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Report No: PAD5642

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A PROPOSED ADDITIONAL GRANT IN THE AMOUNT OF SDR 26.5 MILLION (US\$35.0 MILLION EQUIVALENT)

TO THE

REPUBLIC OF THE GAMBIA

FOR THE THE GAMBIA ESSENTIAL HEALTH SERVICES STRENGTHENING PROJECT

June 6, 2024

Health, Nutrition and Population Global Practice Western and Central Africa Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2024)

,	Gambian Dalasi (GMD)					
GMD 66.89 =	US\$1					
SDR 0.755 =	US\$1					
FISCAI	L YEAR					
January 1 – December 31						

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ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
AIDS	Acquired Immunodeficiency Syndrome
AM	Accountability Mechanism
BEU	Biomedical Engineering Unit
CBA	Cost-Benefit Analysis
CERC	Contingent Emergency Response Component
COVID-19	Coronavirus Disease 2019
CPF	Country Partnership Framework
DALYs	Disability Adjusted Life Years
DHS	Demographic and Health Survey
DHIS2	District Health Information Software 2
DPI	Directorate of Planning and Information
E&S	Environmental and Social
eCRVS	Electronic Civil Registration and Vital Statistics
EFSTH	Edward Francis Small Teaching Hospital
ESCP	Environmental and Social Commitment Plan
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FM	Financial Management
GBV	Gender-based Violence
GEHSSP	Gambia Essential Health Services Strengthening Project
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GHG	Greenhouse Gas
GoTG	Government of The Gambia
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
HEPR	Health Emergency Preparedness and Response
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IDA	International Development Association
IDSR	Integrated Disease Surveillance and Response
IFC	International Finance Corporation
IFR	Interim Financial Report
IRR	Internal Rate of Return
ISR	Implementation Status and Results Report
MICS	Multiple Indicator Cluster Survey
MoFEA	Ministry of Finance and Economic Affairs
МОН	Ministry of Health
NCD	Noncommunicable Disease
NDC	Nationally Determined Contribution
NDIC	National Diagnostic Imaging Center
NETC	National Emergency Treatment Center

NFDQCL	National Food and Drug Quality Control Laboratory
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NPV	Net Present Value
NSC	National Steering Committee
PCU	Projects Coordination Unit
PDO	Project Development Objective
РНС	Primary Health Care
PIC	Project Implementation Committee
PPP	Public-Private Partnership
RBF	Results-based Financing
SBCC	Social and Behavior Change Communication
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
STEP	Systematic Tracking of Exchanges in Procurement
TF	Trust Fund
UHC	Universal Health Coverage
WB/WBG	World Bank/World Bank Group
WHO	World Health Organization

Gambia, The

Third Additional Financing to The Gambia Essential Health Services Strengthening Project

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BASIC INFORMATION – PARENT (The Gambia Essential Health Services Strengthening Project - P173287)

Country	Product Line	Team Leader(s)		
Gambia, The	IBRD/IDA	Samuel Lantei N		
Project ID	Financing Instrument	Resp CC	Req CC	Practice Area (Lead)
P173287	Investment Project Financing	HAWH2 (9542)	AWCF1 (6550)	Health, Nutrition & Population

Implementing Agency: Ministry of Health

Is this a regionally tagged project?							
No							

Bank/IFC Collaboration

No

Approval Date	Closing Date	Expected Guarantee Expiration Date	Environmental and Social Risk Classification
09-Oct-2020	29-Aug-2025		Moderate

Financing & Implementation Modalities

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

Development Objective(s)



To improve quality and utilization of essential health services and strengthen the national system for public health preparedness in The Gambia.

Ratings (from Parent ISR)

	Implementation								
	31-Mar-2022	05-Oct-2022	26-Apr-2023	20-Dec-2023	04-Apr-2024				
Progress towards achievement of PDO	S	S	S	5	S				
Dverall mplementation Progress (IP)	S	S	S	S	S				
Overall ESS Performance	S	S	S	S	S				
Overall Risk	М	М	М	М	М				
Financial Management	MS	S	MS	MU	MS				
Project Management	S	S	S	S	S				
Procurement	S	S	S	S	S				
Monitoring and Evaluation	S	S	S	S	S				

BASIC INFORMATION – ADDITIONAL FINANCING (Third AF to The Gambia Essential Health Services Strengthening Project - P181659)

Project ID	Project Name	Additional Financing Type	Urgent Need or Capacity Constraints
P181659	Third AF to The Gambia Essential Health Services Strengthening Project	Cost Overrun/Financing Gap, Restructuring, Scale Up	No
Financing instrument	Product line	Approval Date	



Investment Project Financing	IBRD/IDA	28-Jun-2024	
Projected Date of Full Disbursement 31-Oct-2025	Bank/IFC Collaboration		
Is this a regionally tagged			
No			

Financing & Implementation Modalities

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

Disbursement Summary (from Parent ISR)

Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed
IBRD				%
IDA	84.50	64.01	16.51	79 %
Grants	4.33	1.92	2.41	44 %

PROJECT FINANCING DATA – ADDITIONAL FINANCING (Third AF to The Gambia Essential Health Services Strengthening Project - P181659)

FINANCING DATA (US\$, Millions)

SUMMARY (Total Financing)



	Current Financing	Proposed Additional Financing	Total Proposed Financing
Total Project Cost	95.33	35.00	130.33
Total Financing	95.33	35.00	130.33
of which IBRD/IDA	84.50	35.00	119.50
Financing Gap	0.00	0.00	0.00

DETAILS - Additional Financing

World Bank Group Financing

International Development Association (IDA)	35.00
IDA Grant	35.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
Gambia, The	0.00	35.00	0.00	0.00	35.00
National Performance-Based Allocations (PBA)	0.00	35.00	0.00	0.00	35.00
Total	0.00	35.00	0.00	0.00	35.00

COMPLIANCE

Policy

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

[] Yes [🗸] No

Does the project require any other Policy waiver(s)?

[] Yes [🗸] No



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

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

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



PROJECT TEAM

Bank Staff

Dalik Stall			
Name	Role	Specialization	Unit
Samuel Lantei Mills	Team Leader (ADM Responsible)	Health	HHNPP
Teegwende Valerie Porgo	Team Leader	Health	HAWH2
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Mamadou Mansour Mbaye	Procurement Specialist	Procurement	EAWP1
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Radha Raju	Team Member	Finance	WFACS
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Yassin Saine Njie	Team Member	Operations	AWMGM
Extended Team			
Name	Title	Organization	Location



I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

A. Introduction

- 1. This Project Paper seeks the approval of the World Bank Board of Executive Directors to provide an International Development Association (IDA) grant in the amount of SDR 26.5 million (US\$35.0 million equivalent). The proposed Third Additional Financing (AF) would support the cost of expanding activities of the Gambia Essential Health Services Strengthening Project (GEHSSP, P173287), approved by the Board on October 9, 2020, in the amount of US\$30.0 million equivalent IDA, first AF (P177263) of US\$50.0 million equivalent IDA approved on November 19, 2021, and second AF (P181161) of US\$4.5 million equivalent IDA plus US\$4.33 million from the Health Emergency Preparedness and Response (HEPR) Trust Fund (TF) approved on July 13, 2023. The parent project entailed a parallel co-financing grant in the amount of US\$4.5 million from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM).
- 2. **Through this AF the project will be restructured** to support the following new activities: (a) preparatory work of potential Public-Private Partnership (PPP) for laboratory and diagnostic imaging services; and (b) integration of an electronic civil registration and vital statistics (eCRVS) system.

B. Parent Project Design and Scope

- 3. The Project Development Objective (PDO) of the parent project is to improve quality and utilization of essential health services and strengthen the national system for public health preparedness in The Gambia. The parent project includes three components: (a) Improving the Delivery and Utilization of Quality Essential Primary Health Care (PHC) Services; (b) Project Management; and (c) Contingent Emergency Response Component (CERC).
- 4. **The Ministry of Health (MOH) is the implementing agency for the project.** The MOH's Project Coordination Unit (PCU) is entrusted with the coordination of project activities, as well as fiduciary tasks of procurement and financial management (FM). The PCU is now fully staffed. The implementation arrangements as stipulated in the Financing Agreement of the parent project comprising the National Steering Committee (NSC), Project Implementation Committee (PIC, and PCU) are in place and functional.
- 5. **The existing NSC will continue to provide strategic guidance for the overall project implementation.** The NSC is multidisciplinary, cross-government and with representation of development partners. The NSC meets quarterly to provide strategic guidance. Additionally, the PIC, chaired by the Permanent Secretary and comprising the directors of the implementing MOH directorates, Results-Based Financing (RBF) Unit senior staff, and PCU senior staff, approves the Annual Work Plans and Budgets and discusses the annual work plan implementation progress, bottlenecks, and remedial actions monthly.

C. Project Performance

6. **Progress towards achieving the PDO.** The PDO rating is **Satisfactory** since the project is on track to achieve the PDO. The health facility quality index is 86.9 percent and has exceeded the endline target of 85.0 percent. The essential health services coverage index is 52.8 percent and is on track to meet the endline target of 56.4 percent by the project closing date in August 2025. Additionally, all the breakdown



indicators for the essential health services coverage index are on track except for the contraceptive prevalence rate, which is slightly behind the mid-term target (21 percent progress value as opposed to 22 percent mid-term review target).

7. **Implementation Progress.** The MOH PCU has been actively engaged in project implementation in coordination with the MOH directorates and units. The PIC meets monthly to discuss the annual work plan implementation progress, bottlenecks, and remedial actions while the NSC meets quarterly to provide strategic guidance. The overall implementation is rated **Satisfactory**.

D. Rationale for AF

- 8. High cost of construction contributed to cost overrun. Annex A presents the details of the total deficit of US\$20.92 million for civil works. The design of the NFDQCL and BEU was financed under the COVID-19 Project which closed on June 30, 2023. As part of the second AF, the Government requested for a recommitment of US\$4.5 million from the COVID-19 Project towards the NFDQCL and BEU construction. The evaluation of the procurement notice for the NFDQCL and BEU construction under the COVID-19 Project indicated that the substantially responsive bid was US\$14.5 million. Given the high price, it was re-advertised in July 2023 and the final contract price was negotiated at US\$10.8 million. Further, the estimated cost of the medical equipment for NFDQCL and BEU is US\$7 million plus US\$800,000 for supervision of the construction by an international firm since repeated advertisements for a local firm were not substantially responsive. Thus, the financing gap for the construction and equipment of the NFDQCL and BEU is US\$14.1 million. However, it was envisaged at the time of the second AF that the NFDQCL and BEU would cost more than the US\$4.5 million but with limited IDA funds at the time, a future AF was expected. Additionally, the National Emergency Treatment Center (NETC) cost was determined at the time of the first AF but the additional construction and equipment of the National Diagnostic Imaging Center (NDIC) as part of the NETC indicated an additional cost of US\$7.6 million. Further, withholding tax of 15 percent is applied to all procurements but this was not factored in the estimated costs for the parent project, and first AF (since the MOFEA instituted the tax during project implementation) indicating that about 10-15 percent of the project financing goes into paying taxes.
- 9. The lesson learned under the first and second AFs regarding construction include (i) selecting a suitable site since this can delay the start of construction; (ii) the importance of identifying competent architects; (iii) the critically of selecting a competent contractor with a good track record to ensure high quality construction; (iv) setting realistic timelines taking into consideration constraints such as limited availability of building materials in The Gambia; (v) the role of proper supervision of contractors to ensure agreed standards are adhered to; and (vi) ensuring environmental and social due diligence is effectively carried out. All these have been taken into consideration for the proposed third AF to ensure proper completion of the construction activities.
- 10. Fast-paced disbursement. The project closing date is August 29, 2025. The project is disbursing at a quick pace. During July 2022-June 2023, US\$25.3 million was disbursed and from July 2023 to May 2024, US\$22.0 million has been disbursed. Although US\$18.92 million remain undisbursed, the completion of the NETC construction in the next six months will exhaust the remaining funds. Thus, the proposed third AF is necessary to have adequate funds to complete the remaining ongoing constructions noted above plus other ongoing activities such as the provision of quality essential health services which would



otherwise have to be halted after July 2024 when the NETC construction is completed and the project runs out of funds.

