity), the Portuguese NGO IMVF (in-service training, supply chain arrangements), UNICEF and associated NGOs (selection, training and supervision of the community health agents), and the Instituto Camoes (governance and training capacity).

Table 5: Complementarity between the World Bank-financed Project and PIMI II

PIMI II	Implementer	World Bank Project
Gratuity (user fees waiver for a list of MCH services)	*Entraide Médicale Internacionale* (EMI)	Project will pay performance bonuses for the delivery of this package of MCH services at hospital and health center levels.
In-service training, supply chain arrangements	*Instituto Marques Valle Flor (IMVF)*	Project will complement the training provided by the IMVF in three ways: (i) expansion of training to regions/providers not covered; (ii) inclusion of additional training (those not in the PIMI II/IMVF package, such as neonatal care and obstetric surgical skills); and (iii) continue the provision of training after PIMI II closes (November 2022).
Community health strategy (Selection, training and supervision of the community health agents)	UNICEF and associated NGOs (VIDA, AIFO, ADPP, AMI, Plan-International, and *Médicos da Comunidade*)	The Project will pay incentives to community health agents and support UNICEF and associated NGOs with funding for training and supervision of the community health agents.
Strengthening governance (mostly at local level, strengthening management capacity at the regional health directorates) and training capacity (focus on medical specialties such as orthopedics, anesthesiology, cardiology, etc.).	Instituto Camoes	The Project will support complementary reforms at central level (PFM, human recourses management, etc.) and will support the strengthening of the physical capacity of the training institutions (in the capital as well as outside the capital) and will focus on basic specialties for MCH service delivery.

68. The Primary Health Care Performance Initiative (PHCPI) partnership. The PHCPI partnership of the World Bank Group, World Health Organization (WHO), Bill and Melinda Gates Foundation with the collaboration of two think-tanks, Ariadne Labs and Research for Development (R4D), aims to catalyze improvements in PHC in low- and middle-income countries through better measurement and knowledge-sharing – will be available to provide technical assistance to the Government of Guinea-Bissau to support its effort to improve utilization of essential maternal and child health services in Guinea-Bissau.

69. The PHCPI team will provide technical support for the development of the PHC Vital Signs Profile for Guinea Bissau at national, sub-national/facility-level balance scorecards. The results of this national scorecard can be part of the deliverable during the first year of the implementation of the project. Once the scorecard is complete and has been shared with the relevant stakeholders in the country, the results will be made public on the PHCPI website and on any other source that the government wishes to use.

5. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

70. The overall risk is rated as **substantial.** There are significant risks for the implementation of the proposed operation, as described below and summarized in Table 6.

71. Political and governance risks here are rated as **high** following the CPF 2018-2021. The project will commence implementation in the run-up to election years (parliamentary elections in 2018 and presidential elections in 2019), which adds to the already difficult political environment and on-going tensions between the President, the Prime Minister and the Parliament making significant legislative reforms extremely challenging. Close coordination with other donor partners (within and outside the health sector) will play an important role in mitigating the political and governance risks.

72. Macro-economic risk for Guinea-Bissau is rated as **substantial.** While real GDP growth is estimated at 5.2 percent in 2016 and is projected to remain robust for the next years, the country economy remains vulnerable to shocks. The narrow economic base oriented towards cashews, particularly on the fiscal side, makes the macroeconomic environment very vulnerable to external and internal shocks. The proposed project aims to improve efficiency within public health service delivery, which may ease pressures on public health sector budget.

73. Sector strategies and policies are weak and the risk category is rated as **substantial.** The existing National Health Sector Development and the National Health Workforce Plans were not fully implemented, in part due to the disconnect of these documents with the fiscal reality of the country (for example, The National Health Workforce Plan suggests an increase of 34 percent in the number of employed health workers with a corresponding increase of 80 percent in the health sector wage bill for the period of 2007-2017). The WBG is supporting efforts to build “core state” functions, including sectoral strategies and capacities, and is also working with alternative stakeholders. The use of results-based financing will incentivize reforms and stronger implementation and results.

74. Technical design of projects and programs is considered substantial in Guinea-Bissau because of weak human resources capacities and the difficult operating environment for technical specialists. This risk is being partially mitigated through increased in-country presence by the World Bank and strong PCU with experienced staff.

75. Institutional capacity for implementation and sustainability is low with respect to both technical and operational skills, thus this **risk category is rated as high.** To address this risk, the project proposed to work directly with non-state-actors (civil society, communities and the private sector), while also building capacity to ensure that the State has the capacity to regulate and monitor health service provision. This risk is being partially mitigated through capacity building actions with PCU staff, who have previous experience with World Bank Projects. Despite the use of a PCU for project implementation, the sustainability aspect is partially mitigated by placing the units under the oversight of the Health System Administration department of the MINSAP. There are also risks related to the implementation of the PBF scheme. These are: a) a substantial risk related to identifying a qualified IVA to be part of the implementation of PBF activities; b) complexity of the PBF scheme and the limited technical capacity to implement it; and c) the reliance on complementary interventions by other donors. These risks will be

mitigated through preliminary discussions to identify NGOs with experience in PBF schemes currently present in Guinea-Bissau and other neighboring countries, by creating a PBF technical unit within the MINSAP, and by establishing coordination mechanisms, such as the existing health sector partners group, to coordinate interventions with partners (especially funder and implementers of PIMI II, namely: European Union, UNICEF, Instituto Camoes, and other international NGOs).

76. Fiduciary risks are substantial mainly because of weak human resources capacity, unclear institutional and policy frameworks, and lack of proper regulations. Although the procurement risk for the Project is rated as High, The New Procurement Framework (NPF) offers flexibility and extra support to fragile and conflict affected (FCV) countries. To mitigate these risks the project used a simplified template to prepare the project's Procurement Strategy for Development and simplified procurement arrangements, and the additional hands-on support for implementation.

77. The social and environmental risks are moderate given the relatively weak government capacity to manage for environmental and social impacts. To partially mitigate this risk, the project will seek support from the Environmental Impact Assessment Agency to support assessments for the health sector.

78. Stakeholder risk is substantial. Civil society is weak and fragmented in Guinea-Bissau. Additionally, even though donor investments have been stable in the health sector, fragmentation and lack of a well-defined health sector strategy risk the achievement of sustainable medium and long-term impacts. The lack of strategy has resulted in sub-optimal results in previous donor investments. The project includes components and activities focusing on citizen engagement and community based health service delivery. These components will support the design and implementation of activities that can leverage citizen participation to increase accountability in health service delivery. The project will also seek to work with both state and non-state actors. The World Bank has led the efforts to establish a donor coordination mechanism that will continue to be supported under the proposed project.

Table 6. Systematic Operations Risk- Rating Tool (SORT)

Risk categories	Rating
1. Political and Governance	High
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	Substantial
7. Environmental and Social	Moderate
8. Stakeholders	Substantial
Overall	**Substantial**

6. APPRAISAL SUMMARY

A. Economic and Financial Analysis

79. The economic analysis of the proposed Project will: (i) provide an overview of the macro-fiscal and health financing context of the country; (ii) analyze the economic rationale for investing in the health sector in Guinea-Bissau; (iii) investigate the costs and benefits of the proposed project's components and activities and through a Cost-Benefit Analysis (CBA). Annex 5 provides a discussion of the macro-fiscal and health financing contexts in the country, and presents the estimated expected returns of the Project interventions.

80. There is a strong economic case for investing in the Guinea-Bissau health sector and, more specifically, on MCH care services. The country's life expectancy is 57 years, which is lower than the average for Guinea-Bissau's regional (59) and income peers (60). The burden of HIV in Guinea-Bissau is the highest in West Africa and it disproportionately affects more women than men (female adults with HIV represents 58.6 percent of the population above 15 years old with HIV). Maternal mortality rate (MMR) is estimated at 900 maternal deaths per 100,000 live births, which is the third highest maternal mortality rate in the world. Infant mortality rate (IMR) and under-five mortality rate (U5MR) remain among the highest rates in the world, 60 and 89 per 1,000 live births, respectively. Demand for MCH services is persistently low, only 45 percent of the deliveries take place within health facilities.[31]

81. The proposed Project interventions will strengthen key health systems functions to improve utilization of MCH services and, ultimately, improve health outcomes for women and children. Given the critical situation of the health care system in Guinea-Bissau, the Project will combine interventions to address immediate health service delivery needs, incentivize health workers to increase productivity and improve quality of services, while also working toward medium- and long-term strengthening of the health system by investing in the training of health personnel, and improving governance and accountability across the public health sector. Additionally, the Project will engage and mobilize communities to bring about behavioral change. These interventions are expected to produce economic gains by increasing the utilization of MCH services (which will ultimately reduce mortality and morbidity among women and children) and improving technical and allocative efficiency within the public health system.

82. The discounted total benefits of the project, estimated in productive life years gained, is estimated at US$133.62 million. Of these, 67 percent comes from the benefits of reducing child mortality, 19 percent from reducing maternal mortality, and 13 percent from efficiency gains on government health spending (indirect benefit). The net present value of the total benefit of the Project, estimated at US$133.62 million, is significantly higher than the net present value of the project cost, US$23.53 million. The benefit-cost ratio is estimated at US$5.68 (133.62/23.53 = 5.68); this means that for each US$1 invested through the Project, there will be an expected return of US$5.68. Although relatively high, this result is based on conservative assumptions on the effects of Project interventions and likely underestimates the total project benefits. A sensitivity analysis explored how uncertainties around Project impact would affect the estimated cost-benefit ratio. Results show that even when considering the lowest impacts, the cost-benefit ratio was approximately US$2 (ranging from 1.96 to 9.5).

[31] Guinea-Bissau Multiple Indicator Cluster Survey (MICS5), 2015

B. Technical

83. The Project design is relevant and consistent with the aim of strengthening the health systems of Guinea-Bissau. The Project will support the delivery of a basic package of MCH services with a focus on community and primary care interventions. Given the persistent challenges facing the country's health system (low public spending, poor infrastructure, inadequate clinical and managerial training systems, malfunctioning referral system, non-operational health-information systems, weak governance and inadequate management capacity and systems), the Project design combines interventions to address short term service delivery needs with medium and long term actions such as institutional strengthening and workforce development. Such a strategy is highly recommended for fragile contexts such as Guinea-Bissau, which permit the country to build the foundations of a more responsive and efficient health system in the future.

C. Financial Management

84. A Financial Management (FM) assessment of the General Directorate of Administration of the Health System (DGASS) within the Ministry of Public Health (MINSAP) was carried out in December 2017. The objective of the assessment was to determine whether the DGASS maintains acceptable FM arrangements to manage the proposed project and to ensure that the IDA Project proceeds would be used only for the intended purposes, with due attention to economy and efficiency. The financial management assessment was carried out in accordance with the Financial Management Practices Manual issued by the Financial Management Board on March 1, 2010 and retrofitted on February 4, 2015.

85. The PCU for the Project will be the same as the PCU that is being established within DGASS for the coordination of the REDISSE II Project. The FM arrangements for this project would be based on the proposed arrangements of the REDISSE II Project that must be set up.

86. As a result of the financial management capacity constraints within the DGASS, the MINSAP will complete the recruitment process of the key staff of the PCU including the financial and administrative officer dedicated to this project and update the existing manual of PNDS including a specific annex on the verification and payment procedures of the Performance Based Financing (PBF) by effectiveness to ensure that financial management satisfies the World Bank's minimum requirements under the World Bank Policy and Directive on Investment Project Financing (IPF) effective in 2017. In order to strengthen the internal control environment and accommodate the project in the existing financial management system, the following measures should be taken: (i) the recruitment of an accountant dedicated to the Project; (ii) the customization of the accounting software to integrate the bookkeeping of the new project and the training of the accountants of regional health directorates and health centers by three (3) months after effectiveness; and (iii) the recruitment of an external auditor by six (6) months after effectiveness.

D. Procurement

87. Procurement activities under the Project shall be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers: 'Procurement in Investment Project Financing, Goods, Works, Non-Consulting, and Consulting Services', dated July 1, 2016; and 'Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants', revised

as of July 1, 2016.

88. All Goods, Works, Non-Consulting, will be procured in accordance with the requirements of section VI. Approved selection methods: Goods, works and non-consultant services of the "Procurement Regulations" and consulting services will be procured in accordance with the requirements set out or referred to in Section VII. Approved Selection Methods: Advisory services of the "Guidelines for Procurement by Borrowers through Financing of Investment Projects" of July 1, 2016 and the Project Procurement Strategy for Development (PPSD), the Procurement plan approved by the World Bank.

89. Risk assessment: The Procurement Risk Assessment System Questionnaire was applied in November 2017 and the risk is estimated as high.

90. IDA would provide oversight of procurement activities through prior reviews, which would be based on the risk level assessed during appraisal and would be updated annually. Based on the risk rating, the Borrower would seek IDA's prior review for contracts as set out in Table 7. In addition, the PCU would: (i) appoint an independent procurement auditor to have the procurement activities of the project audited annually; and (ii) submit the procurement audit report to IDA for its review.

Table 7. Prior Review and Procurement Approaches and Methods Thresholds

Category	Prior Threshold Review	Procurement Methods Thresholds				
	Prior Review (US$ millions)	Open International	Open National	RFQ	Short List of National Consultants	
					Consulting Services	Engineering and Construction Supervision
Works	≥5	≥3	<3	≤0.2	n.a.	n.a.
Goods, IT, and non-consulting services	≥1.5	≥0.3	<0.3	≤0.1	n.a.	n.a.
Consultants (Firms)	≥0.5	n.a.	n.a.	n.a.	≤0.2	≤0.2
Individual Consultants	≥0.2	n.a.	n.a.	n.a.	n.a.	n.a.

91. The Borrower prepared the Project Procurement Strategy for Development (PPSD) which forms the basis for a Procurement Plan for the first 18 months of the Project implementation and provides the basis for the selection methods. This plan was agreed between the Borrower and the Project team and is available in the Borrower/PCU project's database and in the World Bank's external website. The Procurement Plan would be updated by the project team annually or as required to reflect the actual Project implementation needs and improvements in institutional capacity. The project will use the Systematic Tracking of Exchanges in Procurement (STEP) to prepare, clarify and update its procurement plan to ensure its implementation.

E. Social (including Safeguards)

92. The project is expected to have a positive social impact by empowering communities to improve the health and nutritional status of women and children and by improving accessibility of health care for the poorest households. Beyond investing in capacity development at the Ministry and health worker level, the project will increase transparency and accountability of health services delivery through a performance-based system. The project will also enhance community ownership, particularly through the establishment of women's groups, who will be involved in priority setting and the scoring of health services. Finally, broader social benefits are expected from the various communication activities aimed at behavior change in areas such as hygiene and FGM.

93. The project is also committed to a robust Citizen Engagement approach in collaboration with the Advisory Services and Analytical focusing on Mainstreaming Citizen Engagement in Guinea Bissau (P163990), which will encompass beneficiary feedback and grievance redress mechanisms. Moreover, none of the activities is expected to entail negative economic or social impacts through the involuntary taking of land, and therefore OP 4.12 has not been triggered.

F. Environment (including Safeguards)

94. The project is classified as Category B - Partial Assessment for Environmental Assessment purposes. It triggers OP 4.01 Environmental Assessment because of the anticipated increase in biomedical waste due to improved coverage and quality of maternal and child health services across the country. Sub-component 3.1 will finance health facility grants that may be used for small repairs inside selected health facilities (painting, electricity and equipment installation, etc.), to improve surgical capacity, and to purchase essential equipment and supplies. Such activities are consistent with a Category B classification and will be implemented according to the relevant national laws and with appropriate mitigation measures as needed. Beyond these small interior repairs and improvements, the project will not finance any works.

95. While the increase of biomedical waste is an indirect impact of the project activities, it is important to ensure that this Health Risk Waste will be properly handled, collected, transported and eliminated to avoid the spread of infectious diseases. In this context, a Medical Waste Management Plan (MWMP) for Guinea-Bissau was prepared under the REDISSE II Project (P154807) and disclosed in country on January 13, 2017 and at the World Bank on January 12, 2017. The MWMP provides: a) measures for addressing shortcomings identified in the waste management system including guidelines for improving the legal framework; b) institutional arrangements for proper HCW management in the country; c) an implementation action plan with an associated budget; d) guidance on training for health care practitioners; e) monitoring and evaluation plan; and f) awareness raising strategies for the public.

96. The MWMP was reviewed and deemed appropriate as the safeguards instrument for this project given the indirect impacts discussed above. It was updated to reflect this dual coverage and disclosed in-country on February 21, 2018 and at the World Bank on February 23, 2018. The MWMP will serve as the safeguards instrument for this project as its effective implementation will help mitigate, reduce or even eliminate the potential adverse impacts of this project.

97. Concerning the Health Facility Grants and the small interior repairs and improvements they may

finance, the Borrower will review the proposals carefully prior to approval to (1) ensure that they are aligned with these guidelines; and (2) will be implemented according to the relevant national laws and appropriate mitigation measures if needed.

