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Report No: PADHI00687

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A
PROPOSED CREDIT

IN THE AMOUNT OF US$85 MILLION

AND ON A
PROPOSED GRANT

IN THE AMOUNT OF US$10 MILLION
FROM GLOBAL FINANCING FALICITY

TO

THE REPUBLIC OF GUINEA

FOR A

# GUINEA ENHANCING HEALTH SYSTEM TRANSFORMATION (GUEST) PROJECT

AUGUST 29 2024

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

CURRENCY EQUIVALENTS

(Exchange Rate Effective July 31, 2024)

| | |
|---|---|
| Currency Unit = | Guinean Franc (GNF) |
| GNF 8,618 = | US$1 |

FISCAL YEAR
January 1 - December 31

| | |
|---|---|
| Regional Vice President: | Ousmane Diagana |
| Regional Director: | Trina S. Haque |
| Country Director: | Marie-Chantal Uwanyiligira |
| Acting Practice Manager: | Voahirana Hanitriniala Rajoela |
| Task Team Leaders: | Zenab Konkobo Kouanda, Teegwende Valerie Porgo |

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## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| ANIES | National Agency for Economic and Social Inclusion (*Agence Nationale d'Inclusion Economique et Social)* |
| AWPB | Annual Work Plan and Budget |
| BEmONC | Basic Emergency Obstetric and Neonatal Care |
| BSD | Office of Strategy and Development (*Bureau de Stratégie et de Développement*) |
| CBA | Cost-Benefit Analysis |
| CEmONC | Complementary Emergency Obstetric and Neonatal Care |
| CERSPSP | COVID-19 Emergency Response and System Preparedness Strengthening Project |
| CHW | Community Health Worker |
| CNRD | National Committee for Reconciliation and Development (*Comité National du Rassemblement pour le Développement*) |
| CPF | Country Partnership Framework |
| CTN-FBR | National RBF Technical Unit (*Cellule Technique National - Financement Basé sur les Résultats*) |
| CRVS | Civil Registration and Vital Statistics |
| DA | Designated Account |
| DALY | Disability-Adjusted Life Year |
| DHIS2 | District Health Information System 2 |
| E&S | Environmental and Social |
| FASTR | Frequent Assessment and Surveillance Tools for Resilience |
| FDSI | Social Development and Indigence Fund *(Fonds de Développement Social et de l'Indigence)* |
| FM | Financial Management |
| GAVI | The Vaccine Alliance |
| GBV | Gender-Based Violence |
| GFF | Global Financing Facility for Women, Children, and Adolescents |
| GHG | Greenhouse Gas |
| GRM | Grievance Redress Mechanism |
| GRS | Grievance Redress Service |
| GUEST | Guinea Enhancing Health System Transformation (Project) |
| HHFA | Harmonized Health Facility Assessment |
| HMIS | Health Management Information System |
| HRH | Human Resources for Health |
| HSCSP | Health Service and Capacity Strengthening Project |
| HSPWCA | Health Security Program in Western and Central Africa |
| IBRD | International Bank for Reconstruction and Development |
| IDA | International Development Association |
| IEC | International Electrotechnical Commission |
| IFR | Interim Financial Report |
| IMNCI | Integrated Management of Newborn and Childhood Illnesses |
| IRI | Intermediate Results Indicators |
| IPF | Investment Project Financing |

| | |
|---|---|
| IYCF | Infant and Young Child Feeding Practices |
| JICA | Japanese International Cooperation Agency |
| LMIS | Logistic Management Information System |
| LMP | Labor Management Procedures |
| M&E | Monitoring and Evaluation |
| MoHPH | Ministry of Health and Public Hygiene (*Ministère de la Santé et d'Hygiène Publique*) |
| MPA | Multiphase Programmatic Approach |
| NAP | National Adaptation Plan |
| NDC | Nationally Determined Contribution |
| NDCHTM | National Directorate for Community Health and Traditional Medicine (*Direction Nationale de la Santé Communautaire et de la Médecine Traditionnelle*) |
| NGO | Non-Governmental Organization |
| NPV | Net Present Value |
| OOP | Health Out-Of-Pocket Expenditure |
| OP | Operational Policy |
| PCU | Project Coordination Unit |
| PDO | Project Development Objective |
| PLR | Performance Learning Review |
| PPSD | Project Procurement Strategy for Development |
| PS | Procurement Specialist |
| PVVC | Prefectorial Verification and Validation Committee |
| RBF | Results-Based Financing |
| RMNCAH-N | Reproductive, Maternal, Newborn, Child, and Adolescent Health and Nutrition |
| RVVC | Regional Verification and Validation Committee |
| SEA/SH | Sexual Exploitation and Abuse/Sexual Harassment |
| SEP | Stakeholder Engagement Plan |
| UHC | Universal Health Coverage |
| UNPFA | United Nation Population Fund |
| USAID | United States Agency for International Development |
| WASH | Water, Sanitation, and Hygiene |
| WB | World Bank |
| WHO | World Health Organization |

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**DATASHEET**

## BASIC INFORMATION

| Project Beneficiary(ies) | Operation Name | | |
|---|---|---|---|
| Guinea | Guinea Enhancing Health System Transformation (GUEST) Project | | |
| Operation ID | Financing Instrument | Environmental and Social Risk Classification | |
| P506072 | Investment Project Financing (IPF) | Moderate | |

### Financing & Implementation Modalities

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

| Expected Approval Date | Expected Closing Date |
|---|---|
| 23-Sept-2024 | 31-Dec-2029 |
| Bank/IFC Collaboration | |
| No | |

### Proposed Development Objective(s)

To improve the utilization of quality reproductive, maternal, neonatal, child, and adolescent health and nutrition services in selected regions.

### Components

| Component Name | Cost (US$) |
|---|---|
| Supply of quality basic RMNCAH-N services | 55,000,000.00 |

| | |
|---|---|
| Stimulating demand for and access to basic RMNCAH-N services | 31,000,000.00 |
| Project coordination, management, and monitoring and evaluation | 9,000,000.00 |
| Contingent Emergency Response Component | 0.00 |

### Organizations

| | |
|---|---|
| Borrower: | Republic of Guinea |
| Implementing Agency: | Ministry of Health and Public Hygiene |

## PROJECT FINANCING DATA (US$, Millions)

### Maximizing Finance for Development

| | |
|---|---|
| **Is this an MFD-Enabling Project (MFD-EP)?** | No |
| **Is this project Private Capital Enabling (PCE)?** | No |

### SUMMARY

| | |
|---|---|
| **Total Operation Cost** | **95.00** |
| **Total Financing** | **95.00** |
| **of which IBRD/IDA** | **85.00** |
| **Financing Gap** | **0.00** |

### DETAILS

**World Bank Group Financing**

| | |
|---|---|
| International Development Association (IDA) | 85.00 |
| IDA Credit | 85.00 |

**Non-World Bank Group Financing**

| | |
|---|---|
| Trust Funds | 10.00 |
| Global Financing Facility | 10.00 |

### IDA Resources (US$, Millions)

| | Credit Amount | Grant Amount | SML Amount | Guarantee Amount | Total Amount |
|---|---|---|---|---|---|
| National Performance-Based Allocations (PBA) | 85.00 | 0.00 | 0.00 | 0.00 | 85.00 |
| **Total** | **85.00** | **0.00** | **0.00** | **0.00** | **85.00** |

### Expected Disbursements (US$, Millions)

| WB Fiscal Year | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|---|---|---|---|---|---|---|
| Annual | 5.00 | 17.00 | 18.50 | 20.00 | 21.00 | 13.50 |
| Cumulative | 5.00 | 22.00 | 40.50 | 60.50 | 81.50 | 95.00 |

## PRACTICE AREA(S)

### Practice Area (Lead)

Health, Nutrition & Population

### Contributing Practice Areas

Climate Change; Digital Development; Education; Social Sustainability and Inclusion

## CLIMATE

### Climate Change and Disaster Screening

Yes, it has been screened and the results are discussed in the Operation Document

## SYSTEMATIC OPERATIONS RISK- RATING TOOL (SORT)

| Risk Category | Rating |
|---|---|
| 1. Political and Governance | Moderate |
| 2. Macroeconomic | Low |
| 3. Sector Strategies and Policies | Moderate |

| | |
|---|---|
| 4. Technical Design of Project or Program | Moderate |
| 5. Institutional Capacity for Implementation and Sustainability | Moderate |
| 6. Fiduciary | Moderate |
| 7. Environment and Social | Moderate |
| 8. Stakeholders | Low |
| 9. Overall | Moderate |

## POLICY COMPLIANCE

### Policy

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

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

## ENVIRONMENTAL AND SOCIAL

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

| E & S Standards | Relevance |
|---|---|
| ESS 1: Assessment and Management of Environmental and Social Risks and Impacts | Relevant |
| ESS 10: Stakeholder Engagement and Information Disclosure | Relevant |
| ESS 2: Labor and Working Conditions | Relevant |
| ESS 3: Resource Efficiency and Pollution Prevention and Management | Relevant |
| ESS 4: Community Health and Safety | Relevant |
| ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement | Not Currently Relevant |
| ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources | Not Currently Relevant |
| ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities | Not Currently Relevant |
| ESS 8: Cultural Heritage | Not Currently Relevant |
| ESS 9: Financial Intermediaries | Not Currently Relevant |

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

## LEGAL

### Legal Covenants

| Sections and Description |
|---|
| Financing Agreement. Schedule 2, Section I- A 2.e - Without limitation to paragraph (c) immediately above: (i) not later than three (3) months after the Effective Date, or such later date as agreed with the Association, the Recipient shall assign, recruit or appoint an additional five accountants, one procurement assistant, one GBV specialist, one medical waste management specialist, all with qualifications and under terms of reference acceptable to the Association. |
| Financing Agreement. Schedule 2, Section I - A 2.g - The Recipient shall, no later than three (3) months after the Effective Date, or such later date as agreed with the Association: (i) update the configuration of the existing accounting software for the Project, in terms acceptable to the Association; and (ii) update the annual audit work plans of its internal audit team to include the activities of the Project; all with qualifications and under terms of reference acceptable to the Association. |
| Financing Agreement. Schedule 2, Section I - A 3 - The Recipient shall, no later than one (1) month after the Effective Date, or such later date as agreed with the Association, expand the mandate of, and thereafter maintain at all times during the implementation of the Project a steering committee with composition and mandate acceptable to the Association ("Steering Committee"), as further described in the Project Implementation Manual. |
| Financing Agreement. Schedule 2, Section I - B.1 - The Recipient shall, no later than one (1) month after the Effective Date, or such later date as agreed with the Association, prepare, update, and thereafter carry out the Project, and cause the Project Entities to carry out the Project in accordance with, a Project implementation manual ("Project Implementation Manual" or "PIM") setting forth rules, methods, guidelines, and procedures for the carrying out of the Project. |
| Financing Agreement. Schedule 2, Section I – A 2.c.ii - The Recipient shall, no later than three (3) months after the Effective Date, or such later date as agreed with the Association, recruit for each of the regional technical units respectively in the regions of Boké, Mamou, Faranah, Labé and N'Zérékoré, a regional technical manager, a monitoring and evaluation officer, an accountant, an environmental and social safeguard specialist, all with qualifications and a mandate acceptable to the Association, and shall maintain them throughout Project implementation. |
| Financing Agreement. Schedule 2, Section I – A 4.b - As part of the CTN-FBR, the Recipient shall recruit or appoint, as the case may be, not later than three (3) months after the Effective Date, or such later date agreed by the Association, and maintain throughout the Project implementation, the essential staff within CTN-FBR, including a national coordinator, a deputy coordinator, a data manager, a monitoring and evaluation specialist, two RBF experts, all with qualifications and under terms of reference acceptable to the Association |
| ESCP - The Recipient shall adopt the Medical Waste Management Plan (MWMP) within six months of the Project'effective date and thereafter, implement the MWMP throughout Project implementation. |
| ESCP - The Recipient shall, no later than three (3) months after the effective date of the project, assess the Infection Control and Waste Management Plan |
| ESCP - The Recipient shall, no later than three (3) months after the project effectiveness date, update the Stakeholder Engagement Plan |

| |
|---|
| ESCP - The Recipient shall, no later than three (3) months after the project's effective date, establish the grievance mechanism (GM) and thereafter maintain and operate the mechanism throughout Project implementation. In the meantime, the project will use the GM set through the previous project (the COVID-19 Emergency Response and System Preparedness Strengthening Project (P174032) and the Health Services and Capacity Strengthening Project (P163140)) |
| ESCP- The Recipient shall adopt the SEA/SH action plan before the start of activities and monitor its execution throughout Project implementation |

**Conditions**

| Type | Citation | Description | Financing Source |
|---|---|---|---|
| Disbursement | Section III -B 1(b)Withdrawal Conditions | Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made: for Performance Payments under Category (3), unless and until the Recipient has (i) hired the Independent Verification Agency in accordance with Section II.B.2 of Schedule 2 to this Agreement; (ii) updated the RBF Manual in terms and conditions satisfactory to the Association; and (iii) signed the first three (3) Performance Contracts with Selected Health Facilities in terms and conditions satisfactory to the Association | IBRD/IDA |
| Effectiveness | Article IV - Effectiveness | The GFF Grant Agreement has been executed and delivered and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled | IBRD/IDA, Trust Funds |
| Effectiveness | Article V - Effectiveness | The execution and delivery of this Agreement on | Trust Funds |

| | | | |
|---|---|---|---|
| | | behalf of the Recipient have been duly authorized or ratified by all necessary governmental action | |
| Effectiveness | Article V - Effectiveness | The Financing Agreement has been executed and delivered and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled. | IBRD/IDA, Trust Funds |
| Effectiveness | Article V - Effectiveness | As part of the evidence to be furnished pursuant to Section 5.01 (a), there shall be furnished to the Bank an opinion or opinions satisfactory to the Bank of counsel acceptable to the Bank or, if the Bank so requests, a certificate satisfactory to the Bank of a competent official of the Member Country, showing on behalf of the Recipient, that this Agreement has been duly authorized or ratified by, and executed and delivered on its behalf and is legally binding upon it in accordance with its terms. | IBRD/IDA, Trust Funds |
| Disbursement | Section III - B 1(b) | Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made: (b) for Performance Payments under Category (2), unless and until the Recipient has (i) hired the Independent Verification Agency in accordance with Section | Trust Funds |

| | | | |
|---|---|---|---|
| | | II.B.2 of Schedule 2 to this Agreement; (ii) updated the RBF Manual in terms and conditions satisfactory to the Association; and (iii) signed the first three (3) Performance Contracts with Selected Health Facilities in terms and conditions satisfactory to the Bank | |

## I. STRATEGIC CONTEXT

### A. Country Context

1. **Guinea has abundant natural resources and a strategically advantageous geographic location.** With a population of around 14 million in 2024,[1] the country possesses approximately one-third of the world's known bauxite reserves (7 to 8 billion tons), the largest untapped iron ore deposits worldwide (3.2 billion tons), and significant reserves of gold (estimated at 700 tons), diamonds (ranging from 30 to 40 million carats), and various other minerals. Its coastal access grants it a strategic position for business development.[2,3] Additionally, ample rainfall creates excellent agro-climatic conditions for cultivating a diverse range of agricultural products.

2. **Despite the robust growth driven by the mining sector, poverty levels in Guinea remain high.** Between 2012 and 2022, the country achieved an average growth rate of 5.8 percent, significantly surpassing the Sub-Saharan African average of 2.8 percent.[2] Real annual GDP growth averaged 4.8 percent during 2019-2022 (2.2 percent per capita) and reached 7.1 percent in 2023, mainly thanks to the mining sector.[2,3] Nevertheless, the poverty rate declined only slowly from 55 percent in 2012 to 44 percent in 2019,[4,5] while extreme poverty remained high at 13 percent in 2019.[5] However, the COVID-19 pandemic offset most of the progress on poverty reduction made since 2012.[3] Poverty incidence increased by 4 percentage points in 2020 as a result of the COVID-19 pandemic.[3] Major challenges that hindered poverty reduction and shared prosperity include political instability, insecurity, governance challenges, inadequate infrastructure and insufficient services for poor households, low agricultural productivity, and demographic challenges.

3. **Guinea's economic growth is expected to be impacted by its high vulnerability to climate change.** The country faces increasing frequency and severity of droughts, floods, and extreme heat. The Notre Dame Global Adaptation Index ranks Guinea 154$^{th}$ out of 187 countries in terms of adaptive capacity for climate shocks, demonstrating low resilience and high vulnerability to climate risks in 2023. Rainfall varies considerably across the country, with the highest annual rainfall in the north and along the coast, gradually decreasing towards the south and inland.[6] Coastal and southern regions are prone to floods and have a monsoon climate with rainfall exceeding 100 mm per month, a shorter dry season, and a narrower temperature range than the interior. Like the Sahelian climate, Northern or Upper Guinea is characterized by higher temperatures and greater temperature ranges, a shorter rainy season, and a longer dry season (December-May). With 97 percent of cultivation being rainfed, climate change has significantly impacted crop yields and the agriculture sector. Agriculture, along with natural resources such as mining and hydropower, as well as the manufacturing and services sectors, are key economic sectors for Guinea. Approximately 57 percent of rural households rely on agriculture for subsistence, and the sector employs 52 percent of the workforce.[7] Furthermore, the Simandou project, which aims to harness the world's largest undeveloped iron ore deposit and set to start by the end of 2024, could negatively impact nature, biodiversity, water resources, and local communities.

[1] Republic of Guinea. National Institute for Statistic. Analysis of the Third National Census and Housing data/Population Prospects. 2017.
[2] World Bank Group. World Development Indicators. https://databank.worldbank.org/source/world-development-indicators.
[3] World Bank. Guinea: Policy Notes to Support the Transition. 2022.
[4] Republic of Guinea. Ministry of Planning and Economic Development. National Institute of Statistics. 2018-2019 Harmonized Survey of Household Living Conditions.
[5] Republic of Guinea. Ministry of Planning and Economic Development. National Institute of Statistics. 2012 Lightweight Poverty Assessment Survey.
[6] USAID. Climate Risk in Guinea: Country Profile. 2018.
[7] World Bank. Climate Change Knowledge Portal. Guinea. https://climateknowledgeportal.worldbank.org/country/guinea.