- 11. This AF is consistent with the World Bank Group (WBG) Country Partnership Framework (CPF) fiscal year 2022–2026, Report No. 154485,¹ for the Republic of The Gambia, Focus Area 3 (Enhance Human Capital Investments to Develop a Productive Workforce) by supporting ongoing engagements to enhance human capital through improvements in quality and utilization of essential health services.
- 12. The AF will also support The Gambia in achieving its Nationally Determined Contribution (NDC) to the Paris Agreement and contribute to climate change adaptation and mitigation, which is also consistent with the World Bank's Climate Change Action Plan (2021-2025). In the latest NDC submitted by The Gambia to the United Nations Framework Convention on Climate Change in June 2022, the health sector is identified as a vulnerable sector to be prioritized and where climate finance is needed to ensure adaptation to climate change. Moreover, The Gambia includes measures for climate change adaptation of the health sector in its National Adaptation Programme of Action on Climate Change (November 2007), the Long-Term Climate-Neutral Development Strategy 2050 (2022), and its National Health Policy (2021-2030). Some of the main bottlenecks for the health sector identified in the NDC and national health policies include: (i) lack of early warning systems for climate-sensitive diseases; (ii) poor knowledge of the links between climate change and health among healthcare personnel; and (iii) lack of financial and human resources to address the impact of climate change on the health sector. The key adaptation investment priorities identified include: (i) strengthening the surveillance of climate-sensitive diseases; (ii) strengthening vector control; (iii) strengthening the sector's institutional capacity and multisectoral collaboration; and (iv) integrating climate resilience in health infrastructure. There are also some investment priorities in other sectors (i.e., environmental sanitation, improved water management, public transport) that will also provide benefits to the health sector and population health. This operation aims to address some of the main bottlenecks and the investment priorities identified for the health sector, which will help to contribute to the reduction of population vulnerability and build resilience of the sector.

II. DESCRIPTION OF ADDITIONAL FINANCING

A. Proposed Changes

13. The changes proposed for third AF entail financing of the scale-up of activities, new activities and cost overrun. As the proposed activities to be funded under the third AF are aligned with the current PDO, the PDO will remain unchanged. The existing implementation arrangements will remain the same and the closing date also remains the same, that is, August 29, 2025. The proposed changes for the US\$35 million IDA third AF are described below.

(i) **Proposed scaling up and new activities**

14. **The project components will remain unchanged except for the Subcomponents 1.1 and 1.3 description.** This third AF will entail a) scaling up of activities under Subcomponent 1.1 on improving the quality of essential PHC services delivery using an RBF approach; and b) scaling up of activities, addressing a cost

¹ World Bank. 2022. World Bank Group Country Partnership Framework for the Republic of The Gambia, Fiscal Year 2022–2026. Washington, DC: World Bank Group. *https://imagebank2.worldbank.org/search/33765123*



overrun and new activities under Subcomponent 1.3 on building resilient and sustainable health systems. Of the proposed US\$35.0 million equivalent IDA grant, US\$29.6 million will be for scale-up, US\$1.4 million will be for new activities, and US\$4.0 million will be for overrun (see Table 1).

Table 1. Proposed activities under the third AF

Activities	Type of	Amount
	activity	(US\$, millions)
Subcomponent 1.1 on improving the quality of essential PHC services delivery using an RBF		6.8
approach	Casta un	<u> </u>
Improving the quality of essential PHC services delivery including performance-based financing	Scale-up	6.8
grants to the National Health Insurance Authority (NHIA) for the delivery of a Package of		
Essential Health Services. The parent project and first AF will continue to support the delivery		
and utilization of quality essential PHC services.		20.2
Subcomponent 1.3 on building resilient and sustainable health systems to support the		28.2
delivery of quality health services		
Climate-friendly construction and equipment of health facilities:		<i></i>
Construction of the NFDQCL and BEU	Scale-up	6.4
Equipment of NFDQCL and BEU	Scale-up	7.0
Construction of the NDIC	Scale-up	3.7
Equipment of the NDIC	Scale-up	3.0
 Equipment of dilapidated asbestos-containing health facilities 	Scale-up Cost overrun	0.7
 Renovation of Bwiam General Hospital and Brikama Ba Health Center 		2.5
Construction of a Neonatal Intensive Care Unit at Edward Francis Small Teaching Hospital	Cost overrun	1.0
(EFSTH)	Cast avertur	0.5
 Equipment of the Neonatal Intensive Care Unit 	Cost overrun	0.5
Detailed climate-responsive adaptation and mitigation activities related to this subcomponent are elaborated in Annex B.		24.8 (total)
Support preparatory activities for the Basse and Brikama hospitals such as finalizing the sustainable and energy-efficient designs, conducting environmental and social impact assessments (ESIA), site clearing, building fences to secure the two sites, and other preparatory activities.	Scale-up	2.0
Detailed climate-responsive adaptation and mitigation activities are elaborated in Annex B.		
Support preparatory work of potential PPP in diagnostic imaging services as well as PPP in laboratory services. This will entail technical assistance to a) undertake an assessment of the operations of the existing laboratory and diagnostic imaging services that also includes building energy efficiency and sustainability in design, and review of PPP legal and regulatory frameworks; b) support the Government in assessing suitable options including costing and financial structuring; and c) provide capacity building of the public sector in a PPP arrangement.	Scale-up, new activity	0.4
Detailed climate-responsive adaptation and mitigation activities are elaborated in Annex B. Support interoperability of eCRVS and other information systems. This will entail the expansion of the established eCRVS system to become the foundational system that enables interoperability between the information systems within the MOH as well as with various ministries and authorities; procuring user devices (including laptops, desktops, tablets, printers, and biometric equipment); providing Internet service; providing cloud-based services; training of information and communication technology staff and health personnel.	Scale-up, new activity	1.0



Activities	Type of activity	Amount (US\$, millions)
Notably, the e-CRVS will also capture real-time and accurate data on population and demographics, that will be used to overlay climate-change informed disaster preparedness and response systems, including identifying key "hot spots" for climate risks and communities that are particularly vulnerable to climate events in The Gambia.		
Detailed climate-responsive adaptation and mitigation activities are elaborated in Annex B.		
Total		35.0

(ii) **Financing Arrangements**

15. The increase in scope as outlined above combined with the increase in costs is reflected in an increase in indicative Component 1 allocation from US\$92.33 million to US\$127.33 million, with the full amount of the third AF being added under Component 1 (see Table 2 below).

Project Components	Parent Project IDA	Parent Project GFATM	AF1 IDA	AF1 GoTG	AF2	AF2 HEPRTF	AF3 IDA	Total Cost
Component 1. Improving the Delivery and Utilization of Quality Essential PHC Services	27.00	4.50	50.00	2.00	4.50	4.33	35.00	127.33
Component 2. Project Management	3.00	0.00	0.00	0.00	0.00	0.00		3.00
Component 3. CERC	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Total Costs	30.00	4.50	50.00	2.00	4.50	4.33	35.00	130.33

Table 2. Project Cost and Financing (US\$, millions)

(iii) Implementation arrangements

16. The implementation/institutional arrangements in place for the parent project will be applicable to the proposed third AF.

(iv) **Disbursement categories**

17. Existing disbursement categories will not be changed.

(v) Retroactive financing

18. Retroactive financing with a ceiling of US\$7.4 million equivalent will support ongoing construction and preparatory work of potential PPP in diagnostic imaging services.

(vi) **Results Framework**

19. The proposed changes to the project Results Framework regarding intermediate results indicators are described as follows:



Component 1

New Intermediate Results Indicators

- *Interoperability of eCRVS system with other management information systems established (Text)* new indicator to capture interoperability.
- Assessment of PPP diagnostic imaging services and laboratory services completed (Text) new indicator to capture the PPP technical assistance noted above.

• *People who have received National Health Insurance Scheme (NHIS) services (Number).* In addition to the indicator *People enrolled in the NHIS (Number),* this new indicator will capture those who have received NHIS services. The proposed target is 60,000 with the baseline value of 0. The NHIS rollout for delivery and newborn care services commenced on April 1, 2024.

B. Sustainability

20. The GoTG's demonstrated commitment to achieving universal health coverage (UHC) increases the likely sustainability of the project. To improve institutional sustainability, the project is enhancing the management and technical capacity of the MOH and PCU staff to implement the project. Regarding financial sustainability, since 2019, the GoTG has been allocating funds in its annual budget to RBF with US\$1 million allocated to RBF in the 2021 government budget, and additional US\$2 million of the 2021 government local fund was allocated to the NHIS. The allocation in the 2024 budget was lower but it is envisaged that the Government will increase the allocation to the NHIS when the National Health Insurance Act is amended with new sources of funds. Moreover, the Government allocated US\$3.8 million for the procurement of drugs to support the NHIS rollout.

III. KEY RISKS

- 21. The overall risk to achieving the PDO with the expanded scope and AF is Moderate.
- 22. The renovation and construction of health facilities entails certain risks. New constructions involve risks in selecting a suitable site, identifying competent architects for the design, selecting a contractor with a good track record, proper supervision of the construction, and availability of building materials. Regarding the NFDQCL, the following mitigation measures have been undertaken by the MOH: (a) The Ministry of Lands, Regional Government and Religious Affairs issued a letter on January 30, 2023, allocating a land of a size that is larger than what is required for the construction of the NFDQCL alone. As part of the COVID-19 Project (P173798), an ESIA is being prepared and will be disclosed prior to starting construction activities; (b) an international architectural firm (IDOM) that also did the Farato emergency treatment center designs was competitively recruited to develop the detailed designs of NFDQCL which was completed in June 2023 and commenced the construction supervision in December 2023; and (c) the selected contractor for the NFDQCL, Swami India International Limited, has extensive international and local experience. Further, an international medical equipment firm (Meirovich Consulting) that has been providing support to the MOH since 2020, developed the technical specifications of medical equipment and is assisting with the evaluation of the bids. The same firms have been engaged for the BEU construction. Shortage of building materials remains a major challenge in constructions in The Gambia: frequent shortage of cement, rods and basalt (sourced from Senegal), and limited access to good quality sand. Contractors must plan in advance to obtain these building materials.



- 23. **Political and governance risks are assessed as Moderate.** The political coalition established in late 2016 after President Barrow assumed office was fragile and the last re-election in December 2021 was largely peaceful. The Government continues to show commitment to the health sector reform agenda, particularly as it relates to RBF and NHIS.
- 24. **Macroeconomic risks are assessed as Moderate.** The COVID-19 pandemic increased pressure on external and fiscal balances over the medium term. This led to less budgetary allocation to health and substantial risk to RBF and NHIS sustainability. Nevertheless, the GoTG has already allocated the counterpart funding of US\$2.0 million, as noted above.
- 25. Institutional capacity for implementation and sustainability risks is assessed as Moderate. The PCU had limited experience working on WBG operations but implemented The Gambia COVID-19 Preparedness and Response Project (P173798), which closed on June 30, 2023, and is implementing the parent project and first and second AFs. Before the COVID-19 Project, the last WBG-financed project implemented by the MOH was The Gambia Participatory Health, Population, and Nutrition Project (P000825), which was approved on March 2, 1998, and closed on June 30, 2005. The senior management team has been fully engaged in the third AF preparation and has become familiar with WBG procedures and policies. Further, the PCU is fully staffed, and the same staff managed The Gambia COVID-19 Project, which was rated High for the outcomes, and the PCU continues to receive hands-on training.

