Document of

The World Bank

FOR OFFICIAL USE ONLY

Report No: PAD5210

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED ADDITIONAL GRANT

IN THE AMOUNT OF SDR 116.9 MILLION
(US$150.0 MILLION EQUIVALENT)
OF WHICH US$50.0 MILLION EQUIVALENT FROM CRISIS RESPONSE WINDOW

TO THE

REPUBLIC OF CHAD

FOR THE

HEALTH SYSTEM PERFORMANCE STRENGTHENING PROJECT

December 8, 2022

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

CURRENCY EQUIVALENTS

Exchange Rate Effective October 31, 2022

Currency Unit =	CFA Franc (XOF)
US$1.00 =	SDR 1 = 0.779

FISCAL YEAR
January 1 – December 31

Regional Vice President: Ousmane Diagana

Country Director: Clara Ana Coutinho De Sousa

Regional Director: Dena Ringold

Practice Manager: Gaston Sorgho

Task Team Leaders: Jean Claude Taptue Fotso, Kofi Amponsah

ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
ADM	Accountability and Decision-Making
AM	Accountability Mechanism
APA	Alternate Procurement Arrangements
AWP&B	Annual Work Plan and Budget
BMWMP	Biomedical Waste Management Plan
C4D	Communication for Development
CBA	Cost–Benefit Analysis
CDVA	Contract Development and Verification Agency
CERC	Contingent Emergency Response Component
CHW	Community Health Worker
COVID-19	Coronavirus Disease
CPF	Country Partnership Framework
CRI	Corporate Result Indicator
CRVS	Civil Registration and Vital Statistics
CRW	Crisis Response Window
DALY	Disability-adjusted-Life-year
DHIS2	District Health Information System 2
DHS	Demographic and Health Survey
DP	Development Partner
E&S	Environmental and Social
ERF	Emergency Response Fund
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRS	Environmental and Social Review Summary
ESS	Environmental and Social Standards
FAO	Food and Agriculture Organization
FCV	Fragility, Conflict, and Violence
FGM	Female Genital Mutilation
FM	Financial Management
GAM	Global Acute Malnutrition
GBV	Gender-Based Violence
GEMS	Geo-Enabling Initiative for Monitoring and Supervision
GFF	Global Financing Facility
GoC	Government of Chad
GP	Global Practice
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service

HCI	Human Capital Index
HMIS	Health Management Information Systems
HNP	Health, Nutrition, and Population
HSPSP	Health System Performance Strengthening Project
IBRD	International Bank for Reconstruction and Development
IC	Investment Case
IDA	International Development Association
IFC	International Finance Corporation
INSEED	National Institute of Statistics, Economic and Demographic Studies *(Institut National des Statistiques et des Etudes Economiques et Démographiques)*
IP	Implementation Progress
IPF	Investment Project Financing
IPV	Intimate Partner Violence
IRR	Internal Rate of Return
ISR	Implementation Status and Results Report
LIC	Low-Income Country
M&E	Monitoring and Evaluation
MCHSSP	Mother and Child Health Services Strengthening Project
MEDPIC	Ministry of Economy, Development Planning, and International Cooperation
MFB	Ministry of Finance and Budget
MICS	Multiple Indicator Cluster Survey
MPHP	Ministry of Public Health and Prevention
NGO	Nongovernmental Organization
NPV	Net Present Value
NRDSA	National Rural Development Support Agency
NRP	National Response Plan
PAD	Project Appraisal Document
PBA	Performance-Based Allocation
PBC	Performance-Based Condition
PBF	Performance-Based Financing
PDO	Project Development Objective
PFM	Public Financial Management
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PPE	Personal Protective Equipment
PPSD	Project Procurement Strategy for Development
REDISSE	Regional Disease Surveillance Systems Enhancement
RMNCAH-N	Reproductive, Maternal, Neonatal, Child, Adolescent Health, and Nutrition
RUTF	Ready-to-Use Therapeutic Food
SAM	Severe Acute Malnutrition
SBC	Social and Behavioral Change
SDR	Special Drawing Rights

SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SMART	Standardized Monitoring and Assessment of Relief and Transition
SMP	Security Management Plan
SORT	Systematic Operations Risk-rating Tool
STEP	Systematic Tracking of Exchanges in Procurement
TA	Technical Assistance
TF	Trust Fund
UHC	Universal Health Coverage
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WFP	World Food Program
WHO	World Health Organization

Republic of Chad

Additional Financing – Health System Performance Strengthening Project

TABLE OF CONTENTS

BASIC INFORMATION – PARENT (Health System Performance Strengthening Project - P172504)