4. **Guinea ranked 154th out of 193 countries in terms of gender inequality in 2022**. Pervasive gender gaps continue to hinder Guinea's long-term development. Education and health investments for women and girls are disproportionately low compared to men and boys. For example, 24 percent of girls were of out of primary school compared to 13 percent of boys in 2021.[2] Moreover, on the health front, Guinean women, especially in rural areas, experience difficulties in accessing adequate health services, particularly obstetric care, and family planning. Many women are deterred from delivering in health facilities in part because services are disrespectful[8] and not women-friendly, and women lack resources, mobility, and decision-making autonomy (59 percent of women report that their husband or partner makes decisions about their health).[9] In addition, 47 percent of women get married before the age of 18.[9] Furthermore, women and girls are also affected by harmful practices like child marriage, female genial mutilations/cutting, and intimate partner violence.[10] Gender-based violence (GBV) is particularly prevalent in Guinea, with an estimated 63 percent of women experiencing intimate partner violence. There is no clear and coordinated referral system for GBV survivors, and available services lack a survivor-centered approach that provides adequate support through an affordable and quality response system. Finally, regarding employment, female labor force participation was 56 percent in 2018, compared to 76 percent among men.[10]

5. **The human capital of Guinea remains critically low.** In 2020, the Human Capital Index of the World Bank for Guinea was just 0.37, meaning a child born today is expected to reach only 37 percent of their productive potential by age 18. This is below the Sub-Saharan African average of 0.40 and the lower-middle-income countries' average of 0.48. This low index is primarily due to poor health and education outcomes. For health, only 90 percent of newborns survive to age five, 76 percent of 15-year-olds survive to age 60, and 70 percent of children under 5 are not stunted. For education, children starting school at age four complete only seven years of schooling by age 18, with learning-adjusted years of schooling at just 4.6 years. Additionally, students in Guinea score only about 33 percent on internationally harmonized tests. Without any intervention, this situation is likely to persist or worsen, with its impact expected to grow. Currently, the total economic cost of eradicating extreme poverty in Guinea is estimated to be US$360 million (or US$192 per extreme poor), with US$66 million (or US$11 per extreme poor) attributed to health out-of-pocket expenditures (OOPs).[11]

## B. Sectoral and Institutional Context

6. **Health outcomes in Guinea are among the lowest globally.** In 2022, life expectancy was 59 years and the under-five mortality rate was 96 per 1,000 live births. Moreover, the maternal mortality ratio was 553 per 100,000 live births in 2020.[2] In 2018, only 35 percent of pregnant women received four or more prenatal check-ups, 53 percent delivered in health facilities, 46 percent of women and 39 percent of newborns received postnatal care within a day of birth, and 24 percent of children aged 12 to 23 months got all recommended vaccines.[9] Malaria remains a significant health threat, with prevalence increasing from 15 percent in 2016 to 17 percent in 2021 among under-five children,[12] partially due to climate change.[13] Lack of access to clean water and sanitation exacerbates waterborne illnesses, resulting in a diarrhea prevalence of 15 percent among under-five children. Additionally, 11

[8] World Health Organization (WHO) defines respectful care as a care that is organized and provided in a manner that maintains the patient's dignity, privacy and confidentiality, respects their rights, ensures freedom from harm and mistreatment, and enables informed choice and continuous support.
[9] Republic of Guinea. National Institute for Statistics. Demographic and Health Survey Report. 2018.
[10] The World Bank. Unlocking Women's and Girls' Potential - The status of women and girls relative to men and boys in Guinea report. 2022.
[11] Kpegli, Y T; Porgo, TV; Konkobo Kouanda, Z. Impact of Out-of-pocket Health Payments on Poverty and Alignment of Public and External Health Financing in Guinea (English). Health, Nutrition, and Population Global Practice Washington, D.C.: World Bank Group. 2024.
[12] Republic of Guinea. Ministry of Planning and International Cooperation National Institute of Statistics. Malaria Indicator Survey. 2021.
[13] Intergovernmental Panel on Climate Change. 2014. Chapter 11 - Human Health: Impacts, Adaptation, and Co-benefits.

percent and six percent of children suffered from moderate acute malnutrition and severe stunting, respectively, and only four percent of breastfed children aged 6 to 23 months received a minimum acceptable diet in 2018.[9] Furthermore, the total fertility rate was 4.8 children per woman and 47 percent of adolescent women had given birth at least once before the age of 19 in 2018.[9] High fertility rates and prevalence of adolescent deliveries could be associated with a low prevalence of modern contraception, which stands at 10.9 percent among women aged 15-49 and 10.6 percent among adolescents.

7. **In addition, Ebola and COVID-19 outbreaks significantly deepened poverty, disrupted the supply and use of health services, and contributed to a large share of recent deaths.** The 2014–2016 Ebola epidemic is estimated to have increased poverty by two percentage points, while the COVID-19 pandemic raised it by four percentage points.[3] During the Ebola outbreak, the health workforce was severely impacted, reducing the number of nurses and midwives per 1,000 people from 0.56 in 2014 to 0.12, and the number of physicians per 1,000 people from 0.163 to 0.082 within the same period.[2] The Ebola epidemic also led to a decline in health service utilization, with a monthly reduction of 240 deliveries attended by health professionals and 363 pregnant women with three or more antenatal care visits.[14] Full vaccination coverage for children aged 12–23 months dropped from 37 percent in 2012 to 24 percent in 2018.[15] Similarly, COVID-19 decreased the monthly average number of neonatal admissions by 64 percent and increased maternal deaths.[14] Overall, infectious and parasitic diseases, including Ebola, yellow fever, measles, polio, Lassa fever, Marburg virus disease, and COVID-19, account for 32 percent of deaths.[3]

8. **Climate change is further exacerbating poor health outcomes in Guinea, highlighting the country's limited capacity for climate adaptation and resilience.** Notably, the distribution, variability, and pathogenicity of malaria and other infectious diseases in Guinea have worsened due to climate change.[6,16,17] This includes diseases like Ebola, Lassa fever, Rift Valley fever, avian flu, anthrax, and zoonotic tuberculosis.[6] Marginalized communities, including the poor, the elderly, people in rural areas, and women and girls, are most vulnerable to these climate change impacts. Furthermore, climate change is expected to exacerbate food insecurity and malnutrition in Guinea, where 15 percent of children are from underweight.[18] This has increased hunting for bushmeat as a source of animal protein, which has been linked to an increased risk of contracting Ebola and other zoonotic diseases.[6] Frequent floods also contribute to an increase in acute watery diarrhea cases, including cholera and typhoid, with significant impacts on health and health service delivery. Additionally, floods pose significant risks to health facilities that lack climate-sensitive water, sanitation, and hygiene (WASH) measures, and adequate biomedical waste management.[19,20] The limited capacity for climate adaptation has exacerbated the impact of climate change on the population, with disruptions in health service delivery during climate shocks. Climate-vulnerable areas, as identified by climate maps, include Boké, Faranah, Kankan, N'zérékoré, and Kindia, which are particularly susceptible to flooding. These areas, along with Labé, are also severely impacted by extreme heat.[21] To establish

[14] Delamou, A, El Ayadi, AM, Sidibe et al. Effect of Ebola virus disease on maternal and child health services in Guinea: a retrospective observational cohort study. *The Lancet Global Health*, *5*(4), e448-e457. 2017.
[15] Republic of Guinea. National Institute for Statistics. Demographic and Health Surveys. 2012 & 2018.
[16] Sylla MB, Giorgi F, Pal JS et al. Projected Changes in the Annual Cycle of High-Intensity Precipitation Events over West Africa for the Late Twenty-First Century. Journal of Climate 28:6475-6488. 2015.
[17] Tonnang HE, Kangalawe RY, Yanda PZ. Predicting and mapping malaria under climate change scenarios: The potential redistribution of malaria vectors in Africa. Malaria Journal 9(1):111. 2010.
[18] Guinea. Ministry of health and Public Hygiene. National Assessment of the Nutritional Situational using the SMART method. 2022.
[19] Green Climate Fund, 2019. Supporting the Achievement of National Development Policies by Building Climate Adaptive Capacity and Planning in Guinea.
[20] Guinea National Adaptation Plan of Action. 2007.
[21] Guinea Climate maps for riverine, coastal, urban floods; heat maps, and other climate risks ThinkHazard!. ThinkHazard! climate maps.

climate-resilient health systems, it is crucial to address climate challenges such as flooding and extreme heat, which hinder health service delivery and access to health facilities, compromising health infrastructure.

9. **The uneven distribution, low motivation, and suboptimal performance of the health workforce are critical challenges to effective health service delivery in Guinea, resulting in poor health outcomes.** In 2020, there were only 0.33 health workers per 1,000 people in the public sector, including 0.1 doctors, 0.14 nurses, and 0.08 midwives,[22] far below the WHO standard of 4.45 health workers per 1,000 people.[23] Additionally, it is estimated that the country had only 44 percent of the nurses and 18 percent of the midwives needed for maternal and newborn health services. Most health workers are concentrated in urban areas, particularly in Conakry. Although the Guinean Government has identified several post-Ebola reforms in health policy and management, these have yet to be implemented.

10. **Moreover, the operational capacity of health facilities is quite low, leading to inconsistent health care quality for users.[24]** This is primarily due to frequent stock-outs of essential medicines and inadequate infrastructure in energy, connectivity, lighting, waste management, and WASH. Conakry, the capital region, had the highest operational capacity at 67 percent, compared to the national average of 47 percent. In 2020, the average availability of essential medicines, including those for mothers and children, was only at 19 percent, with no health facility having all essential medicines in stock. Only 35 percent of health facilities had a source of light and access to power. Additionally, only 20 percent of health care facilities had computers with internet access, and just 53 percent of health facilities had adequate resources for the storage and disposal of infectious waste. Access to improved water sources and sanitation facilities was limited to 42 percent and 79 percent of health facilities, respectively. Finally, 58 percent of individuals utilizing health facilities reported various issues, including shortages of essential medications, poor cleanliness and hygiene, long wait times, unqualified staff, ineffective treatment, poor reception, and staff absenteeism.[4]

11. **The utilization of reproductive, maternal, neonatal, child, and adolescent health and nutrition** (**RMNCAH-N) services is low, partly due to the aforementioned challenges, and financial barriers**. According to the demographic and health survey (2018), 78 percent of children under five experienced an illness, but only 64 percent of these children visited a health facility.[9] Moreover, only 41 percentage of children aged 6-59 months received vitamin A supplements every six months.[9] Furthermore, 60 percent of women surveyed identified financial barriers as the main reason for not seeking care at a health facility.[9] From 2010 to 2020, the health sector received only 3.5 percent of total public expenditures.[25] Despite public and external health funding, Guinea faced a 62 percent shortfall in achieving health targets outlined in the National Health Development Plan in 2018.[26] Additionally, the Ministry of Health and Public Hygiene (*Ministère de la Santé et d'Hygiène Publique,* MoHPH) budget execution rate averaged 46 percent from 2018 to 2020. Public health expenditures were concentrated in Conakry, where health outcomes are comparatively better. Most public health expenditures are allocated to salaries and wages, leaving little for priority health programs. Consequently, OOPs account for the largest share of total health expenditure, reaching an average of 63 percent over the period 2000 to 2021.[27] This situation poses

[22] Republic of Guinea. Ministry of Health and Public Hygiene. Health Statistics Yearbook. 2020.
[23] WHO. Global Strategy on Human Resources for Health: Workforce 2030.
[24] Republic of Guinea. National Institute for Statistics. Service availability and readiness assessment (SARA), data quality review (DQR), and quality of health care (QoC) in Guinea. 2022.
[25] World Bank. World Bank. Guinea Public Expenditure Review: Investing in Human Capital to Protect the Future. Washington, DC: World Bank. 2021.
[26] Republic of Guinea. Ministry of Health and Public Hygiene, the World Bank, and the Global Financing Facility. Resource Mapping and Expenditure Tracking Report. 2020.
[27] WHO. Global Health Expenditure Database. https://apps.who.int/nha/database/Select/Indicators/en

financial risks: in 2018-2019, 13 percent of the population experienced catastrophic health expenditures and four percent were impoverished due to OOPs.[28] The majority of OOPs (75 percent) were spent on medicines.

12. **Despite commendable progress with the health management information system (HMIS) and civil registration and vital statistics (CRVS) system, significant fragmentation exists across the overall digital health ecosystem.** Few information systems are interoperable with each other or with the HMIS, creating barriers to data utilization and further weakening decision-making processes. Critical components of the health system, including human resources, community health, and CRVS, have yet to be properly digitalized, undermining their efficiency, effectiveness, and responsiveness.

***Recent support from the World Bank requiring scale-up***

13. **Guinea has witnessed significant health improvements over the last decade with support from its partners, including the World Bank.** The Health Service and Capacity Strengthening Project (HSCSP; P163140) was implemented over a five-and-a-half-year period, starting in December 2018. The project aimed to improve the utilization of RMNCH services in target regions (Kankan and Kindia). Commendable achievements were noted in these regions. The project successfully improved the utilization of RMNCH services in the target regions, significantly exceeding the end targets of all Project Development Objective (PDO) indicators by March 31, 2024, with baseline data improving by one and half to three times. For instance, compared to an initial target of 70,740, 119,635 children aged 6-11 months received vitamin A supplementation every six months. Compared to an initial target of 94,320, 662,165 deliveries were supported by trained health personnel. Compared to an initial target of 117,899, 608,871 women received modern contraception. Compared to an initial target of 141,479, 673,077 pregnant women received four antenatal care visits. Lastly, compared to an initial target of 136,239, 661,716 children aged 0–11 months were fully vaccinated. In the four health districts where the Results-Based Financing (RBF) program was implemented, the quality of care improved significantly, with the quality score rising from 45 percent to 70 percent.[29] This success can be attributed to comprehensive and complementary project components: (i) ensuring the availability of essential commodities, equipment, and human resources; (ii) enhancing the quality of care through supportive supervisions and the RBF program; (iii) addressing financial barriers to RMNCH services by (a) implementing effective government-sponsored free health services programs and (b) providing indigent cards for the most vulnerable pregnant women and children under five to enable access to health care; and (iv) improving decision-making through the integration of health facility data into the District Health Information System 2 (DHIS2) Software for monitoring and evaluation (M&E).

14. **The proposed Guinea Enhancing Health System Transformation (GUEST) Project aims to build on the successes of and lessons learned from the implementation of the HSCSP** to extend the HSCSP's intervention in Kankan and Kindia and expand to five additional regions. The project is also designed for swift implementation to avoid unnecessary interruptions in ongoing interventions in Kankan and Kindia.

## C. Relevance to Higher Level Objectives

15. **The PDO fully aligns with the latest Country Partnership Framework (CPF),** 2018-2023, and its corresponding Performance and Learning Review (PLR). The CPF includes two health objectives, with some adjustments made

[28] Porgo TV, Magazi I, Djallo EA. Prevalence of Catastrophic and Impoverishing Health Expenditures and Potential Protection against Financial Risks through Subsidies in Guinea. 2023. Policy Research working paper; no. WPS 10353 Washington, D.C.: World Bank.
Group. http://documents.worldbank.org/curated/en/099615403092324466/IDU097afb21b0970104d330b3150d3880f9cde32.
[29] Republique of Guinea. Ministry of Health and Public Hygiene. RBF Annual Implementation Report. 2023.

during the PLR (Report No. 159551-GN): (i) Objective 2: Strengthening social sector systems through decentralization of service delivery and (ii) Objective 5: Improving health and social protection, especially in rural areas. Specifically, objective 5 focuses on children's vaccination and deliveries assisted by trained health personnel. In line with the CPF, the project aims to strengthen RMNCAH-N service delivery and utilization at the district level and below. The Country Engagement Note 2025-2027, under preparation and scheduled to be finalized in December 2024, will further support the improvement of Education, Health, and Social Protection in line with Axe 4 of the 2022 Interim Program of the transition government with aim to improve access to health services in general and reproductive health in particular specially for young girls. The 2023 Risk and Resilience Assessment also recommends a continued support to investment in people to address identified drivers of fragility. The project is aligned with three of the four transformational goals of the World Bank's Western and Central Region Priorities 2021-2025 "Supporting a Resilient Recovery": (i) transformational goal 1 on "Rebuilding trust between citizens and the state to create a new social contract"; (ii) transformational goal 3 on "Strengthening human capital and empowering women"; and (iii) transformational goal 4 on "Boosting climate resilience".[30] Moreover, the project is aligned with the World Bank's Global Challenge Program 1 on "Fast-Track Water Security and Climate Adaptation," Program 2 on "Energy Transition Efficiency and Access," and Program 5 on "Food and Nutrition Security."

16. **The project is fully aligned with the government's National Health Development Plan 2015-2024 and is guided by the government's RMNCAH-N Investment Case 2020-2024.**[31] The proposed project will build on the aforementioned World Bank project, the HSCSP (P163140), which targeted two of the Investment Case priority regions (Kankan and Kindia) and yielded positive results. The proposed project will not only ensure continuity of the HSCSP (P163140) activities in Kankan and Kindia, but also expand these activities to the other regions, excluding the capital city, which receives the highest financial resources and has the most favorable RMNCAH-N outcomes. The project aims to strengthen RMNCAH-N services, complementing other donor projects to help close the financing gaps identified in the RMNCAH-N Investment Case. The project will implement key interventions, such as the RBF program and the free health care program for indigents,[32] based on evidence-based prioritization developed with stakeholders during the creation of the Investment Case. These interventions also contributed to achieving the HSCSP's PDO.

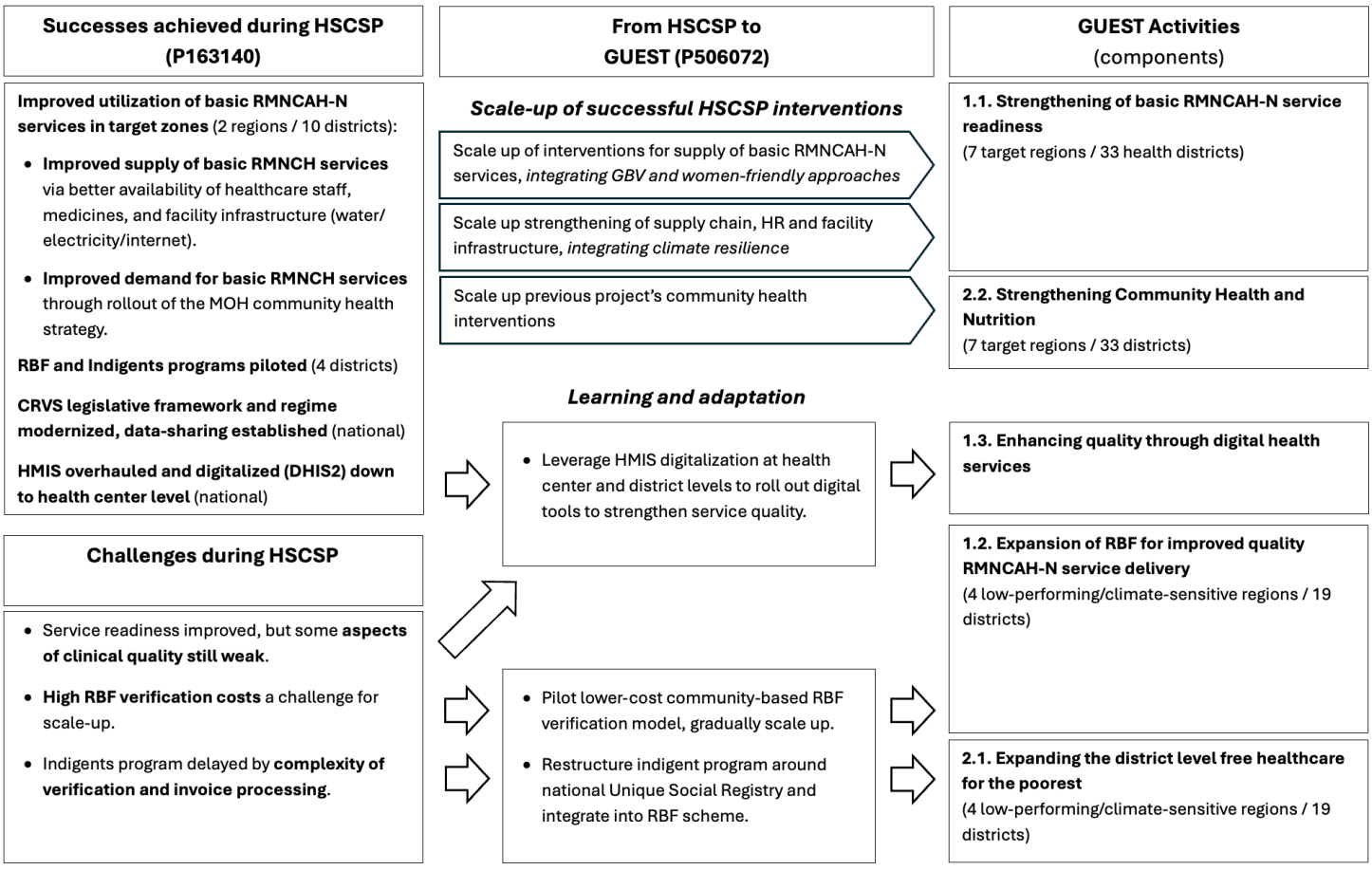
17. **Finally, the proposed project is aligned with the Paris Agreement's adaptation and resilience goals.** The project is consistent with the country's Nationally Determined Contribution (NDC) submitted in 2021. From Guinea's NDC conditional target to reduce greenhouse gas (GHG) emissions by 13 percent, Guinea has now moved to a 17-percent reduction target with unconditional contributions across sectors, potentially reaching 49 percent by 2030,[33] by including land-use and forestry. The Guinea Ministry of Territorial Administration and Decentralization (*Ministère de l'Administration Territoriale et de la Décentralisation*) mandates the inclusion of climate issues into local and urban development plans to promote climate resilience and meet national targets.[6] Guinea ratified the Climate Change Convention in 1993, the Kyoto Protocol in 2000, and signed and ratified the Paris Climate

[30] The World Bank. The World Bank' Western and Central Region Priorities 2021-2025 Supporting a Resilient Recovery. https://documents1.worldbank.org/curated/en/978911621917765713/pdf/Supporting-A-Resilient-Recovery-The-World-Bank-s-Western-and-Central-Africa-Region-Priorities-2021-2025.pdf.
[31] Republic of Guinea. National Health Development Plan 2022-2026; Investment Case for the Reduction of Maternal, Neonatal, Child and Adolescent Mortality 2020-2024.
[32] "Indigent" refers to a person who meets the criteria for extreme poverty, meaning they lack the resources to meet basic needs such as food, housing, education, and medical care. Indigents are in dire need of support and assistance and often suffer from disabilities (motor, sensory, psychological, mental) or disabling illnesses. Other factors that may classify someone as indigent include chronic illness, living in slums, lack of transportation, reliance on a hole-in-the-ground toilet or open defecation, and using traditional or river water for drinking. These criteria justify classifying the household head as extremely poor.
[33] Guinea Nationally Determined Contribution. 2021.