26. Fiduciary risks are assessed as Moderate.

- (a) Procurement. One full-time PCU procurement specialist, three procurement officers, and two procurement assistants will continue to provide procurement support to the project during implementation. Procurement training has been provided to the PCU staff. A contracts committee—which is chaired by the Permanent Secretary (or designee) and comprises the Director of the Directorate of Planning and Information (DPI), Director of the Directorate of National Pharmaceutical Services, PCU coordinator, PCU financial controller or senior accountant, PCU procurement staff with the PCU procurement specialist as secretary, and PCU senior operations officer—meets weekly to review the procurement activities. Nevertheless, keeping information up to date in Systematic Tracking of Exchanges in Procurement (STEP), including Post Review activities and completion of contracts, remains a challenge and requires further training on STEP.
- (b) The FM risk became moderate due to improvement of the FM performance. The FM team consisting of a financial controller, four senior accountants, and six accountants (plus additional two accountants who are being recruited) has been strengthened and now adequate and able to manage the proposed third AF. The following mitigation measures noted in the Project Appraisal Document of the parent project have been undertaken: (a) the accounting software has been customized to include bookkeeping of the project and generate interim financial reports (IFRs); (b) a memorandum of understanding with the Ministry of Finance and Economic Affairs (MoFEA) Directorate of Internal Audit has been signed to cover all World Bankfinanced projects; (c) the FM Unit has received on-the-job training on World Bank FM procedures; and (d) an external auditor has been recruited.
- 27. **Environmental and Social (E&S) risks are rated as Moderate.** The parent project E&S performance has been rated Satisfactory since the start of project activities including healthcare waste management and the preparation of Environmental and Social Management Plans (ESMPs). The same PCU implemented the E&S requirements of the COVID- 19 Project from April 2020 to June 2023. The PCU has benefited from a number



of capacity-building activities organized by the World Bank team. Risk of negative impacts remains the same as for the parent project and the first and second AF. The first AF entailed several constructions and renovations of health facilities (including asbestos removal). Those present risks of negative impacts to the environment and human health such as noise, dust emissions, release of dangerous asbestos fibers into the air, generation of solid and liquid waste, and other health and safety issues. Accordingly, an Asbestos Remedial Action Plan has been developed and disclosed on September 9, 2022, and ESIA/ESMPs were also developed and disclosed.² The measures to address E&S risks presented in the parent project, the first AF, and second AF remain relevant. During construction of the NFDQCL and BEU, activities could generate negative environmental impacts and nuisances such as dust, noise, and poor management of construction waste. In addition, there are occupational health and safety risks (for workers) and community health and safety issues (risk of accidents with construction equipment). The identification and management of environmental risks during construction and operational phases were incorporated into ESIA/ESMPs and contractor ESMPs to guide the construction and operation of the NFDQCL and BEU. The same independent safeguards consulting firm is supervising the constructions of the NETC, NFDQCL and BEU. Weekly and monthly E&S monitoring and reporting will follow the same protocols. On the social side, the main risks will remain (i) exclusion of vulnerable groups in the reporting of priority diseases and events; and (ii) privacy and data misuse issues due to transition from written to electronic records. Regarding the latter, users of the eCRVS system are required to sign a non-disclosure agreement before being granted access to the sensitive data in the eCRVS system. Additionally, MOH is developing a data protection and privacy regulation to ensure effective and efficient administration, use, and protection of the data in the eCRVS system. No new other risk categories are expected from the additional activities. All social risks will continue to be mitigated through awareness activities and the Stakeholder Engagement Plan developed under the parent project and updated for the third AF and disclosed on the World Bank external website as well as Ministry of Health website.³ A comprehensive Gender-based Violence (GBV), Sexual Exploitation and Abuse, and Sexual Harassment (GBV/SEA/SH) Action Plan has been developed and is being implemented.

IV. APPRAISAL SUMMARY

A. Economic and Financial Analysis

28. The parent project along with the proposed AF's development impact, rationale for public investment, and World Bank value added are summarized in the following paragraphs.

Development Impact

29. The project would contribute to economic growth through direct contribution to productivity, accumulation of physical output through savings rates, and indirect contribution to human capital. The project's theory of change envisages that in the long term, it would contribute to improvement of The Gambia's 2020 Human Capital Index (estimated to be 0.42). This could be achieved through improvements in the health status of the population by reducing the maternal mortality ratio and under-five mortality

 ² Asbestos Abatement Remedial Action Plan for Health Care Facilities Renovation and Installation The Gambia Essential Health Services Strengthening Project (P173287) (English). Washington, D.C. : World Bank Group. http://documents.worldbank.org/curated/en/099305009092260685/P1732870ebfa5b0f09fde0e99159cc9688
 ³ https://moh.gov.gm/covid-19-es-documents/



rate. Unlike the traditional input-based financing, the proposed project would address key constraints to effective service delivery by performance-based contracting, which is expected to lead to improved health outcomes.

- 30. In line with the PDO and costs associated with project interventions, a cost-benefit analysis (CBA) (that is, determining whether dollar benefits of the project are likely to outweigh dollar costs) was carried out to determine the viability of the parent project, first AF, second AF and the proposed third AF. The analysis was built around the PDO which aims at improving quality and utilization of essential health services and strengthening the national system for public health preparedness in The Gambia. Since the third AF is supporting the scaling up of the activities in the parent project (i.e., improving the quality of essential PHC delivery using a RBF approach and renovation of selected health facilities) plus the proposed new construction and equipment of a NFDQCL and BEU and capacity building to prevent and detect health emergencies, a CBA was carried out to cover the parent project, first AF, second AF and the proposed third AF. This CBA replaces the previous ones for the parent project and first and second AF.
- 31. In the base-case scenario, the net present value (NPV) of the project is US\$110.06 million, and its internal rate of return (IRR) is 45.33 percent, which exceeds the discount rate of 6 percent used for this analysis. Additionally, the NPV remains **positive** even when the impact on averted Disability Adjusted Life Years (DALYs) is reduced to 9 percent (Table 3). The results show that the proposed activities to be undertaken with the entire project will be economically viable (See Annex C for details).

	DALY reduction rate (%)	NPV (US\$, millions)	IRR (%)
High-case scenario	15	167.88	72.62
Base-case scenario	12	110.06	45.33
Low-case scenario	9	52.25	23.33

Table 3. Results of CBA Base-case Scenario and Sensitivity Analyses

Public Sector Involvement

32. Public intervention is needed to address the following four major causes of market failures: equity, externalities, public good, and market power. With the high urban-rural and wealth quintile disparities in the provision of essential health services, the equity consideration is perhaps the most important factor in The Gambia. Access to health care professionals is skewed heavily toward the urban rather than the rural setting, as 73 percent of health care professionals practice in facilities in urban areas.⁴ Moreover, a core tenet of UHC is to protect individuals from financial consequences of ill health. As such, market-driven user fees, for instance, for health services could either deter patients from using needed services or they may get services but at a cost which could impoverish them or their families. These constraints could be better addressed by the public sector as the market cannot realistically address access and coverage issues through a price mechanism. Public intervention is, therefore, necessary to deal with large variable costs associated with disparities of health care providers across the country. Besides, the project's proposed performance-based contracting approach would help address systemic service delivery issues that might not be attractive to the profit-oriented private sector.

⁴ The Gambia Health Public Expenditure Review (PER) 2019.



Value Added of World Bank

33. Details of the World Bank value added are described in section D. Rationale for AF.

Paris Alignment

- 34. The operation is aligned with the goals of the Paris Agreement on both adaptation and mitigation.
- 35. Assessment and reduction of adaptation risks: The operation contributes to climate resilience, and adaptation design considerations limit the exposure to a low level of residual risk. The main climate and disaster risks likely to affect the project are flooding and expected increases in maximum temperature. The project design takes into consideration the extreme heat, precipitation and flooding risks that threaten the outcomes of the project. Specifically, climate change risks and vulnerability to floods and extreme heat will be managed and mitigated through targeted adaptation measures, such as natural ventilation, solar protection, thermal inertia, rainwater and greywater management, and training/sensitization of healthcare workers and communities on preparedness and response in case of a climatic event. (Please refer to Annex B for additional details on the climate risks, vulnerabilities and the adaptation measures proposed for this operation).
- 36. Assessment and reduction of mitigation risks: The project design will have little to no impact on greenhouse gas (GHG) emissions and has a low risk of preventing The Gambia's transition to low-carbon development pathways. The project will support the adoption of mitigation measures/lower-carbon alternatives and practices, such as sustainable building design, energy-efficient equipment, and use of renewable energy sources (i.e., solar power in health facilities and laboratories that are being constructed and rehabilitated), where technically feasible, economically viable, and developmentally appropriate. Risk of carbon lock-in is expected to be low due to the sustainability design that is being put in place to construct the health facilities and laboratories. Moreover, construction and rehabilitation are small-scale, and they are not expected to be carbon intensive. Energy-efficient measures will be considered in the construction of these buildings. Best management practices for energy efficiency will be used for the installation of water and irrigation systems, including rainwater and greywater management. Activities related to interoperability of eCRVS and other information systems are considered universally aligned. (Please refer to paragraphs 53-56 and Annex B for additional details on the climate risks, vulnerabilities and the mitigation measures proposed for this operation).

B. Financial Management

- 37. In line with the guidelines stated in the FM Practices Manual issued by the FM Sector Board on March 1, 2010 (last updated Septmeber 2021), an FM assessment was conducted for the parent project. The FM arrangements for this AF will be the same as for those under the parent project, including the FM risk assessed, which is Substantial. As all mitigating measures identified have been implemented for the parent project to address FM capacity constraints, the FM satisfies the WBG's minimum requirements.
- 38. **The overall FM performance of the PCU was Moderately Satisfactory during the April 2024 review** due to: significant improvements noted such as (i) the recruitment of two senior accountants to strengthen the finance team; (ii) the World Bank team's recommendation to provide adequate documentation of questionable expenditures of an amount of US\$605,973 for the purchase of cartridges and printer heads

for the mass birth registration campaign as well as meeting the printing needs for other management information systems up to project closing, has been undertaken; (iii) the fixed assets without locations in the fixed assets register have been located; and (iv) reductions in the long outstanding reconciling items in the bank reconciliations was noted and long outstanding imprest balances has also been cleared. The Internal Audit Directorate carried out a review covering July 2022 to June 2023. The main findings of the report include the late retirement of imprest, non-withholding of taxes and awarding of contracts to suppliers not registered with the Gambia Public Procurement Authority.

- 39. Several measures will be taken to accommodate the AF in the existing FM system and ensure readiness for implementation: (i) the accounting software used for the parent project will be updated for the bookkeeping of the AF activities; (ii) the external auditor contract will be amended to include the AF in its audit scope; and (iii) the MoFEA Directorate of Internal Audit will include the AF in its scope of intervention.
- 40. **Disbursement for the project will follow the existing disbursement arrangements for the original project.** Disbursements under the ongoing project are statement of expenditure based. The Direct Payment method will apply as appropriate. A pooled designated account will be used for the AF.

C. Procurement

- 41. **Procurement under the third AF will be carried out in accordance with the World Bank Procurement Regulations for Investment Project Financing Borrowers, dated September 2023**. As with the parent project, the third AF will be subject to the World Bank Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016. The project will use the STEP to plan, record, and track procurement transactions.
- 42. **Procurement Performance Rating:** In accordance with the World Bank Procurement Risk Assessment and Management System, the last procurement risk assessment conducted on March 7, 2024 demonstrated that the procurement performance is **Satisfactory**.
- 43. **Project Procurement Strategy for Development and Procurement Plan:** The Project Procurement Strategy for Development was updated and approved by the World Bank prior to recording in STEP and the Procurement Plan also has been updated to reflect the additional procurement activities including for user devices and consulting services for preparatory work of the potential PPP.