G. World Bank Grievance Redress

98. 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, because of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit *http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service*. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

7. RESULTS FRAMEWORK AND MONITORING

Results Framework

Project Development Objective(s)

To improve coverage of essential maternal and child health services in the Recipient's territory.

PDO Indicators by Objectives / Outcomes	DLI	CRI	Unit of Measure	Baseline	End Target
To improve coverage of essential maternal and child health services in the Recipient's territory.					
Pregnant women attending at least 4 prenatal care consultations during pregnancy			Number	19,580.00	45,000.00
Institutional deliveries			Number	27,288.00	45,000.00
Use of modern contraceptive methods among women of reproductive age			Number	27,866.00	55,000.00
Number of children (0-11 months) fully vaccinated			Number	38,838.00	45,000.00

Intermediate Results Indicators by Components	DLI	CRI	Unit of Measure	Baseline	End Target
Health workforce development					
Number of primary health workers trained in RMNCH competencies			Number	0.00	1,100.00
Percentage of healthcare workers that recommend the correct			Percentage	0.00	60.00

treatment for a basic case of childood malaria, pneumonia or diarrhea					
Institutional Strengthening of the Ministry of Public Health					
Health Workers Absenteeism			Percentage	36.00	10.00
Performance-Based financing					
People who have received essential health, nutrition, and population (HNP) services		Yes	Number	0.00	735,000.00
Number of children immunized		Yes	Number	0.00	230,000.00
Number of women and children who have received basic nutrition services		Yes	Number	0.00	330,000.00
Number of deliveries attended by skilled health personnel		Yes	Number	0.00	175,000.00
Children 12-59 months of age attending at least one healthcare consultation			Number	122,535.00	160,000.00
Percentage of primary health care facilities (type A, B, and C) with all essential drugs available on the day of the visit			Percentage	0.00	50.00
Number of health centers participating in the PBF scheme with a signed contract with the Independent Verification Agency			Number	0.00	80.00
Facilities with beneficiaries reporting illegal charges from providers for essential maternal and child health services			Number	128.00	70.00
Community Health and Social Mobilization					
Women referred to antenatal care, postnatal care, family planning, or delivery by community health workers			Number	0.00	170,000.00
Women of reproductive age attending at least one family planning consultation			Number	19,233.00	75,000.00
Number of pregnant women receiving folic acid and iron supplementation			Number	0.00	35,000.00

Project-supported organization publishing findings of citizen led monitoring			Number	0.00	1.00
Satisfaction of users with basic MCH services provided			Percentage	0.00	60.00

Monitoring & Evaluation Plan: PDO Indicators	
Indicator Name	Pregnant women attending at least 4 prenatal care consultations during pregnancy
Definition/Description	The number of pregnant women who received four or more antenatal care consultations with a healthcare provider during their pregnancy
Frequency	Annually
Data Source	Sistema de Informacao em Saude (SIS) - DHIS2
Methodology for Data Collection	Final project target aims to increase ANC coverage from 26% to 60% of women with at least 4 ANC consultations
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Institutional deliveries
Definition/Description	The number of women of reproductive age who had births at health facilities (health centers type A, B, C, regional hospitals and national hospital)
Frequency	Annually
Data Source	DHIS2
Methodology for Data Collection	Final project target aims to increase institutional deliveries from 36% to 60%
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Use of modern contraceptive methods among women of reproductive age
Definition/Description	Women of reproductive age who receive one or more forms of modern contraceptives (including injections, pills, implants, IUDs)
Frequency	Annually
Data Source	DHIS2
Methodology for Data Collection	Considering all women of reproductive age using modern methods such as injections, pills, implants, IUDs and condoms. Final target aims at increasing use of any contraceptive method from 7.5 to 14.8%
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Number of children (0-11 months) fully vaccinated
Definition/Description	The number of children under 1 year who received full immunization according to national immunization policies for their age group
Frequency	Annually
Data Source	DHIS2
Methodology for Data Collection	Considers children <12 months with BCG, Polio, Measles, Yellow Fever, and Penta 3 immunizations. Project aims to increase coverage from 74.1 to 85.8%
Responsibility for Data Collection	MINSAP/PIU

Monitoring & Evaluation Plan: Intermediate Results Indicators	
Indicator Name	Number of primary health workers trained in RMNCH competencies
Definition/Description	Number of medical doctors and non-physician clinicians who participate in trainings for competencies relevant to reproductive, maternal, neonatal, child and adolescent health throughout the project
Frequency	Twice annually
Data Source	MINSAP
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU
Indicator Name	Percentage of healthcare workers that recommend the correct treatment for a basic case of childood malaria, pneumonia or diarrhea
Definition/Description	Healthcare workers recommending the correct treatment for childhood illnesses as assessed by the SDI survey. Baseline 2018, endline measure estimated 2022.
Frequency	Baseline and endline
Data Source	SDI Survey
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/INE

Indicator Name	Health Workers Absenteeism
Definition/Description	Percentage of health workers absent during unannounced visit to health facility (as part of the Service Delivery Indicators survey)
Frequency	Baseline and endline
Data Source	SDI survey
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/INE

Indicator Name	People who have received essential health, nutrition, and population (HNP) services
Definition/Description	
Frequency	Annually
Data Source	PBF M&E
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Number of children immunized
Definition/Description	
Frequency	Annually
Data Source	PBF M&E
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Number of women and children who have received basic nutrition services
Definition/Description	
Frequency	Annually
Data Source	PBF M&E
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Number of deliveries attended by skilled health personnel
Definition/Description	
Frequency	Annually
Data Source	PBF M&E
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Children 12-59 months of age attending at least one healthcare consultation
Definition/Description	Children ages 1 to 5 attending at least one consultation at health centers and hospitals
Frequency	Annually
Data Source	DHIS2
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Percentage of primary health care facilities (type A, B, and C) with all essential drugs available on the day of the visit
Definition/Description	Proportion of all health centers (type A, B and C) stocked with essential medicine
Frequency	Twice annually
Data Source	PBF M&E
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU
Indicator Name	Number of health centers participating in the PBF scheme with a signed contract with the Independent Verification Agency
Definition/Description	Number of primary care centers participating in the PBF scheme with a signed performance-based contract with the IVA
Frequency	Annually
Data Source	PBF M&E
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Facilities with beneficiaries reporting illegal charges from providers for essential maternal and child health services
Definition/Description	Number of facilities for which beneficiaries report illegal charges for maternal and child health services that are free to users
Frequency	Twice annually
Data Source	PBF M&E
Methodology for Data Collection	Considers facilities type A (5), B (15), and C (108)
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Women referred to antenatal care, postnatal care, family planning, or delivery by community health workers
Definition/Description	Female patients referred to health facilities by CHWs that participate in the PBF program
Frequency	Twice annually
Data Source	PBF M&E
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Women of reproductive age attending at least one family planning consultation
Definition/Description	Women of reproductive age who attend family planning consultations at health centers and hospitals
Frequency	Annually
Data Source	DHIS2
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Number of pregnant women receiving folic acid and iron supplementation
Definition/Description	Women who took iron folic acid tablets for 90 or more days during their pregnancy.
Frequency	Twice annually
Data Source	DHIS2
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

Indicator Name	Project-supported organization publishing findings of citizen led monitoring
Definition/Description	Project-supported organizations that report findings or citizen monitoring on availability of essential health services and drugs
Frequency	Annually
Data Source	MINSAP/PIU
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PIU - responsibility for verifying role of organizations publishing results of citizen led monitoring, established as a citizen engagement initiative through the project

Indicator Name	Satisfaction of users with basic MCH services provided
Definition/Description	The number of pregnant women and mothers of under five years old who report to be sufficiently satisfied or highly satisfied with the services provided by the respective heath facility in their catchment area, divided by the total number of pregnant women and mothers of under five years old who have been surveyed.
Frequency	
Data Source	PBF M&E
Methodology for Data Collection	
Responsibility for Data Collection	MINSAP/PCU

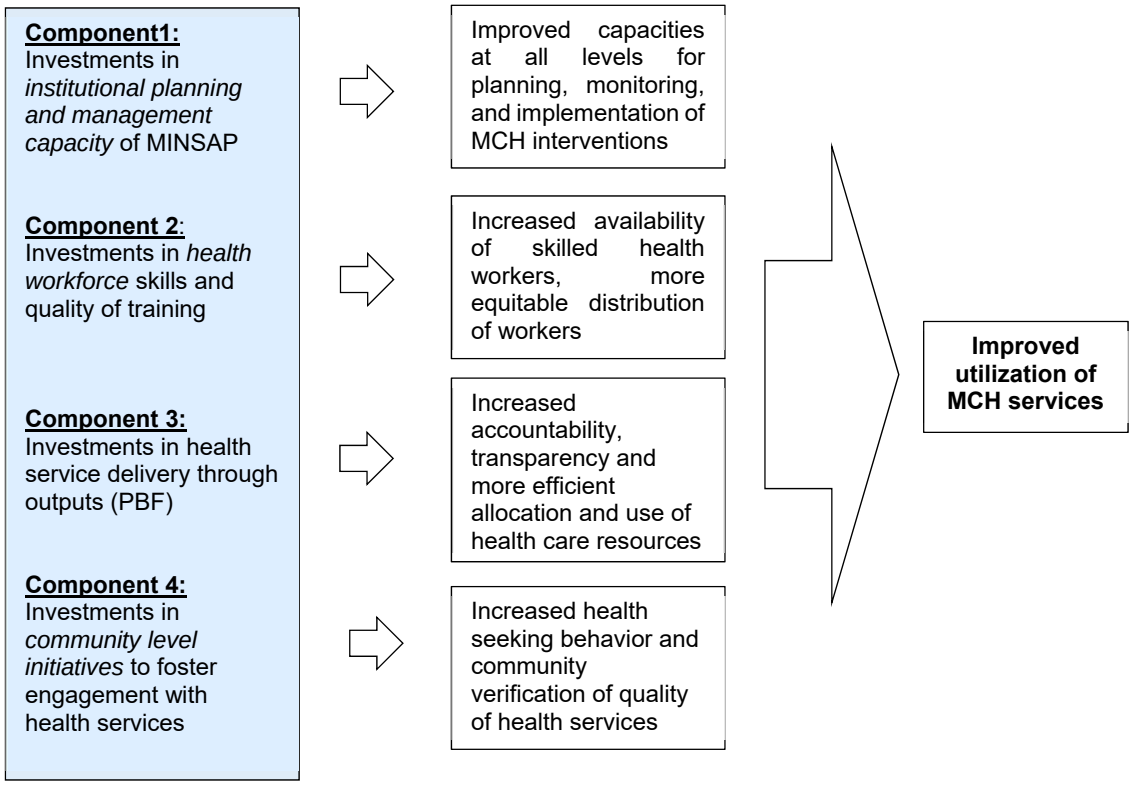
ANNEX 1: DETAILED PROJECT DESCRIPTION

COUNTRY : Guinea-Bissau
Strengthening Maternal and Child Health Service Delivery in Guinea-Bissau

Project Components

1. **The proposed project aims to improve access to essential maternal and child health (MCH) services by strengthening core health systems functions in the country.** Given the vast challenges of the health sector, the proposed project adopts a flexible two-pronged approach that combines interventions to address immediate needs in the provision of quality essential MCH services while also working toward medium- and long-term strengthening of the health system by investing in the training of health personnel, and improving governance and accountability across the public health sector. The proposed project is aligned with the strategic priorities to improve governance and the provision of essential health services and programs delineated in the National Health Sector Development Plan (PNDS III 2018-2022), the Country Partnership Framework (CPF 2018-2021), and the National Strategic Plan (2015-2025).

Figure 1: Theory of Change between intervention and project development outcome



2. **The Project comprises four components that together will address the key challenges to improve MCH outcomes in the country.** The first two aim at strengthening the Ministry of Public Health's (MINSAP) capacity to perform key health systems functions and to improve quality and distribution of the health workforce (Figure 1). Components 3 and 4 aim at improving the utilization and quality of MCH services and increase accountability within the health care system through Performance-Based Financing (PBF) and community health interventions.

The four components are as follows: (i) Institutional strengthening of the Ministry of Public Health (MINSAP); (ii) Health workforce development; (iii) PBF to deliver a package of essential MCH services; and (iv) Community health and social mobilization.

3. **Component 1: Institutional Strengthening of MINSAP (US$2.9 million).** This component will support institutional strengthening at the national, regional, and local levels to improve accountability and efficiency across the different levels of the public health system. This component will also support analytical work and policy dialogue to facilitate the implementation of key institutional reforms to improve health system performance. This component includes two sub-components, as follows:

4. ***Subcomponent 1.1: Institutional reform of MINSAP (US$0.8 million)*:** This subcomponent will focus on strengthening the MINSAP's management capacity. It will support technical assistance to review the current organizational structure of the MINSAP and provide recommendations for reform. The review of the organizational structure entails a thorough revision of the terms of reference, roles, and responsibilities of units and roles across all levels of the ministry. The goal of the institutional reform is to establish roles and responsibilities within the ministry, to strengthen accountability between actors at the national, regional and local levels, and to improve the distribution and management of human resources across all levels of the public health system. Activities under subcomponent 1.1 will include: (i) A comprehensive assessment of the MINSAP organization, revising units and staff positions terms of reference; (ii) Support the implementation of an institutional reform of the MINSAP based on the findings and recommendations of the institutional assessment; (iii) Review and strengthen human resources management (HRM) practices at all levels of the public health system; (iv) Support health workforce regulatory reforms needed to improve availability of skilled health professionals, particularly in rural areas; and (iv) Support MINSAP staff development by building capacity in areas such as HRM, public financial management (PFM), and monitoring and evaluation.

5. ***Subcomponent 1.2: Project Management and Monitoring & Evaluation (US$2.1 million)***. This sub-component will support the creation and operation of the project coordination unit (PCU), which will be placed within the MINSAP. The PCU will support the day-to-day project management, fiduciary tasks, M&E, and other logistical support to the implementation of Project activities. Under this sub-component, the Project will support the implementation of Service Delivery Indicators (SDI) survey and a rigorous impact evaluation (IE). The SDI survey will measure progress on key aspects of service delivery using as baseline the SDI implemented, during the first semester of 2018, by the National Statistics Office (*Instituto Nacional de Estatistica*) in collaboration with the MINSAP and the World Bank. The IE will, among other things, assess the impact of the PBF pilot to inform the scale-up of the PBF program to the entire country. For the IE, the Project will work with the Bandim Health Project (BHP) which is under the National Institute of Health (INASA) of the MINSAP. The BHP monitors mortality, birth outcomes, vaccination coverage, and nutritional status for a nationally representative randomly selected sample of 182 clusters (more than 200,000 individuals in urban and rural Guinea-Bissau). By working with local partners, the Project will contribute to strengthen country's capacity to collect and analyze key health systems data.

6. **Component 2: Health workforce development (US$3.2 million)**. This component aims to address key health workforce shortcomings that limit the country's capacity to improve service delivery to its population. The health workforce challenges include low quality of training, insufficient skills and competencies from clinical cadres, acute shortages of key clinical cadres (such as pediatricians, obstetricians, and gynecologists), absence of quality assurance mechanisms to guarantee minimum standards of training and practice, and the uneven distribution of health workers across the country (concentrated in the capital Bissau). Given that sub-component 1.1 will support the improvement of HRM practices and procedures, Component 2 will focus on health workforce challenges

through strategic investments to improve the country's training capacity, support decentralized training, improve competencies of existing health workers, and implementing mechanisms to enforce minimum standards of training and practice. This component has two sub-components, as follows:

7. ***Sub-component 2.1: In-service training (US$1.4 million).*** This sub-component will target health workers currently employed in the public health system with the goal of upgrading specific competencies related to MCH service delivery. These competencies include but are not limited to emergency obstetric and neonatal care skills, obstetric surgical skills, anesthesia, echography, and provision of routine care for mothers, neonates and infants. Activities under this subcomponent include the development and implementation of in-service training modules across all sanitary regions. This sub-component will also support, in collaboration with UNICEF and the European Union (EU), the development of continuing education plans and materials for health personnel and community health agents.

8. ***Sub-component 2.2: Pre-service training (US$1.8 million).*** This sub-component will support the National School of Public Health and the National School of Medicine to improve the quality of nursing, midwifery and medical education. This sub-component will support activities such as faculty development, curriculum reform (to implement competency-based training), the development of training capacity to produce basic medical specialties in the country, introduction of mechanisms to assess and control quality at entry and at graduation, development of standards to measure quality of training (in public and private schools), and purchase and installation of didactic equipment for the National School of Public Health and the National School of Medicine, including the creation of the National Public Health Library. In line with the CPF 2018-21, the subcomponent will support improvements in the physical and training capacity in the three regional campuses of the National School of Public Health with the goal of increasing the availability of skilled professionals, nurses and midwives, at the local level.