Country	Product Line	Team Leader(s)		
Chad	IBRD/IDA	Jean Claude Taptue Fotso		
Project ID	**Financing Instrument**	**Resp CC**	**Req CC**	**Practice Area (Lead)**
P172504	Investment Project Financing	HAWH2 (9542)	AWCW3 (278)	Health, Nutrition & Population

Implementing Agency: Ministry of Public Health and Prevention

Is this a regionally tagged project?
No

Bank/IFC Collaboration
No

Approval Date	Closing Date	Expected Guarantee Expiration Date	Environmental and Social Risk Classification
06-Aug-2021	31-Dec-2026		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
[ ] Alternate Procurement Arrangements (APA)	[ ] Hands-on Expanded Implementation Support (HEIS)

Development Objective(s)

The Project Development Objective is to improve the utilization and quality of service delivery of essential health services with a particular focus on reproductive, maternal, child and adolescent health, and nutrition services for the population of Chad in project-supported areas

Ratings (from Parent ISR)

	Implementation	
	02-Nov-2021	19-Jun-2022
Progress towards achievement of PDO	S	S
Overall Implementation Progress (IP)	S	S
Overall ESS Performance	S	S
Overall Risk	S	S
Financial Management	S	MS
Project Management	S	S
Procurement	S	S
Monitoring and Evaluation	S	S

BASIC INFORMATION – ADDITIONAL FINANCING (Additional Financing-Health System Performance Strengthening Project - P180039)

Project ID	Project Name	Additional Financing Type	Urgent Need or Capacity Constraints
P180039	Additional Financing-Health System Performance Strengthening Project	Cost Overrun/Financing Gap, Restructuring, Scale Up	Yes
Financing instrument	Product line	Approval Date	
Investment Project Financing	IBRD/IDA	21-Dec-2022	
Projected Date of Full Disbursement	Bank/IFC Collaboration		

26-Jun-2026	No		
Is this a regionally tagged project? No			

Financing & Implementation Modalities

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

Disbursement Summary (from Parent ISR)

Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed
IBRD				%
IDA	90.00	9.60	71.70	12 %
Grants	16.50	2.16	14.34	13 %

PROJECT FINANCING DATA – ADDITIONAL FINANCING (Additional Financing-Health System Performance Strengthening Project - P180039)

FINANCING DATA (US$, Millions)

SUMMARY (Total Financing)

	Current Financing	Proposed Additional Financing	Total Proposed Financing
Total Project Cost	106.50	150.00	256.50
Total Financing	106.50	150.00	256.50

of which IBRD/IDA	90.00	150.00	240.00
Financing Gap	0.00	0.00	0.00

DETAILS - Additional Financing

World Bank Group Financing

International Development Association (IDA)	150.00
IDA Grant	150.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
Chad	0.00	150.00	0.00	0.00	150.00
National Performance-Based Allocations (PBA)	0.00	100.00	0.00	0.00	100.00
Crisis Response Window (CRW)	0.00	50.00	0.00	0.00	50.00
Total	**0.00**	**150.00**	**0.00**	**0.00**	**150.00**

COMPLIANCE

Policy

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

[ ] Yes [✓] No

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

[ ] Yes [✓] No

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

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

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

INSTITUTIONAL DATA

Practice Area (Lead)

Health, Nutrition & Population

Contributing Practice Areas

Climate Change and Disaster Screening

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

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Jean Claude Taptue Fotso	Team Leader (ADM Responsible)	Senior Health Specialist	HAWH2
Kofi Amponsah	Team Leader	Senior Health economist	HAWH2
Monique Ndome Didiba Epse Azonfack	Procurement Specialist (ADM Responsible)	Procurment specialist	EAWRU
Herve Cossi Ahouissou	Financial Management Specialist (ADM Responsible)	Financial Management Specialist	EAWG1
Tahirou Kalam	Financial Management Specialist	Senior Financial Management	EAWG1
Halime Mahamat Hissene	Environmental Specialist (ADM Responsible)	Consultant	SAWE1
Ndoya-Allah Bantiga	Social Specialist (ADM Responsible)	Social specialist	SAWS4
Adama Diop	Team Member	Finance officer	WFACS
Alain-Desire Karibwami	Team Member	GFF focal point	HHNGF
Alice Museri	Team Member	Program assistant	HAWH2
Amantchi Jean - Noel Gogoua	Team Member	Senior Operations Officer	HAWH2
Astyanax Didier Ntiroranya	Team Member	ET Consultant	HAWH2
Aurelie Marie Simone Monique Rossignol	Environmental Specialist	Environnemental specialist	SAWE1
Christophe Rockmore	Team Member	Practice leader	HAWDR
Denise Diane Magne Tamga	Team Member	Consultant	HAWH2
Kochikpa Abdou Raman Olodo	Team Member	Operation officer	AWMTD
Kristyna Bishop	Social Specialist	Social specialist	SAWS4
Mahamat Seidou Seidou Ahmat	Environmental Specialist	ET Consultant	SAWE1
Mistoura Iyabo Motunrayo Salami	Team Member	Financial Management Specialist	EAWG1
Mohamed I. Diaw	Team Member	Operations Analyst	HAWH2
Ndolassem Christabelle Mbairo	Team Member	Program assistant	AWMTD