D. Legal Operational Policies

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

E. Environmental and Social

44. E&S compliance of the parent project is Satisfactory. The second AF E&S instruments have been updated for the proposed third AF and have been publicly disclosed:



- AF Environmental and Social Commitment Plan (ESCP) Third AF to The Gambia Essential Health Services Strengthening Project - P181659 (English)⁵. Washington, D.C.: World Bank Group. April 19, 2024
- AF Stakeholder Engagement Plan Third AF to The Gambia Essential Health Services Strengthening Project - P181659 (English)⁶. Washington, D.C.: World Bank Group. April 19, 2024
- AF Environmental and Social Review Summary Third AF to The Gambia Essential Health Services Strengthening Project P181659 (English)⁷. Washington, D.C.: World Bank Group. April 19, 2024
- 45. The Environmental and Social Management Framework (ESMF)⁸, which was updated as part of the first AF, sets out procedures for the E&S screening, review, approval, and implementation of activities. The identification and management of environmental risks during construction and operational phases in the first AF ESMF is applicable to the second and third AFs and it will not be necessary to revise the ESMF for the third AF. The ESIAs and ESMPs for construction of the NFDQCL at Brusubi and BEU at Farato have been developed and publicly disclosed.⁹¹⁰ The ESIAs for the new Basse and Brikama hospitals are being developed and will be disclosed prior to starting any preparatory work and the fencing of the two sites.
- 46. Further, the MOH has developed a comprehensive GBV/SEA/SH and Grievance Redress Mechanism (GRM) Action Plan, which is under implementation. The project implementation will continue to ensure appropriate stakeholder engagement, proper awareness raising, and timely information dissemination.
- 47. The PCU's Senior Operations Officer is the main coordinator and focal point for E&S issues, supported by the MOH Environmental Health Program Manager, the Health Communications Manager and the GBV/SEA/SH Focal Point. The same PCU has been implementing the E&S requirements of the parent project and AFs. Additionally, the PCU has recruited a full-time Healthcare Waste Management Administrator and Environmental Safeguards Consultant to assist the MOH with the operations and maintenance of the two clinical waste treatment centers as part of the transition to the PPP arrangement, and to assist the Directorate of Public Health Services in undertaking project's E&S due diligence.
- 48. **E&S Due Diligence Reports are submitted quarterly to the WBG**. Together with the WBG E&S specialists, the report has been structured to follow both the ESCP and ESMF commitments. All required project actions are being tracked and reported on. The WBG has organized a series of virtual capacity-building events: (a) a virtual orientation on November 17, 2020 for 37 key stakeholders working on this project to ensure an appropriate E&S Due Diligence Report is carried out; (b) a three-day training (December 1–3, 2020) on implementing the E&S framework in WBG-financed projects for implementing agencies; (c) a workshop on SEA/SH risk management in World Bank-financed operations in The Gambia during

http://documents.worldbank.org/curated/en/099080823140542572/P1732870fe3aaf0c0a18a0ef43bfb483c2 ¹⁰ Environmental and Social Impact Assessment. Biomedical Engineering Unit. The Gambia Essential Health Services

Strengthening Project (P173287) (English). Washington, D.C. : World Bank Group.

http://documents.worldbank.org/curated/en/099080823140542572/P1732870fe3aaf0c0a18a0ef43bfb483c2

⁵ http://documents.worldbank.org/curated/en/099041924110537172/P18165910ecbb4031bfbd158a408a1e5fe

⁶ http://documents.worldbank.org/curated/en/099041924110528195/P181659191ddd30c1a0c31952d18387aa7

⁷ http://documents.worldbank.org/curated/en/099041924110514127/P1816591b9c1080bf18b39187ca06c2807c

⁸ http://documents.worldbank.org/curated/en/143311635256180636/Environmental-and-Social-Management-Framework-ESMF-The-Gambia-Essential-Health-Services-Strengthening-Project-P173287

⁹ Environmental and Social Impact Assessment. National Food and Drug Quality Control Laboratory. The Gambia Essential Health Services Strengthening Project (P173287) (English). Washington, D.C. : World Bank Group.

December 8–10, 2020; (d) a training on May 26, 2021 for more than 24 participants and the topics covered included expanding the stakeholder communication program, ESMPs, SEA/SH Action Plan, and healthcare waste treatment; and (e) a workshop on November 15, 2022 on the E&S due diligence for the various actors involved in the health facilities renovations/constructions.

- 49. The AF will contribute to two World Bank Regional Gender Action Plan priorities: (i) reduce adolescent fertility rate (with the tracking of the PDO-level indicator, contraceptive prevalence rate); and (ii) reduce GBV (as noted above with the implementation of the comprehensive GBV/SEA/SH action plan). The gender assessment conducted for the parent project and first and second AFs is still relevant. Moreover, women of reproductive age (ages 15–49) often face barriers with respect to their sexual and reproductive health and rights—despite progress, the proportion of women using modern contraceptive methods stood at 21.1 percent in 2023. Efforts are under way to address the identified gaps.
- 50. **GRM.** The parent project incorporates a comprehensive project-wide GRM which will enable a broad range of stakeholders to channel concerns, questions, and complaints to the various implementation agencies and a toll-free call center. The project supports the call center with a toll-free number. This number has been publicly disclosed throughout the country in the broadcast and print media. The GRM has been equipped to handle cases of SEA/SH, as rapid guidance on how to respond to these cases has been developed and shared with operators. This will follow a survivor-centered approach. The GRM will continue to be publicized by the MOH and other relevant agencies.

Climate Vulnerability and Resilience

51. This project has been screened for climate change and disaster risks. The overall potential risks in The Gambia were assessed as Moderate in the Summary Climate and Disaster Risk Screening Report. The exposure rating was assessed as 'High' due to extreme temperatures, intense and erratic rainfalls, windstorms, flooding, drought, sea level rise, storm surge, and coastal erosion, especially with their increased frequency and intensity in recent years.¹¹ This exposure risk is assessed at this level for both the current and future time scales. These extreme climate events hinder the country's sustainable development and poverty eradication efforts. In The Gambia, average temperatures range from 18.0°C to 30.0°C during the dry season and 23.0°C to 33.0°C during the wet season.¹² However, mean annual temperatures have increased by 1.0°C since 1960. Rainfall in The Gambia has decreased between 1960 and 2006, but the intensity of rainfall events has increased. An increase in heat and rainfall events may lead to food insecurity due to the population's heavy reliance on rain-fed crops that are vulnerable to persistent drought and intense rainfall.¹³ Droughts can also lead to dust storms, which would have serious respiratory health consequences for a population that has lower respiratory tract infections as the second leading cause of mortality in 2019.¹⁴ Extreme rainfall events and flooding may lead to an increased number of breeding grounds for mosquitoes, water contamination, injuries, drowning, and infrastructure damage. The Gambia ranks 144th (out of 182 countries) under the Notre Dame Global Adaptation

- https://climateknowledgeportal.worldbank.org/country/gambia/climate-data-projections
- ¹³ International College of Business and Human Resource Development (ICOBAHRD) at Kanifing and the Center for International Earth Science Information Network (CIESIN) at Columbia University. 2011. Climate Change and Development in The Gambia: Challenges to Ecosytem Goods and Services. Kanifing, The Gambia.

¹¹ Government of The Gambia. 2022. The Gambia's Long-Term Climate-Neutral Development Strategy 2050.

 $^{^{\}rm 12}$ The Gambia, Climate Projections. The World Bank Climate Change Knowledge Portal –

¹⁴ IHME. 2019. Country Profile: The Gambia. Retrieved at: http://www.healthdata.org/gambia



Initiative, which suggests that the country is highly vulnerable and has low readiness for adapting to the impacts of climate change. Therefore, it is critical to put sustainable and climate-resilient measures in place to reduce the impact of climate change on the population. However, despite the high exposure, the risk on project activities and outcomes is categorized as Moderate due to several adaptation and mitigation measures put in place to reduce the impact of the project's activities on the environment and GHG emissions and to ensure climate resilience in the future.

52. Climate change is a suspected culprit increasing pressure on the healthcare system in The Gambia. Climate forecasts indicate that mean annual temperature, tropical nights and annual precipitation will increase in The Gambia due to climate change.¹⁵ These, in turn, will increase the risk of cardiovascular diseases and epidemiological risk associated with some vector-borne pathogens. A growing body of epidemiological evidence in Africa suggests that temperature increase and changes in precipitation patterns contribute to preterm births, low birth weight, stillbirths, growing antibiotic resistance, hypertension, and other health complications, including teratogenic effects in fetuses from heat exposure in the first trimester of pregnancies.¹⁶ Major infectious diseases are present in The Gambia: bacterial and protozoal diarrhea, hepatitis A, typhoid fever, malaria, dengue fever, schistosomiasis, rabies, and meningococcal meningitis, which can be exacerbated by climate change. Populations suffering from noncommunicable diseases (NCDs), such as cardiovascular diseases, hypertension, diabetes, and respiratory illnesses are also more vulnerable to climate change, which can result in an increased risks of acute episodes as well as mortality. For instance, rural and semi-urban residence in The Gambia were recently found to be strongly associated with hypertension.¹⁷ One possible reason for this is heat exposure, which is likely to become more severe with climate change.¹⁸ Women, children and adolescents are also more vulnerable to climate change. Pregnant women, especially in rural areas, are subject to extreme heat while working outdoors (i.e., farming) which can have significant implications on the health of the women as well as the fetus and future health of the child.¹⁹ This is worrisome since maternal mortality accounts for 36 percent of all deaths among women in the age cohort of 15 to 49 years old according to demographic and health survey (DHS) from 2013. Moreover, although the neonatal mortality is on the declining trend, it is still quite high at 27 deaths per 1,000 live births.^{20,21} Therefore, over 30 percent of country's population will be vulnerable to climate-related health complications in the coming decades and will need healthcare services that can withstand climate emergencies.

53. Improved provision of climate-resilient health services and stronger trust in new and/or renovated healthcare facilities and laboratories will enable collection of robust data, better monitoring of health

¹⁵ The Gambia, Climate Projections. The World Bank Climate Change Knowledge Portal –

https://climateknowledgeportal.worldbank.org/country/gambia/climate-data-projections

¹⁶ Bonell A. et al. (2020) A protocol for an observational cohort study of heat strain and its effect on fetal wellbeing in pregnant farmers in The Gambia - *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7141168/*

- ¹⁷ Cham B. et al. (2018) Burden of hypertension in The Gambia: evidence from a national World Health Organization (WHO) STEP survey. International Journal of Epidemiology, pp. 860-871.
- ¹⁸ Peters, A., Schneider, A. Cardiovascular risks of climate change. *Nat Rev Cardiol* 18, 1–2 (2021).
- https://doi.org/10.1038/s41569-020-00473-5
- ¹⁹ Spencer S, Samateh T, Wabnitz K, Mayhew S, Allen H, Bonell A. The Challenges of Working in the Heat Whilst Pregnant: Insights From Gambian Women Farmers in the Face of Climate Change. Front Public Health. 2022 Feb 10;10:785254. doi: 10.3389/fpubh.2022.785254. PMID: 35237548; PMCID: PMC8883819.

²⁰ Mortality rate, neonatal (per 1,000 live births) – Gambia, The

https://data.worldbank.org/indicator/SH.DYN.NMRT?locations=GM

²¹ Gambia Maternal and Child Health, UNICEF - https://www.unicef.org/gambia/maternal-and-child-health



statistics and obtaining reliable epidemiological information for both communicable and NCDs, including those potentially linked to climate change. While frequency of communicable and NCDs in The Gambia could increase in association with and/or exacerbated by the climate change, it is crucial that the country builds resilience through strengthening its healthcare and laboratory services. Old structures used in the healthcare sector are losing structural integrity and ability to protect against heat waves, windstorms, heavy rains, and floods. The third AF aims to continue to prepare the country's healthcare sector to the challenges and risks posed by climate change, particularly as it relates to adaptation measures. The healthcare facilities and the laboratories that are being constructed and renovated have a sustainability concept design that consider the different climate conditions in the design strategy. This will include: (i) natural ventilation for people to benefit from evaporative cooling, such as orienting the facility where winds are more prevalent and ensuring cross-ventilation in the offices; (ii) solar protection, such as extension of the roof for shading (double skin solar protection) and reflective roofs; (iii) thermal inertia to ensure comfortable temperatures indoors, by using roof and wall insulation that absorb heat and keep the building cool; and (iv) rainwater and greywater management, which will enable water to be collected and used for non-potable water applications and also reduce the impacts of flooding, such as soakaway installation to drain grey waters back to the soil, native vegetation species to reduce the water use for irrigation, grid paving to help prevent runoff water while avoiding heat island effect, and use of permeable surfaces for roads, parking lots and walkways. Further, electronic case-based surveillance system under the second AF will cover climate-sensitive diseases such as malaria, leprosy, meningitis, and tuberculosis. In terms of **climate mitigation measures**, climate-resilient and energy-efficient water supply and storage infrastructure will be procured, which will improve water access and water-use efficiency. The buildings will be equipped with solar panels on every roof, which enable 24/7 electricity generation, which will mitigate GHG emissions by reducing the use of diesel-powered generators. Energy-efficient lighting (i.e., Energy Star LED lights) and light control measures (such as dimming and occupancy sensors) will also be procured.