9. **Component 3: Performance-based financing to deliver a package of essential maternal and child health and community health services (US$10.1 million).** This component will focus on strengthening PHC service delivery in the entire country. Such a model would involve coordination and care provision by integrated frontline PHC teams including nurses, midwives, physicians within health centers, regional hospitals and the national hospital, linked to community and outreach services provided by community health agents. This component will combine investments to improve health facilities conditions and incentives to boost health workers' performance, accountability and transparency within the health service delivery chain. Three sub-components are envisioned under this component:

10. ***Sub-component 3.1: Health facility grants (US$2.9 million).*** The sub-component will provide grants to health facilities to improve health service delivery capacity. These grants could be used for small repairs inside health facilities (painting, electricity and equipment installation, etc.), to improve surgical capacity, and to purchase essential equipment and supplies. At the beginning of the PBF scheme health facilities will be invited to submit grant proposals which will be assessed and approved by the PCU within pre-defined parameters for investments. These proposals would include a detailed description of how the facilities would manage and use the PBF funds, including how communities will participate in the decision of use the grant and PBF funds. These grants would ensure that all facilities entering the PBF scheme would have adequate operating conditions.

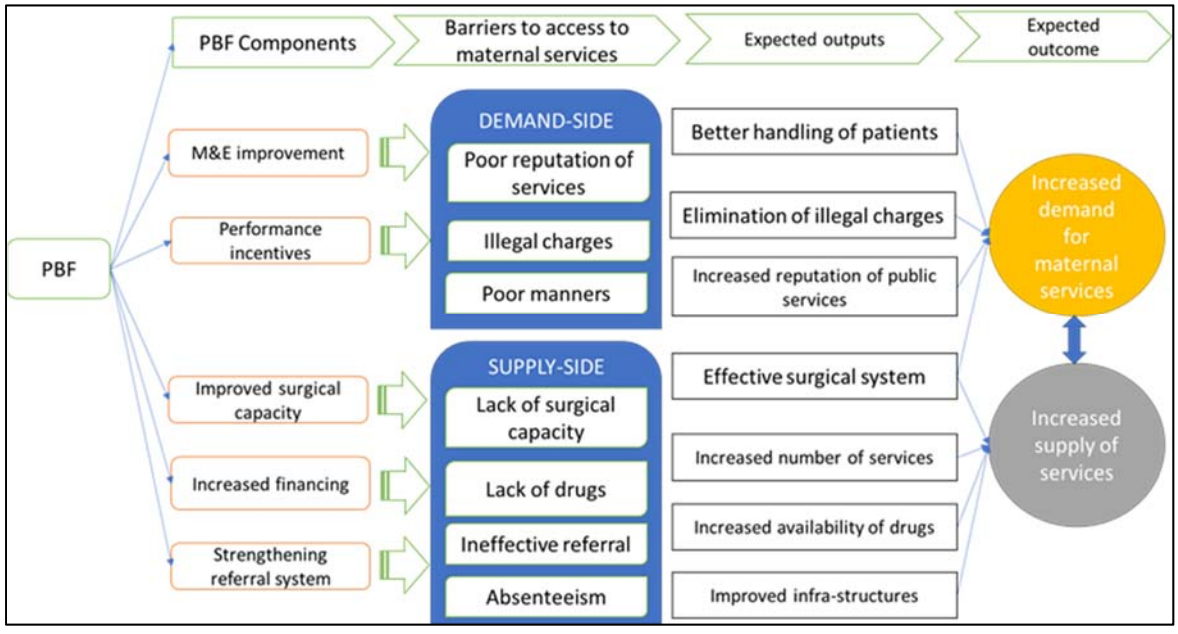
11. ***Sub-component 3.2: Performance-based payment (US$5.9 million).*** This subcomponent will provide performance bonuses to: (i) health facilities, conditional on list of quantity and quality indicators linked to the delivery of a package of MCH services; and (ii) the 11 Regional Health Directorates (DRS) for verifying the quantity and quality of services provided at both community and health facility levels. Health facilities contracted health

facilities will use PBF payments to provide financial incentives to health personnel to increase the quality and the quantity of health services provided at the facility and through outreach strategies, and to fund facility operating costs.

12. ***Sub-component 3.3: Performance-Based Payments Implementation and Supervision (US$1.3 million):*** This subcomponent will support the implementation of Performance-Based Payments by strengthening a dedicated technical unit within the PCU and contracting an IVA, which will verify the quantity and quality of services provided by health facilities, all in line with the Recipient's national regulations.

13. **The ultimate objective of the PBF program is to change the health personnel behavior and to improve the accountability in the service delivery.** The introduction of PBF in Guinea-Bissau would rest on the assumption that, through its sub-components, the intervention would have a direct effect on the demand- and supply-side barriers hampering the provision of services that can reduce maternal and infant mortality. The PBF intervention will encompass a few interventions, among which, grants for improvement in infrastructure and equipment, performance incentives to health workers, increased overall financing of health services, improved supervision, monitoring and evaluation for data collection for reimbursement, and bonuses to eliminate illegal charges. Such specific interventions aim to address specific demand-side and supply-side barriers patients experience when accessing services. These range from lack of services, lack of drugs, or functional surgical capacity (supply-side factors), to illegal charges, poor reputation of services and service conditions (demand-side factors). There is international evidence that such interventions are effective, for example, in improving job satisfaction and retention among health workers (Shen et al. 2017), improving accountability and reducing illegal charges (de Walke et al, 2017), and increasing coverage of assisted deliveries and preventive care visits (Basinga et al., 2011).

Figure 2: PBF in Guinea-Bissau - Theory of Change



14. **International evidence suggests that such specific interventions may be able to increase the quantity of services provided, improve the surgical referral system, availability of drugs, and handling of patients.** Such expected outputs should have the final effect of increasing the supply of quality maternal services, but also the demand of such services by the population, which is believed will contribute to reducing the country's high

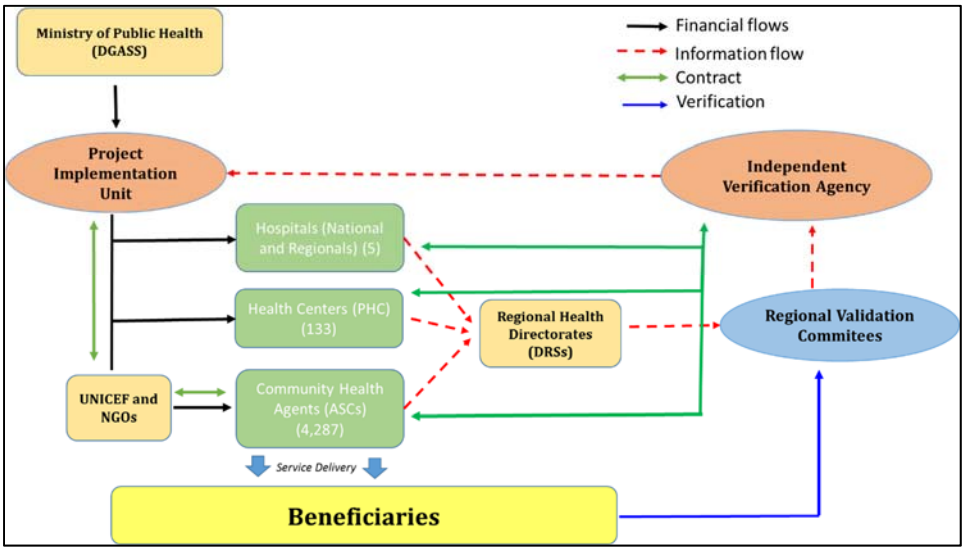
maternal mortality rate.

15. **The implementation of the PBF component will be phased.** The PBF will be rolled out in priority regions from the first year of the project alongside the IE that will identify key factors enabling (or disenabling) the successful implementation of the PBF. Implementation of the PBF will start in Gabu, Bafata and Farim, regions with lowest percentage of assisted delivery, over the first 12 months of the Project implementation. Based on PBF projects in other Sub-Saharan African countries, the cost per capita per year ranges from US$3.5 to US$5.00. For the context of Guinea-Bissau, given that the European Union project is already funding gratuity (user fees exemptions) of MCH services and supply chain management, the PBF costs is estimated at US$3.5 per capita/year.

16. **Facility payments will be made quarterly based on both a set of incentivized indicators emphasizing reproductive, maternal and child health, and nutrition interventions.** A list of output indicators will be defined for primary and tertiary care (see Appendix A). In addition to the payments based on the quantity of services provided, a quality bonus will be provided and which will increase up to 30 percent of the total payment based on health service quantity. This percentage depends on the health facility quality score. A quality checklist will be designed for each level of the service package and will focus on the availability of medicines and supplies, good maintenance of facilities, listing user charges, privacy, the condition of the waiting area and consultation room, proper documentation of health services, and other aspects of service delivery. A remoteness bonus will be included to health facilities located in hard-to-reach areas of the country. This bonus aims to provide further incentives to health personnel to practice in these areas and to provide financial conditions to these health facilities to implement outreach activities. Remoteness bonuses will range from 30 percent to 60 percent of the basic subsidy, based on the following criteria: (i) Geographical inaccessibility (hard-to-reach) that makes it difficult the retain staff; and (ii) The size of the health area and low population densities that results in more outreach activities. In addition to pay incentives to health facilities, the subcomponent will also pay incentives to DRSs (11 in the entire country), which is estimated at 10 percent of the amount to be paid in incentives to health facilities.

17. **The sub-component will also support PBF implementation by contracting an independent verification agency (IVA) and providing technical assistance.** The Project will maintain a PBF Technical Unit within the PCU to coordinate the PBF interventions and to contract an IVA, which will verify quantity and quality of services provided. The Technical Unit and IVA will work with the DRSs to ensure delivery of health interventions is in line with national regulations. The contract management and verification for PBF implementation is estimated to be at 18 percent of the total PBF budget, which is in-line with international experience. This sub-component also includes technical assistance (TA) to support the implementation of the PBF program. The TA aims to develop capacity to lead the implementation of the PBF, it will include training, national and regional workshops, and consultancy with PBF experts.

Figure 3: PBF Implementation Arrangements



18. **Component 4: Community Health and Social Mobilization (US$8.8 million).** This component will support the continuation of the community health strategy in the country and will engage communities to promote health-seeking behavior, dissemination of information, and monitoring of service providers. The objectives are to improve the demand for key reproductive, maternal and child health services, and to sensitize the population on health promoting and disease preventing behaviors through community-based interventions. Activities included in this component will range from recruitment, training, and payment of incentives to community health workers; outreach activities to inform, sensitize and raise awareness about harmful cultural practices such as female genital mutilation (FGM); facilitate monitoring of health services; and involving communities on planning and execution of improvements of health centers. The component will include the following sub-components.

19. ***Sub-component 4.1: Community Health (US$7.6 million).*** This sub-component will support the implementation of the community health strategy in the country. The project will provide financial incentives to ASCs based on the delivery of a package of essential community and preventive services defined by the MINSAP. Payments to ASCs will be made directly through mobile money transfers (already tested for that purpose). Performance payments will be linked to a pre-defined list of 16 activities listed in the National Community Health Plan 2016-2020, these include household visits, health promotion and prevention, referral to health centers, and the distribution of basic health care inputs. The sub-component will finance incentive payments to community health agents (4,287 ASCs in the country with a monthly payment of approximately CFA 15,000), and it will support UNICEF and its associated NGOs in the provision of training and supervision of the ASCs (including verification of service delivery by ASCs).

20. ***Subcomponent 4.2: Social Mobilization and Support (US$1.2 million).*** Activities under this subcomponent include: (i) support community mobilization and organization for monitoring of health service delivery; (ii) promotion of social and behavior change communication; and (iii) support the expansion and maintenance of maternal waiting homes. The sub-component will support the creation and functioning of women's groups to engage communities in the monitoring of service delivery at facility level and incentivize social accountability. This sub-component will support the development and implementation of community scorecards to assess health facilities' infrastructure and equipment (including accessibility, staffing, infrastructure, water, electricity, and availability of essential drugs), and quality of services provided (including information exchange, client-provider

interaction, and illegal charges). Scorecards will be piloted in PBF pilot regions before scaling-up nationally.

21. **This sub-component will also support the development and delivery behavior change messages on intersecting topics (reproductive health, nutrition practices, hygiene, safe delivery, and harmful traditional practices such as genital mutilation) that influence maternal and child health outcomes.** Activities include the development and dissemination of media materials, hosting of workshops, awareness campaigns, and sensitization of community opinion leaders to advocate for the reduction of female genital mutilation (FGM), promotion of health care seeking behavior for antenatal care and birth, promotion and use of family planning methods, and awareness of nutritional needs of pregnant women, children and adolescents. These strategies and materials will support and complement activities incentivized through the sub-components 4.1 (payment to community health workers) and sub-component 3.2 (PBF to health facilities).

22. **This sub-component will support the operation of maternal waiting homes (*Casa das Mães*).** Currently, three maternal waiting homes operate in the country, two linked to regional health hospitals and one linked to a type A health center. Maternal waiting homes in Guinea-Bissau serve as a bridge between communities and the health system, not only to overcome distances, but also to provide key education to expecting mothers on infant care, feeding, and healthy delivery. Maternal homes are frequently mentioned by users, community health workers, and regional health directorates as an effective strategy to improve accessibility of maternal care for women with high-risk pregnancies and for those for whom distance is a key barrier to accessing services.

23. **Component 5: Contingent Emergency Response (US$0).** This component would allow funds to be quickly reallocated to emergency activities in the event of a natural or man-made disaster or crisis that has caused, or is likely to imminently cause, a major adverse economic and/or social impact.

24. **Project implementation will be phased.** The first year of the Project (2018-2019) will be dedicated to implement analytical work and policy dialogue around the institutional reform of the MINSAP, workforce development, community participation, and the PBF component. For the PBF component, preparation will include the development of the PBF manual, preparing calls for grants, establishing PBF contracts in the pilot regions, and contracting with an IVPA. The PBF pilot is expected to start around the second quarter of 2019 and scale-up is expected by the second year of project implementation).

Project Cost and Financing

Table 1: Overview of costs by component in US$ million

Project Components and Subcomponents	Project cost	% IDA Financing
1. Institutional Strengthening of MINSAP	**2.9**	100
1.1 Institutional reforms of MINSAP	0.8	100
1.2 Project management and M&E	2.1	100
2. Health workforce development	**3.2**	**100**
2.1 In-service training	1.4	100
2.2. Pre-service training	1.8	100
3. Performance-Based financing to deliver a package of essential maternal and child health and community health services	**10.1**	**100**
3.1. Health Facility grants	2.9	100
3.2. Performance-Based Payment	5.9	100
3.3 Performance-Based Payments Implementation and Supervision	1.3	100
4. Community Health and Social Mobilization	**8.8**	**100**
4.1 Community Health	7.6	100
4.2 Social Mobilization and Support	1.2	100
5. Contingent Emergency Response	**0.0**	**0.0**
Total Project Costs	**25.00**	**100**

Appendix A: Output quantitative indicators

Table A.1: Output Indicators for the Minimum Package of activity – Health Centers Type A, B, and C

N°	Curative Care	Definition	Support documents for data collection
1	PHC Consultations (home visits) < 5years (new cases): Nurse	Number of persons aged < 5 years consulting the health center with a new episode of illness (seen by a qualified by nurses)	Outpatient consultation register or register used for curative care consultations for < 5 years
2	PHC Patient Consultations (home visits) > 5 years (new cases): Nurse	Number of persons aged >5 years consulting the health center with a new episode of illness (seen by qualified nurses)	Outpatient consultation register or register used for curative care consultations for > 5years
3	Minor surgery cases	Total number of new cases of minor surgery treated in the health facility (incision of abscesses, wound sutures, circumcisions etc.)	Minor surgery register
	Preventive Services/Care		
4	Children Completely Vaccinated	Children 0-11 months who received all of the following vaccines (BCG, Pentavalent 1, Pentavalent 2, Pentavalent 3 yellow fever and measles)	Vaccination register of the health facility
5	Cases of TB diagnosed positive by Microscopy	Number of new cases diagnosed positive by Microscopy in the health facility	TB and Lab registers
6	Cases of TB treated and healed	Total number of positive TB cases on treatment who were completely healed in the month (new and/or relapsed	TB register, Lab register
7	Voluntary Counseling and Testing for HIV/AIDS	Number of people who came to the health facility for HIV/AIDS voluntary counseling and testing and who collected their results	VCT Register
8	Newborn management of a baby born of an HIV positive mother.	Number of babies born of HIV positive mothers who are placed on PMTCT protocol in the month according to National directive	PMTCT Register
9	HIV positive Pregnant Women put on ARV prophylactic treatment	Number of HIV positive Pregnant Women put on ARV prophylactic treatment according to the national PMTCT protocol in the month	PMTCT Register
10	Case infant with uncomplicated severe acute malnutrition treated	Total number of children 6-59 months treated for uncomplicated severe acute malnutrition in the month	Nutrition Register
11	Vitamin A supplementation (distribution)	Number of children 6 to 59 months who received Vit A	Vit A supplementation register, Vaccination Register
	Reproductive Health		
12	Normal Assisted Delivery	Total number of normal deliveries carried out by qualified (or skilled) staff (nurses) in the facility in the month followed by partogram	Deliveries Register (Maternity Register)
13	Referral of pregnant woman	Total number of referred pregnant women who are received at the referral hospital from PHC	Referral register of the health center, referral forms at the level of the Hospital, consultation registers of the hospital, Hospitalization registers
14	FP: Implants and IUD	Number of new cases of Implants and/or IUD carried out in the month	Family planning register