Agreement in 2016. The project will support Guinea's commitment to building climate resilience in vulnerable communities, developing climate-resilient health systems, and contributing to GHG emission reduction targets.

## II. PROJECT DESCRIPTION

18. **This project builds on the success of the HSCSP (P163140)**, scaling up the core elements that contributed to its success while also making adjustments based on lessons learned. The diagram below shows how this new project scales up the HSCSP's successful strategies and activities, while also drawing on lessons learned to adapt approaches where necessary.



## A. Project Development Objective (PDO)

### PDO Statement

**19.** To improve the utilization of quality reproductive, maternal, neonatal, child, and adolescent health and nutrition services in selected regions.

### PDO Level Indicators

***Improved utilization of RMNCAH-N Services***

a) Number of women receiving deliveries attended by skilled health personnel (Number) (Corporate Result Indicator/CRI)
b) Number of children immunized (Number) (Corporate Result Indicator/CRI)
c) Number of women and children who have received basic nutrition services (Number) (Corporate Result Indicator/CRI)
d) Family planning couple-years of protection (Number)

***Improved quality of RMNCAH-N Services***

e) Pregnant women receiving four antenatal care visits (Number)
f) Average score of the RBF quality-of-care checklist (Percentage)

## B. Project Components

**Component 1: Supply of quality basic RMNCAH-N services *(US$55.0 million, including IDA credit:US$50.0 million & Global Financing Facility for Women, Children, and Adolescents [GFF][34] grant: US$5.0 million)***

**Subcomponent 1.1: Strengthening of basic RMNCAH-N service readiness (*US$12. million, including IDA credit: US$10.0 million & GFF grant: US$2.0 million*)**

**20. Health service readiness for quality RMNCAH-N service delivery refers to the overall capacity of health facilities to deliver quality health services.** It encompasses the availability of essential components required for service delivery in all seven regions, with a focus on climate-affected regions and areas prone to climate shocks. This subcomponent will also establish a Basic Emergency Obstetric and Neonatal Care network (BEmONC)[35] and a Complementary Emergency Obstetric and Neonatal Care network (CEmONC).[36] Drawing from the experience of the HSCSP (P163140), this subcomponent will support the procurement of essential maternal, child, and nutrition products, medicines, and commodities through the Central Pharmacy of Guinea, the national drugs supply chain

[34]The GFF supports low- and lower-middle-income countries to accelerate progress on reproductive, maternal, newborn, child, and adolescent health and nutrition, and strengthen financing and health systems for universal health coverage. The GFF supports government-led, multi-stakeholder platforms to develop and implement a national, prioritized health plan (called an investment case) that aims to help mobilize sustainable financing for health and nutrition. The GFF Trust Fund, hosted by the World Bank, links moderate amounts of resources to World Bank financing, and supports countries to strengthen their focus on data, quality, equity, results, and domestic resources for health.

[35] BEmONC encompasses a set of seven key obstetric services, or "signal functions," which have been identified as critical to basic emergency obstetric and newborn care: administration of parenteral antibiotics; administration of parenteral anticonvulsants; administration of parenteral uterotonics; removal of retained products (manual vacuum aspiration); assisted vaginal delivery; manual removal of the placenta; and resuscitation of the newborn.

[36] CEmONC includes all BEmONC services and adds surgical capacity and blood transfusion.

entity. Additionally, it will procure medical and laboratory equipment, including cold chain equipment, anthropometric measurement tools, and equipment for screening and managing malnutrition, as well as logistics (15 4x4 vehicles for supervision) and IT equipment. These resources will also address climate-sensitive conditions, including stunting and wasting, and help improve the nutritional status of children and pregnant women, particularly during periods of extreme heat, drought, and floods. Moreover, investments will include (a) access to climate-adapted and sustainable water supply systems, including the installation of climate-adapted wells, water towers, and waterless toilet technologies in remote, climate-risk, and flood-prone areas; (b) electrification of district-level health facilities through the installation of solar power system and energy-efficient medical equipment to minimize GHG emissions; (c) acquisition of energy-efficient equipment, such as the Ecosteryl 250,[37] to improve medical waste management, treatment, and recycling processes; (d) implementation of female-friendly WASH improvements to ensure the safety, dignity, and health of women and girls, making facilities more accessible to them; and (e) rehabilitation of five in-patient nutritional recovery centers (*Centre hospitalier de récupération nutritionnelle en interne [CRENI]*). Moreover, the project will support strong and inclusive capacity-building at the local and central levels to ensure effective operation and maintenance.

21. **This subcomponent will also help the government address the shortage of human resources for primary health care.** Investments will include (a) local recruitment of qualified frontline staff (especially midwives, nurses, and general medical practitioners), with a particular emphasis on reducing barriers for women entering the healthcare workforce and advancing into management roles; (b) developing a culture-change and training strategy to make maternity services more respectful and women-friendly; and (c) continuous training and skill enhancement of frontline staff, focusing on core competencies like patient-centered care, evidence-based medical practices, quality improvement, and informatics. Additional training will cover behavioral and technical competencies, including a defined RMNCAH-N training package and capacity-building initiatives such as Integrated Management of Newborn and Childhood Illnesses (IMNCI), long-acting and permanent family planning methods, BEmONC and CEmONC services, and nutrition services, including Infant and Young Child Feeding practices (IYCF) and integrated management of acute and chronic malnutrition. Capacity building efforts will also include clinical mentoring and coaching, healthcare task delegation, patient-centered and safe care practices, integrated GBV services, and climate-sensitive healthcare delivery. In addition, leadership and supervision training will be provided to heads of health facilities, health districts, and regional directorates.

22. **To reduce the impact of climate change on the readiness of health facilities to provide RMNCAH-N services in Guinea, this subcomponent will finance:** (a) the rehabilitation of health facilities at risk of flooding and extreme heat to make them resilient, including WASH improvements, as flooding is a primary driver of diarrheal diseases; (b) flood and extreme heat risk assessments of health facilities and their integration in essential RMNCAH-N services readiness in climate vulnerable areas such as flood-prone Boké, Faranah, Kankan, and N'zérékoré; (c) the development of climate change RMNCAH-N health service delivery contingency plans for health facilities during climate shocks; and (d) the development of delivery and pre-positioning plans during climate shocks for vector control, water treatment supplies, and medicines to limit outbreaks of vector- and water-borne diseases (especially malaria, dengue, and diarrhea) and ensure continuity in service delivery and the availability of ancillary health staff during climate emergencies. Further details on climate-targeted activities are outlined in the climate adaptation and mitigation table in the Climate Note Annex 2.

23. **This support will be based on a needs assessment conducted at the onset of project implementation**. Project-supported activities will be designed to be climate sensitive, incorporating energy efficient systems and promoting the use of reusable, eco-friendly medical supplies, and equipment. Waste management systems will be designed

[37] The Ecosteryl 250 will be combined with the R-steryl to facilitate waste sorting for purposes of recycling.

to minimize waste and reduce the carbon footprint of health facilities while ensuring patient safety, thereby ensuring continuity of care during climate and health emergencies.

**Subcomponent 1.2: Expansion of RBF for improved quality RMNCAH-N service delivery in poor-performing and climate-sensitive regions *(US$40.0 million, including IDA credit: US$37.0 million & GFF grant: US$3.0 million*)**

24. **This subcomponent will support the scale-up and strengthening of the RBF program to improve the quality and quantity of RMNCAH-N services provided by health facilities in prioritized regions.** RBF will be scaled up from four health districts in two regions (Kankan and Kindia) to all 19 health districts in four prioritized regions out of the seven, covering about 7.3 million inhabitants. The prioritized regions – Kankan, Kindia, Labé, and Faranah – are among the poorest performers in RMNCAH-N outcomes and are climate-vulnerable notably to climate shocks of flooding and high-heat as well (see the project Beneficiaries section for the methodology used for prioritization). This subcomponent will finance performance-based payments to health facilities (health posts, health centers, health districts, and regional hospitals) in all the four regions as well as to community health workers (CHWs), relays, the National RBF Technical Unit (*Cellule Technique National - Financement Basé sur les Résultats [CTN-FBR*]), and regulation entities (health districts and regional health directorates management teams). Payments will be made based on the indicators defined in performance contracts and according to the processed outlined in the RBF implementation manual. The health facilities will receive incentives for the quantity and quality of services provided, and regulators will be rewarded based on the quantity and quality of indicators related to their roles in improving health services delivery in their catchment areas including supervision, control, and evaluation of quality of health facilities and districts.

25. **The RBF program will prioritize indicators for the delivery of Packages of Basic Health services related to RMNACH+N, climate-sensitive diseases, and GBV services across the health pyramid.** The core services will continue to align with the minimum package of RMNCAH-N services identified in the government's RMNCAH-N Investment Case, incorporating GBV aspects, climate-sensitive RMNCAH-N diseases and conditions (such as malaria, undernutrition, and malnutrition). Analysis and modelling will be developed throughout the project's life to tailor the RMNCAH-N package to emerging needs. GBV response activities integrated into the RBF program will be supported through in-service training and mentoring of health workers, as well as regular updates to the mapping of GBV service providers (which was initiated by the National Observatory on the Fight Against GBV as part of the Sahel Women Empowerment and Demographic Dividend (SWEDD) Project [P150080]). The RBF program implementation manual from the HSCSP (P163140), which includes a complete list of targeted services and indicators, will be revised to incorporate these new cross-cutting themes.

26. **Verifications, training, coaching, and supervision.** Based on lessons learned from the previous project, a more cost-effective verification process will be gradually rolled out for RBF. In the four health districts that have already implemented RBF, independent verification of qualitative and quantitative RMNCAH-N service delivery results will be carried out locally by independent regional verification and validation committees (RVVC) for hospitals and by independent prefectorial verification and validation committees (PVVC) for health and post center levels. For health districts new to RBF, independent verification firms (*Agences de control et de verification [ACV]*) will be contracted and paid under this subcomponent for at least two years to ensure accountability, value for money, and improved quality of health service delivery. These firms will also coach providers to improve their performance and assist the Guinea Government in gradually setting up RVVC and PVVC to take over the verification process. This new approach is expected to reduce operating costs by five to ten percent compared to the previous project.

27. **The project will leverage the country's RBF experiences to strengthen citizen and community engagement for advocacy and accountability through semi-annual community verification led by local non-governmental organizations (NGOs).** This community audit will be conducted within the area surrounding all health centers and hospitals, using a household survey protocol with a concise questionnaire. The survey will confirm whether clients or households have utilized the services provided by the health facility, evaluate their level of satisfaction, and gather suggestions for service improvement. Community verification serves as both a community feedback mechanism and a means of empowering communities, as the result are incorporated into the final quality score of health facilities. As the RBF and indigent programs become mainstreamed, the voices of vulnerable and marginalized groups will be heard, and their needs and preferences will be considered in health service delivery. Finally, an evaluation of the RBF scale-up will be conducted via Subcomponent 3.2 to assess the feasibility of a sustainable, national RBF scale-up. Eligible expenditures include performance-based payment to health facilities, CNT-FBR, and regulators totaling US$34 million; ACV and NGOs contractual services costs; operating costs for the RVVC and PVVC; salaries for CTN-FBR technical assistants; and other operating costs (e.g., training and meetings) amounting to US$6 million.

28. **Retroactive financing will be provided for this subcomponent** in an amount not to exceed US$2.0 million for eligible government expenditures incurred (a) in the four initial health districts that implemented the RBF approach and contributed to the proposed project's PDO and (b) on or after January 1, 2024, and prior to the Signature Date of the financing agreement. Eligible expenditures will include performance payments for health facilities (health centers and health districts hospitals) and regulators at health district and regional levels, training cost, and per diems and operating costs for the verification process.

**Subcomponent 1.3: Enhancing quality through digital health services (IDA credit: US$3.0 million)**

29. **This subcomponent will build on the successful digitalization of the HMIS/DHIS2 at the health facility level to roll out digital tools to support the quality of RMNCAH-N services.** The subcomponent will cover four health districts in two priority regions (two health districts in each region of Kankan and Kindia) and will include (i) digitalization of supportive supervision processes in RBF districts to improve performance management and quality assurance data utilization; (ii) piloting and, if appropriate, scale-up of digital tools for CHWs; and (iii) enhancing and extending the existing pilot of the *Electronic Maternity Consultation Register* to integrate with RBF, assessing its potential to strengthen RBF quality assurance and accountability processes. The Electronic Maternity Consultation Register tool could be expanded to other districts, depending on the assessment results and resource availability.

30. **Furthermore, the digitalization of HMIS/DHIS2 for CHWs will facilitate the delivery of quality services to populations in priority regions (including climate-vulnerable populations)**. These populations may face difficulties accessing health services, particularly during climate shocks and emergencies. This digital platform will incorporate measures to maximize the reach of the community health system for climate change adaptation and ensure service continuity during climate shocks. These measures include (i) a digital communication platform to facilitate communication between CHWs and managers, as well as among CHWs during climate shocks and emergencies; (ii) digital data collection on climate-sensitive diseases to improve real-time data availability and integrate it in RMNCAH-N service delivery in climate-vulnerable areas. These measures will help the health system adapt to the health impacts of climate change and ensure service continuity during climate shocks and emergencies in Guinea.

**Component 2: Stimulating demand for and access to basic RMNCAH-N services (*US$31.0 million, including IDA credit: US$27.0 million & GFF grant: US$4.0 million)***

**Subcomponent 2.1: Expanding the district-level free health care for the poorest in low-performing and climate-vulnerable regions *(US$9.0 million, including IDA credit: US$7.0 million & GFF grant: US$2.0 million)***

31. **This subcomponent will finance the geographical expansion of government financial mechanisms that aim to improve access to essential health and nutrition services for the most vulnerable impoverished households at the community and health facility levels**. The project will rely on the indigent database from the Unique Social Registry, which has been developed and piloted by the Social Development and Indigence Fund (*Fonds de Développement Social et de l'Indigence; FDSI*) and the National Agency for Economic and Social Inclusion (*Agence Nationale d'Inclusion Economique et Social; ANIES*). Building the lessons learned from the implementation of two World Bank operations, the Social Safety Net Program under the Emergency Response and Nafa Program Support Project (P168777) and the HSCSP (P163140), and depending on the stage of development of the Unified Social Registry in the four priority regions, the project will: (a) focus on a local, community-led process of identifying indigent women and children under five and validating the indigents registry where needed; (b) develop and enhance the electronic database for these people and strengthen the district health authorities' capacity to manage it; and (c) provide indigence cards where needed to allow the poorest pregnant women and children under five to access free RMNCAH-N services. Additionally, free access to care will be extended to survivors of GBV/Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) at primary level facilities. This subcomponent will finance the associated costs, including medical care, medical certificate fees, and the enhancement of a national comprehensive referral care mechanism.

32. **To enhance and streamline the verification and accountability process and ensure effectiveness and efficiency**, **this program will be integrated with the RBF program.** The same verification process (quantity and quality verification at the facility level and community audits by independent NGOs) and payment/reimbursement systems will apply. Activities financed under this subcomponent include the different verification processes, training of health workers and CHWs, awareness-raising campaigns on the indigent program and its benefits, and payments to health facilities for services provided free of charge to indigent individuals. The total cost for reimbursements is estimated at US$8 million, with an additional US$1 million allocated for community validation, health card distribution, and program audits.

**Subcomponent 2.2: Strengthening community health and nutrition *(US$22.0 million, including IDA credit: US$20.0 million & GFF grant: US$2.0 million)***.

33. **This subcomponent aims to scale up and improve the community health strategy to increase the coverage and utilization of evidence-based, sustainable, high-quality maternal, children, adolescent, and nutrition interventions at the household and community levels.** This subcomponent will help reduce barriers (especially geographical and communication) and increase demand for and use of RMNCAH-N services with an emphasis on nutrition and adolescent health for improved access to primary health care. It will facilitate a shift toward community-based services and enhance community engagement according to their health needs, preferences, and health-seeking behavior, especially for those vulnerable to climate change in regions like Boké, Faranah, Kankan, N'zérékoré, Kindia, and Labé, which face environmental challenges such as floods and extreme heat. The subcomponent will support the government's Community Health Strategy (2023-2027) in alignment with other partners. Support will be provided through combined community service delivery, capacity strengthening, and social and behavior initiatives to promote healthier practices. Investments will include:

- **Recruiting and strengthening CHWs to implement a community health and nutrition services package at the community level, which will involve home visits.** The goal of this intervention is to tackle obstacles to communication and behavior change related to gender, health equity, and issues of GBV/SEA/HS, and harmful traditional practices that hinder access to health services by vulnerable people. It also aims to help communities adapt to and withstand the health impacts of climate change. Specific efforts will be made to help CHWs reach out to adolescents, youth, and vulnerable populations and provide community services that are more female- and youth-friendly. The CHWs will work in conjunction with other community-based stakeholders and frontline health workers across the primary health care spectrum to provide health education and promotion, diagnose and manage illnesses, provide referrals, and distribute commodities during routine activities and health campaigns. This will be done by: (a) revising the community health services package to include quality promotional, preventive, and curative RMNCAH-N services; (b) recruiting roughly 300 CHWs and 2700 community relays with an emphasis on gender-sensitive recruitment (increasing the number of female CHWs) at a total cost of US$1.2 million in line with norms and standards defined in the National Community Health Strategy; (c) building their capacity through training, coaching, and supervision; (d) procuring equipment, logistics (motorcycles), IT equipment (tablets), and communication tools and materials for community-based outreach activities; and (e) ensuring availability of medicines in line with the CHW's responsibilities.
- **Setting up and building the capacity of Early Years, nutrition, and WASH services support groups** to implement community-based approaches that focus on social, and behavior change to improve nutrition among young children and pregnant and breast-feeding women. Specifically, activities will promote exclusive breastfeeding, dietary diversity with locally produced, nutrient-rich foods, and hygiene and sanitation practices to prevent disease transmission (e.g., malaria, respiratory and enteric infections). These groups will include women's groups, health facility management committees, youth groups, and village communities. They will be set up or revived, empowered using their own resources, monitored and supervised monthly: (i) organize village-wide nutrition demonstrations using nutrient-rich local ingredients; (ii) screen children and pregnant women for malnutrition (underweight, wasting, and stunting) and refer them to health centers as needed, with a focus on drought-prone and food-insecure districts; (iii) promote nutrition-specific practices to reduce stunting, such as IYCF (exclusive breastfeeding and complementary feeding for children from 0 to 24 months), and encourage balanced energy protein supplementation for pregnant women; (iv) conduct awareness campaigns on gender roles, parenting, early child care, stimulation, nutrition, WASH behaviors (e.g., handwashing with soap, cleanliness), climate change, and agriculture.
- **Assessing user satisfaction:** every six months, the same health service users' satisfaction survey conducted in RBF regions will be administered to receive feedback from populations in areas surrounding health centers and hospitals in the three other regions (Mamou, Boké, and N'zérékoré) and improve health service delivery. The data collected will be analyzed, and concrete recommendations will be integrated into revised implementation plans.
- **Technical assistance for M&E, including joint monitoring of community structures:** activities by the health facility management team, the local department of Women Promotion, Childhood and Vulnerable People (the Ministry of Social Affairs) and the communes. A learning and adaptation approach will be employed, based on accurate and timely local data, to ensure the optimal fit of the community strategy to the local context.