54. Healthcare sector capacity-building activities are also envisaged in the project. In addition to the overarching effort to increase climate resilience of the healthcare sector in The Gambia as detailed above, simultaneous capacity building of healthcare workers will be directly facilitated through this operation. Climate change resilience measures will help raise awareness about the impacts of climate change on communicable and NCDs, and nutrition as well as climate emergency preparedness and response. This will include training among healthcare professionals and the general public on measures to take in the event of extreme heat or drought to reduce the chances of dehydration, illness and prevent deaths from heat waves and other climate emergencies that can aggravate chronic cardiovascular and respiratory diseases. Special attention will be given to capacity-building for addressing and responding to pre- and post-natal and health complications due to heat exposure. Moreover, the social and behavior change communication (SBCC) which is being implemented countrywide and context-specific training materials and messages being developed and tailored for community members and health care providers will include contextual information on climate change and climate resilience. The call center that was established in the country is part of the early warning system mechanism and will enable the population to provide any information related to climate impacts or disasters, particularly due to the climate variability that the country experiences every few years, and excessive rainfall that leads to flooding. This will enable emergency health personnel to mobilize quickly to address climate disasters to reduce injuries, drownings, and deaths.



V. WORLD BANK GRIEVANCE REDRESS

Grievance Redress. Communities and individuals who believe that they are adversely affected by a project supported by the WB may submit complaints to existing project-level grievance mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's AM, please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the Bank's AM, please visit https://accountability.worldbank.org.



VI SUMMARY TABLE OF CHANGES

	Changed	Not Changed
Results Framework	\checkmark	
Components and Cost	\checkmark	
Implementing Agency		√
Project's Development Objectives		√
Loan Closing Date(s)		√
Cancellations Proposed		√
Reallocation between Disbursement Categories		√
Disbursements Arrangements		√
Legal Covenants		√
Institutional Arrangements		√
Financial Management		√
Procurement		√
Implementation Schedule		√
Other Change(s)		\checkmark

VII DETAILED CHANGE(S)

COMPONENTS

Current Component Name	Current Cost (US\$, millions)	Action	Proposed Component Name	Proposed Cost (US\$, millions)
Component 1. Improving the Delivery and Utilization of Quality Essential Primary Health Care Services	92.33	Revised	Component 1. Improving the Delivery and Utilization of Quality Essential Primary Health Care Services	127.33
Component 2. Project	3.00		Component 2. Project	3.00



management		management	
Component 3. Contingent Emergency Response Component (CERC)	0.00	Component 3. Contingent Emergency Response Component (CERC)	0.00
TOTAL	95.33		130.33

Expected Disbursements (in US\$)

Fiscal Year	Annual	Cumulative
2021	3,592,800.00	3,592,800.00
2022	10,000,000.00	13,592,800.00
2023	20,000,000.00	33,592,800.00
2024	30,000,000.00	63,592,800.00
2025	53,000,000.00	116,592,800.00
2026	2,907,200.00	119,500,000.00

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Latest ISR Rating	Current Rating
Political and Governance	Moderate	Moderate
Macroeconomic	Moderate	Moderate
Sector Strategies and Policies	Moderate	Moderate
Technical Design of Project or Program	Moderate	Moderate
Institutional Capacity for Implementation and Sustainability	Moderate	Moderate
Fiduciary	Substantial	Moderate
Environment and Social	Moderate	Moderate
Stakeholders	Moderate	Moderate
Other		
Overall	Moderate	• Moderate



LEGAL COVENANTS – Third AF to The Gambia Essential Health Services Strengthening Project (P181659)

Sections and Description

No information available

Conditions



VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Gambia, The

Third AF to The Gambia Essential Health Services Strengthening Project

Project Development Objective(s)

To improve quality and utilization of essential health services and strengthen the national system for public health preparedness in The Gambia.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline		Intermediate Targets				
			1	2	3	4		
Improve quality of essential h	ealth se	ervices						
Health Facility Quality Index (Percentage)		69.00	72.00	75.00	79.00	82.00	85.00	
Improve utilization of essentia	al healtl	n services						
Essential health services coverage index (Geometric means of tracer indicators, on a scale of 0-100) (Percentage)		45.90	47.55	49.78	52.13	54.46	56.38	
Contraceptive prevalence rate (Percentage)		17.10	19.00	22.00	26.00	30.00	33.00	
Antenatal care, four or more visits (Percentage)		78.50	80.00	81.00	82.00	83.00	84.00	
Delivery in a health facility (Percentage)		83.70	84.00	85.00	86.00	87.00	88.00	



Indicator Name	PBC Base	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Fully immunized children (percentage of children who at age 12-23 months had received all basic vaccinations) (Percentage)		84.60	85.00	86.00	87.00	88.00	90.00
Children aged 6-23 months who received minimum acceptable diet (Percentage)		14.00	15.00	16.00	17.00	18.00	19.00
Children under age 5 for whom advice or treatment was sought for symptoms of acute respiratory infection (Percentage)		70.30	71.00	73.00	74.00	76.00	77.00
Strengthen the national system	n for pu	ublic health preparedness					
Electronic case-based surveillance system established and validated for priority diseases (Text)		No web-based electronic case-based surveillance system					Electronic case-based surveillance system established and validate for priority diseases

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline		End Target				
			1	2	3	4		
Component 1: Improving the Delivery and Utilization of Quality Essential Primary Health Care Service								
People who have received essential health, nutrition, and		799,590.00	1,575,900.00	2,388,400.00	3,215,900.00	4,076,400.00	4,972,800.00	



Indicator Name	PBC	C Baseline		Intermediate Targets				
			1	2	3	4		
population (HNP) services (CRI, Number)								
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement) (CRI, Number)		399,000.00	817,000.00	1,200,000.00	1,700,000.00	2,200,000.00	2,700,000.00	
Number of children immunized (CRI, Number)		72,412.00	145,000.00	219,000.00	294,000.00	369,000.00	445,000.00	
Number of women and children who have received basic nutrition services (CRI, Number)		668,603.00	1,310,900.00	1,985,400.00	2,669,900.00	3,384,400.00	4,129,800.00	
Number of deliveries attended by skilled health personnel (CRI, Number)		58,575.00	120,000.00	184,000.00	252,000.00	323,000.00	398,000.00	
Pregnant women coming for antenatal care in the first trimester (Number)		23,216.00	46,000.00	69,000.00	92,000.00	116,000.00	139,000.00	
Delivery by cesarean section (Percentage)		3.70	5.00	6.00	7.00	7.00	7.00	
People enrolled in the NHIS (Number)		0.00	10,000.00	50,000.00	160,000.00	260,000.00	330,000.00	
Timely processing of claims submitted by health facilities to the NHIA (Percentage)		0.00	10.00	20.00	30.00	40.00	50.00	
New acceptors of modern contraception (Number)		80,909.00	125,000.00	165,000.00	200,000.00	240,000.00	280,000.00	
Children under 5 treated for moderate or severe acute malnutrition (Number)		2,587.00	3,900.00	5,400.00	6,900.00	8,400.00	9,800.00	



Indicator Name	PBC	BC Baseline		End Target			
			1	2	3	4	
Children age 12-59 months dewormed (Number)		180,402.00	260,000.00	350,000.00	400,000.00	450,000.00	500,000.00
Children between the age of 6 and 59 months receiving Vitamin A supplementation (Number)		234,243.00	480,000.00	738,000.00	1,009,000.00	1,294,000.00	1,593,000.00
Post-partum mothers supplemented with vitamin A (Number)		55,658.00	111,000.00	166,000.00	222,000.00	278,000.00	333,000.00
Pregnant women receiving iron and folic acid (IFA) supplements (Number)		286,914.00	586,000.00	901,000.00	1,232,000.00	1,579,000.00	1,944,000.00
Health facilities reporting no stock-out of essential tracer medicines and medical supplies at the time of the health facility quality of care assessment (Number)		25.00	35.00	40.00	45.00	50.00	65.00
Health facilities that can perform diagnostic services at the time of the health facility quality of care assessment (Percentage)		10.50	15.00	25.00	35.00	40.00	50.00
Quarterly counter verification of health facility service delivery data conducted and report available (Text)		Not available as of July 31, 2020 for the April- June 2020 quarter	Counter verification report available				
Timely submission of health facilities monthly reports (Percentage)		69.80	72.00	75.00	80.00	85.00	90.00
Completeness of health facilities monthly reports		75.70	80.00	82.00	85.00	87.00	92.00



Indicator Name	PBC	BC Baseline		End Target			
			1	2	3	4	
(Percentage)							
Service delivery reports from community health workers integrated into HMIS (Percentage)		80.60	82.00	84.00	86.00	88.00	90.00
Electronic human resource management information system established (Text)		No web-based electronic human resource management information system					Web-based electronic human resource management information system established
Electronic logistic management information system established (Text)		Web-based electronic logistic management information system					Web-based electronic logistic management information system established
Health personnel trained (Number)		0.00	40.00	120.00	180.00	230.00	250.00
Births registered (Number)		101,515.00	213,000.00	336,000.00	471,000.00	619,000.00	783,000.00
Marriages registered (Number)		490.00	1,419.00	2,300.00	3,300.00	4,400.00	5,500.00
Health facilities renovated/constructed (Number)		0.00	0.00	0.00	2.00	3.00	12.00
National emergency treatment center intensive care unit, emergency observation and treatment center, public health laboratory and training center, blood transfusion center constructed (Number)		0.00	0.00	0.00	0.00	0.00	1.00



Indicator Name	PBC	Baseline		Intermed	iate Targets		End Target	
			1	2	3	4		
National Food and Drug Quality Control laboratory constructed (Number)		0.00					1.00	
Health facilities renovated/constructed with energy efficient systems in place and/or with energy- efficient appliances installed (Number)		0.00	0.00	0.00	0.00	10.00	13.00	
Grievances addressed within stipulated service standards for response (Percentage)		0.00	10.00	40.00	50.00	70.00	90.00	
Health personnel trained in surveillance standard operating procedures (Number)		0.00					150.00	
Notifiable diseases and events detected within 7 days of emergence (Percentage)		0.00					50.00	
People who have received NHIS services (Number)		0.00					60,000.00	
Action: This indicator is New							vices. The proposed target	
Interoperability of electronic civil registration and vital statistics system with other management information systems established (Text)		Interoperability of electronic civil registration and vital statistics system with other management information systems being established					Interoperability of electronic civil registration and vital statistics system with other management information systems established	



Indicator Name	PBC	Baseline		Intermediate Targets				
			1	2	3	4		
Rationale: Action: This indicator is New Indicator to capture interoperability								
Assessment of Public-Private Partnership diagnostic imaging services and laboratory services completed (Text)		Assessment of Public- Private Partnership diagnostic imaging services and laboratory services not yet started					Assessment of Public- Private Partnership diagnostic imaging services and laboratory services completed	
	Ration New ir	ale: ndicator to capture the PP	P technical assistance					

	Monitoring &	Evaluation Plar	n: PDO Indicators		
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Health Facility Quality Index	The index, on a scale of 0 to 100, is computed for all health centers based on a quality of care assessment checklist and the average score reported.	Annual	Administer quality of care checklist	Quality of care checklist	Ministry of Health Directorate of Planning and Information
Essential health services coverage index (Geometric means of tracer indicators, on a scale of 0-100)	Geometric means of six tracer indicators, on a scale of 0-100. The Geometric Mean formula in Excel is =GEOMEAN(A1:A6) (i.e., geometric mean of the	2019-2020 DHS data/ February- March 2023 /2024 MICS/2025	Household survey	Nationally representative sampling	MOH DPI



	data in cells A1 to A6)	DHS			
Contraceptive prevalence rate	Numerator: Number of currently married women who use any modern method of contraceptive nationally *100 Denominator: Number of currently married women ages 15-49 nationally in the same period	2019-2020 DHS data/ February- March 2023 /2024 MICS/2025 DHS	Household survey	Nationally representative sampling	MOH DPI
Antenatal care, four or more visits	Numerator: Number of women aged 15 to 49 years with a live birth that received antenatal care four or more times * 100 Denominator: Number of women aged 15 to 49 years with a live birth nationally in the same period	February- March 2023 /2024 MICS/2025	Household survey	Nationally representative sampling	MOH DPI
Delivery in a health facility	Numerator: Number of deliveries in health facilities nationally *100 Denominator: Number of births in health facilities nationally in the same period	2019-2020 DHS data/ February- March 2023 /2024 MICS/2025 DHS	Household survey	Nationally representative sampling	MOH DPI
Fully immunized children (percentage of children who at age 12-23 months	Numerator: Number of children who at age 12-23	2019-2020 DHS data/	Household survey	Nationally representative sampling	MOH DPI



had received all basic vaccinations)	months had received all basic vaccinations *100 Denominator: Number of children age 12-23 months nationally in the same period Basic vaccinations are measles, and 3 doses each of DPT or pentavalent and polio vaccine	February- March 2023 /2024 MICS/2025 DHS			
Children aged 6-23 months who received minimum acceptable diet	Numerator: Number of children aged 6-23 months who received minimum acceptable diet *100 Denominator: Number of children aged 6-23 months nationally in the same period The minimum acceptable diet for breastfed children aged 6-23 months is defined as receiving the minimum dietary diversity and the minimum meal frequency, while for non- breastfed children it further requires at least two milk feedings and that the minimum dietary diversity is achieved without counting milk	2019-2020 DHS data/ November 2022 Second National Nutrition Sentinel Surveillance /2024 MICS/2025 DHS	Household survey	Nationally representative sampling	MOH DPI



	feeds.				
Children under age 5 for whom advice or treatment was sought for symptoms of acute respiratory infection	Numerator: Number of children under age 5 for whom advice or treatment was sought for acute respiratory infection from the following sources: public sector, private medical sector, shop, market, and itinerant drug seller *100 Denominator: Number of children under age 5 who experienced the following in the 2 weeks preceding the survey: a cough accompanied by short, rapid breathing or difficulty breathing as a result of a chest-related problem (symptoms of an acute respiratory infection) nationally in the same period	2019-2020 DHS data/ February- March 2023 /2024 MICS/2025 DHS	Household survey	Nationally representative sampling	MOH DPI
Electronic case-based surveillance system established and validated for priority diseases	Web-based electronic case- based surveillance system established validated for priority diseases	Annual	Epidemiology and Disease Control Unit administrative records	Annual Epidemiology and Disease Control Unit administrative records	Epidemiology and Disease Control Unit