15	Post-abortive Curettage (spontaneous or induced)	Total number of new cases of curettage (post-abortive) carried out in the facility in the month	Maternity and theater register
16	ANC1 or ANC2 or ANC3 or ANC4	Total number of pregnant women who consulted the health facility in the month either for ANC1 or ANC2 or ANC3 or ANC4	ANC Register
17	ANC1	Total number of pregnant women who consulted the ANC1 service of the facility in the month	ANC Register
18	Post-natal care(PNC)	Total number women who consulted the health facility in the month before 15 days	Post Natal visit register

Table A.2: Output Indicators for the Complementary Health Package – Regional Hospitals

N°	Curative Care	Definition	Support documents for data collection
1	Out Patient Consultations > 5 years (new cases): Doctor	Number of persons > 5 years consulting the health center with a new episode of illness (consulted by Medical Doctors)	Outpatient consultation register or register used for curative care consultations
2	Out Patient Consultations < 5 years (new cases): Doctor	Number of persons < 5 years consulting the health center with a new episode of illness (consulted by Medical Doctors)	Outpatient consultation register or register used for curative care consultations
3	Hospital bed days for patients < 5 years (observation/Hospitalization)	Total Number of days spent by all the inpatients < 5 years in the health center (for observation or awaiting referral) period limited to a maximum of 48 hours	Inpatient (hospitalization register of the health facility
4	Hospital bed days for patients > 5 years (observation/Hospitalization)	Total Number of days spent by all the inpatients> 5 years in the health center (for observation or awaiting referral) period limited to a maximum of 48 hours	Inpatient (hospitalization register of the health facility
5	Counter Referral received in the Health Center	Total number of counter referred patients who are received at the health center	Counter Referral register of the health center, counter-referral forms at the level of the health center
6	Major Surgery	Total number of major surgical cases carried out in the hospital in the month under general or local or regional anesthesia except cesareans and minor surgery	Surgical theater register
7	Minor surgery cases	Total number of New cases of minor surgery treated in the health facility (incision of abscesses, wound sutures, circumcisions, dental extractions, reduction of dislocations and fractures etc.)	Minor surgery register
8	Malaria	Number of infant < 5 years treated for complicated malaria during the month	Hospitalization (Malaria) register
	Reproductive Health		
9	Normal Assisted Delivery	Total number of normal deliveries carried out by qualified (or skilled) staff (nurses) in the facility in the month followed with partogram	Deliveries Register (Maternity Register)

10	Cesarean Surgery	Total number of justified cesarean surgeries carried out in the Hospital in the month	Maternity Register, Surgical theater register
11	Dystocique Delivery	Total number of difficult deliveries (according to MOH definition) carried out in the month followed with partogram	Maternity Register
12	FP: Permanent methods (Vasectomy, Tubal Ligation)	Number of new cases of tubal ligations or vasectomies carried out in the hospital in the month	Family planning register
13	Post-abortive Curettage (spontaneous or induced)	Total number of new cases of curettage (post-abortive) carried out in the facility in the month	Maternity and theater register
14	Postnatal visit	Total number women who consulted the PNC service of the facility in the month after the delivery	PNC Register
15	Nutrition	Total number of complicated acute malnutrition treated at the hospital in the month.	Nutrition register
16	GBV	Total number of GBV completely support at the hospital during the month	GBV Register
17	Newborn management of a baby born of an HIV positive mother.	Number of babies born of HIV positive mothers who are placed on PMTCT protocol in the month according to National directive	PMTCT Register
18	HIV positive Pregnant Women put on ARV prophylactic treatment	Number of HIV positive Pregnant Women put on ARV prophylactic treatment according to the national PMTCT protocol in the month	PMTCT Register
29	Malaria	Number of pregnant women treated for complicated malaria during the month	Hospitalization(Malaria) register

Table A. 3: Output Indicators for ASCs

Prevention and Promotion	Curative
• Behavior change communication; • Promotion of essential family practices adopted at the national level; • Monitoring of growth and promoting adequate nutrition; • Supporting outreach strategy (information sharing, evacuation, identifying follow-up cases); • Community-based distribution of non-medicinal approved products including contraceptives (condoms, combined oral contraceptive pills, emergency contraceptives); • Administration of products and distribution of inputs during mass campaigns (Vitamin A, Oral Polio Vaccine, deworming medicine, insecticide-treated nets).	• Identify warning signs and assist in the evacuation of newborns, children, pregnant women, and post-partum women; • Community-based assistance for uncomplicated cases of malaria, pneumonia, diarrhea, and acute moderate malnutrition; • Simple newborn care; • Screening and referral of severe acute malnutrition cases (based on middle-upper arm circumference); • Support epidemiological surveillance of communicable and non-communicable diseases; • Follow-up of tuberculosis patients and children in families with TB cases; • Regular collection of patient information and submission to health centers.

ANNEX 2: IMPLEMENTATION ARRANGEMENTS

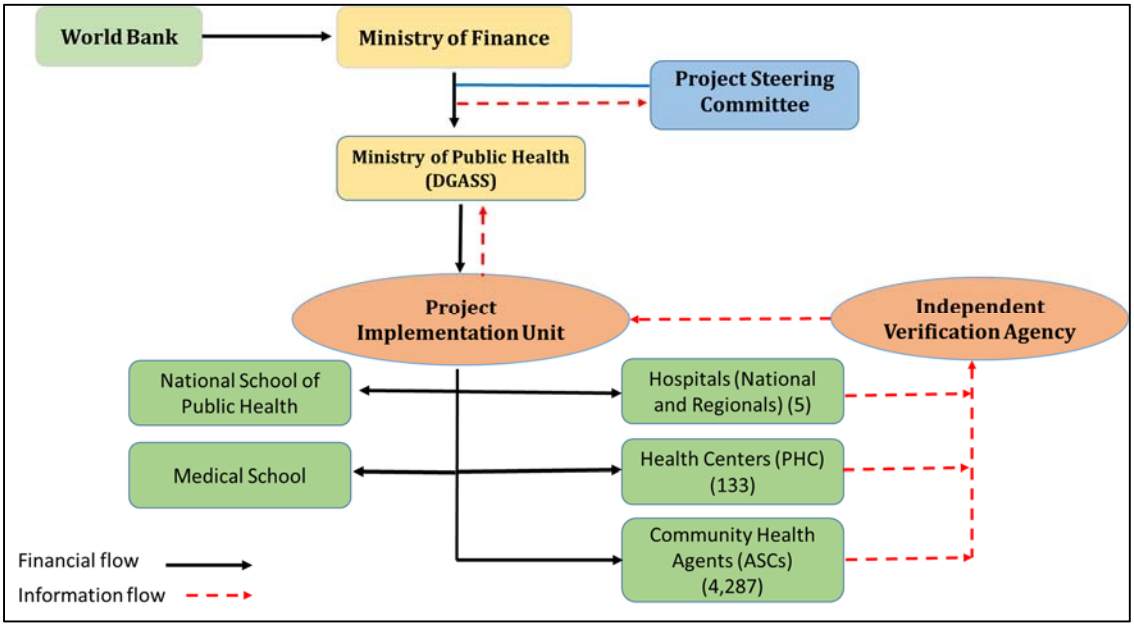
COUNTRY : Guinea-Bissau
Strengthening Maternal and Child Health Service Delivery in Guinea-Bissau

Project Institutional and Implementation Arrangements

1.The General Directorate of Administration of the Health System (DGASS) of the Ministry of Public Health (MINSAP) will be the government unit responsible for the implementation of the proposed project. The Project Coordination Unit (PCU) will be the same PCU that was established for the coordination of the REDISSE II Project, which became effective in September 2017, and works under the coordination of the Management Unit of the National Health Development Plan *(Célula de Gestão do Plano Nacional de Desenvolvimento Sanitário*, CG-PNDS). The PCU will report directly to the Secretary-General of the MINSAP and will be responsible for the day-to-day management of the project and will: (i) coordinate the project activities; (ii) ensure the financial management of the project activities in all components; (iii) act as "payer" for the incentives under the PBF under component 3; and (iv) prepare consolidated annual work plans, budgets, monitoring and evaluation, and the implementation report of the project to be submitted to the steering committee and the World Bank.

2.A Project Steering Committee (PSC) will be established to provide strategic direction and monitor the overall progress of the project. Membership of the PSC will consist of representatives from MINSAP, Ministry of Finance, Ministry of Education, The Ministry of Women, Family and Social Cohesion (MWFSC), representatives of local, regional and global partners (European Union, UNICEF, UNFPA, WHO, USAID, Global Fund and others), and civil society representatives. The PSC will approve the annual work plans, and annual reports. It will be chaired by a ranking official of the Ministry of Public Health (possibly the General Secretary of the MINSAP).

Figure 1: Project Implementation arrangements



Financial Management and Disbursements

3. The FM arrangements for the proposed project would be based on the arrangements defined under the REDISSE II Project. The recruitment of the key staff of the PCU including a Finance and Administrative Officer is ongoing. The FM staff would be responsible for collecting and controlling invoices, maintaining the books, entering data in the accounting software, managing the project's bank account, keeping the books of account and preparing the financial reports as well as the withdrawal and direct payments applications.

4. The World Bank's financial management assessment of the Ministry of Public Health (MINSAP) concluded that the project's financial management arrangements will satisfy the Bank's minimum requirements under Bank Policy and Directive on Investment Project Financing (IPF) effective in 2017 once the proposed mitigation measures are met. Given the capacity constraints with DGASS and the fact that the FM system is not yet in place, the overall FM residual risk rating for the project is rated as **Substantial**.

5. The financial management action plan below outlines the mitigating measures which, if implemented, would strengthen the financial management arrangements.

Table 1. Financial Management Action Plan

	Action	Date due by	Responsible
1	Recruitment of Financial and Administrative Officer	By effectiveness	MINSAP
2	Update the manual to include a specific annex to cover procedures related to the management of the Performance-Based Financing (PBF)	Within 3 months of effectiveness	MINSAP
3	Customization of accounting software	Within 3 months of effectiveness	MINSAP
4	Recruitment of an Accountant dedicated to the project	Within 3 months of effectiveness	MINSAP
5	Appointment of an external auditor completed and contract signed	Within 6 months of effectiveness	MINSAP

Project Financial Management Arrangements

Budgeting Arrangements

6. Budgeting. The Project budgeting process will be defined in the revised PNDS Manual applicable to projects in the health sector. The budget would be reviewed and adopted by the Project Steering Committee, before the beginning of each fiscal year. Annual draft budgets would be submitted to IDA's non-objection before adoption and implementation. Any changes in the budget and work plans would be approved by the Steering Committee and receive a World Bank non-objection. The Steering Committee would also: (i) discuss and review the quarterly budget execution report; and (ii) monitor and assess the implementation progress and results of the project.

7. The budget will be monitored through the accounting software which will be customized and through the

unaudited quarterly financial reports, which will measure actual performance against targets for each period. Significant differences between planned and actual expenditures will also need to be documented on the quarterly reports.

Accounting Arrangements

8.The Organization for the Harmonization of Business Law in Africa (*Organisation pour l'Harmonisation en Afrique du Droit des Affaires,* SYSCOHADA) and the West African Economic and Monetary Union (WAEMU) accounting system applicable in Guinea-Bissau. Project accounts would be maintained on a cash basis, supported with appropriate records and procedures to track commitments and to safeguard assets. Annual financial statements would be prepared by the PCU in accordance with the SYSCOHADA, considering IDA requirements and specificities related to external financed investment projects. The accounting policies and financial procedures will be documented in the revised Manual. The PCU would prepare Quarterly Interim Unaudited Financial Reports (IFRs) reflecting operations of the designated account (DA) and submitted to the World Bank, within 45 days after the end of each calendar quarter. The IFR format would comprise the following: (i) report on the sources and use of funds by disbursement category and by component, on a cumulative basis (project-to-date; year-to-date) and for the period, showing budgeted amounts versus actual expenditures, including a variance analysis; and (ii) forecast of sources and uses of funds. The current PCU's accounting software would be customized to accommodate the bookkeeping of the project.

9. In addition to the accounting system to be installed and the books needed to maintain an accurate and complete record of transactions, the DGASS will maintain a set of additional books of registry for control purposes. These books will include at least (i) a Fixed Asset Register; (ii) contracts Register and; (iii) gasoline log books.

10. The provider of the accounting software will train the accountants of MINSAP and an adequate technical assistance contract should be concluded to ensure just-in-time support and as needed that is country-based.

Internal Control Arrangements

11. The internal control system is aimed to ensure (i) the effectiveness and efficiency of operations, (ii) the reliability of financial reporting, and (iii) the compliance with applicable laws and regulations. The Ministry already has an overall implementation manual that has some internal control procedures, and documents some responsibilities related to the project management, but which will need to have an annex on procedures related to the Strengthening Maternal and Child Health Service Delivery Project. The annex will be more specific to cover procedures related to the management of the Performance Based Financing (PBF), to reporting (including the agreed format of quarterly reports) to IDA, preparation of withdrawal applications, detailed processes for filing, as well any other issues that may be relevant from the accounting software system.

12. The Ministry also has an internal controller (CI) who reports directly to the coordinator, and whose function is to ensure that project transactions are occurring in accordance with agreed guidelines. The CI will also perform similar responsibilities on the funds from IDA. In addition, MINSAP has its own Internal Audit activity, the General Inspectorate, which is responsible for conducting assurance services on the activities of the Ministry and the unit should include project activities on its audit plan.

Funds Flow and Disbursement Arrangements

13. Designated accounts (DA): MINSAP will open Two DAs: DA A for the PBF component and DA B for the remaining components at a commercial bank acceptable to IDA and will be denominated in CFAs to receive IDA advances, and pay for project eligible expenditures. Its ceiling would be determined in the disbursement letter based on the disbursement forecast for the first four months. The PCU Coordinator and the FM specialist would be joint signatories of the DA. The account would be set up to fund eligible expenditures based on the approved annual budget and work program. Disbursements would comply with specific procedures included in the Manual prepared for this Project.

14. Disbursement methods and processes. Disbursements under the Project would be transaction-based. In addition to making advances to the DAs, other disbursement methods would be available for use under the Project, such as reimbursement, direct payment and special commitment. Further instructions on disbursement and details on the operations of the Withdrawal Applications and Direct Payments would be outlined in the Disbursement Letter (DL).

15. Disbursement of funds to PBF beneficiaries will be processed after the verification of quantity and quality of services conducted by an Independent Verification Agency (IVA). The PCU will make payments to contracted health facilities, community health workers, regional health directorates and other beneficiaries regarding the specified activities in the components of the project. Payments will be made in accordance with the payment modalities, as specified in the respective conventions/contracts. Specifically, the PCU will transfer the funds to PBF beneficiaries (health facilities, community health works, regional health directorates) based on predetermined health services delivered that have been reviewed and approved by the IVA. The criteria for payment and reimbursement and evidence for services delivered will be detailed in the annex of the project operations manual. The CI and the FM staff will reserve the right to verify the expenditures ex-post, and refunds might be requested for non-respect of contractual clauses. Misappropriated activities could result in the suspension of financing for a given entity.

Auditing arrangements

16. Annual audited financial statements with the respective management letter will be submitted by the MINSAP to the Bank within six months of the end of the year being audited. The audit reports will be publicly disclosed on the Bank's external website and the audits will be conducted in accordance with International Standards on Auditing (ISA). The Annual Financial Statements for the project will incorporate all activities, and include:

(a) A Statement of Sources and Uses of Funds;

(b) A Summary of Expenditures analyzed by both Component and Category;

(c) The supporting notes in respect of significant accounting policies and accounting standards adopted by management; and

(d) Summary listing of withdrawal applications by reference number, date and amount.

Table 2. Table of Audit Compliance Requirements

Audit Report	Periodicity	Due date
Project audit reports (opinion on the financial statements and management letter)	Annually	Not later than 6 months after the end of the fiscal year

17. Implementation Support Plan. 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 financial management system throughout the project's life.

Table 3. Implementation Support Plan

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

Procurement

18. Procurement under the Project shall be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers: 'Procurement in Investment Project Financing, Goods, Works, Non-Consulting, and Consulting Services', dated July 1, 2016; and 'Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants', revised as of July 1, 2016.