**Component 3: Project coordination, management, and M&E *(US$9.0 million, including IDA credit: US$8.0 million & GFF grant: US$1.0 million)***

**Subcomponent 3.1: Project coordination and management *(IDA credit: US$2.0 million)***

34. **This subcomponent will provide support for project management through the Project Coordination Unit (PCU) established under the HSCSP (P163140) and strengthened under the Health Security Program in Western and Central Africa (HSPWCA; P179078)**. It will encompass: (i) the operating cost of the PCU at the central and regional levels; (ii) the fulfillment of fiduciary and the World Bank's Environmental and Social Framework (ESF) requirements, including financial management (FM), procurement, and environmental and social tasks; and (iii) the cost of project coordination, supervision, and overall management activities.

35. **This subcomponent will also finance the strengthening of the National RBF technical unit for the effective roll out of the RBF program and health financing reforms toward Universal Health Coverage (UHC)**. Activities will include (i) building the capacity of the CNT-FBR by nominating or hiring qualified experts in the RBF approach, providing ongoing training for CNT-FBR staff, and equipping them with adequate infrastructure, including procuring IT equipment and one 4x4 vehicle for supervision and (ii) ensuring the CNT-FBR's management autonomy by financing its annual work plan and budget (AWPB). Moreover, capacity-building will be extended to the Office of Strategy and Development (*Bureau de Stratégie et Développement* [BSD]) of the MoHPH, which is the entity responsible for developing MoHPH policies and strategic documents, producing sectoral statistics and indicators, and ensuring program sustainability and health financing policies. These two entities of the MoHPH will lead the design, monitoring, and evaluation of the output-based financing program, with technical assistance, to ensure the transition from inputs-based financing toward the institutionalization and sustainability of strategic purchasing as part of the UHC reforms.

36. **Finally, investments under this subcomponent will continue to support the MoHPH in coordinating donor interventions, promoting harmonization and alignment of partners' activities under the "One Plan, One Budget, One Report" approach.** The project will finance the development and progressive implementation of a Health Sector Development Program Harmonization Manual. Moreover, it will enhance the functionality of the country's multisectoral platform, established with GFF support, and expand the operationalization of the multisectoral nutrition platform at regional and prefectorial levels. Technical and financial support will be provided for implementing action plans across different platforms.

**Subcomponent 3.2: Project monitoring and evaluation *(US$3.5 million, including IDA credit: US$3.0 million & GFF grant: US$0.5 million)***

37. **This subcomponent will support the M&E of the project.** This will be done through: (i) developing an action plan for M&E; (ii) collecting data from MoHPH directorates and other implementing agencies, including support for surveys; (iii) compiling data into project implementation progress reports; (iv) conducting annual expenditure reviews; (v) training health staff involved in the HMIS M&E at all administrative levels; and (vi) supporting consultancies and workshops for review and assessment.

38. **The project will include an evaluation of the scale-of sustainable RBF and free health services for indigent programs to assess their feasibility for nationwide implementation.** Ideally, this will be conducted using a quasi-experimental, evaluative methodology, such as a stepped wedge design or matching approach across intervention

and non-intervention facilities. The evaluation will incorporate capacity-building initiatives, leveraging Guinean academics and students to help strengthen health sector evaluation skills and experience.

**Subcomponent 3.3**: **Strengthening the health information system *(US$3.5 million, including IDA credit: US$3.0 million & GFF grant: US$0.5 million)***

39. **The project will continue strengthening the health information system strategies of the previous World Bank project.** Building on the previous project's successful strengthening of the HMIS and complementing surveillance and data use initiatives in the HSPWCA (P179078), this project will support the *Service de Modernisation des Systèmes d'Information* (SMSI) at the national level to enhance governance, digital infrastructure, and interoperability across key health information subsystems. A digital health system will be developed to govern, align, and rationalize the plethora of digital interventions currently being piloted or used in Guinea, and a common interoperability framework will be established. This framework will serve as the foundation for further strengthening key information systems used for project monitoring, including revitalizing the Human Resource Information System and better integrating supply chain information systems (e.g., Logistic Management Information System [LMIS] and Warehouse Management System). Innovative tools, such as the new DHIS2 Climate app, will be introduced to combine public health and meteorological data for proactive surveillance and predictive modelling of climate and health impacts (e.g., water- and vector-borne diseases, heat-sensitive illnesses, climate impacts on health infrastructure, etc.). Support will also be provided, in collaboration with other partners, for major national surveys such as the Demographic and Health Survey (DHS) and the Harmonized Health Facility Assessment (HHFA).

40. **This subcomponent will also continue supporting to the Guinean government's efforts to reform, modernize, and digitalize the civil registry and identification system in the four regions where the RBF will be implemented**. It will help (i) provide technical assistance to finalize the revision and strengthening of the legal and institutional framework for civil registration to align with international standards, (ii) regularize and issue authentic birth certificates, and (iii) support the digitalization of vital statistics reporting and its interoperability with the HMIS (DHIS2). Further details on climate adaptation and mitigation aspect of this subcomponent is detailed in the Climate Annex.

**Component 4: Contingent Emergency Response Component (CERC) (US$0.0)**

41. **A CERC is included in the project in accordance with the Investment Project Financing (IPF) Policy, paragraphs 12 and 13, for Situations of Urgent Need of Assistance and Capacity Constraints.** This will allow for the rapid reallocation of uncommitted IDA grant funds in the event of an eligible emergency as defined in OP 8.00. A CERC Manual will guide the activation and implementation of the CERC, and an Emergency Action Plan will be prepared to confirm activities and financing for specific events.

**Project Costs and Financing**

42. **The total project cost is US$95 million, including IDA credit: US$85 million & GFF grant: US$10 million (Table 1)**.

**Table 1: Project Components and Costs (US$ million)**

| | Cost (US$, millions) | IDA | GFF |
|---|---|---|---|
| **Component 1: Supply of quality basic RMNCAH-N services** | **55.0** | **50.0** | **5.0** |
| Subcomponent 1.1: Strengthening of basic RMNCAH-N service readiness | 12.0 | 10.0 | 2.0 |
| Subcomponent 1.2: Expansion of the RBF for improved quality RMNCAH-N service delivery | 40.0 | 37.0 | 3.0 |
| Subcomponent 1.3: Enhancing quality through digital health services | 3.0 | 3.0 | 0.0 |
| **Component 2: Stimulating demand for and access to basic RMNCAH-N services** | **31.0** | **27.0** | **4.0** |
| Subcomponent 2.1: Expanding the district-level free health care for the poorest and in climate-vulnerable areas | 9.0 | 7.0 | 2.0 |
| Subcomponent 2.2: Strengthening Community Health and Nutrition | 22.0 | 20.0 | 2.0 |
| **Component 3: Project coordination, management, and M&E** | **9.0** | **8.0** | **1.0** |
| Subcomponent 3.1: Project Coordination and Management | 2.0 | 2.0 | 0.0 |
| Subcomponent 3.2: Project Monitoring and Evaluation | 3.5 | 3.0 | 0.5 |
| Subcomponent 3.3: Strengthening the health management information system | 3.5 | 3.0 | 0.5 |
| **Component 4: Contingent Emergency Response Component (CERC)** | **0.0** | **0.0** | **0.0** |
| **Total** | **95.0** | **85.0** | **10.0** |

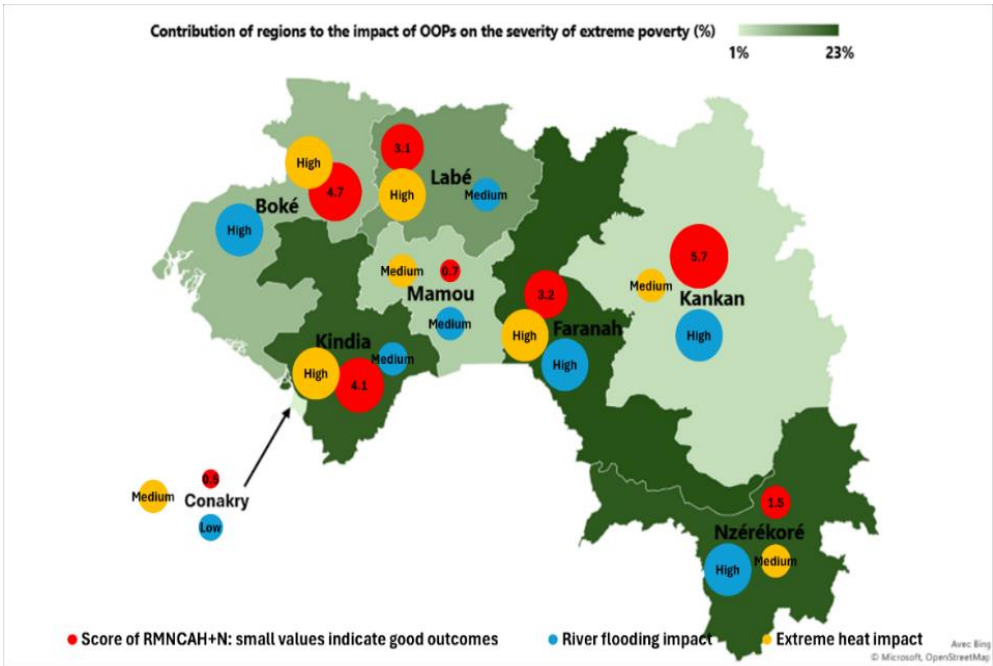
### C. Project Beneficiaries

46. **The primary beneficiaries of this project are women, children, and adolescents who reside in the seven target regions of Guinea who need basic health care.** This core group, including pregnant women, and children under five, will directly benefit from improved delivery of integrated and comprehensive health care services that address their specific needs and work to reduce inequitable health outcomes. The seven regions have an estimated 11.8 million inhabitants, accounting for 84.3 percent of the Guinean population (about 14 million inhabitants in 2024).[38] Direct beneficiaries from these regions include 6.2 million women aged 15-49 and 3.1 million children under five who account for respectively 52.5 percent and 26.4 percent of the population of the seven regions.

47. **Within the seven target regions, four regions have been prioritized for additional interventions to address weaker health outcomes and higher climate sensitivity.** These interventions include the scale-up of RBF to strengthen the volume, quality, and climate resilience of essential health services, as well as the expansion of free health care to cover vulnerable households. The selection of these regions was guided by the RMNCAH-N Investment Case's prioritization of regions, based on performance against key impact and outcome indicators, and each region's climate vulnerability (e.g., flood-prone areas and/or those exposed to extreme heat). Although five regions were identified as underperforming in RMNCAH-N outcomes and climate-sensitive (see map below), ongoing projects in the Boké region and the overall financing considerations of the proposed project led the government to select the four regions of Kankan, Kindia, Faranah, and Labé (about 7.3 million inhabitants, or about 52 percent of Guinea's population) for the RBF and free health care program scale-up.

[38] Republic of Guinea. National Institute for Statistic. 2024. https://population.insguinee.org/resultat/.

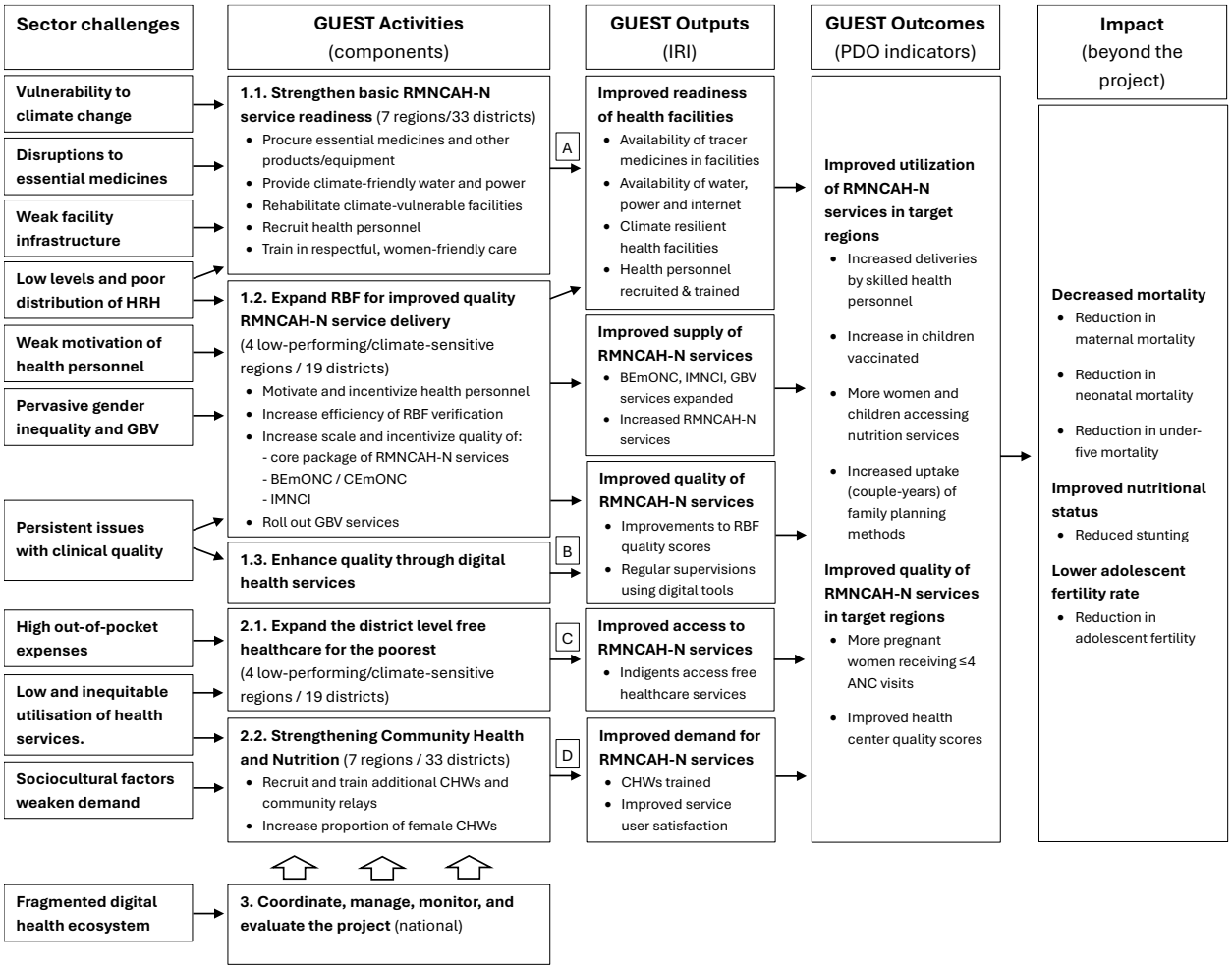
**Figure 1: Mapping of RMNCAH-N Outcomes, Contributions of regions to the impact of OOPs, and Climate Change vulnerability**



## D. Results Chain

**48.** The theory of change diagram below outlines the key sector challenges the project will address, together with the causal chain of activities and expected outcomes for the project.

**Figure 2: The Theory of Change**




Key assumptions in the theory of change include:

**A**: Supply chain improvements by government and other partners enable distribution of medicines.

**B.** Digital supervision tools and the electronic maternity register strengthen clinical quality and supervision.

**C.** Indigents can overcome barriers other than fees and take up free services.

**D.** CHWs act as a bridge between communities and their facilities, improving responsiveness and demand.

## E. Rationale for World Bank Involvement and Role of Partners

**49. The World Bank is the second largest partner in the health sector in Guinea (18 percent of the external financing)**.[26] Despite this contribution, the NHDP's funding gap totals US$2.7 billion (or 62 percent) over its five-year implementation period. The RMNCAH-N Investment Case also faces a financial gap of US$46 million (8

percent of its total cost) for its implementation from 2021 to 2024. The World Bank will contribute to reducing this financing gap through the proposed project. Moreover, as a leading institution in the field of financing and global knowledge, the World Bank offers tailored technical assistance and convening power to help the government of Guinea achieve its goal of UHC by 2030.

50. **In addition, the World Bank can play a crucial role in convening various stakeholders to support the mobilization and allocation of increased resources as well as ensuring alignment and synergies among development partners working in the health sector to scale up effective and efficient RMNCAH-N services and achieve greater impact.** Since Guinea joined the GFF, the health sector's share of the government budget has increased from 7.0 percent in 2014 to 12.7 percent in 2021, with a focus on women and children's well-being. Furthermore, through the current and the future Investment cases (2018-2024 and 2025-2029, respectively), which outline key health sector priorities, with a focus on women and children, and the national coordination RMNCAH-N platform, the GUEST Project (P506072) will support effective collaboration and coordination among health sector partners, ensuring strategic and operational complementarity, avoiding duplication of efforts, and ensuring accountability.

## F. Lessons Learned and Reflected in the Project Design

51. **The GUEST Project will build on the significant achievements and lessons learned from the HSCSP (P163140), previous health projects supported by the World Bank in Guinea, and global lessons on improving the utilization of RMNCAH-N services and strengthening primary health care in low- and middle-income-countries**. The following lessons, derived from the design and implementation of previous World Bank operations and the RBF model implemented in Africa and worldwide, are valuable for the design of the GUEST Project:

- Ensuring country buy-in and ownership by aligning interventions with national planning documents (the National Health Policy, the GFF Investment Case, and the Community Health Plan).
- Coordinating investments with partners (European Union, United States Agency for International Development [USAID], WHO, United Nations Children's Fund, Global Alliance for Vaccines, and Immunization (GAVI), Global Funds, European Union, French Embassy) to avoid programmatic fragmentation of public health interventions and maximize synergy and efficiency.
- Timely provision of essential inputs, such as drugs and medical equipment, skilled providers, and improved working environment with electricity, water, and WASH facilities, is crucial for improving health service delivery.
- Implementing decentralized approaches and strategies coupled with enhanced supervision and control.
- Gradually scaling up RBF and Indigent programs incorporating lessons learned from previous projects and early implementation stages.
- Recruiting, training, and incentivizing local human resources increase their likelihood of remaining in their regional posts.
- Scaling-up and incorporating best practices for a successful community health approach.[39] There is unanimity in the literature that CHW cadres and programs have significant potential to strengthen health and community systems at the interface increasingly identified as community health systems.

52. **The GUEST Project will also be implemented in complementarity and synergy with other operations in Guinea**. The project will complement the Guinea Support to Local Governance Project 2 (P177095), which aims to improve national and local capacity for (i) efficient and accountable service delivery to communities; (ii) climate-resilient local development; and (iii) inclusive citizen engagement. The local government unit (municipalities and prefectures) will be a key stakeholder in the implementation of the community health strategy including the local recruitment of the human resources for health (HRH), especially CHWs and relays, as stipulated in the Law on the

[39] WHO. Geneva. Community Health Worker Programs in the WHO African Region: Evidence and Options-Policy brief. 2017.

Status of Local Civil Servants adopted on December 9, 2024, as well community-based nutrition activities. Both projects will also work together to strengthen the local government's capacity for an effective management of local development funds expected to increase with growing mining revenues, allowing for greater spending on SRMNEA-N services from the community development plan. This involvement of the local government will help improve its accountable management of the health facilities, ensure a sustained availability of funds and qualified human resources for an effective local health service delivery. Finally, the GUEST Project will support the Emergency Response and Nafa Program Support Project Additional Financing (P177214) Project's goal to develop the building blocks of a national responsive social protection system and increase access to responsive safety nets for poor and vulnerable households.

## III. IMPLEMENTATION ARRANGEMENTS

### A. Institutional and Implementation Arrangements

53. **The same Institutional and Implementation Arrangements in place for the HSCSP (163140) and the HSPWCA (P179078) will be applied.** The MoHPH will serve as the implementing agency responsible for executing and managing all aspects of planning, budgeting, and reporting at all levels across the health pyramid, while also providing technical stewardship at the central level. Additionally, a steering committee set up in the HSCSP (163140), will have its mandate expanded to this project no later than one month after project effectiveness. This committee will provide strategic direction, monitor progress, approve AWPB, and semi-annual and annual reports, and ensure that the project runs smoothly and achieves its objectives. The composition of the steering committee will be updated to include new stakeholders such as civil society and private health sector representatives. It will be supported by relevant Directorates and representatives of other entities involved in the project. Directorates at the central level, along with regional and district management teams and the National technical committee, will manage administrative duties related to the project.