Monitoring & Evaluation Plan: Intermediate Results Indicators							
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection		
People who have received essential health, nutrition, and population (HNP) services		Annual	DHIS2	Annual HMIS reports	MOH DPI		
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement)		Annual	DHIS2	Annual HMIS reports	MOH DPI		
Number of children immunized		Annual	DHIS2	Annual HMIS reports	MOH DPI		
Number of women and children who have received basic nutrition services		Annual	DHIS2	Annual HMIS reports	MOH DPI		
Number of deliveries attended by skilled health personnel		Annual	DHIS2	Annual HMIS reports	MOH DPI		
Pregnant women coming for antenatal care in the first trimester	Cumulative number of pregnant women who received their first antenatal care in the first trimester	Annual	DHIS2	Annual HMIS reports	MoH DPI		
Delivery by cesarean section	Numerator: Number of deliveries by cesarean section *100 Denominator: Number of live births nationally in the same period	2022 Malaria Indicator Survey/202 3 MICS/2025 DHS	Household survey	Nationally representative sampling	MOH DPI		



People enrolled in the NHIS	Cumulative number of people enrolled in the NHIS (cumulative)	Annual	NHIS administrative data	Annual membership reports	NHIA
Timely processing of claims submitted by health facilities to the NHIA	Numerator: Number of claims submitted by health facilities to the NHIA that were processed in one month *100 Denominator: Number of claims submitted by health facilities to the NHIA in the same period	Annual	NHIS administ rative data	Annual claims processing reports	NHIA
New acceptors of modern contraception	Cumulative number of new acceptors of modern contraception (cumulative)	Annual	DHIS 2	Annual HMIS reports	MOH DPI
Children under 5 treated for moderate or severe acute malnutrition	Cumulative number of children under age 5 years treated for moderate or severe acute malnutrition	Annual	DHIS 2	Annual HMIS reports	MOH DPI
Children age 12-59 months dewormed	Cumulative number of children age 12-59 months who were dewormed	Annual	DHIS 2	Annual HMIS reports	MOH DPI
Children between the age of 6 and 59 months receiving Vitamin A supplementation	Cumulative number of children between the age of 6 and 59 months receiving Vitamin A supplementation	Annual	DHIS2	Annual HMIS reports	MOH DPI
Post-partum mothers supplemented with vitamin A	umulative number of post- partum mothers supplemented with vitamin A (cumulative)	Annual	DHIS2	Annual HMIS reports	MOH DPI



Pregnant women receiving iron and folic acid (IFA) supplements	Cumulative number of pregnant women receiving iron and folic acid (IFA) supplements	Annual	DHIS2	Annual HMIS reports	MOH DPI
Health facilities reporting no stock-out of essential tracer medicines and medical supplies at the time of the health facility quality of care assessment	Numerator: Number of health facilities reporting no stock-out of essential tracer medicines and medical supplies (based on the quality of care checklist) at the time of the health facility quality of care assessment *100 Denominator: Number of health facilities (minor health centers, major health centers and hospitals) assessed in the same period	Annual	Administer quality of care checklist	Quality of care checklist	MOH DPI
Health facilities that can perform diagnostic services at the time of the health facility quality of care assessment	Numerator: Number of health facilities that can perform diagnostic services (12 core tests include: hemoglobin, blood glucose, malaria diagnostic capacity, urine dipstick- protein, urine dipstick- glucose, HIV diagnostic capacity, Dried Blood Spot collection, TB microscopy, syphilis rapid diagnostic test, general microscopy, urine	Annual	Administer Quality of Care Checklist	Quality of Care Checklist	MOH DPI



	pregnancy test, alanine aminotransferase (ALT) test, and creatinine test) at the time of the health facility quality of care assessment *100. ALT test, creatinine test, and TB microscopy are not applicable to minor health centers. Denominator: Number of health facilities (minor health centers, major health centers and hospitals) assessed in the same period.				
Quarterly counter verification of health facility service delivery data conducted and report available	Quarterly counter verification of health facility service delivery data has been conducted by the MOH M&E unit and the report is available	Annual	M&E administrative records	Annual M&E administrative records	MOH DPI
Timely submission of health facilities monthly reports	Numerator: Number of public health facilities monthly reports submitted by health facilities to the DHIS2 not later than 10th day after the end of each calendar month*100 Denominator: Number of public health facilities in	Annual	DHIS2 database	Review of DHIS2 records	MOH DPI



Service delivery reports from community health workers integrated into HMIS	received Numerator: Number of service delivery reports from community health workers integrated into HMIS during the last quarter of the calendar year	Annual	DHIS2 database	Review of DHIS2 records	MOH DPI
Completeness of health facilities monthly reports	the reporting period) that are received on time per the national guidelines. Numerator: Number of public health facilities monthly reports submitted by health facilities to the DHIS2 not later than 30th day after the end of each calendar month*100 Denominator: Number of public health facilities in the same period The GFATM equivalent indicator is Percentage of expected facility monthly reports (for the reporting period) that are actually	Annual	DHIS2 database	Review of DHIS2 records	MOH DPI
	the same period The GFATM equivalent indicator is Timeliness of facility reporting: Percentage of submitted facility monthly reports (for				



	Denominator: Number of service delivery reports from community health workers expected during the last quarter of the calendar year. GFATM indicator				
Electronic human resource management information system established	Web-based electronic human resource management information system established	Annual	National human resource for health administrative records	Annual national human resource for health administrative records	Directorate of human resource for health
Electronic logistic management information system established	Web-based electronic logistic management information system established	Annual	National Pharmaceutic al Services administrative records	Annual National Pharmaceutical Services administrative records	Directorate of National Pharmaceutical Services
Health personnel trained	Cumulative number of health personnel trained	Annual	National human resource for health administrative records	Annual national human resource for health administrative records	Directorate of human resource for health
Births registered	Cumulative number of births registered by the MOH, cumulative	Annual	MOH CRVS division administrative data	Annual birth records	MOH DPI



Marriages registered	Cumulative number of marriages registered by the MOH, cumulative	Annual	MOH CRVS division administrative data	Annual marriage records	MOH DPI
Health facilities renovated/constructed	Renovation/construction of health facilities financed by the project The proposed list of facilities/structures to be considered for this indicator are: Basse District Hospital, Brikama Ba Health Center, Brikama District Hospital, Bwiam General Hospital, National emergency treatment center intensive care unit, national emergency observation and treatment center, national public health laboratory and training center, national blood transfusion center, conference center, Neonatal unit at Edward Francis Small Teaching Hospital, Bansang General Hospital staff quarters, Bansang Regional Health Directorate office and staff quarters, Bansang School	Annual	Maintenance unit administr ative	Annual maintenance unit administrative records	MOH DPI



	for Enrolled Nurses and Midwives, Farafenni Old Health Center, Kaur Health Center, Kiang Karantaba Health Center, Kudang Health Center and staff quarters, Mansa Konko staff quarters, North Bank East Regional Health Directorate office and staff quarters, and Yorro Bawol staff quarters				
National emergency treatment center intensive care unit, emergency observation and treatment center, public health laboratory and training center, blood transfusion center constructed	National emergency treatment center intensive care unit, emergency observation and treatment center, national public health laboratory and training center, national blood transfusion center, and conference center constructed	Annual	Maintenance unit administr ative records	Annual maintenance unit administrative records	MOH DPI
National Food and Drug Quality Control laboratory constructed	National Food and Drug Quality Control laboratory constructed	Annual	Maintenance unit administr ative records	Annual maintenance unit administrative records	MOH DPI
Health facilities renovated/constructed with energy efficient systems in place and/or with energy-efficient appliances installed	Health facilities renovated/constructed with energy efficient systems in place and/or with energy-efficient appliances installed	Annual	Maintenance unit administr ative	Annual maintenance unit administrative records	MOH DPI



financed by the project		
The proposed list of		
facilities are: Basse District		
Hospital, Birkama Ba		
Health Center, Brikama		
District Hospital, Bwiam		
General Hospital, National		
emergency treatment		
center intensive care unit,		
national emergency		
observation and treatment		
center, national public		
health laboratory and		
training center, national		
blood transfusion center,		
conference center,		
Neonatal ward at Edward		
Francis Small Teaching		
Hospital, Bansang General		
Hospital staff quarters,		
Bansang Regional Health		
Directorate office and staff		
quarters, Bansang School		
for Enrolled Nurses and		
Midwives, Farafenni Old		
Health Center, Kaur Health		
Center, Kiang Karantaba		
Health Center, Kudang		
Health Center and staff		
quarters, Mansa Konko		
staff quarters, North Bank		



	East Regional Health Directorate office and staff quarters, and Yorro Bawol staff quarters				
Grievances addressed within stipulated service standards for response	Numerator is number of grievances addressed within 7 working days; denominator is number of grievances reported to MOH	Every 6 months	MOH directorate of health promotion and education ad ministrative records	Records kept by MOH directorate of health promotion and education on grievances	MOH directorate of health promotion and education
Health personnel trained in surveillance standard operating procedures	Number of health personnel and community event-based volunteers trained in surveillance standard operating procedures	Annual	Epidemiology and Disease Control Unit administrative records	Annual Epidemiology and Disease Control Unit administrative records	Epidemiology and Disease Control Unit
Notifiable diseases and events detected within 7 days of emergence	Numerator: Number of notifiable diseases and events detected within 7 days of emergence Denominator: Number of new notifiable diseases and events	Annual	Epidemiology and Disease Control Unit administrative records	Annual Epidemiology and Disease Control Unit administrative records	Epidemiology and Disease Control Unit
People who have received NHIS services	Cumulative number of people who have received NHIS services	Annual	NHIS administ rative data in the electronic NHIS system	NHIA progress reports	NHIA



Interoperability of electronic civil registration and vital statistics system with other management information systems established	Interoperability of electronic civil registration and vital statistics system with at least one other management information system established	Annual	MOH CRVS division administrative data	Annual MOH CRVS division administrative records	MOH CRVS division
Assessment of Public-Private Partnership diagnostic imaging services and laboratory services completed	Assessment of Public- Private Partnership diagnostic imaging services and laboratory services completed	Annual	Projects Coordination Unit administr ative records	Annual Projects Coordination Unit administrative records	Projects Coordination Unit