19. All Goods, Works, Non-Consulting, will be procured in accordance with the requirements of section VI. Approved selection methods: Goods, works and non-consultant services and consulting services will be procured in accordance with the requirements of Section VII. Approved Selection Methods of the Procurement Regulations of July 1, 2016. The Team has prepared the Project Procurement Strategy for Development (PPSD) and the Procurement plan have been submitted and approved by the World Bank. The procurement plan stipulates, for each contract: a) a brief description of the activities/contracts, b) the selection methods to be applied; c) the estimated cost; d) the schedules; and e) the World Bank requirements for assessment and other relevant information on public procurement. The Procurement Plan will cover the first 18 months of project implementation. The project will use the Systematic Tracking of Exchanges in Procurement (STEP) to prepare, clarify and update its procurement plan to ensure its implementation.

20. The PNDS Management Unit, under the supervision of the General Directorate of Health System Administration is a service created in 1998 for the administrative, programmatic and financial management of the funds delegated by the partners. It has an organizational chart with definitions of the role of each stakeholder in the management of the delegated funds.

21. The **Procurement Officer (PO) was hired based on a competitive selection.** The PO will handle both REDISSE II Project and the proposed Projects and will answer directly to the Coordinator of the REDISSE II Project. The PCU will be strengthened with the selection of a procurement assistant (national) funded by the proposed Project.

22. The MINSAP has prepared terms of reference for each PCU staff with the respective tasks and responsibilities. the MINSAP has also prepared a Manual of Administrative, Financial, Accounting Procedures of the MINSAP, that includes a procurement component of the Ministry. A Project Implementation Manual has been prepared by the MINSAP, and approved by the World Bank, whose applications is mandatory for all CG-PNDS staff including the PCU team of the REDISSE II Project.

23. According to an assessment carried out, the overall procurement risk has been evaluated as **high**. It will be updated during implementation.

Assessment of risks related to procurement and mitigation measures

a) Acquisition of computer equipment

24. The acquisition of computer equipment (computers and laptops in this case) presents a substantial level of risk because of the small number of suppliers identified as capable of executing this market and the unavailability of financial means to ensure stocks locally. However, by using mitigation measures (described in table 4 below), this risk could be mitigated to a moderate level. The table below presents the potential risks of this market as well as the mitigation measures to reduce them to a moderate level.

Table 4: Summary of Findings and Actions (Risk Mitigation Matrix)

Description of Risk	Mitigation Masures	Responsible
Delay in the delivery time which could affect the schedule of activities	Application of penalties provided for in the contractual clauses Offset of the calendar of activities.	Project
Quality of the equipment not meeting the standards	Requirement in the bidding for the manufacturer's certificate and an equipment manual.	Project
Delay in the payment of the supplier's invoice	Financial records will be processed on time and the project accountant will regularly monitor the contracts. Definition of payment periods will be well defined in the clause "Payment" contracts	Project
Poor description of the supplies during the assembly of the Tender Dossier involving the IT department in the assembly of the file.	Involve IDA in the quality review of technical specifications	Project

b) Recruitment of Individual Consultants

25. The recruitment of individual consultants (both national and foreign) presents a substantial level of risk because of the low attractiveness of the local market (because of the socio-political situation) and the possible availability of local competent consultants. To reduce this risk to a moderate level, mitigation measures are planned. The table below presents the potential risks of this market as well as mitigation measures to minimize market risks.

Table 5: Summary of Risk Mitigation Measures

Description of risk	Mitigation Measures	Responsible
Low attractiveness of the local market	Publication in national newspapers (for national consultants) and in UNDB online (for international consultants) regardless of the amount of the contract	Project
Lack of availability of competent local consultants	Open competition (possibility for both national and foreign resident consultants to apply)	Project
Lack of Competence of the Consultant	A careful analysis of the curriculum vitae made by the Bid Evaluation Committee. Expanded support from line ministries in the evaluation of applications IDA Preliminary Review for Approval	Project/IDA
The delay in the payment of the consultant's service	Financial records will be processed on time and supported by the accountant. The payment deadlines will be well defined in the "Payment" clause of the contracts	Project
The poor description of the skills required when editing the ToRs	Involve all the beneficiary heads of services in the description of the skills required. IDA Preliminary Review by IDA for Approval	Project

Summary of the PPSD

26. In view of the above, it can be concluded that the environment is favorable for the procurement of goods intended for the implementation of the project.

27. The domestic market is still weak to meet the needs for computer hardware, which will be purchased using the open Quotation Request procedure; for this the possibility of establishing a consortium with foreign suppliers is acceptable.

28. For individual consultants who will provide technical support, the client will widely disseminate the solicitation of expression of interest that will be published in the national newspapers and/or UNDB to generate the maximum interest.

Table 6: List of Major Contracts for Works, Goods, Non-Consulting Services, and Consulting Assignments

Contract Title, Description, and Category	Estimated Cost (Risk Rating)	Bank Oversight	Procurement Approach/ Competition	Selection Method	Evaluation Method
Supply of equipment for central archives of the Ministry	US$50,00 (Substantial)	Post review	Open/International/ National	RFQ	Qualifying criteria/lowest evaluated cost
Supply of equipment (didactic, IT) for the public-school poles	US$400,00 (Substantial)	Prior review	Open/	AOI	Qualifying criteria/lowest evaluated cost
Purchase of equipment for human laboratory	US$30,00 (Substantial)	Post	Limited	Shopping	Qualifying criteria/lowest evaluated cost
Purchase of equipment for health centres including laboratory consumables	US$1.00 million (High)	Prior review	Open/international	AOI	Qualifying criteria/lowest evaluated cost
Purchase of medical equipment for mothers' homes	US$100,00 (High	Post review	Open/ International	RFQ	Qualifying criteria/lowest evaluated cost
Technical assistance for results-based financing	US$300,00 (High)	Prior Review	Open/International/National	SBQC	Technical and financial scores combined
Supervision and training	US$ 1.573,60 (High)	Prior Review	National/international	Direct Agreement	Negotiations
Management of payments to Community Health Workers	US$ 786,80 (High)	Prior Review	National /International	SBQC	Technical and financial scores combined

Note: TOR = Terms of reference; CQS = Selection Based on the Consultants' Qualifications; IC = Individual Consultant; CV = Curriculum vitae.

Environmental and Social (including safeguards)

Social

29. The project is expected to have a positive social impact by empowering communities to improve the health and nutritional status of women and children and by improving accessibility of health care for the poorest households. Beyond investing in capacity development at the Ministry and health worker level, the project will increase transparency and accountability of health services delivery through a performance-based system. The project will also enhance community ownership, particularly through the establishment of women's groups, who will be involved in priority setting and the scoring of health services. Finally, broader social benefits are expected from the various communication activities aimed at behavior change in areas such as hygiene and FGM.

30. The project is also committed to a robust Citizen Engagement approach in collaboration with the ASA on Mainstreaming Citizen Engagement in Guinea Bissau, which will encompass beneficiary feedback and grievance redress mechanisms. Moreover, none of the activities is expected to entail negative economic or social impacts through the involuntary taking of land, and therefore OP 4.12 has not been triggered.

Environmental

31. The project is classified as Category B - Partial Assessment for Environmental Assessment (EA) purposes. It triggers OP 4.01 Environmental Assessment because of the anticipated increase in biomedical waste due to improved coverage and quality of maternal and child health services across the country. Sub-component 3.1 will finance health facility grants that may be used for small repairs inside selected health facilities (painting, electricity and equipment installation, etc.), to improve surgical capacity, and to purchase essential equipment and supplies. Such activities are consistent with a Category B classification and will be implemented according to the relevant national laws and with appropriate mitigation measures as needed. Beyond these small interior repairs and improvements, the project will not finance any works.

32. While the increase of biomedical waste is an indirect impact of the project activities, it is important to ensure that this Health Waste Risk will be properly handled, collected, transported and eliminated to avoid the spread of infectious diseases. For this purpose, a Medical Waste Management Plan (MWMP) for Guinea-Bissau was prepared under the REDISSE II Project (P154807) and disclosed in country on January 13, 2017 and at the World Bank on January 12, 2017. The MWMP provides: a) measures for addressing shortcomings identified in the waste management system including guidelines for improving the legal framework; b) institutional arrangements for proper HCW management in the country; c) an implementation action plan with an associated budget; d) guidance on training for health care practitioners; e) monitoring and evaluation plan; and f) awareness raising strategies for the public.

33. The MWMP was reviewed and deemed appropriate as the safeguards instrument for this project given the indirect impacts discussed above. It was updated to reflect this dual coverage and disclosed in-country on February 21, 2018 and at the Bank on February 23, 2018. The MWMP will serve as the safeguards instrument for this project as its effective implementation will help mitigate, reduce or even eliminate the potential adverse impacts of this project.

34. Concerning the Health Facility Grants and the small interior repairs and improvements they may finance, the Borrower will review the proposals carefully prior to approval to (1) ensure that they are aligned with these

guidelines; and (2) will be implemented according to the relevant national laws and appropriate mitigation measures if needed.

Monitoring and Evaluation

35. The general principle underlying the M&E approach is the alignment with routine health data systems of the Ministry of Public Health. Currently, the World Bank, through the REDISSE II Project, is supporting the strengthening of the health information system in the country. Additionally, as described above, Component 1 of the proposed project (Institutional Strengthening and Governance), includes activities that will strengthen MINSAP capacity to collect and process health service delivery and epidemiological data at the local and regional levels. The monitoring of project performance will directly benefit from those activities. Existing information systems include the District Health Information System (DHIS2), which integrates information from vertical programs such as the Advanced Vaccination Program (*Programa Avançado de Vacinação*), HIV/AIDS, Malaria and Tuberculosis programs, and routine production data from healthcare facilities. The M&E specialist of the PCU will compile and report data for all indicators in the results framework based on the DHIS2 routine data collection and on activities carried out by the respective MINSAP units (e.g. Human Resources Directorate regarding training of health personnel).

36. Since PDO Indicators will also be monitored as part of the Project's PBF scheme, the PBF program through its independent verification agency (IVA), will collect and report data on the progress towards achievement of PDO indicators. As the PBF program aims to improve service delivery and quality of MCH services, close monitoring of service delivery quantities and quality will be made. These include the record of PHC visits, assisted deliveries, immunizations, and utilization of nutrition services and other MCH related services. It will allow the Project to identify low performing areas and take remedial action during the life of the project. That process is inherent to any PBF program and will ensure that data to assess project impact will be collected in a timely manner.

37. In addition to the routine data, the M&E strategy will also use survey data to measure the Project implementation progress: a) Service Delivery Indicators [SDI] survey; and b) population-based health survey (Multiple Indicator Cluster Survey [MICS]). The SDI is a facility survey aiming to assemble objective and quantitative information to benchmark the performance of frontline service delivery units. The data collected through SDI will provide a comprehensive picture of the service delivery capacity, the effective amount of public resources each provider receives and how efficiently they use the resources. Currently, the World Bank is implementing a first SDI survey in partnership with the MINSAP and the National Statistics Office (*Instituto Nacional de Estatisticas*). The SDI survey was implemented during the first semester of 2018 and will serve as a baseline to monitor progress of the project (e.g., the survey will assess knowledge, competencies and efforts of health workers, which will be measured before-and-after the implementation of the project and will allow to assess how the project impacted on health workers' behavior as well as quality of care). Another wave of the SDI survey will be carried out during the final year of the project. The Project will also provide support to the implementation of the MICS in Guinea-Bissau (the last MICS was carried out in 2014). The UNICEF is leading the efforts in the implementation of the new wave of the MICS and the Project, along with other partners will co-finance the implementation of the MICS 2018.

38. A rigorous impact evaluation is planned to assess the impact of the PBF intervention. The Project will work with the Bandim Health Project (BHP), which monitors mortality, birth outcomes, vaccination coverage, and nutritional status for a nationally representative randomly selected sample of 182 clusters. The BHP has implemented two Health and Demographic Surveillance System (HDSS) sites in Guinea-Bissau. The urban HDSS

covers 100,000 individuals in six suburbs of the capital Bissau (corresponding to a one-third of the capital) with intensive follow-up and registration of preventive and curative services at the point of care. The rural HDSS covers women and children in a population in a nationally representative sample of villages. Data is collected among the Project's target populations (women of reproductive age and children) from these clusters in six month intervals, which will be utilized for baseline, midpoint and endpoint results of the pilot interventions. The evidence generated through this evaluation will provide information to inform the scale-up of the PBF program to the other regions of the country.

39. Finally, a process evaluation will be conducted as part of the mid-term review (2021) to understand success and barriers to the implementation and achievement of results under the Project. The findings will inform discussions with key national, regional and global stakeholders and contribute to course corrections as needed.

Role of Partners

40. The Project will build synergies with other donor-financed projects supporting the health sector in Guinea-Bissau. Currently, other partners are developing new investments in the health sector in the country: The Global Fund is expected to allocate 29 million Euros for the period of 2017-2019, the European Union is expected to expand the current investments by 22 million Euros (2017 – 2020) and GAVI expects to fund 8 million Euros for the next three years (2017-2019). The World Bank's health donor coordination group will serve as a platform to coordinate partners' activities and share information, this group includes UNICEF, United Nations World Food Program (UNWFP), UNICEF-Water, Sanitation and Hygiene (WASH), UNDP, United Nations Population Fund (UNFPA), the Portuguese Cooperation, European Union, Center for Disease Control and Prevention (CDC), Global Fund, and GAVI.

41. The Project, through its Project Coordination Unit (PCU), will work closely with the implementers of the PIMI II. In addition to the overall donor coordination, which has been started during the Health Sector donors' coordination group, the most relevant interventions of PIMI II that will complement the proposed Project are: (i) gratuity (user fees waiver) for selected MCH services (including consultations, diagnostic, transfers/referrals, and drugs); (ii) in-service training for health professionals in key MCH practices; (iii) support the community health strategy through the provision of equipment, training, and supervision; and (iv) strengthening of governance and training capacity of the public health system. The implementers of PIMI II are the French NGO EMI (responsible for payment of gratuity), the Portuguese NGO IMVF (in-service training, supply chain arrangements), UNICEF and associated NGOs (selection, training and supervision of the community health agents), and the Instituto Camoes (governance and training capacity).

Table 7: Complementarity between the World Bank-financed Project and PIMI II

PIMI II	Implementer	World Bank Project
Gratuity (user fees waiver for a list of MCH services)	*Entraide Médicale Internacionale* (EMI)	Project will pay performance bonuses for the delivery of this package of MCH services at hospital and health center levels.
In-service training, supply chain arrangements	*Instituto Marques Valle Flor (IMVF)*	Project will complement the training provided by the IMVF in three ways: (i) expansion of training to regions/providers not covered; (ii) inclusion of additional training (those not in the PIMI II/IMVF package, such as neonatal care and obstetric surgical skills); and (iii) continue the provision of training after PIMI II closes (November 2022).
Community health strategy (Selection, training and supervision of the community health agents)	UNICEF and associated NGOs (VIDA, AIFO, ADPP, AMI, Plan-International, and *Médicos da Comunidade*)	The Project will pay incentives to community health agents and support UNICEF and associated NGOs with funding for training and supervision of the community health agents.
Strengthening governance (mostly at local level, strengthening management capacity at the regional health directorates) and training capacity (focus on medical specialties such as orthopedics, anesthesiology, cardiology, etc.).	Instituto Camoes	The Project will support complementary reforms at central level (PFM, human recourses management, etc.) and will support the strengthening of the physical capacity of the training institutions (in the capital as well as outside the capital) and will focus on basic specialties for MCH service delivery.

ANNEX 3: IMPLEMENTATION SUPPORT PLAN

COUNTRY : Guinea-Bissau
Strengthening Maternal and Child Health Service Delivery in Guinea-Bissau

Strategy and Approach for Implementation Support

1. **The proposed implementation plan is consistent with the other World Bank PBF operations and carefully considers the capacity of the project implementation unit.** The Project implementation unit will be placed within the Management Unit of the MINSAP; the unit has considerable expertise in managing funds and implementing programs from other donors (currently the Global Fund and GAVI, and World Bank projects in the past). The Project will provide support to strengthen technical capacity in procurement, financial management, governance and anti-corruption, and monitoring and evaluation. The Bank's implementation support will consist of:

- Capacity building activities to strengthen the national and local levels' ability to implement the program, covering the technical, fiduciary, and social and environmental dimensions.
- Provision of technical advice and implementation support geared to the attainment of the Project Development Objectives.
- On-going monitoring of implementation progress, including regularly reviewing key outcome and intermediate indicators, and identification of bottlenecks.
- Monitoring risks and identification of corresponding mitigation measures.
- Close coordination with other donors and development partners to leverage resources, ensure coordination of efforts, and avoid duplication.

2. **An annual fiduciary review will be conducted for the project; adequate budget will need to be allocated for this review**. This review will be supplemented by on-site visits done by the Bank's fiduciary staff at least twice a year. Reliance will also be placed on the annual audit reports produced by the Controller and Auditor General. In addition, desk reviews will be done for audit, financial, procurement and any other reports received during the financial year. In-depth reviews may also be commissioned by the Bank whenever deemed necessary.

3. **Additionally, the Project will provide technical assistance to support the implementation of the PBF program**. The technical assistance aims to develop capacity to lead the implementation of the PBF in the medium and long terms, it will include training, national and regional workshops, and consultancy with PBF experts.