53. **A well-experienced PCU will manage the proposed project.** The PCU team has already managed four World Bank-financed projects, including the Ebola Emergency Response Project (P152359), the Regional Disease Surveillance Systems Enhancement (REDISSE; P154807), the Guinea Post-Ebola Support Project, Mamou (P158579), and the Guinea Primary Health Services Improvement Project (P147758). Moreover, it has managed and coordinated three World Bank projects in the health sector, including the Guinea HSCSP (P163140), the Guinea COVID-19 Emergency Response and System Preparedness Strengthening Project (CERSPSP) (P174032), and the Guinea component of the HSPWCA (P179078). The PCU within the MoHPH will handle the day-to-day operational tasks of all project activities, including the preparation of a consolidated annual work plan for approval by the steering committee and comprehensive semester and annual reports for the project. As per the implementation arrangement of the HSPWCA (P179078), the current PCU includes a central PCU based in Conakry and five regional PC in regional health districts. The PCU will be expanded by adjusting the number of staff to ensure smooth implementation and maintain quality management for the regional project and this project.

54. **Finally, the CTN-FBR will oversee the strategic management, coordination, and day-to-day implementation of the RBF program, ensuring its institutionalization and integration at all levels of the healthcare system, as outlined in the RBF manual**. The capacity of this entity will be strengthened in terms of human resources, material resources, organization, and operating procedures, enabling it to fully perform its assigned role. Accordingly, the government will nominate or recruit within three months of the project's effective date the following staff: a national coordinator, a deputy coordinator, a data manager, a M&E specialist, and two RBF experts.

### B. Results Monitoring and Evaluation Arrangements

55. **M&E arrangements will be supported under Component 3 (Project coordination, management, and M&E) and will build on the HSCSP M&E system to track the project's progress.** The Results Framework focuses on accountability for results by emphasizing intermediate outcomes and the learning function of evaluation. It uses existing HMIS data and indicators to measure the progress of the project and its contribution to the national program, not only for efficiency, but also to build on and strengthen existing data collection mechanisms. Hence, it relies on DHIS2, the RBF database, and the Frequent Assessment and Surveillance Tools for Resilience (FASTR) for rapid-cycle monitoring.[40] For other indicators, a baseline survey will be conducted within three months after effectiveness and then annually. Surveys of beneficiary households and other key stakeholders will be conducted at key points during the life of the project to inform the Results Framework. In addition to monitoring concrete results at the intermediate and PDO levels (such as service utilization numbers), once updated census population figures are released, the project will also undertake modelling to estimate the health outcomes (population coverage) for key indicators at both national and subnational levels and use these to better target lagging regions.

56. **The PCU will manage the M&E system**. It will coordinate data collection, analysis, and reporting. In collaboration with other relevant directorates and participating governmental entities, the PCU will prepare and send project reports to the World Bank on a semestrial basis before the implementation mission support, no later than one month after the end of each semester.

### C. Sustainability

57. **Government commitment, ownership, and leadership**. Political commitment, ownership and leadership are strong, as the GUEST Project is fully aligned with national policies and priorities (2015-2024 NHDP, 2020-2024 RMNCAH-N Investment Case) which aim to improve the well-being of the population by improving maternal, child, and adolescents' health, preventing and combating disease, and strengthening the healthcare system. Additionally, central, and local government officials have been actively involved in the project's preparation and will be participating in the planning, implementation, and monitoring of the project. Finally, the MoHPH and the other project's stakeholders will be accountable for the project's outcomes and make necessary adjustments for the PDO achievement.

58. **Technical sustainability will be ensured through knowledge transfer activities throughout the project.** Although previous experience with RBF and a comprehensive training program have provided the capacity to implement Component 1, certain national technical entities, such as the BSD and the National RBF technical unit, as well as other entities involved in the project's implementation, will still benefit from capacity building activities including training and on-the-job coaching. Additionally**,** capacity-building efforts will enhance the MoHPH's operation and maintenance capacity. In line with the support provided under the CERSPSP (P174032, P176706, and P178602), this project will help build a pool of experts in the operation and maintenance of health assets within the MoHPH, including solar panels, medical equipment, materials, and logistics through certified and ongoing training programs. The training will include guidelines specifying the content of operation and maintenance training, highlighting regional best practices, incentive-based mechanisms, and principles of cost-recovery**.**

[40] The GFF FASTR's rapid-cycle monitoring approaches provide timely, rigorous, and high-priority data tailored to each country's specific priorities and data use needs. It supports a collaborative and country-led approach, reinforced by learning and capacity-enhancing activities aimed at practical data use.

59. **Financial sustainability and institutionalization of the RBF and the indigents program**. The project will continue the ongoing policy dialogue on the financing mechanism of the MoHPH to reform it progressively from an inputs-based to an outputs-based financing to institutionalize the RBF within the broader health financing strategy. Building on lessons learned from previous projects and recommendations issued from technical assistance on program sustainability of the program, the project design will include the following cost saving measures:[41]
- verification through electronic records: updating RBF indicators to align them as closely as possible with HMIS indicators. The RBF portal and HMIS will be interoperable (this work has already been carried out under the HSCSP), to facilitate systematic monthly payments and enable quarterly verification without causing financial hardship for healthcare facilities;
- a gradual shift of verification of quantity from a third party (international NGOs) to independent internal government verifiers is expected to lower the verification cost by around 10 percent (from 15 percent to 5 percent).

## IV. PROJECT APPRAISAL SUMMARY

### A. Technical and Economic Analysis

60. **Economic growth in Guinea is hampered by its demographic characteristics and low level of human capital.** Female participation in the labor force is significantly lower than male participation (42 vs. 64 percent in 2023). This represents a substantial productivity loss, exacerbated by the fact that there are about 10 percent more women than men. Moreover, the high dependency ratio, standing at 85 percent, is compounded by a high total fertility rate of 4.1 live births per woman, which is declining slowly.

61. **The project aims to tackle some of the main challenges in the health sector by investing US$95 million, primarily in regions with promising returns.** The project's interventions will help address the demographic challenges and improve human capital in the long term. For example, children without vitamin A deficiency have between 1.43 and 1.64 times the odds of avoiding stunting compared to children with vitamin A deficiency.[42] Additionally, for every 10-percentage point decrease in the prevalence of childhood stunting, adult productivity increases by 3.5 percent.[43] Moreover, several interventions also impact child and maternal mortality rates. It has been shown that vitamin A supplementation decreases under-five mortality rates by 34 percent.[44] Neonatal conditions account for 15 percent of averted disability-adjusted life years (DALYs) in the population. Based on cost-benefit analysis (CBA), investments are projected to yield positive returns, with a net present value (NPV) estimated at US$851.87 million and a benefit-cost ratio of US$10.70, indicating that each US$1 invested through the project yields an economic return of at least US$10.70.

62. **The CBA is based on the number of DALYs averted by the project.** DALYs for a health condition are the sum of years of life lost due to premature death and the years lived with a disability due to prevalent cases of the health condition in a population.[45] Thus, DALYs capture both mortality and morbidity in a population, with one DALY representing the loss of the equivalent of one year of full health. Only indicators that could be converted into

[41] World Bank Group. Health. Health, Nutrition and Population (HNP) Discussion Paper. Petra Vergeer, Anna Heard, Erik Josephson, Lisa Fleisher. Verification in Results-Based Financing for. December 2016.
[42] Ssentongo P, Ba DM, Ssentongo AE et al. Association of vitamin A deficiency with early childhood stunting in Uganda: A population-based cross-sectional study. PloS one, 15(5), e0233615. 2020.
[43] The World Bank Group. The Human Capital Index 2020 Update: Human Capital in the Time of COVID-19. Washington DC: World Bank Group; 2020.
[44] Sommer A, Djunaedi E, Loeden AA et al. Impact of vitamin A supplementation on childhood mortality: a randomized controlled community trial. The Lancet, 327(8491), 1169-1173. 1986.
[45] WHO. The Global Health Observatory. DALYs. https://www.who.int/data/gho/indicator-metadataregistry/imr-details/158.

DALYs were considered as benefits. These include the following PDO indicators and Intermediate Results Indicators: (i) number of deliveries assisted by trained health personnel; (ii) number of children (0-11 months) fully vaccinated; and (iii) number of children (0-23 months) receiving vitamin A supplementation every six months. While other indicators could be converted into DALYs, including them would have duplicated the project's impact because they relate to similar issues already covered by the indicators mentioned above.

## B. Fiduciary

### (i) Financial Management (FM)

63. **The PCU (under the supervision of the MoHPH) of the HSPWCA (P179078)-Guinea, the closed HSCSP (P163140) and CERSPSP (P174032, P176706 & P178602) will have the overall fiduciary responsibilities for the project.** The FM capacities of this PCU were reassessed during the last supervision mission of the HSCSP (163140) (May 2024) and were judged satisfactory with moderate risk. Indeed, adequate FM arrangements are in place and operational. The project has adequate staffing and internal control tools: manual of procedures including FM procedures, accounting software, AWPB, and unaudited interim financial reports (IFRs) for the HSCSP (P163140) and CERSPSP (P174032, P176706, and P178602), are submitted on time and of acceptable quality. Furthermore, the 2020, 2021 and 2022 audit reports for both projects were submitted within the required deadlines and accepted by the World Bank. Finally, the auditor issued an unmodified opinion on the financial statements of both projects for fiscal year 2022 (latest reports received).

64. **The overall conclusion of the FM assessment is that the project's FM arrangements meet the World Bank's FM requirements under the World Bank IPF Policy and Directive**. The risk rating of the project is moderate. Given that the GUEST Project will be implemented in seven regions of Guinea, (i) three additional accountants will be recruited and based in the Regional PCU no later than three months after project effectiveness to strengthen the FM team already in place (two Regional PCU already includes one accountant each hired under the HSCSP (P163140) and the HSPWCA (P179078); (ii) the existing FM manual of procedures revised as part of the HSPWCA (P179078) will be used for the GUEST Project; (iii) the existing Tompro multi-project management software will be configured to account for the new project within three months of the project's effective date; (iv) the Internal auditor's work-program will be updated to include internal audits on this new project; and (v) an external auditor will be recruited.

### (ii) Procurement

65. **Procurement rules and Procedures.** Procurement under the project will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers for Goods, Works, and Non-Consulting and Consulting Services, dated September 2023, and the World Bank's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and updated on July 1, 2016. The project will use Systematic Tracking of Exchanges in Procurement (STEP) to plan, record, and track procurement transactions. In addition, the project will require bidders/primary suppliers of solar-powered cold-chains (and other materials, as applicable) to provide two declarations: a Forced Labor Performance Declaration (which covers past performance) and a Forced Labor Declaration (which covers future commitments to prevent, monitor, and report any forced labor, cascading the requirements to their own sub-contractors and suppliers). In addition, the Recipient will include enhanced language on forced labor in the procurement contracts. The World Bank will conduct a prior review of the procurement of solar panels and components to ensure that enhanced provisions are used by the Recipient.

66. **Project Procurement Strategy for Development (PPSD) and Procurement Plan**. The Recipient has prepared a PPSD that forms the basis for a Procurement Plan for the first 18 months of the project implementation and will provide the basis for the selection methods. Twenty-five contracts have been identified, including one works contract, 16 goods and non-consulting contracts, and eight consulting service contracts. Major procurements will be done for (i) water wells; (ii) medical equipment; (iii) micronutrient supplements; (iv) drugs and consumables; and (v) solar panels.

67. **Procurement capacity and risk assessment**. The procurement assessment reveals that the PCU has adequate procurement staff familiar with World Bank procurement procedures. All procurement under the project will be undertaken by this existing PCU.

68. **The key risks for procurement under the project are as follows**: (i) the need for the PCU to interact with various partners involved in the procurement process; (ii) the MoHPH has one procurement specialist (PS) (*Personne Responsable des Marchés Publics-PRMP*) overseeing all the ministry's public procurement activities and a tender committee involved in project procurement processes; and (iii) outside the Ministry, there is one other actor (*Direction Générale du Contrôle des Marchés Publics* under the Ministry of Finances - DGCMP) who will be involved in the public procurement process.

69. **Given that so many entities will be involved in procurement and contract management processes related to the project, and considering that significant delays in procurement are common, the overall inherent procurement risk is rated as Substantial before mitigation measures.** The residual risk will be Moderate after implementing the following mitigation measures: (i) retention of the PS currently assigned to the project; (ii) provision of procurement training on World Bank procedures to the tender committee and other partners involved in procurement; and (iii) recruitment of a procurement assistant to assist the PS in managing procurement files and ensuring the archiving of project procurement documents three months after project effectiveness.

## C. Paris Alignment

70. **The operation is consistent with the Paris Agreement on climate change.**

- **Adaptation risks and mitigation measures:** Guinea is highly vulnerable to climate change, notably flooding, severe droughts, and extreme heat. The country's vulnerability context is detailed in Annex 2. The project's health service delivery activities are vulnerable to climate shocks attributable to floods and extreme heat. The project will apply resilience measures to address these climate shocks. To support climate-resilient health system development, tools for analyzing and understanding the relationship between climate and health data will be developed. These tools will inform the development of climate-adaptive measures and enhance the capacity of health workers in climate emergency preparedness and response. For example, Subcomponent 3.3 will use the new DHIS2 Climate app to combine public health and meteorological data for proactive surveillance and predictive modelling of climate and health impacts (water- and vector-borne diseases, heat-sensitive illnesses, climate impacts on health infrastructure, etc.), which will be used to inform the implementation of the operation's climate activities. Climate-adapted infrastructural interventions are expected to minimize the impact of climate shocks. Subcomponent 1.1 will improve access to climate-adapted and sustainable water supply and adaptations through the installation of climate-adapted water wells and towers and waterless toilet technologies in climate shock-prone areas. Climate-sensitive data, including flood and extreme heat risk assessments of health facilities, will be used in the implementation of activities under this subcomponent. This includes designing essential RMNCAH-N services in flood-prone areas such as Boké, Faranah, Kankan, and N'zérékoré, and rehabilitating health facilities at risk of flooding and extreme heat. Risk mitigation measures for climate-resilient rehabilitation will include

construction aligned with bioclimatic goals for sustainable design, notably through shading, thermal inertia to ensure comfortable indoor temperatures by using roof and wall insulation that absorbs heat, and generation of an outdoor microclimate from vegetation. Soak-away installation to drain grey waters back to the soil, grid paving, and permeable surfaces will be used to develop resilience against flooding.

- **Mitigation risks and reduction measures:** Most of the project activities, except building rehabilitation and minor construction, are considered universally aligned with the Paris agreement on climate change**.** Climate-resilient rehabilitation of health facilities will incorporate climate mitigation measures, including the installation of solar power and energy-efficient medical equipment for district-level health facilities to ensure at least a 20 percent improvement in energy efficiency in comparison to current practices in Guinea.

## D. Legal Operational Policies

| Legal Operational Policies | Triggered? |
|---|---|
| Projects on International Waterways OP 7.50 | Yes |
| Projects in Disputed Area OP 7.60 | No |

72. **OP 7.50 is applicable to this Project because the project will finance activities that may use or risk polluting waters** of the (i) the Gambia River system (shared by the Gambia, Guinea, Guinea Bissau, and Senegal); (ii) the Senegal River system (shared by Guinea, Mali, Mauritania, and Senegal); (iii) the Niger River system (shared by Benin, Burkina Faso, Cameroon, Chad, Cote d'Ivoire, Guinea, Mali, Niger, and Nigeria); (iv) the Little Scarcies River (shared with Sierra Leone); (v) the Kolenté or Great Scarcies River (shared with Sierra Leone); and (vi) the Moa River (shared with Sierra Leone) and/or their tributaries**,** which are considered international waterways. The exception to the riparian notification requirement according to paragraph 7(a) of the Policy applies because activities are limited to upgrading and modernization of existing health facilities or sanitation infrastructure or upgrading of existing schemes. Given that the water wells will be built in facilities and hospitals alone for their essential functioning, limited amount of water will be abstracted. Moreover, any risks and impacts on the quality of international waterways due to construction work will also be limited. Therefore, the project will not adversely change the quantity and quality of water flows to other riparians. The exception to the notification requirement was approved by the Regional Vice Presidency on August 15, 2024.

## E. Environmental and Social

73. **The overall project environmental and social (E&S) risk is considered as Moderate, with five relevant Environmental and Social Standards (ESSs) (ESS1, ESS2, ESS3, ESS4, ESS10) identified.** The project aims to improve the utilization of quality essential health services for beneficiaries, with minimal infrastructure work related to access to water and solar power systems. Small infrastructure upgrades are planned, and physical and/or economic displacement is not expected. The activities could generate low to moderate direct and indirect E&S risks and adverse impacts for project workers, the community surrounding the health centers, and beneficiaries in general. Several E&S risks and impacts have been identified like exclusion, community and occupational health and safety risks, exacerbation of gender inequalities, SEA/SH risks, medical waste production, and pollution.

74. **The potential risks and negative impacts of the project have been analyzed according to the mandatory requirements set by the World Bank ESSs to prevent and mitigate any adverse effects.** Based on this assessment, the Recipient has prepared the following (E&S) instruments: an Environmental and Social Management Framework (ESMF), an Environmental and Social Commitment Plan (ESCP), a Stakeholder Engagement Plan (SEP), Labor Management Procedures (LMP), and an Infection Control and Waste Management Plan (ICWMP). The ESMF and ESCP were adopted and disclosed in-country on August 19, 2024, and ESMF was disclosed on the World Bank's website on August 20, 2024. The SEP and LMP were disclosed in-country on July 19, 2024, and on the World Bank's website on August 8, 2024.[46] Regional medical waste management plans for Kankan and Kindia will be updated, and new plans will be developed for the remaining regions. The ICWMP will be assessed, and necessary measures will be taken to address any gaps related to the project. The MWMP and ICWMP are expected to be approved by the World Bank and disclosed in-country and on the World Bank's website six months and three months after project effectiveness, respectively.

75. **The PCU has experience with managing E&S risks under the ESF.** However, the E&S performance of former health projects in the country improved from Moderately Unsatisfactory to Moderately satisfactory only during the last project implementation support mission (held in March 2024) after two and a half years of unsatisfactory performance. If performance is unsatisfactory by the third month after project effectiveness, new E&S specialists will be hired no later than six months after the evaluation. This provision will allow to manage the risks associated with the project, including operating and managing a grievance mechanism and undertaking a robust stakeholder engagement given the nature and scope of project activities, and leading the medical waste management strategy with all the associated stakeholders. The E&S team will be strengthened with a full-time GBV Specialist and a full-time medical waste management specialist within three months after project effectiveness. Moreover, as required by the HSPWCA (P179078), four E&S specialists will be hired (two environment and two social specialists) in Regional Health Directorates to oversee the E&S aspects of the subprojects on the ground.

76. **Citizen Engagement: Citizen engagement is central to the project's objective of strengthening the utilization of key services, particularly among marginalized groups, including women, pregnant women, children, and adolescents**. Meaningful engagement of these groups requires a contextually rooted approach throughout all project components. This will involve robust consultations and effective feedback mechanisms built into the project at various levels. The SEP outlines activities to ensure continuous consultations and feedback incorporation throughout project implementation. Key citizen engagement activities include (i) outreach and communication efforts to raise awareness about the project and its services, as well as to solicit beneficiary input and feedback on an iterative basis; (ii) beneficiary satisfaction surveys to inform any calibrations and improvement of service delivery; and (iii) strengthening the project Grievance Redress Mechanism (GRM) to capture grievances, questions, and other feedback from target communities. The project will include two beneficiary feedback indicators: (i) *grievances addressed within the specified project timeline (percentage)* and (ii) *users satisfied with project-delivered services (percentage).*

## V. GRIEVANCE REDRESS SERVICES

77. ***Grievance Redress.*** Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the World Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order

[46] All project ESF related disclosed instruments can be found in the following link: https://documents.worldbank.org/en/publication/documents-reports/documentlist?keyword_select=allwords&srt=score&order=desc&qterm=P506072&lang_exact=

to address project-related concerns. Project-affected communities and individuals may submit their complaint to the World Bank 's independent Accountability Mechanism. The Accountability Mechanism houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of World 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 World Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank 's Grievance Redress Service (GRS), visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank 's Accountability Mechanism, visit https://accountability.worldbank.org.

## VI. KEY RISKS

78. **The overall risk of the proposed operation is Moderate**. Six of the eight risk categories are rated Moderate and two are rated Low (Macroeconomic and Stakeholders). The overall risk rating under this project benefits from the consistent Moderate overall risk rating of the Implementation and Status Results Report of the HSCSP (P163140) since January 2020, as well as the ongoing sector and national development. Each risk category has been systematically assessed with the residual risks accounted for.