ANNEX A: Civil Works and Equipment Cost (US\$, millions) and Status

Activities	Original estimate	New cost	Deficit	Status
Construction and equipment, at Farato, of the national emergency treatment center (NETC) intensive care unit, emergency observation and treatment center, national public health laboratory and training center, national blood transfusion center, conference center and NDIC. This is a climate-friendly health facilities with sustainability concept design. The NDIC is the scale-up activities since it was introduced after the first AF.	22.80	26.50	3.70	It is expected to be completed by December 2024. All buildings (except for NDIC and National Blood Transfusion Center) have been completed and roofed with concrete slabs. Shortage of building materials is the major challenge in constructions in The Gambia: frequent shortage of cement, rods and basalt (sourced from Senegal), and limited access to good quality sand.
Equipment for NETC and NDIC (energy-efficient equipment) The NDIC equipment is the scale-up.	6.00	9.00	3.00	NETC request for bid closed on January 16, 2024 and evaluation of bids has been completed. NDIC request for bid closed on March 27, 2024 and evaluation of bids has been completed. The installation of the medical equipment is expected to be completed in December2024.
Construction supervision for NETC.	0.70	1.60	0.90	Ongoing.
Renovation of dilapidated asbestos-containing health facilities: Bansang General Hospital Staff Quarters; Bansang Regional Health Directorate Office and Staff Quarters; Bansang School for Enrolled Nurses and Midwives; Basse District Hospital; Brikama District Hospital; Bwiam General Hospital (old health center, transport only); Farafenni Old Health Center; Kaur Health Center; Kiang Karantaba Health Center; Kudang Health Center and Staff Quarters; Mansa Konko Staff Quarters; North Bank East Regional Health Directorate Office and Staff Quarters; and Yorro Bawol Staff Quarters.	9.00	3.40	-5.60	Renovations started in October 2023 and expected to be completed by December 2024.
Equipment of dilapidated asbestos-containing health facilities (energy-efficient equipment)	3.00	1.00	-2.00	Expected to be equipped by February 2025.
Removal of asbestos and transport, and construction supervision for dilapidated asbestos- containing health facilities.	0.10	0.17	0.07	Asbestos removal completed in September 2023.
Renovation of Brikama Ba Health Center with a new operating room for caesarean delivery.	2.00	2.20	0.20	Construction expected to commence in July 2024.
Equipment of Brikama Ba (energy-efficient equipment)	0.50	0.00	-0.50	Will be part of future PPP arrangement or follow-on project.
Construction supervision for Brikama Ba	0.05	0.20	0.15	Construction expected to commence in July 2024.
Renovation of Bwiam General Hospital and accommodation This entails cost overrun.	2.00	4.30	2.30	Construction expected to commence in July 2024.
Equipment of Bwiam General Hospital and accommodation (energy-efficient equipment) This entails cost overrun.	0.50	0.00	-0.50	Will be part of future PPP arrangement or follow-on project.
Construction supervision for Bwiam	0.05	0.20	0.15	Construction expected to commence in July 2024.



Activities	Original estimate	New cost	Deficit	Status
Construction of Neonatal Intensive Care Unit at EFSTH (climate-friendly health facilities with sustainability concept design) This entails cost overrun.	1.00	1.50	0.50	Construction commenced in December 2023 and expected to be completed in April 2025.
Equipment of Neonatal Intensive Care Unit at EFSTH This entails cost overrun.	0.50	1.50	1.00	Some equipment procured and in use at EFSTH and additional equipment to be procured in January 2025.
Construction supervision for Neonatal Intensive Care Unit at EFSTH (energy-efficient equipment).	0.10	0.20	0.10	Ongoing.
Construction NFDQCL at Brusubi and BEU at Farato (climate-friendly health facilities with sustainability concept design) This entails scale-up of activities since at the time of the second AF, it was recognized that there was insufficient IDA and a third AF would be required.	4.40	10.80	6.40	Started in December 2023 and expected to be completed in June 2025.
Equipment for NFDQCL and BEU (energy-efficient equipment) This entails scale-up of activities since at the time of the second AF, it was recognized that there was insufficient IDA and a third AF would be required.	0.00	7.00	7.00	Request for bid for BEU closed on January 23, 2024 and evaluation of bids in process. Request for bid for NFDQCL closed on March 7, 2024 and evaluation of bids in process.
Construction supervision for NFDQCL and BEU This entails scale-up of activities since at the time of the second AF, it was recognized that there was insufficient IDA and a third AF would be required.	0.10	0.80	0.70	Construction began in January 2024 and expected to be completed by July 2025.
Renovation of X-ray rooms in five hospitals (Bansang Hospital, Bwiam General Hospital, EFSTH, Farafenni Hospital, and Kanifing Hospital). Scale-up activities as part of co-financing with GFATM.	0.00	0.86	0.86	Renovations completed.
X-ray equipment and installation (energy-efficient equipment)	0.00	0.190	0.19	Expected to be completed in June 2024
Scale-up activities as part of co-financing with GFATM.				
Designs and preparatory work for Basse and Brikama hospitals. Initially these were supposed to be renovated but after assessment, the architect recommended construction of new hospitals instead, which is outside the scope of this third AF since it is estimated to cost about US\$70 million and may take three years to complete. Scale-up activities for third AF	0.00	2.20	2.20	Ongoing and expected to be completed by April 2025.
E&S Due Diligence	0.00	0.10	0.10	Ongoing.
Total Costs	52.80	73.72	-20.92	



ANNEX B: Climate Change Adaptation and Mitigation Actions

Subcomponent financed by 3 rd AF	Climate Activity
-	ng the Delivery and Utilization of Quality Essential PHC Services (US\$35 million IDA in 3 rd AF)
Subcomponent 1.1: Improving the quality of essential PHC services delivery using an RBF approach (US\$6.8 million)	 This subcomponent will finance the improvement of the quality of essential PHC service delivery. Climate change (forming 82 percent of all natural hazards) is a primary driver of health emergencies, communicable diseases, and most NCD (respiratory infections) in The Gambia are climate-sensitive. In this context, climate-sensitive diseases, particularly floods, extreme heat, droughts and are the primary impetus of the activities within this subcomponent and are a primary focus of activities. Climate change will be integrated within each activity as follows: Expansion of the Essential Healthcare Package This activity will scale-up and support delivery of services for climate-sensitive water and vector-borne diseases, and climate-resilient health service delivery options that will be included to the PHCs.
	Noting the need for improving the quality of essential PHC services delivery during climate catastrophes, notably flash floods and droughts in The Gambia, climate activities of this subcomponent will support and scale-up the following and notably contribute to adaptation:
	Climate-resilient and responsive health service delivery (US\$6.8 million): This activity will scale-up and support delivery of services for climate-sensitive water and vector-borne diseases, and climate-resilient health service delivery options that will be included to the PHCs. Available climate data will be used to inform delivery of health services for these conditions to support adaptation to the health impacts of climate change; this includes adjusting based on seasonal patterns to maximize resiliency during climate catastrophes, notably, during floods and high heat. Other adjacent efforts supported by this activity will include developing capacity of CHWs to respond to climate emergencies, SBCC for climate change, and logistical interventions to enhance outreach and promote accessibility during rainy and high heat periods.
Subcomponent 1.3. Building resilient and sustainable health systems (US\$28.2 million)	This subcomponent will focus on climate-smart rehabilitation and construction of health and laboratory facilities to enhance energy efficiency. Notably, these rehabilitation and construction activities for the facilities described below are aimed at improving its resilience to climate change-exacerbated severe flooding and heat waves, while also involving expansion to develop capacity and efficiency. These activities intend to support both climate change adaptation and mitigation.
	Construction of the National Food and Drug Quality Control Lab (NFDQCL) and Biomedical Engineering Unit (BEU) (US\$6.4 million) – As detailed in the 2023 FDQCL and BEU design reports that mapped sustainable design goals, one of the main challenges in the sustainable design of The Gambia's NFDQCL and BEU facilities is the high contrast between the main two seasons. In a warm and humid climate natural ventilation and shading is a priority. However, in a dry and warm climate the thermal mass from walls, combined with night cooling, generates indoor comfort most of the time. This activity will scale-up construction aligned with these bioclimatic goals for sustainable design. Also, from the passive design perspective, the overheating problem will be addressed by construction that will offer protection from direct solar radiation through shading, solar protection with extension of roof for shading (double skin solar protection), thermal inertia to ensure comfortable indoor temperatures, by using roof and wall insulation that absorbs heat, and generation of an outdoor microclimate from vegetation. This will entail the use of the building thermal mass to balance the day/night temperature swings, and natural ventilation. Furthermore, given the location of these facilities, solar power for



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	health facilities to improve access to power considering limited power access due to climate shocks and the conflict, while minimizing GHG emissions will be addressed by this construction and rehabilitation. These measures will help health facilities adapt to the impacts of climate change and go beyond standard practice. Also, rainwater and greywater management will enable water to be collected and used for non-potable water applications and also reduce the impacts of flooding, such as soak-away installation to drain grey waters back to the soil, native vegetation species to reduce the water use for irrigation, grid paving, and use of permeable surfaces to develop resilience against flooding. Overall, this construction aligned with the sustainable and bioclimatic design goals is expected to contribute to the end-use efficiency improvement, develop capacity of these facilities, and utilize best available technology to optimize sustainable performance.
	The Project commits to adopting measures that substantially reduce net energy consumption, resource consumption, and CO2e emissions of the NFDQL and BEU. The project also commits to securing post-construction EDGE level 1 certification for the construction of the NFDQL and BEU. As there are currently no energy efficiency standards in The Gambia, this goes beyond national standards for an estimated total of US\$6.4 million. The Project will finance technical assistance for energy efficiency assessments and implementing the EDGE building criteria, which will center around low embedded GHG emissions in the building materials used, thermal protection and low emissivity of the building envelope and glazing and passive energy design with active or passive façade shading elements as appropriate for the NFDQL and BEU. The design and construction of the energy-efficient NFDQL and BEU will contribute to reductions in GHG emissions.
	Equipment of NFDQCL and BEU (US\$7 million): Electrical medical equipment purchased through this subcomponent for health facilities will apply energy efficiency standards to ensure substantial reduction of energy consumption, resource consumption, or CO ₂ e emissions compared to the current context in The Gambia, where such guidelines are absent. The cost of this electrical medical equipment ²² will be an estimated US\$7 million from IDA. This introduces, and thereby surpasses, national standards. By introducing energy efficiency requirements into equipment specifications, the Project goes above and beyond current technology performance benchmarks. Energy Star efficiency standards, IEC energy efficiency standards, and similar viable standards for medical equipment will be used exceeding mandatory minimum energy performance standards set in The Gambia , with particular reference to IEC 60601-1-9, 'Medical Equipment - General requirements for basic safety and essential performance – Collateral Standard: Requirements for environmentally conscious design'. ²³ The highest energy efficiency rating or labelling that allows to perform quality medical and laboratory services adequately will be pursued. Rated criteria will be used in the procurement process to ensure that the highest energy efficiency rating or labelling that allows to perform quality laboratory services adequately will be pursued.
	Construction of the National Diagnostic Imaging Center (NDIC) (US\$3.7 million), equipment of the NDIC (US\$3 million), and equipment of dilapidated asbestos-containing health facilities (US\$0.7 million): Aligned with the bioclimatic and sustainable design goals of the assessment highlighted above, this activity will scale-up energy-efficient design of the NDIC. This will include construction using new energy-efficient UPS systems that have latest design to provide continuous energy to NDIC

²⁴ DALYs for a disease or health condition are calculated as the sum of the Years of Life Lost (YLL) due to premature mortality in the population and the Years Lost due to Disability (YLD) for people living with the health condition or its consequences (WHO).
²⁴ DALYs for a disease or health condition are calculated as the sum of the Years of Life Lost (YLL) due to premature mortality in the population and the Years Lost due to Disability (YLD) for people living with the health condition or its consequences (WHO).