Table 1: Implementation Support Plan

Time	Focus	Skills Needed	Resource Estimate	Partner Role
First twelve months	Development of institutional reform plans for Ministry of Health, schools of Medicine and Public Health	HRH Specialist	200,000 (IDA)	
	Capacity building and development of instruments for PBF pilot	PBF expert		Identification and selection of Independent Verification agency
	Capacity building on FM, procurement, internal audit and safeguard implementation and compliance	FM, Procurement and Safeguards staff, and consultants		
12-48 months	Implementation support	Same as above	150,000 each subsequent year	

Table 2: Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task team leader	15 SWs annually	Field trips as required	Washington based
Public Health Specialist	10 SW annually	Field trip as required	Washington/CO based
Procurement Specialist	5 SWs annually	Field trips as required	CO based
FM Specialist	5 SWs annually	Field trips as required	CO based
Operations Analyst/ Officer	6 SW annually	Field trip as required	Washington based
Natural resources management specialist	4 SW annually	Field trip as required	Washington based
PBF Specialist	6 SW annually	Field trips as required	Washington based
Community Health Specialist	4 SW annually	Field trips as required	Washington based
Governance Specialist	4 SW annually	Field trips as required	Washington based
Administrative Support	10 SW annually	Field trips as required	Washington and CO based

ANNEX 4: PERFORMANCE-BASED FINANCING

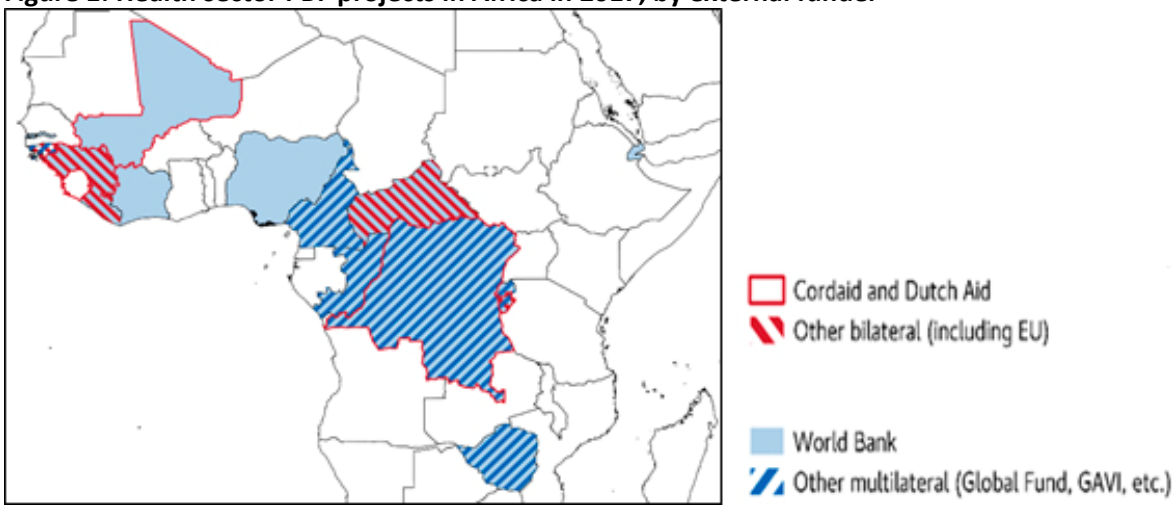
COUNTRY : Guinea-Bissau
Strengthening Maternal and Child Health Service Delivery in Guinea-Bissau

Performance-Based Financing in fragile contexts: experiences, designs and results

1. Performance based financing (PBF) schemes typically aim to improve health services by providing bonuses to service providers, based on the verified quantity of outputs produced, often adjusted by quality indicators. PBF is a provider payment mechanism which uses information on provider activities to drive health care resources allocations to achieve health system's objectives. PBF is materialized by a contractual relationship between the different actors of the health system and it is different from traditional input-type financing where health facilities received inputs for their operations activities often without any obligation of results. As such, PBF is considered a strategic purchasing tool that helps to translate the population's health priorities into services. The introduction of PBF schemes has brought clear benefits, such as: (i) shifting the focus from executing the budget to output orientation (service delivery); (ii) explicitly linking resources and results; and (iii) moving resources to frontline providers.

2. **PBF schemes have been expanding rapidly across low and middle countries (LMICs) in the past decade, often focusing on maternal and child health services.** A recent review by Bertone and colleagues (2017) found documents on PBF programs (on-going or implemented over the period) in 23 out of the 53 Fragile and Conflict-Affected States (FCAS) identified (Bertone et al, in press). The World Bank's *Performance-Based Financing Toolkit* reports that in 2015 there were 34 PBF schemes, at either pilot or national level, among the 51 countries of sub-Saharan Africa (Fritsche, Soeters, and Meessen 2014). Of these, 56 percent are implemented in countries that are included in the FCAS list. These numbers may be suggesting a higher rate of adoption of PBF among FCAS countries. PBF programs seem to have been scaled-up at national level earlier in FCAS settings compared to other LMICs. Indeed, three countries to have introduced PBF nation-wide are Rwanda (2008), Burundi (2010) and Sierra Leone (2011), all FCAS countries. The implementation of the early PBF programs followed the introduction of the 'contracting' approach in other FCAS settings, such as Cambodia, Haiti, Afghanistan and Liberia (Figure 1).

Figure 1: Health sector PBF projects in Africa in 2017, by external funder



Source: Bertone et al (in press).

3. The evidence around the effectiveness of PBF on health outcomes in LMICs is plentiful. Studies have shown a positive impact of PBF on health service coverage, at times coupled with improvements in quality; an evaluation in Rwanda where districts were randomly assigned to treatment (PBF) and comparison (input financing with matched financial resources) found large and statistically significant positive impacts on institutional deliveries and preventive care visits (Basinga et al. 2010). Binyaruka and colleagues found an 8.2 percent increase of institutional deliveries linked to PBF program in Tanzania, and a 10.2 percent increase in antimalarial distribution, but no effect on eight other service indicators (Binyaruka et al., 2015). In Burundi, one PBF program was found to increase the share of women delivering their babies in an institution by 22 percentage points, and the share of women using modern family planning services by 5 percentage points; however, no effect on the self-reported quality of care as reported by patients (Bonfrer et al., 2014). In Burundi, PBF was associated with a 20 percent increase in the number of anti-tetanus vaccination of pregnant women in the target population ($p < 0.10$), and with not-significant positive effects on institutional deliveries and prenatal consultations (Falisse et al., 2015). A 2013 study evaluated the separate and combined impact of PBF and international support on PHC's service delivery in Haiti's health sector, and found that support alone increased the quantities of PHC services over 3 years by 35 percent, and support plus incentives increased these amounts by 87 percent over 3 years (Zeng et al., 2013).

Table 1: Summary of PBF experiences in selected LICs

Country	Design features	Results	Lessons
Cameroon (de Walke et al, 2017)	Impact evaluation of the PBF package in Cameroon to understand the role of explicit financial incentives as opposed to additional funding not linked to performance, as well as separating the impact of enhanced supervision and monitoring. The evaluation compared four arms: (1) the standard PBF package (T1), (2) the same level of financing as T1 but not linked to performance, and with the same levels of supervision, monitoring, and autonomy as PBF (C1), (3) no additional resources or autonomy, but the same levels of supervision and monitoring as PBF (C2), and (4) pure comparison (C3).	- Significant increases in utilization in the PBF arm for several services (child and maternal vaccinations and use of modern family planning); - Reduction in informal charges; - No significant effects on antenatal care visits and facility-based deliveries	The Cameroonian experience shows that there was a clear effect of additional financing, irrespective of whether it was linked to incentives, in combination with reinforced supervision through performance-based financing. The authors discuss that enhanced supervision and monitoring on their own are not sufficient to improve maternal and child health outcomes.
Rwanda (Basinga et al, 2010)	Evaluation of the impact of P4P on the use and quality of prenatal, institutional delivery, and child preventive care using data produced from a prospective quasi-	P4P had a large and significant positive impact on institutional deliveries and preventive care visits by young children, and improved quality of prenatal	The authors conclude that P4P financial performance incentives can improve both the use of and the quality of health services. Because the analysis isolates the incentive

	experimental evaluation nested into the national rollout of P4P in Rwanda. The data were collected from 166 facilities and a random sample of 2158 households. Treatment facilities were enrolled in the P4P scheme in 2006 and comparison facilities were enrolled two years later.	care. No effect on the number of prenatal care visits or on immunization rates. P4P had the greatest effect on those services that had the highest payment rates and needed the lowest provider effort.	effect from the resource effect in P4P, the results indicate that an equal amount of financial resources without the incentives would not have achieved the same gain in outcomes.
Tanzania (Binyaruka et al, 2015)	Evaluation of the effects of a P4P scheme on utilization of all maternal and child immunization services targeted by the scheme, and non-targeted general outpatient service use in 150 facilities across all 7 intervention districts over 13-months in January 2012 and February 2013. The scheme provides financial payments to health facilities and district and regional health managers as a bonus based on achievement of targets relating to maternal and child health care and for specific services. The programme stipulates that at least 75% of bonus payments are distributed among health workers with the remainder being retained by the facility for investment in drugs, supplies or minor renovation. Payments are made if at least 75% of the target is achieved. Full payment is made if 100% of the target is achieved; otherwise 50% of the potential pay-out is made.	Significant increase (8.2%) in coverage of institutional deliveries among women in the intervention area, and a 10.3% increase in the provision of anti-malarials during pregnancy. Use of non-targeted services reduced at dispensaries by 57.5 visits per month among children under five and by 90.8 visits per month for >5 years. There was no evidence of an effect of P4P on patient experience of care for targeted services. P4P was associated with a 5.0% reduction in those paying out of pocket for deliveries, but no evidence of an effect on the average amount paid.	The authors argue that while P4P achieved limited effects on targeted maternal and child health services, overall progress towards universal coverage was mixed.
Burundi (Falisse et al, 2014)	The core mechanism of PBF in Burundi consists in establishing results- based contracts with health facilities. Through these	PBF is associated with an increase in the number of anti-tetanus vaccination of pregnant women (around .20 percentage points in target	In Burundi, the implementation of performance-based financing (PBF) schemes is associated with an increase in the use of some maternal and child health-care services.

	contracts, the implementing agency (i.e. an NGO or the MoH) pays subsidies for services delivered by the health facility. When health facility delivers a contracted service, it is eligible for a unit subsidy that can be assigned to: (1) health facility day-to-day operations (drug purchase, cleaning materials, etc.), (2) small investments in equipment and facilities to improve the quality of care and (3) financial motivation of health workers, traditional birth attendants or community health workers.	population, P<0.10). Non-robust positive effects are also found on institutional deliveries and prenatal consultations. Changes in outpatient visits, postnatal visits and children vaccinations are not significantly correlated with PBF. It is also found that more qualified nurses headed to PBF-supported provinces.	PBF has no visible impact on the use of other services. It is suspected that a substantial part of the apparently positive correlation between PBF and the use of maternal and child health-care services is due to the interaction between PBF and the removal of user fees for pregnant women and children below 5 years old. PBF supposedly acted on improving the supply of services while free health-care services led to an increase in the demand. The authors suggest it is complicated to assess what exactly led to the positive impact on the use of maternal and child health-care service; the exact role of the PBF incentive mechanisms could not be pinpointed.
Afghanistan (Engineer et al, 2016)	Between 2004-2008 in Afghanistan P4P bonuses were provided quarterly to health workers, based on the volume of nine health services at each facility reported through the Health Management Information System, with additional annual payments also made based on two measures of equity of service provision, a balanced scorecard that addresses quality of services, and contraceptive prevalence rates (CPR) in HF catchment areas. Funds to the health workers were channelled through the NGOs managing those facilities, and paid on top of their regular budgets. The NGOs' central offices retained 10% of the performance payment.	No substantial differences in any of the five MCH coverage indicators (P4P vs comparison): modern contraception (10.7% vs 11.2% (P . 0.90)); antenatal care (56.2% vs 55.6% (P . 0.94)); skilled birth attendance (33.9% vs 28.5%, P . 0.17); postnatal care (31.2% vs 30.3%, P . 0.98); and childhood pentavalent3 vaccination (49.6 vs 52.3%, P . 0.41), or in the equity measures. Substantial increases in the quality of history and physical examinations index (P . 0.01); client counselling index (P. 0.01); and time spent with patients (P . 0.05). Health workers reported limited understanding about the bonuses.	Despite high expectations, pay for performance (P4P) incentives to improve maternal child health services do not always work as intended at the population level, as demonstrated in the Afghanistan P4P intervention. P4P is intended to improve health worker motivation and satisfaction, but this did not occur in the Afghanistan study. Despite this, the P4P still had a positive effect on health worker behaviour related to improvements in three measures of technical quality of care at outpatient facilities, although the intervention did not have any impact on any of the other 17 measures of quality at health facilities that were less directly under health worker control. The inattention to demand-side factors and difficulty in communicating to health workers about the intervention may have undermined the potential effects of the P4P intervention. More attention needs to be given to these factors in the design, management and implementation of P4P programmes.

Designs and adaptation to context in fragile states

4. In terms of type of program implemented, the PBF arrangements that are most commonly in place across FCAS are those described in the World Bank's *PBF Toolkit*. Most of the programs analyzed cover a comprehensive list of indicators, usually related to the basic and complementary health service package that facilities are supposed to provide, with a focus on maternal and child health. However, a few programs, early and small-scale ones had a disease-specific focus. This is the case, for example, for the early pilots implemented with President's Emergency Plan for AIDS Relief (PEPFAR) funding in Cote d'Ivoire since 2006 (MSHP, 2010).

5. After its early development, PBF has been designed and implemented in a very similar way in most countries. There have been adaptations to accommodate unexpected contextual events such as the Ebola epidemic in West Africa, resurgence of armed conflict in Nigeria, Mali and CAR, or influx of refugees from other regions in Cameroon. In Guinea, a new PBF scheme is currently being adapted to include health system functions that are relevant to epidemics, such as notification and confirmation of Ebola cases, contact searching, and appropriate burial measures (Camara et al. 2017). In northern Nigeria, during the humanitarian crisis caused by Boko Haram's insurgency, PBF contracts continued with the clinics that were still functioning, providing funds for facilities and incentives for health workers. Following the 2013-2014 humanitarian crisis in CAR and Cameroon, the existing PBF programs were adapted to increase the proportion of population exempted from fees. In CAR, while under normal conditions facilities are allowed to provide services for free to the very poor for a maximum of 20 percent of the costs of services provided, the exemptions can increase to 50 percent or 100 percent to the same population group in case of humanitarian crisis (Banga-Mingo et al. 2014).

6. There is a noticeable synergy between PBF and the removal of user fees. In Burundi, for example, PBF replaces facility income that would have been collected through user charges (Falisse et al. 2014). PBF funding maintained the cash flows and replaced the incentives previously associated with the user-fees while reducing financial barriers to users (Soucat et al., 2017). While this is not specific to FCAS, there is an even stronger case for removing fees for essential services during crises, and in countries or sub-regions affected by conflict – this has been a rationale for PBF introduction in Mali for example (Toonen 2017). However, this link between PBF-related incentives and scrapping user-charges is also problematic if the funding for PBF is limited and there is also an expectation that PBF will incentivize and fund quality improvements; clearly if it merely substitutes user fees in an underfunded system, then quality improvements cannot realistically be expected (Kiendrébéogo et al. 2015).

7. PBF can be a catalyst for the institutionalization of an integrated purchasing strategy that underpins the entire health financing system. In donor-dependent countries, such as Guinea-Bissau, PBF offers an instrument to rationalize donor assistance around a package of basic priority services. PBF will help to move the focus away from supporting programs and parallel vertical schemes, to delivering priority services. The institutionalization of PBF, which encompasses a transition from 'program' to 'policy', requires a commitment to a sustained level of funding, internal and external. The last phase of PBF expansion from policy to system for the whole country and to multiple sectors, has been seen in Rwanda; this experience shows that incorporating internal and external resources and the government's choice to use PBF as the preferred mode of financing were the pre-requisites for the transition.