Nicolas Rosemberg	Team Member	Health economist	HAWH3
Paivi Koskinen-Lewis	Social Specialist	Senior social Development Specialist	SAWS4
Sophie Martine Olivia Wernert	Counsel	Senior Counsel	LEGAM
Timoleon Kossadoum	Procurement Team	Team Assistant	AWMTD

Extended Team

Name	Title	Organization	Location

I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

A. Introduction

1. **This Project Paper seeks the approval of the World Bank Group Board of Directors to provide an International Development Association (IDA) grant in the amount of US$150.0 million equivalent – US$100.0 million from the National Performance-Based Allocations (PBA) and US$50.0 million from the Crisis Response Window (CRW) – for Additional Financing (AF) to the Health System Performance Strengthening Project (HSPSP) (P172504).** CRW funding allocation is based on the project's response to the nutrition crisis. The AF aims to (i) respond to the nutritional crisis in Chad; (ii) fill the financing gap; and (iii) expand project activities to additional provinces.

2. **A restructuring is also proposed to**: (i) change the Project Development Objective (PDO); (ii) expand the project coverage; (iii) reallocate funds across components and between expenditure categories; (iv) introduce the Contingent Emergency Response Component (CERC) activities based on the approved CERC action plan; and (v) modify the results framework to include new indicators to monitor implementation of planned CERC activities and revise the original indicators and their targets to reflect the increased investment and target population**.**

3. **The Health System Performance Strengthening Project (HSPSP), with a total financing of US$106.5 million, was approved on August 6, 2021, signed on September 21, 2021, and became effective on November 29, 2021 with a closing date of December 31, 2026**. The project was originally financed by an IDA grant of US$90.0 million and a Global Financing Facility (GFF) Trust Fund (TF) of US$16.5 million.

4. **The PDO of the parent project is to improve the utilization and quality of service delivery of essential health services**, with a particular focus on reproductive, maternal, child and adolescent health, and nutrition services for the population of Chad in project-supported areas.

Project Components

5. The parent project consists of the following four components, which are described in the Project Appraisal Document (PAD)[1]:

(a) **Component 1: Scaling up Performance-Based Financing (PBF) for better health service delivery (US$67.5 million equivalent: US$58.5 million from IDA and US$9.0 million from GFF)**. The current PBF scheme incentivizes the delivery of a defined package of Reproductive, Maternal, Neonatal, Child, Adolescent Health, and Nutrition (RMNCAH-N) services and subsidizes services for the poor and the vulnerable;

(b) **Component 2: Strengthening service delivery readiness to deliver quality RMNCAH-N services (US$26.0 million equivalent: US$21.5 million from IDA and US$4.5 million from GFF)**. This

[1] *https://documentsinternal.worldbank.org/search/33290265*

component builds health facilities' capacity to deliver quality health services and to improve the coverage of essential services, particularly family planning and nutrition;

(c) **Component 3: Project management and verification of results (US$13.0 million equivalent: US$10.0 million from IDA and US$3.0 million from GFF).** This component covers the project's management costs and finance the verification and quality evaluation of results under the PBF component; and

(d) **Component 4: CERC (US$0.0).** This component allows a rapid reallocation of project resources in the event of a natural or artificial disaster or crisis that has caused, or is likely to imminently cause, a major adverse economic and/or social impact.