Subcomponent financed by 3 rd AF	Climate Activity
	and medical imaging equipment, this is particularly helpful for this power-cut sensitive equipment. Electrical medical equipment purchased will apply energy efficiency standards to ensure substantial reduction of energy consumption, resource consumption, or CO ₂ e emissions compared to the current context in The Gambia, where such guidelines are absent. Aligned with the sustainable design goals described above for energy efficiency optimization, power availability, quality, reliability and safety conditions, this activity will scale-up energy-efficient equipment including rechargeable diagnostic sets, digital phones, ultrasound scanners, waste disposal, among other essentials. This equipment is also expected to substantially reduce net energy consumption, resource consumption, and CO2e emissions of the health facilities.
	This activity will also scale up support to remove asbestos per the national Asbestos Remedial Action Plan 2022. Asbestos-containing facilities present risks of negative impacts to the environment and human health, such as dust emissions, release of dangerous asbestos fibers into the air and particulate pollution, generation of solid and liquid waste, and other health and safety issues.
	A substantial number of facilities will benefit from these interventions namely: Bansang General Hospital Staff Quarters, Bansang Regional Health Directorate Office and Staff Quarters, Bansang School for Enrolled Nurses and Midwives, Basse District Hospital, Brikama District Hospital, Bwiam General Hospital (old health center, transport only), Farafenni Old Health Center, Kaur Health Center, Kiang Karantaba Health Center, Kudang Health Center and Staff Quarters, Mansa Konko Staff Quarters; North Bank East Regional Health Directorate Office and Staff Quarters; and Yorro Bawol Staff Quarters.
	Renovation (US\$2.4 million), and equipment of Bwiam General Hospital (US\$0.1 million): This activity will cover cost-overrun towards renovation and energy-efficient equipment of the Bwiam General Hospital. Aligned with sustainable and bioclimatic design outlined in the NFDQCL and BEU reports noted above, this energy-efficient equipment is expected to substantially reduce net energy consumption, resource consumption, and CO2e emissions of the hospital. Electrical medical equipment purchased will apply energy efficiency standards to ensure substantial reduction of energy consumption, resource consumption, or CO ₂ e emissions compared to the current context in The Gambia, where such guidelines are absent.
	Construction of Neonatal Intensive Care Unit at EFSTH (US\$1 million): Electrical medical equipment purchased will apply energy efficiency standards to ensure substantial reduction of energy consumption, resource consumption, or CO ₂ e emissions compared to the current context in The Gambia, where such guidelines are absent.
	Equipment of Neonatal Intensive Care Unit (US\$0.5 million): This activity will cover cost-overrun towards renovation and energy-efficient equipment of the NICU. Aligned with sustainable and bioclimatic design outlined in the NFDQCL and BEU reports noted above, this energy-efficient equipment is expected to substantially reduce net energy consumption, resource consumption, and CO2e emissions of the NICU. Electrical medical equipment purchased will apply energy efficiency standards to ensure substantial reduction of energy consumption, resource consumption, or CO2e emissions compared to the current context in The Gambia, where such guidelines are absent.
	Support preparatory activities for the Basse and Brikama hospitals (US\$2 million): This activity will scale up preparatory activities for the two health facilities. This includes finalizing the sustainable and energy-efficient designs, conducting ESIA for the sites, site clearing, building fences to secure the two



Subcomponent financed by 3 rd AF	Climate Activity
	sites, and other preparatory activities. This activity will finance the development of climate-resilient and energy-efficient health facility specifications, estimated to cost US\$2 million; general architectural guidelines, specifications, and drawings as well as other aspects of architectural drawings will not be incorporated. The project will hire technical assistants to develop these, ensuring that the designs integrate specific measures to limit the impact of The Gambia's climate shocks (high heat, storms, and flooding) on health facilities (going beyond standard practice) and improve energy efficiency by more than 20 percent compared to standard practice. These facility designs will be developed to be adopted by the Government for future health facility construction.
	Support preparatory work of potential PPP in diagnostic imaging services as well as PPP in laboratory services (0.4 million): This is a new activity that will also scale up preparatory work of PPP in diagnostic imaging and laboratory services. This will entail technical assistance to a) undertake an assessment of the operations of the existing laboratory and diagnostic imaging services that also includes building energy efficiency and sustainability in design, and review of PPP legal and regulatory frameworks; b) support the Government in assessing suitable options including costing and financial structuring per the assessment; and c) provide capacity building of the public sector in a PPP arrangement. The assessment and adjacent preparations are expected to contribute to the overall push towards building energy-efficient systems that are resilient to power instability and mitigate CO2e emissions. As above, this activity will finance the development of climate-resilient and energy-efficient health facility specifications, estimated to cost US\$0.4 million; general architectural guidelines, specifications, and drawings as well as other aspects of architectural drawings will not be incorporated. The project will hire technical assistants to develop these, ensuring that the designs integrate specific measures to limit the impact of The Gambia's climate shocks (high heat, storms, and flooding) on health facilities (going beyond standard practice) and improve energy efficiency by more than 20 percent compared to standard practice. These facility designs will be developed to be adopted by the Government for future health facility construction.
	Support interoperability of eCRVS and other information systems (US\$1 million): This is a new activity that will also scale up expansion of the established eCRVS system to become the foundational system that enables interoperability between information systems. Notably, the eCRVS will be critical to capture real-time and accurate data on population and demographics, that is key to develop climate-change informed disaster preparedness and response systems, including identifying key "hot spots" for climate risks and communities that are particularly vulnerable to climate events in The Gambia. This will contribute to an agile and timely response to such communities and regions during climate emergencies and areas prone to flooding and heat waves. The eCRVS will also cover climate-sensitive diseases such as malaria, acute-watery diarrhea, and respiratory diseases. To support digitization, the activity will also procure user devices (including laptops, desktops, tablets, printers, and biometric equipment), provide Internet and cloud-based services, training of information and communication technology staff, and health personnel.

ANNEX C: ECONOMIC AND FINANCIAL ANALYSIS

- The economic impact of both the parent project and the proposed AF was estimated using a CBA based on available information. Broadly, the project benefits are estimated by evaluating the potential impact of the costs incurred on the RBF, rollout of the proposed NHIS, new and renovated health facilities on Gambians' health status measured in terms of DALYs.²⁴ This CBA supersedes all previous ones (at original appraisal, AF1, and AF2).
- 2. Although the project closes in August 2025, the investments are expected to have lasting impact long after the implementation period, so the analysis considers the period spanning 2021-2031. Benefits from the parent project will accrue initially, while the impact of the proposed AF will be felt a little later. This is because a considerable part of AF3 focuses on completing capital investments. Health infrastructure such as the new and renovated facilities have a long lifespan (10-20 years) and can be expected to serve their intended purposes long after the project is closed. In the long term, it is expected that the project, including the proposed AF will contribute to strengthening the resilience of The Gambia's health system to better serve the health needs of Gambians and respond to future public health emergencies.
- 3. This analysis notes that the AF has become necessary because of deviations from the planned project costs. This is due mainly to scale-up activities, cost overrun and new activities, that could adversely affect the timely delivery of services, but that is unlikely as the project is expected to still be on schedule. Besides, the additional investments would result in extra quality health benefits.
- 4. The costs include the funds provided by the World Bank, GFATM, and HEPRTP to be disbursed according to an estimated schedule. Cost will also be incurred in operating and running the health facilities. The analysis uses the US\$2.0 million as a proxy for the annual cost to be incurred for operating the new and renovated facilities.
- 5. Benefits of the entire project were estimated based on the number of DALYs expected to be averted. To estimate the number of DALYs averted, the DALYs profile of The Gambia was employed (Figure C1). Although the project/proposed AF will improve all health services, this analysis assumes that the project will only have an impact on five selected causes DALYs (proxies related to the services expected to be delivered by the parent project, AF1, AF2 and proposed AF3), which account for 44 percent of total DALYs in The Gambia. They include maternal and neonatal morbidity, respiratory infections (including tuberculosis), enteric infections, HIV/AIDS and sexually transmitted infections, and nutritional deficiencies. The health services expected to be provided through the entire project could be critical to avoid deaths and disabilities. It is therefore assumed that the project investments will help reduce the DALYs related to these health problems in the country by 12 percent in the basecase scenario. To assess the sensitivity of the results to this key assumption, DALY reductions of 15 and 9 percent are applied as well.

²⁴ DALYs for a disease or health condition are calculated as the sum of the Years of Life Lost (YLL) due to premature mortality in the population and the Years Lost due to Disability (YLD) for people living with the health condition or its consequences (WHO).

6. Each DALY averted is valued at gross domestic product (GDP) per capita (US\$808, World Development Indicators, 2022) although the Disease Control Priorities Project²⁵ and Copenhagen Consensus²⁶ guidelines consider three-times the per capita income as a conservative estimate. After considering the effect of inflation, the real value of DALYs averted, investment, and recurrent costs are discounted at a rate of six percent, which is double the three percent suggested by the WHO.²⁷

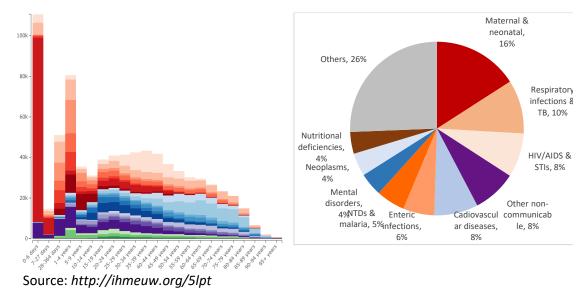


Figure C1. DALYs Profile in The Gambia, 2019

7. The full range of the combined benefits of the parent project/proposed AF is expected to start in 2024 once the construction is completed and the new and renovated facilities begin operating. The project interventions, including the new and renovated health facilities will bring a significant increase in the benefits and operating costs. The combined DALYs produced from the five selected conditions were 351,055 DALYs in 2019.²⁸ This analysis assumes that under the high-case scenario, services provided through project interventions and the facilities will reduce the DALYs by 15 percent (52,658 DALYs) annually. Key indicators of the project are expected to drive the DALY reductions. For instance, skilled attendance at delivery is estimated to avert about 16 to 33 percent²⁹ of all maternal deaths by preventing obstetric complications. Similarly, vaccinations, in many low-income countries, are the main point of contact for monitoring newborns' health and detecting conditions such as malnutrition.³⁰ An increased utilization of newborn child and infant immunization and nutrition

³⁰ Karing, A. (2018). Social Signaling and Childhood Immunization: A Field Experiment in Sierra Leone. University of California,

²⁵ The Disease Control Priority Project is an ongoing project that aims to establish priorities for disease control across the world.

²⁶ Copenhagen Consensus 2008. Malnutrition and Hunger. Challenge Paper.

²⁷ World Health Organization. Making Choices in Health: WHO Guide to Cost-Effectiveness Analysis.2003.

²⁸ Institute for Health Metrics and Evaluation (IHME). GBD Compare Data Visualization. Seattle, WA: IHME, University of Washington, 2019. Available from http:// vizhub.healthdata.org/gbd-compare. (Accessed October 23 5, 2021).

²⁹ Graham, W., J. Bell, and C. Bullough. 2001. "Can Skilled Attendance at Delivery Reduce Maternal Mortality in Developing Countries?" page 97–130. In Safe Motherhood Strategies: A Review of the Evidence. Studies in Health Services Organisation and Policy, 17.

services are expected to reduce child and infant morbidity and mortality. Again, rollout of the NHIS is likely to offer some protection against out-of-pocket expenditure, making it possible for relatively poorer households to invest in their health.³¹ Quality improvements and the newly renovated and/or constructed facilities are likely to result in increased utilization of services and preparedness for public health emergencies thereby driving down DALYs.

- 8. As noted above, the value of each DALY averted is US\$808 (GDP per capita). The number of DALYs averted per year is multiplied by the per capita GDP to monetize the benefits due to DALYs averted. The monetary value is then discounted at a rate of 6 percent.
- 9. In the base-case scenario, the NPV of the project is US\$110.06 million, and its IRR is 45.33 percent, which exceeds the discount rate used in this analysis. Additionally, the NPV remains positive even when the impact on DALYs averted is considered in high-case (15 percent) and low-case (9 percent) scenarios respectively (Table C1). The results show that the project/proposed AF activities will be economically viable. It is worth noting that benefits to be derived from the new and renovated health facilities are underestimated. Benefits such as local workforce capacity development, transportation cost savings for testing products locally instead of sending them abroad, revenues to be generated from the operations of the facilities are not factored into the calculations.

	DALY reduction rate* (%)	NPV (US\$, millions)	IRR (%)				
High-case scenario	15	167.88	72.62				
Base-case scenario	12	110.06	45.33				
Low-case scenario	9	52.25	23.33				

Table C1. Results of CBA Base-case scenario and Sensitivity Analyses

Note: (*) This refers to a reduction of DALYs related to maternal and neonatal morbidity, respiratory infections and TB, enteric infections, HIV/AIDS and STIs and nutritional deficiencies.

Berkeley. *https://economics.yale.edu/sites/default/files/jmp_socialsignaling.pdf* (Accessed on October,28 2021)³¹ The Gambia PER (June 2020). ³¹ The Gambia PER (June 2020).