Table 2. Scaling-up Phases of Performance-Based Financing Programs (enabling factors)

	Phases			
	Generation	**Adoption**	**Institutionalization**	**Expansion**
Country examples	Chad, Mozambique, Uganda	Kenya, Tanzania	Burundi, Cambodia, Cameroon	Rwanda
Key enabling factors	Global development context prioritizing aid effectiveness	Existence of favorable pre-existing policies and institutions	Domestic financial resources made available	Stable and sustained internal and external funding
	RBF perceived as addressing a "felt need" at the national level	A political context favoring transparency and results	Legislative and financing structures that enhance facility autonomy	Expansion of PBF policies to multiple sectors
	RBF's success in Rwanda as a policy example	Critical mass of key actors with technical capacity in RBF at the national level	Political and technical leadership within and beyond the Ministry of Health	Choice of PBF as the country's main financing strategy
	Global health financing experts convince funders and implementing agencies	Presence of national policy entrepreneurs	Expanded national "ownership" and policy influence	

ANNEX 5: ECONOMIC AND FINANCIAL ANALYSIS

1. The proposed Project interventions will strengthen key health systems functions to improve utilization of maternal and child health (MCH) services and ultimately improve health outcomes for women and children. Given the critical situation of the health care system in Guinea-Bissau, the Project will combine interventions to address immediate health service delivery needs, incentivize health workers to increase productivity and improve quality of services, while also working toward medium- and long-term strengthening of the health system by investing in the training of health personnel, and improving governance and accountability across the public health sector. Additionally, the Project will engage and mobilize communities to bring about behavioral change. These interventions will contribute to improve the distribution of health care resources by increasing the provision and uptake of MCH services in rural and remote areas where needs are the greatest.

2. There is a strong economic case for investing in the Guinean-Bissau health sector and, more specifically, on MCH care services. The country's life expectancy is 57 years, which is lower than the average for Guinea-Bissau's regional (59) and income peers (60). Malaria is the single biggest cause of deaths (15.8 percent), followed by HIV, neonatal disorders, lower respiratory infections, diarrheal diseases and nutritional deficiencies. The burden of HIV in Guinea-Bissau is the highest in West Africa and it disproportionately affects more women than men (female adults with HIV represent 58.6 percent of the population above 15 years old with HIV). Maternal mortality rate (MMR) is estimated at 900 maternal deaths per 100,000 live births, which is the third highest maternal mortality rate in the world.[32] The country did not achieve the Millennium Development Goal (MDG) for maternal health, set to lower MMR to 229 per 100,000 live births and is unlikely to achieve the Sustainable Development Goals (SDGs) target for 2030 along the current trend. Progress has been made to reduce child mortality, but both infant mortality rate (IMR) and under-five mortality rate (U5MR) remain among the highest rates in the world, 60 and 89 per 1,000 live births, respectively.[33] Demand for MCH services is persistently low. Only 45 percent of the deliveries take place within health facilities.[5]

3. There are strong rationales for public provision of maternal and child health services in Guinea-Bissau and the strengthening of public health service more broadly. The first is simply the overwhelming economic burden that a fragile health system places on households and the government. Guinea-Bissau faces persistent challenges related to high maternal and infant mortality, which hinders the country's human capital accumulation. For example, using WHO data, Kigia and colleagues conclude that 83,409 maternal deaths in a selected group of low-income Africa countries resulted in a total non-health GDP loss of US$1.3 billion in 2010 (0.29 percent of the group's total GDP). [34,35] Analyzing the consequences of malnourished children in Africa and South Asia, Hoddinot and colleagues (2011) and Horton and Steckel (2013) demonstrate that young children who were stunted were 3 percent less likely to escape poverty as adults and the consequences can add up to overall GDP losses of 4 to 11 percent.[36, 37] Chronically undernourished children are short in physical stature, but the development of their brains is also affected. Fewer neural connections are formed in the brain of undernourished children, and these gaps cannot be closed later in life, generating long-term personal deficits for the individual and overall economy.

[32] UNICEF, 2015. Multi Indicators Cluster Survey.)
[33] World Development Indicators, 2016.
[34] KIRIGIA, Joses Muthuri et al. Indirect cost of maternal deaths in the WHO African Region in 2010. BMC pregnancy and childbirth, v. 14, n. 1, p. 299, 2014.
[35] Countries included: Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, DRC, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Rwanda, Sierra Leone, South Sudan, Togo, Uganda, United Republic of Tanzania and Zimbabwe.
[36] Hoddinot et al. 2011.
[37] Horton and Steckel (2013).

Additionally, large share of the burden of morbidity and mortality among adults are mostly due to infectious diseases, which constraint national economic development. Communicable diseases decrease productivity, undermine the human resource base and deter foreign investment in Africa. For example, tuberculosis causes approximately US$12 billion in annual losses to the global economy. Tuberculosis patients lose an average of 3-4 months of work time annually with lost earnings amounting to between 20-30 percent of household income (Fonkwo, 2008). It has been shown that malaria inhibits economic growth by 1.3 percent per year in malaria-endemic countries (Gallup and Sachs, 2000). The impact of AIDS on the economic growth is estimated to be 1.5 percent per year; which means that over 25 years their economies would be 31 percent smaller than otherwise expected.

4. Additionally, Households bear a high proportion of health spending in Guinea-Bissau. Payments for health care increase the absolute and extreme poverty headcount ratio by 1.4 and 1.1 percentage points. It means health care payments push more households into poverty and deepen the poverty of the already poor. Every year in Guinea-Bissau approximately 15,000 people are pushed into extreme poverty due to health care payments. By strengthening governance, providing incentives for quality and accountability, the project will help the country to reduce household's vulnerability. These direct and indirect impacts justify World Bank interventions to reduce poverty and boost Guinea-Bissau economic development.

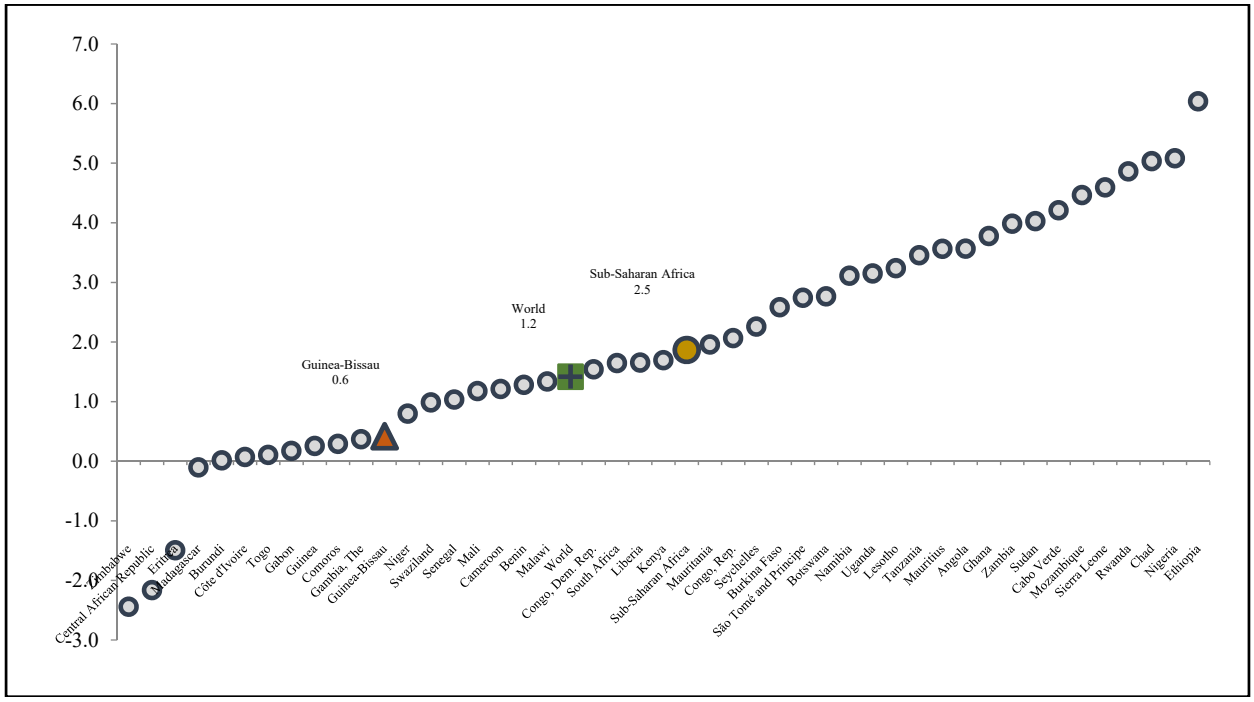
5. Economic analysis plays a crucial role in informing the choice of project alternatives, especially in resource-constrained environments. It is often used to make decisions on how a project could enable efficient and equitable use of resources. It also helps estimate the economic returns of sector-specific investments and the sustainability of these investments in the medium and long terms. The economic analysis of the proposed Project will: (i) provide an overview of the macro-fiscal and health financing context of the country; (ii) analyze the economic rationale for investing in the health sector in Guinea-Bissau; (iii) investigate the costs and benefits of the proposed project's components and activities and through a Cost-Benefit Analysis (CBA).

Macro-fiscal and Health Financing Context

6. Guinea-Bissau is one of the poorest countries in the World, with Gross National Income (GNI) per capita estimated at US$620 in 2016. The country ranks 178th out of 188 countries of the 2016 Human Development Report. The country's Human Development Index (HDI) is 0.420, which is below the average among countries in the low human development category (0.497) and well below the average among countries in Sub-Saharan Africa (0.523).[38] Most of the population, particularly the rural poor, has limited access to basic goods and services that directly influence the wellbeing of households. Poverty rates are higher in rural Guinea-Bissau (76 percent) than in the capital Bissau (51 percent). The GNI per capita grew at an annual average rate of 0.6 percent per year between 2000 and 2015, significantly below the average 2.2 percent recorded for Sub-Saharan Africa (SSA) during the same period (Figure 1).

[38] UNDP, 2016. Human Development Report 2016. Briefing note for countries (Guinea-Bissau).

Figure Error! No text of specified style in document.**: Average GNI growth in Africa (2000-2015)**



Source: IMF, 2016.

7. Guinea-Bissau's economy is dominated by the production and sale of unprocessed cashew. Agriculture, mostly cashew nuts, accounts for over 40 percent of Gross Domestic Product (GDP) and employs about 80 percent of the workforce. The production and export of raw cashews nuts constitute the main source of income for more than two thirds of households (and for virtually all small farmers) and represent over 85 percent of the country's total export earnings. The increases in prices and demand for cashew on the international markets has boosted the economy recently, resulting in an average GDP growth of 4.1 percent between 2014 and 2016 (5.6 percent in the last year). In contrast with the trends in most of the countries in the region, manufacturing contributes to approximately 16 percent of GDP.

8. Although the external current account balance has remained in surplus in recent years, budgetary developments are still volatile. As the price of Guinea-Bissau's dominant export product, cashew nuts, increased by 8 percent and as fuel and non-fuel import prices fell, Guinea-Bissau's terms of trade improved by 14 percent in 2016. This helped raise the surplus in merchandise trade, despite a halting of wood exports and an increase in construction-related imports. The economy is still largely vulnerable to fluctuations in aid flows and terms of trade shock due to the reliance on cashew nuts. The last three cashew seasons (2014 - 2016) were very successful in terms of exports with an increase of 30 percent, and despite a volatile environment with new regulatory uncertainty at the beginning of the year.[39] The fiscal deficit is expected to decline from 4.8 percent in 2016 to 1.8 percent of GDP in 2017, supported by increased revenue and tightened budget execution. Public debt has stabilized at a little over 50 percent of GDP and the risk of external debt distress remains moderate. Inflation has

[39] A draft decree, approved by the Council of Ministers, would have limited cashew buying (currently dominated by foreigners) to domestic operators but was ultimately not signed by the President.

been stable below 2 percent.[40]

9. Regular tax collections picked up in 2017 due to the stronger economic environment, -but significant challenges remain with other revenue components falling below expectations. Tax revenues peaked at 10 percent of GDP in 2016 (Table 1), which ranks Guinea-Bissau among the worst performers in the region in terms of revenue mobilization, despite receiving significant technical assistance from international organizations, such as the IMF and the World Bank, to modernize its tax system. Direct taxes constitute an important revenue source (2.8 percent of GDP) but collection has been undermined by high level of discretion and governance weaknesses. Indirect taxes correspond to more than 70 percent of government revenue (domestic sales taxes alone are responsible for a third of the total amount). Guinea Bissau is the only West African Economic and Monetary Union (WAEMU) member country that has not yet introduced the valued-added tax (VAT). Finally, grants fell short of expectation by 0.6 percent of GDP and represent a somewhat declining path.

Table 1: Fiscal Indicators (in % of GDP)

	2015	2016	
		Prog.	Prel.
Revenue and grants	**20.3**	**17.9**	**16.4**
Revenue	13.8	13.2	12.4
Tax revenue	10.1	9.3	9.3
Direct taxes	2.8	2.5	2.7
Indirect taxes	7.3	6.8	6.6
Import duties	1.8	1.6	1.6
Domestic sales tax	3.2	3	3
Other indirect taxes	2.3	2.1	2.1
Nontax revenue	**3.7**	**3.9**	**3.1**
Grants	**6.5**	**4.6**	**4**
Expenditure	**23.3**	**22.4**	**21.2**
Current	15.2	15.3	14.9
Wage	5.2	4.8	5.1
Non-wage	9.3	9.8	9.1
Interest	0.7	0.7	0.7
Capital	8	7.1	6.2
Domestic primary expenditure	**15.3**	**14.9**	**14.4**

Source: IMF, 2016.

10. Recent analysis by the IMF shows that there is scope for the country to perform at a higher level in terms of revenue mobilization.[41] For this to happen, the authorities will need to accelerate reforms in both tax administration and customs. This includes, among other things, implementation of the universal use of the tax identification numbers to broaden the tax base; proper use of tax segmentation on business classification, and recovery of areas possibly through an amnesty. Medium-term reforms should focus on modernizing the legislation, including the introduction of a simple, transparent regime for taxing small and medium-sized

[40] PER
[41] IMF Country Report No. 17/228

businesses and the harmonization of regulations with WAEMU standards. The IMF estimated that the overall effect of the project could contain the fiscal deficit to 2 percent of GDP in 2017 and 2018.

11. Government health expenditures is relatively low in Guinea-Bissau. In 2014, the health sector received less than 8 percent of the total government budget, which accounted for about 20 percent of total health spending. Out-of-pocket (OOP) payments represent the largest source of financing, 49.5 percent. A recent World Bank report shows that OOP payments for health care increase the absolute and extreme poverty headcount.[42] In addition to being limited, government spending on health is also hugely skewed towards staff costs. In 2014, 93 percent of the health budget was spent to cover personnel costs, more than half of which was used to pay salaries alone. In 2015 staff costs decreased to 79 percent of the total government health expenditures, mainly due to a reduction in "other compensation," while the amount allocated to salaries continued to be around 56 percent of the total government health expenditures, with an increase of 17 percent compared to the previous year. [43] Between 2014 and 2015, salaries for non-tenured staff dramatically reduced (Table 2) due to more strict controls in the inclusion of new staff in the government payroll. Nearly all recurrent costs, including medicines and other health inputs, are financed by donors and user-fees.

Table 2: Government Health Expenditure by categories (CFA Francs) – Guinea-Bissau, 2014/2015

	2014		2015		
	Budget Executed	**%**	**Budget Executed**	**%**	**YoY**
Personal	**3,028,102.00**	**93%**	**2,953,932.00**	**79%**	**-2%**
Salaries	1,783,355.00	55%	2,091,283.00	56%	17%
Salaries of tenure staff	1,337,445.00	41%	1,958,417.00	52%	46%
Salaries of other staff	445,910.00	14%	132,866.00	4%	-70%
Other compensation	1,244,747.00	38%	862,649.00	23%	-31%
Purchase of goods and services	**217,973.00**	**7%**	**737,040.00**	**20%**	**238%**
Expenditure	**18,491.00**	**1%**	**65,253.00**	**2%**	**253%**
Total	**3,264,566.00**		**3,756,225.00**		**15%**

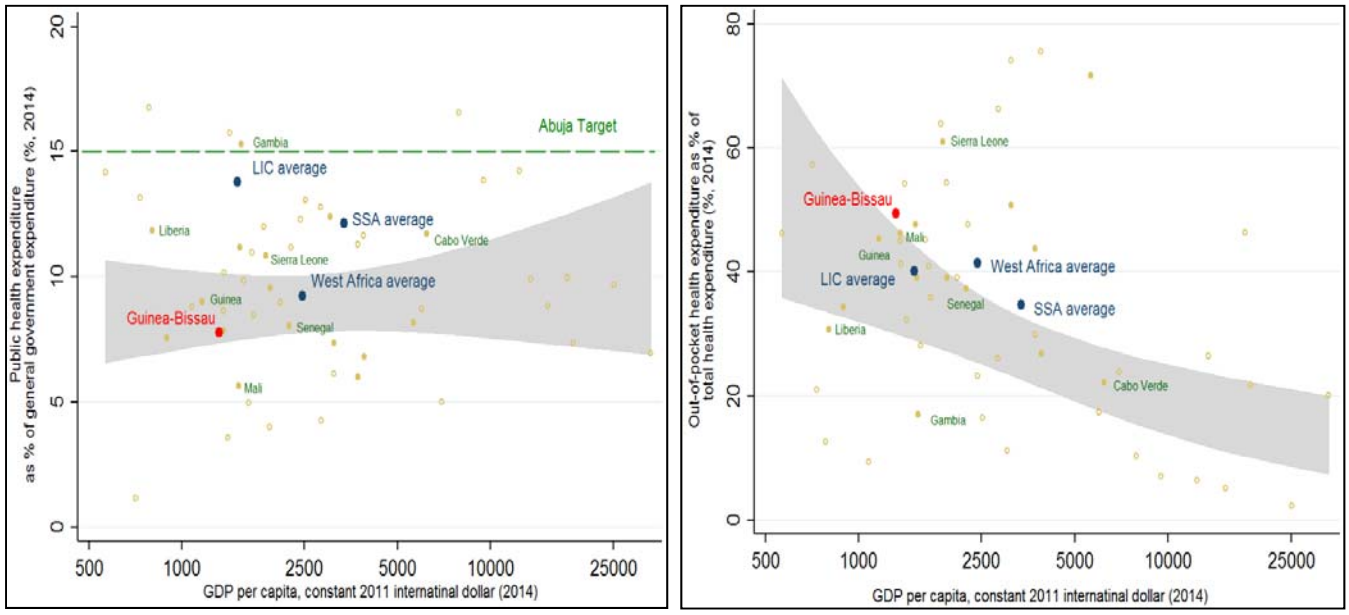
Source: World Bank, 2016.