79. **Political and governance risk is Moderate. Although Guinea has faced political, social, and governance challenges with political and social instability, these have not significantly hindered the execution of national programs and the achievement of development projects' objectives in the health sector.** The main challenges include: (i) restriction on freedom of expression with the arrest of critical voices, the banning of civil protests and large political gatherings; (ii) deviation of the transition road map agreed with the Economic Community of West African States (ECOWAS) with a return to constitutional order by 2025 rather than December 2024. The persistence of political and governance volatility could fuel civil unrest that are driven by demands for greater inclusiveness, accountability, and improved governance. Nonetheless, according to the Bertelsmann Transformation Index (BTI) 2024 report,[47] since the coup d'état by the National Committee for Reconciliation and Development (*Comité National du Rassemblement pour le Développement; CNRD*) in September 2021 and the ambitious reforms undertaken by the new government, there has been a notable reduction in corruption and autocratic governance compared to the previous administration's later years. Nevertheless, there is still uncertainty about the transition period after December 2024 as well as political and social stability after the next presidential election, though the risk of a significant impact on the operation of health services, especially in the project's regions and thus on the achievement of the PDO is considered to be moderate.

80. **Sector strategies and policies risk is Moderate. The MoHPH has developed robust sector strategies and policies in line with its international commitments, including the Sustainable Development Goals 2030.** Since the 2016-2017 Ebola virus disease outbreak, the government has reaffirmed its strong commitment to the Heath Sector, as evidenced in various national policy documents, such as the 2022-2025 Interim Reference Program (*le Programme de Référence Intérimaire 2022-2025) and the NHDP 2020-2024*. There has also been continuous improvement in sector financing through the state budget. Overall, the health policies and strategies, including the planned reforms, remain appropriate for the project, and the project is aligned with the government's national health policy and program. Its design draws on lessons learned from the implementation of current World Bank-financed projects and addresses global challenges facing the country. To mitigate the risk of intervention misalignment, the project will strengthen support for the RMNCAH-N multisectoral platform and enhance the MoHPH's capacity to

[47] Bertelsmann Stiftung. BTI 2024 Country Report- Guinea. Gütersloh: Bertelsmann Stiftung, 2024.

coordinate health sector interventions, including those financed by partners, to reduce fragmentation. The main residual project design risks stem from its complexity, the challenge of implementing a comprehensive set of interventions (including RBF, free health care for the poorest, and e-health) in new regions with relatively low capacity to support approaches, as well as the risk of fraudulent invoicing for reimbursements. Mitigation measures will include: (i) gradually scaling up interventions; (ii) updating the national manual on RBF to clarify institutional arrangements and procedures for the RBF program; and (iii) independent verification and cross-verification of RBF results, payments and for the indigent approach.

81. **The inherent risk to institutional capacity for implementation and sustainability is deemed Moderate** given the government's track record in successfully implementing several World Bank-financed projects, including the Primary Health Service Project (P147758), the Ebola Emergency Response Project and its Additional Financing (P152359 and P152980), the Regional Disease Surveillance Systems Enhancement (REDISSE; P154807), the Guinea Post-Ebola Support Project, Mamou (P158579), the HSCSP (P163140), and the CERSPSP and its two additional financing (P174032, P176706 & P178602). As a mitigation measure, the project will provide training, capacity-building, support for a range of reforms, and ensure close monitoring.

82. **The residual procurement and FM risks of the project are both rated as Moderate, reflecting remaining fiduciary challenges, despite the MoHPH's satisfactory performance in executing World Bank projects**. To mitigate FM and procurement risks, action plans will include (i) significant technical assistance and support to the MoHPH to ensure sufficient fiduciary capacity for effective project implementation; (ii) updating the Project Implementation and FM Manual to strengthen internal controls around RBF and indigent payments; and (iii) establishing a direct disbursement mechanism from the PCU's commercial account to health centers' bank accounts after verification of all RBF payments.

83. **The E&S risks are both rated as Moderate**. The SEA/SH risk level for this project is deemed to be substantial. The main environmental concern is the production of infectious medical waste at health centers and surrounding areas due to the increased patronage of medical health centers. Additional concerns include managing unusable expired medical products and ensuring local community health and safety. Other key environmental issues are related to (i) pollution and noise nuisance and (ii) occupational health and safety of workers. Minor infrastructure activities, such as small-scale rehabilitation of existing health facilities, are expected, but no land acquisition or economic and physical displacement will occur. Key social risks include the potential exclusion of disadvantaged and vulnerable groups from project benefits (mainly access to health services), as well as community and occupational health and safety risks (exposure to biological, chemical, and psychological hazards in health care settings). These risks could increase vulnerability and undermine the project's general objectives. Other associated risks involve exacerbating existing gender inequalities and raising ethical considerations regarding informed consent, privacy, confidentiality, and equitable resource distribution. Additionally, SEA/SH risks could be specifically exacerbated. To address these risks, the Recipient prepared and adopted E&S instruments (See paragraph 74 above).

## VII. RESULTS FRAMEWORK AND MONITORING

### PDO Indicators by PDO Outcomes

| Baseline | Period 1 | Closing Period |
|---|---|---|
| **Improved utilization of RMNCAH-N Services** | | |
| **Number of women receiving deliveries attended by skilled health personnel (Number of people) [CRI]** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 595,948 | 1,324,330 |
| **Family planning couple-years of protection (Number)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 1,161,099 | 2,580,220 |
| **Number of children immunized (Number of people) [CRI]** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 531,099 | 1,180,220 |
| **Number of women and children who have received basic nutrition services (Number of people) [CRI]** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 643,587 | 1,430,194 |
| **Improved quality of RMNCAH-N Services** | | |
| **Pregnant women receiving four antenatal care visits (Number)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 551,109 | 1,224,687 |
| **Average score of the RBF quality-of-care checklist (Percentage)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 40 | 55 | 75 |

### Intermediate Indicators by Components

| Baseline | Period 1 | Closing Period |
|---|---|---|
| **Supply of quality basic RMNCAH-N services** | | |
| **Six monthly doses of vitamin A supplementation received by children aged 0-23 months (Number)** | | |

| | | |
|---|---|---|
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 531,857 | 1,181,906 |
| **Health workers receiving in-service training on RMNCAH-N, women-friendly services and GBV (Number)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 700 | 900 |
| **Average service readiness of health centers for integrated management of newborn and childhood illnesses (IMNCI) (Percentage)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 41 | 57 | 75 |
| **Health centers meeting Basic Emergency Obstetric and Newborn Care (BEmONC) standards (Number)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 2 | 40 | 50 |
| **RMNCAH-N tracer drug availability in health centers (Percentage)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 60 | 75 | 80 |
| **Health facilities benefitting from new installations of climate-adapted water supply and/or solar power (Number)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 150 | 175 |
| **New Adolescent Family Planning users (Number)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 277,071 | 615,715 |
| **RBF health facilities that have received payments in the last quarter (Percentage)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 80 | 90 |
| **Reviews of maternal dealths (Percentage)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 26 | 70 | 90 |
| **Birth declaration transmitted by the health facilities to civil status centers (Percentage)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 3 | 70 | 90 |
| **Stimulating demand for and access to basic RMNCAH-N services** | | |
| **RMNCAH-N Services access free-of-charge by Indigent People under the free health care program (Number)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 241,650 | 537,000 |
| **New Community Health Workers (CHW) recruited and trained in RMNCAH-N skills and climate change, by gender (Number)** | | |

| | | |
|---|---|---|
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 500 | 675 |
| ➢New Female CHWs recruited and trained in RMNCAH-N and climate change (Percentage) | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 15 | 25 | 35 |
| **New Community Relays recruited and trained in RMNCAH-N skills and climate change, by gender (Number)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 5,208 | 6,945 |
| ➢New Female Community Relays recruited and trained in RMNCAH-N and Climate Change (Percentage) | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 20 | 30 | 35 |
| **Users satisfied with the project delivered services (Percentage)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 40 | 60 | 75 |
| **Project coordination, management, and monitoring and evaluation** | | |
| **Health centers receiving at least one district supportive supervision visit per quarter (Percentage)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 50 | 75 | 90 |
| **Diseases for which HMIS climate-and-health modelling estimates are available (Number)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 2 | 3 |
| **National Health Accounts (NHA) and Health Expenditure Analysis Reports (PER) products (Yes/No)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| No | Yes | Yes |
| **Grievances addressed within the project specified timeline (Percentage)** | | |
| Jul/2024 | Jul/2027 | Dec/2029 |
| 0 | 60 | 80 |
| **Contingent Emergency Response Component** | | |

### Monitoring & Evaluation Plan: PDO Indicators by PDO Outcomes

| Indicator | Description | Frequency | Data source | Methodology for data collection | Responsibility for data collection |
|---|---|---|---|---|---|
| Improved utilization of RMNCAH-N Services | | | | | |
| Number of women receiving deliveries attended by skilled health personnel (Number)[CRI] | Cumulative number of women receiving deliveries attended by skilled health personnel | Quarterly | HMIS (DHIS2) | Monthly HMIS reports | HMIS / MoHPH |
| Number of children immunized (Number)[CRI] | Cumulative number of children immunized | Quarterly | HMIS (DHIS2) | Monthly HMIS reports | HMIS / MoHPH |
| Number of women and children who have received basic nutrition services (Number)[CRI] | Cumulative number of women and children who have received basic nutrition services | Quarterly | HMIS (DHIS2) | Monthly HMIS reports | HMIS / MoHPH |
| Family planning couple-years of protection (Number) | Cumulative number of couple-years of family planning protection provided in the 7 project regions. | Quarterly | HMIS (DHIS2) | Monthly HMIS reports | HMIS / MoHPH |
| Improved quality of RMNCAH-N Services | | | | | |
| Pregnant women receiving four antenatal care visits (Number) | Cumulative number of women in the 7 project regions who have attended a fourth antenatal visit. | Quarterly | HMIS (DHIS2) | Monthly HMIS reports | HMIS / MoHPH |
| Average score of the RBF quality-of-care checklist (Percentage) | Average quality score of RBF facilities for the latest quarter in the 4 prioritized regions. | Quarterly | RBF Portal | Quarterly district supervision visits | District Health Teams |

### Monitoring & Evaluation Plan: Intermediate Results Indicators by Components

| Indicator | Description | Frequency | Data source | Methodology for data collection | Responsibility for data collection |
|---|---|---|---|---|---|
| Supply of quality basic RMNCAH-N services | | | | | |
| Six-monthly doses of vitamin A supplementation received by children aged 0-23 months (Number) | Cumulative number of vitamin A doses (total of 1st plus 2nd doses) distributed to children aged 0-23 months | Quarterly | HMIS (DHIS2) | HMIS reports | HMIS / MoHPH |
| New Adolescent Family Planning users (Number) | Cumulative number of adolescents who received family planning services | Quarterly | HMIS (DHIS2) | HMIS reports | HMIS / MoHPH |
| Health workers receiving in-service training on RMNCAH-N, women-friendly services, and GBV (Number) | Cumulative number of health workers receiving a standard package of RMNCAH-N training that includes training on GBV and women-friendly services | Quarterly | Administrative records | Training reports | PCU / MoHPH |
| Average service readiness of health centers for integrated management of newborn and childhood illnesses (IMNCI) (Percentage) | Latest average IMNCI readiness score of facilities in the seven project regions (SARA/HHFA definition of IMNCI readiness) | Six-monthly | FASTR facility surveys | FASTR telephone surveys of a sample of facilities | PCU / BSD |
| Health centers meeting BEmONC standards (Number) | Number of health centers meeting 80 percent or more of national BEmONC standards in the seven project regions | Six-monthly | FASTR facility surveys | FASTR telephone surveys of a sample of facilities | PCU / BSD |

| | | | | | |
|---|---|---|---|---|---|
| RMNCAH-N tracer drug availability in health facilities (Percentage) | Average percentage of RMNCAH-N tracer medicines that are in-stock at month-end in health facilities in the seven project regions. | Quarterly | LMIS / DHIS2 | LMIS reports | National Directorate of Pharmacies and Medicines (NDPM) |
| Health facilities benefitting from new functional installations of climate-adapted water supply and/or solar power (Number) | Health facilities in seven project regions that have a functional project-funded infrastructure package that ensures both climate-adapted water supply and/or solar power | Six-monthly | FASTR facility surveys | FASTR telephone surveys of a sample of facilities | PCU / BSD |
| Reviews of Maternal deaths (Percentage) | Proportion of maternal deaths assessed among maternal deaths | Quarterly | HMIS (DHIS2) | HMIS reports | PCU / MoHPH |
| Birth declarations transmitted by the health facilities to Civil status centers | Number of birth declarations transmitted to the town hall by the health facilities (health post, health centers, and districts hospitals) | Quarterly | HMIS / DHIS2 | HMIS reports | HMIS / MoHPH |
| RBF facilities that have received payments in the last quarter (Percentage) | Proportion of facilities with an active RBF contract in the four prioritized regions that received an RBF payment in the latest quarter | Quarterly | RBF Portal | RBF invoicing and payment records | CTN-FBR / PCU |
| Stimulating demand for and access to basic RMNCAH-N services for the poorest and most climate-vulnerable people | | | | | |
| RMNCAH-N services accessed free-of-charge by indigent people under the free health care program (Number) | Cumulative number of services provided free-of-charge to pre-identified indigents and reimbursed under the district free healthcare program | Quarterly | RBF Portal | RBF invoicing and payment records | CTN-FBR / PCU |

| | | | | | |
|---|---|---|---|---|---|
| New CHWs recruited and trained in RMNCAH-N skills and climate change (Number), by gender (Percentage) | Cumulative number of new CHWs in the seven project regions recruited and trained in an integrated high impact package of RMNCAH-N skills and climate change using project funds | Quarterly | Administrative records | Community health recruitment and training records | National Directorate for Community Health and Traditional Medicine (NDCHTM) / PCU |
| New female CHWs recruited and trained in RMNCAH-N skills and climate change, (Percentage, Custom Breakdown) | Proportion of new CHWs recruited and trained in RMNCAH-N skills and climate change that are female | Quarterly | Administrative records | Community health recruitment and training records | NDCHTM / PCU |
| New community relays recruited and trained in RMNCAH-N skills and climate change, by gender (Number) | Cumulative number of new community relays in the seven project regions recruited and trained in RMNCAH-N skills and climate change using project funds | Quarterly | Administrative records | Community health recruitment and training records | NDCHTM / PCU |
| New female community relays recruited and trained in RMNCAH-N skills and climate change, (Percentage, Custom Breakdown) | Proportion of new CHWs recruited and trained in RMNCAH-N and climate change that are female | Quarterly | Administrative records | Community health recruitment and training records | NDCHTM / PCU |
| Users satisfied with project delivered services (Percentage) | Proportion of users that are satisfied with the RMNCAH-N services they have received from project-funded facilities in the four priority regions | Quarterly | Monitoring survey | Monitoring survey of health facility clients | |
| Project coordination and Management, and Monitoring and Evaluation | | | | | |
| Health centers receiving at least one district supportive supervision visit per quarter (Percentage) | Proportion of RBF facilities in the four priority regions receiving at least one supervision visit in the previous quarter | Quarterly | RBF Portal | RBF community surveys | CTN-FBR / PCU |

| | | | | | |
|---|---|---|---|---|---|
| Diseases for which HMIS climate-and-health modelling estimates are available (Number) | Number of climate-sensitive diseases for which complex modelling has been performed using a combination of climate/weather data and national HMIS data | Quarterly | Administrative records | Review of analytical reports | BSD / PCU |
| National Health Accounts (NHA) and Health Expenditure Analysis Reports (PER) produced | Evidence of National Health Accounts (NHA) and Health Expenditure Analysis Reports (PER) produced | Quarterly | Administrative records | Review of analytical reports | BSD / PCU |
| Grievances addressed within the specified project-timeline" (percentage) | Proportion of grievances that are handled within the time specified in the project implementation manual | Quarterly | Administrative records | Review of analytical reports | PCU |
| Contingent Emergency Response Component | | | | | |

## ANNEX 1: Implementation Arrangements and Support Plan

### Project Institutional and Implementation Arrangements

1. The MoHPH will be the Implementing Agency for the proposed project with oversight and coordination responsibilities. Thus, the MoHPH will be responsible for the execution and delivery of the project and accountable for achievement of the PDO. The detail of the institutional arrangement and support plan is as follow:

- A Steering committee will be established by the expansion of the mandate of the Steering committee established for the HSCSP (163140) through a ministerial administrative order, no later than one month after the project's effective date. It will be chaired by the Secretary General of the MoHPH. The committee will include representatives from the Ministry of Economy and Finance, the Ministry of Budget, the Ministry in charge of decentralization, the Ministry of Women's Promotion, Childhood, and Vulnerable People, Civil Society Organizations, and the private health sector. The composition of the steering committee will be updated to include new stakeholders such as civil society and private health sector representatives. It will provide strategic direction, overall oversight, monitor progress, approve AWPB, and semi-annual and annual reports, and ensure that the project runs smoothly and achieves its objectives. It will be supported by relevant Directorates and the representatives of other entities involved in the project. Directorates at the central level, along with regional and district management teams will manage administrative duties related to the project.

- The PCU will oversee the entire project FM, including the management of funds and the designated account (DA) and will primarily be responsible for: (i) planning and budgeting; (ii) disbursement and financial reporting; (iii) procurement; and (iv) internal controls and auditing. The FM specialist of the current PCU will have overall oversight of the project's FM system. In addition to the current accountant based in the central PCU, three accountants, hired on a competitive basis as part of the Guinea component of the HSPWCA (P179078) and based in five health regions, will support the current FM team. Seven PCU regional offices will support the central PCU to coordinate and manage day-to-day activities in the ground with the collaboration of the health regional directorates. To ensure an effective and timely support, the regional PCU will be located in the health regional directorates. Each regional PCU will include a regional coordinator, a M&E specialist, an accountant, and E&S specialist.

- The National RBF Technical Unit will oversee the strategic management, coordination, and day-to-day implementation of the RBF program, ensuring its institutionalization and integration at all levels of the healthcare system, as outlined in the RBF Manual. This includes: (i) ensuring revisions and adjustments to performance indicators, indicator prices, and the RBF scheme and manual; (ii) coordinating the contracting process and the signing of performance contracts; (iii) coordinating monthly quantity verification of health facilities and quarterly quality performance verification of regional and district health departments, as well as Independent Verification Agencies; (iv) ensuring timely payment of performance invoices; (v) coordinating and monitoring the preparation of the consolidated RBF AWPB; (vi) providing training and support to health service providers and other stakeholders; (vii) supervising, monitoring, and evaluating the implementation of the RBF program; and (viii) consolidating and finalizing the RBF bi-annual and annual reports. To ensure independent verification, the ACV, the PVVC and the RVVC will be contracted to conduct monthly quantity verifications and the local NGOs will be contracted to conduct semi-annual community verifications during the project period.

- The multisectoral platforms, including the RMNCAH-N multisectoral platform will provide a collaborative framework to ensure that interventions are comprehensive and sustainable by leveraging a coordinated approach across various sectors. These platforms will help address the complex and interlinked determinants of health by

involving multiple stakeholders, including government ministries, donors, civil society, and private sector partners. They will be decentralized and operational at the regional and prefectorial levels.

- The project will collaborate with relevant stakeholders to actively engage citizens and communities, ensuring large, continuous, and effective information dissemination, and valuable citizen feedback as well. It will also establish strong partnerships with the GFF, which has made significant commitments to providing financial and technical support to the project. Furthermore, the World Bank will work with the other partners (the Global Fund against AIDS, tuberculosis and malaria, the Vaccine Alliance [GAVI], the USAID, the European Union [*Délégation de l'Union Européenne*], the French Ambassy, WHO, the UNICEF, the United Nation Population Fund [UNPFA] and the Japanese International Cooperation Agency [JICA]) in coordinated efforts to align strategies, funding, and activities with the country's health priorities. This harmonization will be crucial for providing a comprehensive technical and financial support to the Government and maximizing the impact of donor contributions, avoiding duplication of efforts, and ensuring that resources are used efficiently to improve health outcomes.
- To uphold accountability and transparency, the World Bank will maintain close oversight of the project's implementation. Six-monthly implementation support missions will be conducted to provide on-the-ground assistance and oversight to ensure the effective execution of the project, review compliance, address any challenges, adjust implementation strategies, and facilitate the achievement of the PDO. Regular progress reports and evaluations will be conducted to comprehensively assess the project's effectiveness and gauge its achievements and impact. This rigorous oversight is essential to ensuring that the project is achieving its intended objectives and delivering tangible benefits to the communities it aims to serve.
- The Government will update the Project Implementation Manual adopted under the HSCSP (P163140) to outline detailed arrangements and procedures, including (i) detailed description of the project and institutional arrangements for implementing the project, (ii) the FM manual including monitoring, evaluation, reporting, financial management and accounting, and governance procedures for the project, (iii) implementation of environmental and social instruments referred to in the ESCP, (iv) the RBF procedures manual, and (v) other technical, administrative, fiduciary and coordination arrangements. The MoHHP will adopt the Project Implementation Manual no later than one month after the project's effectiveness.