6. **The Ministry of Public Health and Prevention (MPHP) is the implementing agency for the project.** The MPHP has established a well-functioning Project Implementation Unit (PIU) responsible for the overall project planning, oversight, coordination, and management of the project, in collaboration with relevant divisions and departments of the MPHP. The PIU has experience in working on projects financed by the World Bank. This same PIU is also managing the Regional Disease Surveillance Systems Enhancement (REDISSE IV) and the Coronavirus Disease 2019 (COVID-19) projects (P176658 and P173894 respectively). The PIU has the following staff: a Project Coordinator, a Financial Management (FM) Specialist, a Procurement Specialist, an Internal Auditor, an Accountant, a Monitoring and Evaluation (M&E) Specialist, an Environmental and Social (E&S) Development Specialist, a Public Health Expert, and a Communication Specialist. Oversight of the parent project is provided by a Steering Committee headed by the Minister of Public Health and Prevention or a designee. Representatives who serve on the Project Steering Committee include those from the Ministry of Finance and Budget (MFB), the Ministry of Economy, Development Planning, the Ministry of Economy, Development Planning, and International Cooperation (MEDPIC), the MPHP, and any other ministry that plays a role in the implementation of the project. The Steering Committee provides high-level strategic and technical guidance and participates in the evaluation of project Implementation Progress (IP). The Steering Committee convenes biannually to evaluate and monitor the implementation of the Annual Work Plan and Budget (AWP&B). Furthermore, as part of the GFF process, the national GFF Country Platform oversees achievement of interventions related to the GFF Investment Case (IC). Representatives from the MPHP, MEDPIC, MFB, United Nations (UN) agencies, the private sector, civil society, and nongovernmental organizations (NGOs) are all part of the national GFF Country Platform. The national GFF Country Platform is coordinating the development of the IC and participates in M&E during implementation.

Parent Project Performance

The parent project's progress towards the achievement of the PDO and overall IP are currently rated Satisfactory in the last Implementation Status and Results Report (ISR) dated on June 19, 2022.

7. **Under Component 1 – Scaling up PBF for better health service delivery – the Government of Chad (GoC) organized five international courses for 12 days each in Chad to train more than 188 staff from the central, regional, and district levels of the health system in the PBF approach.** Key contractual arrangement for the various stakeholders involved in project implementation have been completed. The first performance contracts for health facilities, contract development and verification agencies (CDVAs), health districts, provincial delegations, and directorates of the MPHP have been signed and are being

implemented. CDVAs have provided PBF training for 934 frontline workers in all the beneficiary health facilities and have signed performance contracts with 771 health facilities (health centers and hospitals). First payments to health facilities are ongoing. An initial amount of CFA409,775,661 (US$0.65 million) has already been paid to 474 health facilities during the third quarter of 2022. These contracts with the Directorates are expected to improve coordination and stewardship at different levels of the health system and the quality and utilization of health services at the operational level.

8. **Under Component 2 – Strengthening service delivery readiness to deliver quality RMNCAH-N services – the GFF Investment Case (IC) has been developed**. Approximately ten key directorates at the central Ministry of Health, including the technical leadership (General Secretary) which are expected to drive implementation, have prepared their first six-month action plans, and have signed the first six-month performance contracts. Contracts for technical assistance (TA) are in preparation between the GoC and selected UN agencies (World Health Organization (WHO), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), and World Food Program (WFP) to give implementation support to the central directorates of the MPHP and to procure family planning and nutrition supplies.

9. **Under Component 3 – Project management and verification of results – the new structures required for the implementation of the project, which include the Steering Committee, the National PBF Technical Unit, and Contract Development and CDVAs, have been established and are functioning well**. The National Institute of Statistics, Economic and Democratic Studies *(Institut National des Statistiques et des Etudes Economiques et Démographiques- INSEED)* has signed a contract to provide external verification services through four CDVAs established in different provinces, with each CDVA covering two provinces. A PBF Technical Unit has been established and is fully staffed with the requisite experts. In addition, a PBF portal, which will facilitate the monitoring of PBF activities and the payment of subsidies to health facilities, has been established and is operational. Over 1,066 workers at the PIU, provincial health facilities and hospitals, and the Directorate of National Statistics are using the portal for their day-to-day operations.

10. **Under Component 4 CERC – CERC was triggered on July 25, 2022, to mobilize US$50.0 million to respond to the nutrition emergency that Chad is undergoing.** Resources were reallocated from Component 1 and Component 2 to CERC activities. The GoC prepared the CERC Action Plan and CERC Manual, which were reviewed and approved by the World Bank. The Plan entails purchasing nutrition and agricultural inputs and implementing community mobilization for nutrition activities. The GoC has signed two agreements with the WFP and UNICEF to procure nutrition supplies, and another agreement with the Food and Agriculture Organization (FAO) for the procurement of agriculture inputs. The first tranche of the contract payment is expected to be made by the end of December 2022.

11. **The parent project's disbursement rate is 11 percent**. With ongoing CERC contracts with UN agencies and the payment of the first PBF grants to health facilities, it is expected that disbursements will increase to more than 50 percent by December 2022. Table 1 provides the breakdown of CERC commitments by activities.