12. Public spending on health in Guinea-Bissau is significantly lower than its regional and economic peers. At 20 percent of total health expenditures (THE), public spending is significantly lower than the average among the West African countries (32 percent), but close to the average for Sub-Saharan African countries (22 percent). As a share of total government expenditure, Guinea-Bissau is below the average among its regional and economic peers (Figure 2a). The percent share of OOP payments in Guinea-Bissau has been steadily higher than 45 percent relative to the THE (Figure 2b), which is also higher than Guinea-Bissau regional and economic peers - on average these countries have managed to decrease OOP below 40 percent of the THE.

[42] World Bank (2016). Health Sector Diagnostic. Washington, DC.
[43] "other compensation" includes mainly bonus and incentives given to the ministry employees.

Figure 2: Health Spending in Guinea-Bissau and its peers – 1995/2014

a) Public health expenditure as % government budget b) OOP as % of THE



Source: World Bank, 2016.

Cost-Benefit Analysis

13. The economic analysis is expected to determine whether the costs in achieving the objectives of the project are reasonable in relation to the expected benefits of the project. The main challenge in economic evaluations is to combine all possible outcomes into a single, composite, measure of effectiveness (or benefits). This is usually overcome by conducting a cost-benefit analysis (CBA). In a CBA, costs and outcomes are valued in a commensurate unit, often money. This allows a direct comparison of costs and benefits of the project; the costs and benefits of alternative uses of the project resources (economic costs) and compare costs and benefits of interventions beyond the health sector.

14. The project will support the government of Guinea-Bissau to increase utilization of MCH services in the country. To achieve its project objective, proposed interventions are organized around four complementary components: The four components are as follows: (i) Institutional strengthening of MINSAP; (ii) Health workforce development; (iii) Performance-Based Financing to deliver a package of essential maternal and child health and community health services; (iv) Community health and social mobilization. These four components will address the key challenges to improve MCH health outcomes in the country. Therefore, the impacts of the project can be modeled as a series of interventions that affect the following health indicators applicable to the beneficiaries of the project: maternal mortality rate and infant mortality rate.

Economic benefits of improving MCH outcomes

15. The economic benefits of improving MCH outcomes can be described in two separate benefits: direct health benefits and indirect health benefits. The direct health benefits are those related to reduced morbidity and mortality. The indirect health benefits are defined here as those with no direct impact on the population's health

but with a straightforward impact on the economy, either as productivity gains of avoided mortality and reduced morbidity, or as health care costs saved from avoided hospitalizations (and efficiency gains in the service delivery chain).

16. There is well-documented evidence on the impacts of community based primary health care interventions on maternal mortality and child malnutrition with significant impacts from interventions. Major issues arise from the ethical and equity debate around the task of how to value a life saved. Analyzing the coverage of maternal and newborn health (MNH) interventions in Burkina Faso and how often is influenced by concerns with equity issues; Hounton and Newlands (2012) conclude that relatively low-cost interventions resulted in 30-10 percent increase on institutional births and a significant reduction on perinatal mortality rates.[44] Prevention of unwanted pregnancies is one of the four pillars of prevention of maternal mortality; if the unmet needs for contraception were fully met, maternal deaths would further decline by 29 percent.[45] Bhutta and colleagues (2015) show that improving maternal and child health in Bangladesh could reduce the maternal mortality rate by 75 percent as well as cut by half the proportion of malnourished children under five.[46]

17. Total gains from reduced birth mortality and child nutrition deficiencies have crucial and long-standing effects on the overall economy. Not only are chronically undernourished children short in physical stature, but the development of their brains is also affected. Between the third trimester and third year of life, one million synapses are formed every second and these connections are the foundation upon which all learning, behavior, and health depend. Fewer neural connections are formed in the brain of undernourished children, and these gaps cannot be closed later in life, generating long term personal deficits for the individual and overall economy. Studies show that young children who were stunted were 3 percent less likely to escape poverty as adults and the consequences can add up to overall GDP losses of 4 to 11 percent in Africa and Asia.[47] The effectiveness of MNH in diagnosing and treating childhood malnutrition (leading cause of under-five mortality globally) is well-established: a meta-analysis of several published studies from Bangladesh, India, Nepal, Pakistan, the Philippines, and Tanzania demonstrate a reduction in total mortality of 24 percent and a reduction in pneumonia-specific mortality of 36 percent in under-five children.[48] Adopting more conservative parameters, this analysis opted for increasing benefits on reducing mortality for both children under five and pregnant woman from 2 percent to 10 percent, over the project time frame.

Modelling approach

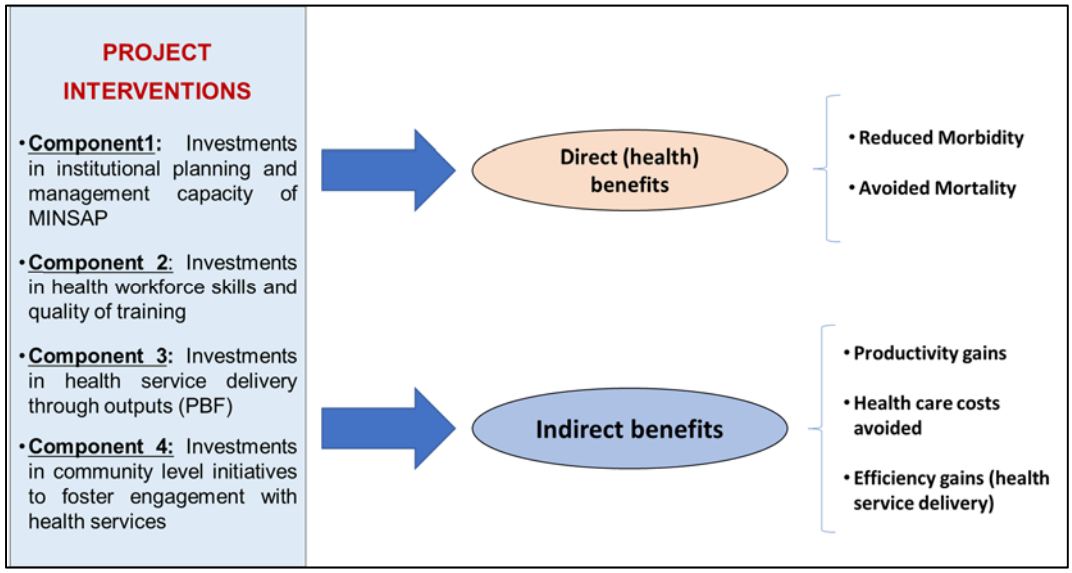
18. To model the benefit size of the project, a conservative approach was adopted given the uncertainties related to the magnitude of the impacts of interventions and project implementation. It is assumed that the project interventions will reduce maternal mortality and child mortality. As previously described, we use a conservative approach based on international experience with the potential impact of 24 percent and 20 percent on the mortality rate for the total number of children under five with malnutrition symptoms and pregnant woman, respectively.

19. The indirect benefits of the project are calculated in terms of productivity gains to reduced morbidity and

[44] Hounton S and Newlands D (2012).
[45] Ahmed et al., 2012.
[46] Bhutta, Zulfiqar A., et al. Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?. The lancet 382.9890 (2013): 452-477.
[47] Hoddinot et al. 2011.
[48] Sazawal & Black, 2003.

avoided mortality, and efficiency gains in the service delivery system. Improving health service performance requires that budgets be built around outputs linked to priority services and populations. Uncertain demands on health services makes accurate budgeting more difficult, and spending needs to be flexible enough to be reallocated when demand for certain services surges, e.g. following disease outbreaks. Setting spending controls at the level of health programs would provide flexibility without compromising financial controls. The indirect benefits will be computed together with direct benefits and their potential impact.

Figure 3: Economic benefits of Project Interventions



20. The analysis adopts a comprehensive perspective by modeling the health and economic impacts of reducing the likelihood of death and morbidity, the two groups of interest (pregnant women and children) in addition to gains of economic efficiency. The benefit-cost ratio is given by:

$$CBA = \frac{B_T}{C_T} = \frac{\sum(B_D + B_I)}{C_T} \qquad (1)$$

21. Where: B_T and C_T are total benefit and cost from the project. B_D is the total health related benefits of the project (avoided mortality and reduced morbidity) and B_I represents the indirect economic benefits of the project interventions (avoided health care costs, labor productivity gains and efficiency gains in the health service delivery).

22. Health benefits can be modelled as:

$$B_{D_i} = \sum(B_{child_i} + B_{maternal_i}) \qquad (2)$$

23. Where: B_{D_i} is the health-related benefits from each Project intervention *i*, reduced morbidity and avoided mortality for pregnant women and children under five.

24. The indirect economic benefits are given by:

$$B_I = \sum B_{I_t} \quad (3)$$

25. Where: B_{I_t} is the economic benefit resulting from improved technical and allocative efficiency of the public health system, and health care costs avoided.

26. The analysis uses population health and demographic indicators (table 3) and applies the following assumptions to estimate the (economic) benefits of reducing child malnutrition and maternal mortality as follows:[49]

- For children, productive years are assumed to range from 13 to 57 (Guinea-Bissau's life expectancy at birth). This means their productive life years will start when a child is 13 years old and the same will contribute with 44 years of labor. It is also assumed the average year of a saved child is 2 years old;

- We assume that the average pregnant woman is 20 years old and the maximum age for being active in the labor force is 59 (Life expectancy for woman), which means that the average active years added to the economy is 39 years for the woman. In addition to that, we consider that every woman saved will also result in one new newborn that will contribute with 44 productive years of life;

- The GNI per capita is used to value each productive life years gained (i.e., additional years of life due to project interventions). GNI per capita in 2016 was US$620. After the recent political turmoil on the cashew nuts production was resolved, GNI per capita growth seems to have recovered to a stable positive trajectory.

- The analysis adopts a five-year time frame following the project implementation proposed. Both cost (project total amount) and benefits (productive life years gained) are discounted with a 3 percent discounting rate which is the country's basic interest rate and close to commonly used rates in similar economic evaluations (WHO, 2003; Drummond et al., 2005). The disbursement rate is in average US$5 million across the five years, yielding a net present value of US$23.53 million as we show in greater detail in table 4 below;

Table 3: Guinea-Bissau Population Health and Demographic Indicators

Population under five with nutrition deficiencies (2016)	296,248
Number of pregnant women (2016)	78,419
GNI per capita (US$, 2016)	620
Life expectancy at birth	57
Infant Nutritional Deficiencies (per 1,000)	5,300
Maternal Mortality ratio (per 100,000)	1,100
Newborn mortality (per 1,000)	3,600
Population growth rate	2.05%
GDP growth rate	4.5%

Sources: World Bank, WDI; UNICEF 2016.

27. Table 4 contains the results of the analysis. The discounted total benefits of the project, estimated in productive life years gained, is estimated in US$133.62 million which is derived from 67 percent of benefits on

[49] Some of the assumptions are taken from previous cost-benefits analysis of Bank's projects (e.g., Zambia, Guinea and Indonesia).

reducing children mortality, 19 percent from maternal mortality, and 13 percent from efficiency gains on government health spending (indirect benefit). The net present value of the total benefit of the Project, estimated at US$133.62 million, is significantly higher than the net present value of the project cost, US$23.53 million. The benefit-cost ratio is estimated at US$5.68 (133.62/23.53 = 5.68). This means that for each US$1 invested through the Project there will be an expected return of US$5.68. Although relatively high, this result is based on conservative assumptions on the effects of Project interventions and likely underestimates the total project benefits.

28. A sensitivity analysis was performed to explore how uncertainties around Project impact would affect the estimated cost-benefit ratio. The analysis tested changes the benefits by assuming lower and higher impacts of the Project interventions from more superficial scenarios with zero impact to twice the size of the baseline (maximum of 20 percent reduction in mortality). The analysis shows average variation in the cost-benefit (from 1.96 to 9.5), but even in the worst-case scenario, the result is still approximately US$2.

Figure 4: Sensitivity analysis results

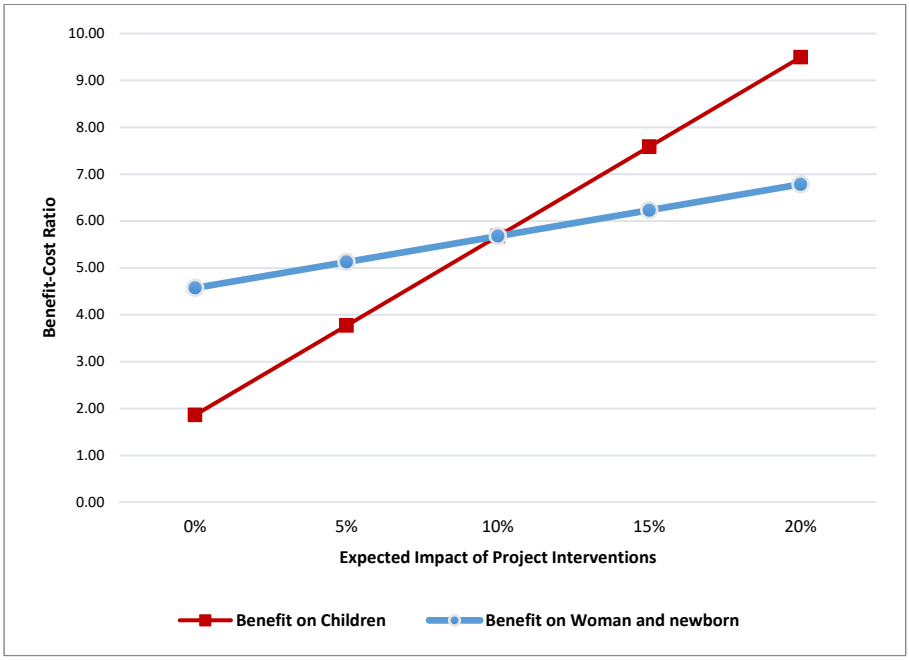


Table 4: Cost Benefit Analysis	2018	2019	2020	2021	2022	Total
Direct Health impact						
Child under 5 Nutrition deficiencies Benefit						
Number of Children under five	30,8518.7	31,4843.3	32,1297.6	32,7884.2	33,4605.8	
Benefited Children under five	549	1,121	1,716	2,335	2,978	8,698
Gained productive life-years per child under five (Present Value)	18.04	17.50	16.99	16.49	16.00	85.02
Total Gained productive life-years (present value)	9,904	19,619	29,147	38,490	47,651	144,812
Economics Gains due to improved child health (US$ million, present value)	6.14	12.16	18.07	23.86	29.54	89.78
Maternal Health Benefit						
Number of pregnant women	80,026.2	81,666.7	83,340.9	85,049.4	86,792.9	
Averted deaths (women and newborns)	72.02	147.00	225.02	306.18	390.57	1,141
Gained productive life-years per saved women (Present value)	23	22	21	21	20	108
Gained productive life-years per saved newborn (Present value)	17	16	16	16	15	80
Total Gained productive life-years (present value)	2,866	5,679	8,438	11,145	13,801	41,930
Economics Gains due to improved maternal and newborn health (US$ million, present value)	1.78	3.52	5.23	6.91	8.56	26.00
Indirect Health impact						
Efficiency gains 10% (US$ million, present value)	-	1.7	3.5	5.4	7.3	17.84
Total Benefit						
Economics Gains due to improved maternal, newborns and child health (US$ million, present value)	7.9	15.7	23.3	30.8	38.1	115.8
Total indirect benefits (US$ million, present value)	-	1.7	3.5	5.4	7.3	17.8
Total benefits (US$, million, present value)	7.92	17.40	26.80	36.13	45.38	133.62
Total Costs						
Total Costs (Nominal, US$ million)	4.01	5.11	5.67	5.44	4.76	25.00
Total Costs (present value, US$ million)	4.01	4.97	5.35	4.98	4.23	23.53
BENEFITS/COSTS RATIO	**1.98**	**3.50**	**5.01**	**7.26**	**10.72**	**5.68**