**Table A1.1: Summary of Implementation Support Responsibilities**

| Level | Element | Responsibility |
|---|---|---|
| National | Steering Committee | Oversight of project in alignment with the NHDP |
| | Secretary General of the MoH | Project coordination and oversight |
| | CTN-FBR | Overall management for RBF program implementation |
| | MoH directorates | Technical support for project implementation and capacity building, according to their respective missions |
| | FDSI and ANIES | Identification and issuance of indigent cards |
| | Sectoral Unit in charge of the procurement process | Support procurement of project |
| | National Public Hygiene Directorate | E&S safeguards of project |
| | RMNCAH-N multisectoral platform | Technical support and coordination of multiple stakeholders for an improved RMNCAH-N services delivery |
| | PCU | Day-to-day, fiduciary, E&S management and coordination of the project |

| | | |
|---|---|---|
| | Technical assistance providers | Support for project implementation, capacity building, and operations research activities |
| Regional and Prefectural | Regional Councils, the regional verification teams, regional health directorates, health district management teams | Regulatory agencies involved in verification activities and decentralized coordination of RBF |
| | ACV, PVVC and RVVC | Monthly quantity verifications |
| | NGOs and other community service providers | Semi-annual community verification activities and support to the implementation the National Community Health Strategy and Nutrition activities |
| | Health facilities | Provision of health and nutrition services (promotional, preventive, and curative) |
| | CHWs | Implementation of the National Community Health Strategy and the community-based RBF activities |

### Financial Management and Disbursements

2. The FM risk assessment and mitigation measures are summarized in the Table A1.1. The FM Action Plan in Table A1.2 has been developed to mitigate the overall FM risks identified during the assessment. Subject to the implementation of the agreed action plan, the overall residual FM risk of the project is rated as Moderate.

**Table A1.2: Fiduciary Risks and Mitigation Measures**

| Type of Risk | Residual Risk Rating | | Brief Explanation of Changes and any New Mitigation Measures |
|---|---|---|---|
| | Last supervision | FM assessment review of the new project | |
| **Inherent Risk** | | | |
| **Country level** | S | S | Low public FM capabilities. |
| **Entity level** | M | M | The PCU is familiar with World Bank FM rules and procedures. |
| **Project level** | S | M | The PCU has already implemented similar projects. |
| **Overall Inherent Risk** | **S** | **S** | |
| **Control Risk** | | | |
| **Budgeting** | S | S | During the supervision mission, the AWPB was prepared late due to the ongoing project restructuring. We noted changes in activities that we not reflected in the revised AWPB. |
| **Accounting** | M | M | The PCU accounting software will be customized to include the new project activities. |
| **Internal control** | M | M | The existing manual will be revised as part of the HSPWCA (P179078) and will be used for the GUEST Project. |
| **Funds Flow** | M | M | The PCU is familiar with World Bank disbursement rules and procedures. |
| **Financial Reporting** | M | M | The IFR was submitted on time and acceptable. |
| **External Auditing** | M | M | Audit reports were submitted on time and acceptable. |

| Type of Risk | Residual Risk Rating | | Brief Explanation of Changes and any New Mitigation Measures |
|---|---|---|---|
| | Last supervision | FM assessment review of the new project | |
| **Overall control risk** | **M** | **M** | |
| **Overall Residual FM risk** | **M** | **M** | **Moderate** |

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

**Table A1.3: FM Action Plan**

| FM Activity | Frequency |
|---|---|
| **Desk reviews**<br>IFRs' review<br>Audit report review of the program | <br>Quarter<br>Annually |
| **On-site visits**<br>Review of overall operation of the FM system (Implementation Support Mission)<br>Monitoring of actions taken on issues highlighted in audit reports, auditors' management letters, internal audits, and other reports | <br>Once a year for moderate risk<br><br>As needed |
| **Capacity-building support**<br>FM training sessions | <br>Before project effectiveness and during implementation as needed |

**Financial Management Arrangements**

3. **Planning and budgeting:** The PCU will prepare an initial detailed work plan and budget for implementing project activities over the entire life of the project. Thereafter, the PCU will prepare an updated AWPB annually. The annual budget will be submitted to the project steering committee for approval and thereafter to the IDA for no-objection, not later than November 30 of the year preceding the year of implementation.

4. **Accounting and records:** The existing Tompro multi-project management software will be configured to take the new project into account. The West African Francophone countries accounting standards (SYSCOHADA) for non-profit entities, effective from January 1, 2024, will be applied.

5. **Financial Reporting:** The PCU will submit a full set of unaudited IFRs consolidated for all implementing entities, project components, and sources of funding for each calendar quarter throughout the life of the project. The IFRs will be due 45 days after the end of each quarter. The format and content of the IFR will remain consistent with previous projects.

6. **Internal control:** The FM Procedures Manual, currently in place at the PCU and used by the HSCSP (P163140) and CERSPSP (P174032, P176706 & P178602), must be revised as part of the HSPWCA (P179078)-Guinea. This revised manual will be updated to be used for the GUEST Project. The internal auditor will include the internal audit of this new project in his work program.

7. **External audit:** The annual audit of the project's financial statements will be conducted by an independent auditor with qualifications and experience acceptable to the World Bank. The audit report will be submitted to the World Bank no later than six months after the end of the audited period. The project will comply with the World Bank's disclosure policy for audit reports.

8. **Disbursements arrangements:** The project will finance 100 percent of eligible expenditures, including taxes. A DA will be opened in US$ at the Central Bank of Guinea, and Project Account will be opened in GNF at commercial banks

under terms and conditions acceptable to the IDA. The ceiling of the DA will be stated in the Disbursement and Financial Information Letter. An initial advance not exceeding the DA ceiling will be made, and subsequent disbursements will be on the submission of statements of expenditure reporting the use of the initial/previous advance. The option to disburse based on the submission of quarterly unaudited IFRs (also known as report-based disbursements) may be considered once the project meets the necessary criteria. Other disbursement methods (including reimbursement, direct payment, and special commitment) will also be available. The minimum value of applications for these methods will be stated in the Disbursement and Financial Information Letter. Funds will be disbursed in accordance with project expenditure categories and components, as shown in the Financing Agreement.

9. **Transparency, accountability, and anti-corruption** efforts will be supported via a complaint handling mechanism, a communication strategy to inform the public through the media about all aspects of the project, and the publication of audited financial statements. The PCU will address fraud and anti-corruption issues in accordance with the World Bank Anti-Corruption Guidelines referred to in the Financing Agreement.

### Procurement

10. **Procurement rules and Procedures**: Procurement under the project will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers for Goods, Works, and Non-Consulting and Consulting Services, dated September 2023, and the World Bank's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and updated on July 1, 2016. The project will use Systematic Tracking of Exchanges in Procurement (STEP) to plan, record, and track procurement transactions.

11. **Procurement manual**: The Procurement Manual, which outlines procurement arrangements, roles and responsibilities, methods, and requirements, will be a section of the Project Implementation Manual. The Project Implementation Manual shall be updated by the Recipient and agreed upon with the World Bank, no later than one month after project effectiveness.

12. **Procurement methods**: Goods and non-consulting services will be procured in accordance with the requirements outlined in 'Section VI. Approved Selection Methods: Goods, Works, and Non-Consulting Services of the Procurement Regulations.' Consulting services will be procured in accordance with the requirements in 'Section VII. Approved Selection Methods: Consulting Services of the Procurement Regulations.' All these requirements have been incorporated into the PPSD and the Procurement Plans approved by the World Bank.

**Table A1.4: Thresholds for Procurement Methods and Prior Review**

| Type of procurement | High risk | Substantial risk | Moderate risk | Low risk |
|---|---|---|---|---|
| Works including turnkey, supply and installation of plant and equipment, and PPP | 5 | 10 | 15 | 20 |
| Goods, information technology, and non-consulting services | 1.5 | 2 | 4 | 6 |
| Consultants: Firms | 0.5 | 1 | 2 | 4 |
| Consultants: Individuals | 0.2 | 0.3 | 0.5 | 0.5 |

13. **The risks and mitigation measures are provided below**.

**Table A1.5: Action Plan for Strengthening Procurement Capacity**

| Risk/Issue | Action | Responsibility | Timeline |
|---|---|---|---|
| The PCU will communicate with various partners that will be involved in the procurement process | • Put in an efficacy communication plan with all actors.<br>• Maintain the current PS.<br>• Recruit a Procurement Assistant to help the PS in the procurement task three months after project effectiveness.<br>• Provide procurement training in World Bank procedures to the tender committee and other partners involved in the procurement process during the life of the project. | PCU<br>MoHPH<br>World Bank | During the project implementation |

## ANNEX 2: Climate Note

1. **The project has been screened for short and long-term climate disasters and risks and found to be highly exposed, with the risk to project activities assessed as moderate.** Guinea faces increasing frequency and severity of droughts, floods, and extreme heat. The Notre Dame Global Adaptation Index ranks Guinea 157th out of 185 countries in terms of adaptive capacity for climate shocks, demonstrating low resilience and high vulnerability to climate risks. Rainfall varies considerably across the country, with the highest annual rainfall in the north and along the coast, gradually decreasing towards the south and inland.[48] Coastal and southern regions are prone to floods and have a monsoon climate with rainfall exceeding 100 mm per month, a shorter dry season, and a narrower temperature range than the interior. There are diverse elevation levels across Guinea, with a concentration of higher terrains in the Fouta Djallon region and lower elevations towards the coastline where Conakry is located. Like the Sahelian climate, Northern or Upper Guinea is characterized by higher temperatures and greater temperature ranges, a shorter rainy season, and a longer dry season (December–May).[49] Although Guinea has abundant forests that could serve as a carbon sink, significant deforestation has reduced the forested area by 33 percent between 1972-2000, limiting its ability to sequester $CO_2$. With its favorable climate for agriculture (average annual rainfall of 1,200 mm in the North and Northeast, 4,000 mm in Conakry, and up to 1,800 mm in the mountains of Fouta-Djalon) Guinea is both exposed and highly sensitive to climate change.[49] Generally hot and humid, Guinea experiences a monsoonal rainy season (June to November) with southwesterly winds and a dry season (December to May) with northeasterly harmattan winds. Climate change is causing increasingly intense and variable rainfall, extreme heat, and climate-exacerbated landslides in forested areas.[50] Current projections point to unpredictable and variable rainy seasons, a temperature increase of 1.1 – 3°C by 2060, and a sea-level rise of 0.4 m–0.7 m by 2100.[48]

2. **Guinea's climate vulnerabilities have severely impacted vulnerable populations, including displaced persons, increased poverty, widened gender disparities, and aggravated food insecurity.** With 97 percent of cultivation being rainfed, climate change has significantly impacted crop yields and the agriculture sector. Agriculture, along with natural resources, such as mining and hydropower, as well as the manufacturing and services sectors, are key economic sectors for Guinea. Approximately 57 percent of rural households rely on agriculture for subsistence, and the sector employs 52 percent of the workforce.[49] The Simandou project, which aims to harness the world's largest undeveloped iron ore deposit, expected to start by the end of 2025, is anticipated to have potentially negative impacts on nature, biodiversity, water resources, and local communities.

3. **The impact of climatic change on water- and vector-borne diseases and the impact of climate shocks on the already strained health system, which has limited adaptation capacity, have greatly affected health in Guinea.** Notably, the distribution, variability, and pathogenicity of malaria and other infectious diseases prevalent in Guinea have worsened due to climate change.[48,51,52] These infectious diseases include Ebola, Lassa fever, Rift Valley fever, avian flu, anthrax, and zoonotic tuberculosis.[48] Malaria accounts for 12.5 percent of the disease burden (in DALYs).[53] Frequent floods also contribute to an increase in acute watery diarrhea cases, with diarrhea in Guinea

[48] USAID. Climate Risk in Guinea: Country Profile. 2018.
[49] World Bank. Climate Change Knowledge Portal. Guinea. 2021.
[50] UNDP. Guinea launches project aimed at strengthening the climate resilience of communities in its forested region. 2023. https://www.undp.org/africa/press-releases/guinea-launches-project-aimed-strengthening-climate-resilience-communities-its-forested-region.
[51] Sylla MB, Giorgi F, Pal JS et al. Projected Changes in the Annual Cycle of High-Intensity Precipitation Events over West Africa for the Late Twenty-First Century. Journal of Climate 28:6475-6488. 2015.
[52] Tonnang HE, Kangalawe RY, Yanda PZ. Predicting and mapping malaria under climate change scenarios: The potential redistribution of malaria vectors in Africa. Malaria Journal 9(1):111. 2010.
[53] Institute for Health Metrics and Evaluation. https://vizhub.healthdata.org/gbd-compare/. Guinea.

accounting for 3.14 percent of disease burden (in DALYs).[53] Marginalized communities, including the poor, the elderly, people in rural areas, and women and girls, are most vulnerable to these climate change impacts. Furthermore, climate change is expected to exacerbate food insecurity and malnutrition in Guinea, where 26 percent of the population already suffers from chronic malnutrition. Nearly 6.1 percent of children under five are affected by global acute malnutrition, 24.4 percent are stunted, and 12 percent are underweight in Guinea.[54] With over 21.8 percent of households being food insecure, rural populations reliant on agriculture are particularly vulnerable to climate-exacerbated food insecurity.[54] This has increased hunting for bushmeat as a source of animal protein, which has been linked to an increased risk of contracting Ebola and other zoonotic diseases.[48] Seasonal rainfall variability has contributed to stunting in Guinean children due to reduced access to nutritious food,[55] highlighting the importance of nutrition interventions during climate shocks. Promoting off-season cropping practices, particularly market gardening, which is mostly practiced by women, effectively contributes to increasing women's incomes and food security. However, water shortages have impacted productive yields.[56] Studies in Sub-Saharan Africa, with a similar climate profile to Guinea, have shown an increase in acute respiratory infections, particularly in children, following extreme weather events, such as floods and droughts.[57] The high frequency of respiratory diseases among women and children, who are particularly exposed to toxic fumes from wood combustion, is expected to decrease through energy-related measures outlined in Guinea's NDC, aiming to create an immediate positive impact on women and children.[58] Rising surface temperatures and sea-levels have led to drinking water shortages, compromised WASH infrastructure, and increased pressure on mangrove ecosystems, further threatening development progress in Guinea.[56,59] Climate change-exacerbated flooding and groundwater depletion have contributed to drinking water shortages; the cost of surface water purification technologies, boreholes, and improved wells is high and disproportionately impacts WASH systems in rural areas.[56] Waste management is also a significant issue in Guinea, with coastal shores often used as dumping grounds for household and industrial waste, as well as untreated sewage, leading to biological and chemical pollution of the water and an increase in parasitic and bacteriological infestations harmful to human and animal health.[56]

4. **To establish climate-resilient health systems, there is a particular need to address climate challenges, such as flooding and extreme heat, which hinder health service delivery and access to health facilities**, and compromise health infrastructure. Floods pose significant risks to health facilities that lack climate-sensitive WASH measures and adequate biomedical waste management. By 2100, projections indicate that up to 37 percent of coastal rice-farming areas will be lost to rising seas and floods, severely impacting early warning systems and health infrastructure in coastal populations.[60] Increasing heat also affects health infrastructure and service delivery; rising mean temperatures are contributing to escalating heat stress risks in cities in Guinea.[61] Low climate-resilient health infrastructure, exacerbated by urban heat islands created by glass, steel, asphalt, and concrete structures, further elevates these risks.[62] Bioclimatic design is lacking, and facilities often lack vegetative cover to mitigate these effects.

[54] World Food Program. 2024.
[55] Headey D, Heidkamp R, Osendarp S et al. Impacts of COVID-19 on childhood malnutrition and nutrition-related mortality. The Lancet 396(10250):519-521. 2020.
[56] Guinea National Adaptation Plan of Action. 2007.
[57] Tesema GA, Worku MG, Alamneh TS (2022). Understanding the rural urban disparity in acute respiratory infection symptoms among under-five children in Sub-Saharan Africa: a multivariate decomposition analysis. BMC Public Health 22(2013).
[58] Climate and Clean Air Pollution: Guinea.
[59] Green Climate Fund. Supporting the Achievement of National Development Policies by Building Climate Adaptive Capacity and Planning in Guinea. 2019.
[60] Magnan AK, Colombier M, Billé R et al.. Implications of the Paris agreement for the ocean. Nature Climate Change 6(8):732-735. 2016.
[61] Guinea Country Program 2017.
[62] Drame A. A review of strategies for resilience of health impacts of climate variability in Guinea. African Journal of Environmental Science and Technology. 2024.

5. **This project aims to implement measures to adapt to the impacts of climate change–primarily floods and extreme-heat risks–while also taking steps to mitigate GHG emissions in Guinea.** Specific measures are outlined in the table below.

**Table A2.1: Climate Change Adaptation and Mitigation Actions**

| Subcomponent | Climate Activity |
|---|---|
| **Component 1: Supply of quality basic RMNCAH-N services (US$55 million, including IDA credit: US$50 million & GFF grant: US$5 million)** | |
| **Subcomponent 1.1: Strengthening of basic RMNCAH-N service readiness in climate-vulnerable areas** (*US$12 million, including IDA credit: US$10 million & GFF grant: US$2 million)* | **This subcomponent will finance climate-resilient RMNCAH-N services and readiness to respond during climate shocks and emergencies in Guinea.** The primary driver for this activity is Guinea's vulnerability to floods and extreme heat that pose significant risks to health facilities and service delivery. Climate-vulnerable areas identified using climate maps for Guinea include flood-prone Boké, Faranah, Kankan, N'zérékoré, and Kindia.[63] Additionally, these regions are also severely impacted by extreme heat with Labé being one of the hardest hit regions.<br><br>**Climate-sensitive service delivery and RMNCAH-N readiness in climate-vulnerable areas:** This subcomponent will finance: (a) flood and extreme heat risk assessments for health facilities and their integration into essential RMNCAH-N service readiness in climate-vulnerable areas identified using climate maps, including Boké, Faranah, Kankan, and N'zérékoré, that are impacted by floods; (b) development of climate-change related RMNCAH-N health service delivery contingency plans at health facilities during climate shocks; (c) development of delivery and pre-positioning plans for vector control, water treatment supplies, and medicines to limit outbreaks and ensure uninterrupted service delivery during climate emergencies; (d) training of CHWs and ancillary health staff on climate-sensitive RMNCAH-N service delivery and climate emergency preparedness and response; (e) supply of health products, including medicines and commodities, through the Central Pharmacy of Guinea, the national drugs supply chain entity for maternal and newborn health products, nutrition, medicines for vector- and water-borne diseases, including anti-malarial drugs, which are climate sensitive. Climate-sensitive data use and planning will be incorporated in this subcomponent and used to adjust service delivery based on anticipated flooding and impact from extreme heat, which are increasingly detrimental to RMNCAH-N health service delivery in Guinea**. (adaptation)**<br><br>**Climate resilient WASH improvements with waterless toilets and biomedical waste management:** The primary driver for this activity is flooding in Guinea, which is becoming more frequent and severe with climate change. Flooding damages facilities in climate-vulnerable areas and disrupts WASH interventions and biomedical waste management. To reduce the impacts of climate change, this subcomponent will finance the rehabilitation of health facilities at risk from flooding and extreme heat to make them resilient. This subcomponent will finance: a) female-friendly WASH management in areas impacted by floods and extreme heat; b) WASH improvements and expand the construction of climate-adapted water wells and towers in health facilities and district hospitals in the seven target regions, with a particular focus on climate-affected regions in areas prone to climate shocks; (c) climate-adapted and sustainable water supply; and (d) the implementation of waterless toilet technologies in remote and climate-risk-prone areas. **(adaptation)** |

[63] Climate maps for riverine, coastal, urban floods; heat maps, and other climate risks for Guinea; ThinkHazard!

| Subcomponent | Climate Activity |
|---|---|
| | **Acquisition of energy-efficient equipment (the Ecosteryl 250) for medical waste treatment and recycling.** In line with criteria 7.4 "Material recovery from separately collected waste involving mechanical processes" of the "Solid Waste Management" section of the Multilateral Development Bank Mitigation Finance Methodology, this subcomponent will finance the purchase of the Ecosteryl 250 and R-Steryl, based on the results of the needs assessment, to complement waste management equipment procured under the World Bank's previous projects [HSCSP (P163140) and CERSPSP (174032, P176706 & P178602]. The Ecosteryl medical waste management system is entirely electrical and shreds, microwaves, decontaminates, and sorts medical waste into separate bins for recycling. The waste produced by the Ecosteryl system is dry, with an 80 percent reduction in volume compared to standard post-treatment waste. The recovered material will be sorted according to type, waste, etc., to facilitate their recovery and subsequent reuse**. (mitigation)**<br><br>**Energy-efficient medical equipment for district-level health facilities**: This subcomponent, aligned with Criteria 9.5 of the Multilateral Development Bank Mitigation Finance Methodology, will finance the purchase of energy-efficient electrical medical equipment for health facilities. The goal is to significantly reduce energy consumption, resource use, and $CO_2$ emissions compared to the current context in Guinea, where such guidelines are absent. The estimated cost of this equipment[64] is US$1.00 million from the IDA. This investment highlights the project's commitment to substantial GHG emission reductions, as outlined in line Box F.4 of the World Bank's Interim guidance on demonstrating substantial net GHG emission reduction (internal draft). By incorporating energy efficiency requirements into equipment specifications, the project exceeds current technology performance benchmarks. Standards such as Energy Star, International Electrotechnical Commission (IEC) energy efficiency standards, and other similar viable options will be used, surpassing Guinea's mandatory minimum energy performance standards. Particular reference will be made to IEC 60601-1-9, which covers general requirements for the basic safety and essential performance of medical equipment, including environmentally conscious design.[65] During procurement, criteria will focus on achieving the highest energy efficiency rating or labelling that ensures the adequate performance of medical and laboratory services. This approach will ensure that selected equipment not only meet but exceed environmental and efficiency standards. **(mitigation)**<br><br>**Solar power for RMNCAH-N district-level facilities:** This subcomponent will finance the provision of solar power to about 100 health facilities, with a total amount of US$2.5 million (including the cost of maintenance during the project's life). This initiative addresses the limited and unreliable power supply caused by climate shocks in Guinea, while also aiming to minimize GHG emissions. **(mitigation)** |
| **Subcomponent 1.2: Expansion of RBF for improved quality RMNCAH-N service delivery in poor-performing and climate-sensitive** | **This subcomponent will finance a scaled-up RBF approach in four climate-vulnerable regions identified using climate maps[63] that highlight geographic areas impacted by floods, extreme heat, and landslides.** The primary driver for this activity is Guinea's vulnerability to these climate events.<br><br>**The scale-up of the RBF approach will target all health districts in five priority regions**, covering 7.3 million inhabitants (about 52 percent of Guinea's population). Climate change has worsened |

[64] Medical and laboratory equipment are anticipated to be composed of electrical equipment such as scanners, ion chromatographs, spectrophotometers, UV analysers, and microscopes, for priority health facilities in flood and extreme heat prone areas of Boké, Faranah, Kankan, N'zérékoré, and Kindia.

[65] International Electrotechnical Commission Standards (2020) Medical electrical equipment - Part 1-9: General requirements for basic safety and essential performance - Collateral Standard: Requirements for environmentally conscious design.

| Subcomponent | Climate Activity |
|---|---|
| **regions** (US$40 million, including IDA credit: US$37 million & GFF grant: US$3 million) | malnutrition and stunting in these regions, leading to poor health outcomes, particularly in maternal, child, and adolescent health and nutrition. The expanded program will focus on improving key indicators, including child and infant mortality, antenatal care, assisted deliveries by a qualified heath worker, C-section proportion, women contraceptive prevalence, under five stunting, and adolescent fertility. The RBF program will also prioritize addressing climate-sensitive diseases and GBV in climate-vulnerable areas. **(adaptation)** |
| **Subcomponent 1.3: Enhancing quality through digital health services** (IDA credit: US$3 million) | **This subcomponent will finance the digitalization of the HMIS/DHIS2 at the health facility level to enhance the quality of RMNCAH-N services.** This digitalization effort will include (i) improving supportive supervision processes in RBF districts within climate-vulnerable areas to enhance performance and utilize quality assurance data; (ii) piloting and, if appropriate, scaling up digital tools for CHWs in these areas; and (iii) extending the existing pilot of the Electronic Maternity Consultation Register to integrate it into the RBF program in one district, assessing its potential to strengthen RBF quality assurance and accountability processes.<br><br>**Digitalizing the HMIS/DHIS2 for CHWs is crucial for delivering services to climate-vulnerable populations, particularly during climate shocks and emergencies.** This digital platform will incorporate measures to maximize the reach of the community health system for climate change adaptation and ensure service continuity during climate shocks. Key features include: (i) a digital communication platform to facilitate communication between CHWs and managers during climate shocks and emergencies and (ii) the digital collection of data on climate-sensitive diseases to improve availability of real-time data on these conditions and its integration into RMNCAH-N service delivery in climate-vulnerable areas. These measures will help the health system adapt to the health impacts of climate change and ensure service continuity during climate shocks and emergencies in Guinea. **(adaptation)** |
| **Component 2: Stimulating demand for and access to basic RMNCAH-N services** (US$31 million, including IDA credit: US$27 million & GFF grant: US$4 million) | |
| **Subcomponent 2.1: Expanding the district level free health care for the poorest in low-performing and climate-vulnerable regions** (US$9 million, including IDA credit: US$7 million & GFF grant: US$2 million) | **This subcomponent will finance the expansion of government financial mechanisms to improve access to essential health and nutrition services for the most vulnerable, impoverished climate-impacted households at the community and health facility levels, as identified by climate maps for Guinea.**[63] The target households are those in climate-vulnerable areas, as listed in the Unique Social Registry of the Social Development and Indigence Fund *(Fonds de Développement Social et de l'Indigence; FDSI*) and those identified as indigents by the National Agency for Economic and Social Inclusion (*Agence nationale d'Inclusion Economique et Social ANIES*).<br><br>**The subcomponent will support the development of a social registry to enable a swift and timely response to populations affected by climate shocks, such as heatwaves and flooding**. This will enhance the ability to reach people during climate shocks by: (a) establishing referral care mechanisms and contingency plans for climate-related health service delivery at referral health facilities for children and adolescents with special needs in climate-vulnerable areas and (b) providing free health care for climate-sensitive diseases in these areas, addressing the growing burden of water- and vector-borne diseases. **(adaptation)** |
| **Subcomponent 2.2: Strengthening Community health** (US$22 million, including IDA credit: US$20 million & GFF grant: US$2 million) | **This subcomponent will finance activities to develop climate adaptation skills and strategies** to strengthen community health and nutrition programs by empowering CHWs, community groups, and local NGOs with necessary skills, knowledge, and resources in climate-vulnerable areas of Boké, Faranah, Kankan, N'zérékoré, Kindia, and Labé, which are prone to flooding and extreme heat. This will include financing for the recruitment and training of additional CHWs in climate adaptation strategies, as well as in the prevention and treatment of climate-sensitive diseases aggravated by Guinea's changing climate. The subcomponent will also finance training on climate emergency |

| Subcomponent | Climate Activity |
|---|---|
| | preparedness and response to ensure continuity of community health services during climate shocks.<br>**Climate adaptation skills for climate-vulnerable communities:** This subcomponent will finance targeted training on climate adaptation skills for communities, particularly vulnerable groups such as women, children, adolescents, the elderly, and internally displaced persons affected by climate shocks like flooding and landslides in forested areas of Guinea. This will include building awareness for climate-exacerbated social and health inequities, including healthcare access, climate-exacerbated malnutrition and undernutrition, and the prevention of and the fight against GBV in climate-vulnerable areas. Additionally, female CHWs will be recruited and trained to enhance preparedness for climate emergencies and facilitate rapid medical outreach during climate shocks and emergencies. **(adaptation)**<br><br>**Climate adaptive RMNCAH-N services:** This subcomponent will finance a comprehensive community health services package including quality promotional, preventive, curative, and rehabilitative RMNCAH-N services in climate-vulnerable areas. It will integrate reproductive and child health services at the community level and contribute to addressing communication barriers and behavior change challenges, particularly among adolescents and vulnerable populations. The focus will be on gender, health equity, and the prevention and fight against GBV in climate-vulnerable areas of Boké, Faranah, Kankan, N'zérékoré, Kindia, and Labé. **(adaptation)**<br><br>**Recruitment and training of CHWs for climate adaptation and emergency response**: This subcomponent will finance the recruitment of CHWs to strengthen community-based efforts in climate adaptation and emergency response. Efforts will be made to make community services more women-friendly, including increasing the recruitment of female CHWs, to reach marginalized groups particularly impacted by climate change. These CHWs will receive training and coaching to address climate-sensitive diseases and respond to climate-related emergencies. Additionally, communication and behavior change activities on climate adaptation strategies will be developed for CHWs. **(adaptation)**<br><br>**Procurement of equipment and supplies for climate-sensitive diseases and conditions**: This subcomponent will finance the procurement of equipment and supplies to ensure the delivery of essential quality services for climate-sensitive diseases and conditions. This includes resources to address stunting and wasting in climate-vulnerable areas, nutritional products to mitigate the climate-related impacts of undernutrition on children and pregnant women, antenatal care services to improve maternal and newborn health outcomes, and preventative services such as treated mosquito nets for malaria prevention during floods. **(adaptation)**<br><br>**This subcomponent will also finance technical assistance for the M&E** of the community health strategy, including the capacity of communities to respond to climate and health emergencies. **(adaptation)** |
| **Component 3: Project coordination, management, and M&E** (US$9 million, including IDA credit: US$8 million & GFF grant: US$1 million) | |
| **Subcomponent 3.1: Project Coordination and Management** *(IDA credit: US$2 million)* | This subcomponent will finance **project management and coordination for the project's climate change activities**. **(adaptation and mitigation)** |
| **Subcomponent 3.2: Project Monitoring and Evaluation** *(US$3.5* | This subcomponent will finance **data collection, analysis, workshops, and staff training for the project's climate change activities**. **(adaptation and mitigation)** |

| Subcomponent | Climate Activity |
|---|---|
| *million, including IDA credit: US$3 million & GFF grant:US$0.5 million)* | |
| **Subcomponent 3.3**: ***Strengthening the Health Management Information System*** *(US$3.5 million, including IDA credit: US$3 million & GFF grant:US$0.5 million)* | **This subcomponent will finance the development of a digital CRVS system that is interoperable with the HMIS (DHIS2) in Guinea.** The activities financed include (i) digitalization of the CRVS system, which is expected to substantially reduce GHG emissions and expand the reach of the CRVS system; (b) linking the CRVS with the DHIS2, which is connected to the social registry used to reach impacted populations following climate shocks; and (c) generating data on the population, which will inform analytics on climate and health vulnerability. **(adaptation)**<br><br>**This subcomponent will finance the integration of the CRVS and other health information systems with the National Social Registry, enhancing the ability to reach climate-impacted populations following climate shocks**. This activity will expand the number of people in the social registry, increasing the ease with which people are reached during climate shocks. The scaling up and digitalization of civil registry services will enable the collection of accurate population and demographic data, the development of climate-change-informed disaster preparedness and response systems, the identification of evolving climate risk "hot spots," and the linkage with the DHIS2 for generating specific information to assist climate-impacted individuals. Climate change adaptation is the primary driver of this activity. **(adaptation)**<br><br>**This subcomponent will also finance the integration of meteorological data into the DHIS2 health information system.** This will involve overlaying meteorological data with key climate-sensitive diseases and conditions, including water- and vector-borne diseases, heat-sensitive illnesses, and maternal and newborn health conditions. It will also establish a framework for further integrating meteorological data with health indicators. This integration is expected to enhance Guinea's capacity in health information systems to adequately address climate change in health interventions, such as malaria control, where prevalence is linked to high humidity and highly variable rainfall. This activity is entirely focused on climate change adaptation. **(adaptation)**<br>The digitalization of the national CRVS system is anticipated to contribute significantly to GHG reductions, as described above. This activity will support the implementation of the digital CRVS system, leading to substantial GHG reductions. The digitization of CRVS and its interoperable integration with DHIS2 are expected to have a substantial impact on GHG emissions by reducing paper use and road travel within the country. The transition to digital CRVS registration is expected to result in substantial reduction in GHG emissions, with reductions of over 20 percent, i.e. 2.04 metric ton CO2eq/yr with paper-based vs. 0.25 metric ton CO2eq/yr with digital CRVS (please see footnote for key GHG calculation outputs and assumptions),[66] as demonstrated for substantiality by calculations of GHG emissions based on global and country evidence. **(mitigation)** |

[66] **Annual estimates for reduced emissions are based on the following:** With paper-based registration, for printing electricity use per page (Wh/page), emissions are expected to be 1.6 metric ton CO2eq/yr; for lighting electricity use per record processed (Wh/record), emissions are expected to be 0.03 metric ton CO2eq/yr; for storage electricity use per storage room (Wh/yr), emissions are expected to be 0.07 metric ton CO2eq/yr; for van emissions, this is expected to be 0.25 metric ton CO2eq/yr, and motorbike emissions are 0.08 metric ton CO2eq/yr. In contrast, emissions from digital interventions are expected to be the following: for laptop use emissions are expected to be 0.10 metric ton CO2eq/yr; tablet use emissions to be 0.05 metric ton CO2eq/yr; local server emissions at 0.09206 metric ton CO2eq/yr; and cloud storage emissions to be 0.00661 metric ton CO2eq/yr. Total emissions from paper-based registration are estimated at 2.04 metric ton CO2eq/yr while total emissions from digital registration are estimated at 0.25 metric ton CO2eq/yr, thus demonstrating substantial reduction in GHG emissions with digital interventions.
**Key Assumptions for GHG Calculations:** Paper records being transported from 348 primary centers and 6 secondary centers to the head of the rural commune, with a trip distance of about 5 km, assuming using A4 paper sheets made from 80 gsm or g/m^2, which would weigh 5 g each. Meta on average energy consumption ranges for desktop computers at 60-250 W and laptop computers at 20-50 W; Samsung, which is a commonly used tablet company in Africa (Note: Using 7600 mAh, 4.35 V for

## ANNEX 3: Economic Analysis

1. **For this CBA, a discount rate of 5 percent was used to calculate present values for costs and DALYs, as is common practice in CBAs in the health sector and recommended for low- and middle-income countries.**[67,68] The discount rate was assumed to be constant throughout the project.

***Costs***

2. **The total amount allocated for the project was used.** The year 2024 was used as the reference year to calculate the costs of the project in present value (from 2024 to 2029).

***Benefits***

3. **Data on DALYs in Guinea were obtained from WHO's DALY database, based on the selected indicators.** DALYs for each year were estimated by discounting DALYs for the previous year (from 2019 to 2029). For the number of deliveries assisted by a trained health personnel, DALYs related to maternal conditions as well as DALYs related to neonatal conditions were included. For the number of children (0-11 months) fully vaccinated, DALYs for tuberculosis, measles, tetanus, diphtheria, hepatitis B, yellow fever, and whooping cough were included. These conditions, in addition to polio and type B Influenza, are targeted by the Expanded Program on Immunization in Guinea. Nevertheless, DALYs for polio and type B influenza were not available. It was assumed that vaccines were 100 percent effective. For the number of children (0-23 months) receiving vitamin A supplementation every six months, DALYs for vitamin A deficiency were included.

4. **For each selected indicator, the yearly number of DALYs that were averted was calculated by applying the corresponding yearly DALYs rate to the number of women or children who benefited from health services as a result of the project.**

5. **The valuation of DALYs was done using the most current Guinea GNI per capita of US$1,190 (Atlas method, 2022).**[69] The total economic gains were calculated by summing yearly averted DALYs, converted to monetary value, across the selected indicators.

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Galaxy Tab Active Pro); Kez et al. 2022 paper titled "Exploring the sustainability challenges facing digitalization and internet data centers" on carbon footprint of 1.98 g CO2eq per GB in the global median data storage scenario, with South Africa at 67% higher, with assumption that Guinea could be a similar percentage higher than the global median as South Africa. Storadera local servers vs. cloud storage comparison suggesting ~5 times more energy consumption for the former based on Western Digital and Dell. In Guinea, average device usage duration of 2 min per patient to process records, average data storage of 16 GB per local server for 348 local servers with 2 TB total of cloud storage, and proportions of commonly used devices, with assumption that each page of patient data is ~100 kB on average, 50% of paper use to be replaced by digitalization. Association for Progressive Communications estimate of energy to print one A4 page, not including the embodied energy of the computer or printer. The assumption here is using 1 storage room of 3 square meters, noting an office space energy use estimate from Nigeria due to limited information in Guinea; USAID report on Powering Health: Efficient Lighting and LEDs indicating 6-7W for 400-500 lumens, 5 min of lighting per record processed on average. Toyota emissons data is based on Hiace model, which is commonly used for minibuses in the region; UNEP GFEI Average for 3 African Countries from 2015-2019 without carpooling; World Resources Institute (WRI) Carbon Dioxide Inventory Report on average motorcycle emissions.

*Grid Emissions Factors: UNFCCC IFI Default Grid Factors 2021 https://unfccc.int/documents/437880*

*Data Storage Emissions Estimates: Dlzar Al Kez, Aoife M. Foley, David Laverty, Dylan Furszyfer Del Rio, Benjamin Sovacool. 2022. Exploring the sustainability challenges facing digitalization and internet data centers. Journal of Cleaner Production, Volume 371. https://www.sciencedirect.com/science/article/pii/S0959652622032115*

*Transport Emissions Estimates: UNEP Global Fuel Economy Initiative Average for 3 African Countries from 2015-2019; World Resources Institute (WRI) Carbon Dioxide Inventory Report on Average*

*Printing Emissions Estimate: https://www.apc.org/sites/default/files/SustainableITtips5_0.pdf*

*USAID POWERING HEALTH: EFFICIENT LIGHTING AND LEDS https://www.usaid.gov/sites/default/files/2022-05/Powering-Health_Efficient-Lighting-LEDs.pdf*

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[68] Attema AE, Brouwer WBF, Claxton K. Discounting in Economic Evaluations. PharmacoEconomics. 36 (7):745–758. 2018.

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***Results of the Cost-Benefit Analysis***

6. **While the total invested financial resources amounted to US$79.65 million in present value, the benefits totaled US$931.52 million (Table A3.1).** The NPV was US$851.87 million with a BCR of 10.70, indicating that each US$1 invested through the project yielded an economic return of US$10.70.

**Table A3.1: Cost-Benefit Analysis Results**

| | **Total** |
|---|---|
| **Project costs** | |
| Total costs (nominal, US$) | 95,000,000 |
| **Total costs (present value (2024), US$)** | **79,649,107** |
| | |
| **Benefits** | |
| **Deliveries assisted by a trained health personnel** | |
| Number of women who benefitted from these services thanks to the project | 1,324,330 |
| Total DALYs averted (present value) | 515,223 |
| Economic gains (US$, present value) | 613,115,784 |
| ***Children (0-11 months) fully vaccinated*** | |
| Number of children who were fully immunized thanks to the project cycle | 1,323,430 |
| Total DALYs averted (present value) | 27,186 |
| Economic gains (US$, present value) | 317,950,926 |
| ***Children (0-23 months) receiving vitamin A supplementation every six months*** | |
| Number of children who received vitamin A supplementation every 6 months thanks to the project | 239,270 |
| Total DALYs averted (present value) | 378 |
| Economic gains (US$, present value) | 450,120 |
| | |
| **Total economic gains (US$, present value)** | **931,516,830** |
| | |
| **NPV (US$, 2024)** | **851,867,723** |
| **BCR** | **10.70** |