Table 1: CERC commitments

No.	Activities	Amount (US million)
1.	Procurement and distribution of Ready-to-Use Therapeutic Food (RUTF) for Severe Acute Malnutrition (SAM) through UNICEF	18.1
2.	Procurement and distribution of RUTF for Moderate Acute Malnutrition through WFP	21.9
3.	Procurement and distribution of small agricultural equipment and improved seeds through FAO	5.0
4.	Community Mobilization by NGOs and Community Health workers (CHW)	5.0
	Total	**50.0**

Rationale for Additional Financing (AF)

12. **To respond to the immediate crisis, the proposed AF has been prepared under paragraph 12, Section III of the Investment Project Financing (IPF) Policy and Condensed Procedures pursuant to the Bank's procedure "Preparation of Investment Project Financing — Situations of Urgent Needs of Assistance or Capacity Constraints."** The AF and its embedded restructuring aim to respond to the nutritional crisis in Chad by replenishing project resources that were already allocated to respond to the nutrition crisis through the triggering and activation of the project's CERC and by continuing to finance nutrition activities in project area. Chad is facing a nutrition crisis, which forced the GoC to declare a food and nutrition state of emergency on June 1, 2022, through Decree N1520/PCMT/PMT/2022. At the peak of the nutrition crisis, between June and September 2022, it was estimated that around 1.67 million children under the age of five would suffer from acute malnutrition. An estimated 335,000 children with SAM, for whom the support for RUTF is a priority, were at risk of mortality. It is also estimated that 250,000 pregnant women will suffer from malnutrition. According to the preliminary results of the 2021 Standardized Monitoring and Assessment of Relief and Transition (SMART) – a nutrition survey – the Global Acute Malnutrition (GAM) rate was 11.5 percent at the national level and SAM averaged 2.1 percent, worse than the previous year and exceeded the WHO emergency threshold of 10 percent. The GAM prevalence rate exceeded 15 percent in seven provinces: Kanem (16.2 percent), Bahr El Gazel (16.5 percent), Batha (16 percent), Salamat (15.5 percent), Wadi Fira (16.2 percent), Ennedi-Est (17 percent), and Ennedi-Ouest (18.5 percent).

13. **The major drivers of malnutrition include**: (a) inadequate complementary feeding for children and poor infant and young child feeding practices; (b) inadequate access to quality health services; (c) poor sanitation; (d) low levels of education; (e) high levels of early marriage and pregnancy (increasing the probability of low birth weights and nutritional deficiencies); and (f) pervasive gender inequity, and social norms that impede optimal nutrition practices, among others. These factors are compounded by inadequate access to nutritious food, particularly during the lean months of June, July, and August, which is further exacerbated by poor agricultural performance, soaring food prices due to the war in Ukraine.

14. **The GoC prepared and adopted by the National Response Plan (NRP) to respond to the food security and malnutrition crisis in April 2022, with an estimated budget of US$168.4 million**. The NRP covers five priority areas, namely: (i) Food assistance; (ii) Agro-sylvo-pastoral support; (iii) Food

supplement and veterinary inputs; (iv) Prevention and treatment of malnutrition; and (v) Coordination and M&E.

15. **The GoC has allocated roughly US$71.3 million to respond to this crisis, leaving a financing gap of US$97.1 million**. To successfully implement the NRP, the GoC has requested development partners (DPs), including the World Bank, to contribute to closing the financing gap.

16. **Following the crisis and subsequent development of the NRP, the GoC requested the World Bank to immediately activate the CERC through a formal request dated May 4, 2022**. On July 25, 2022 the World Bank activated the CERC and reallocated US$50.0 million from the HSPSP to support the GoC's response to the ongoing severe nutrition crisis. The CERC Manual and Action Plan were prepared by the GoC and approved by the World Bank. The CERC Action Plan earmarked US$5.0 million for the purchase of agricultural inputs and US$45.0 million for RUTFs, medicines, and community mobilization for nutrition. Contracts have been negotiated and signed between the GoC and UN agencies (UNICEF, WFP, and FAO) to procure these inputs. The contracts are expected to be fully paid for by the end of December 2022. These contracts were developed, using the standard procurement agreement template agreed between the World Bank and United Nation Agencies. The contract clearly specifies the use of World Bank Guidelines and Procedures and application of ESF instrument during project implementation.

17. **The proposed AF and restructuring will enable the project to fill a financing gap required to meet its development objectives and replenish the funds reallocated towards the CERC**. Initially, the previous World Bank project – Mother and Child Health Services Strengthening Project (P148052) – piloted PBF activities in five provinces (Batha, Guera, Logone Oriental, Mandoul and Tandjile). Based on the successful implementation of this project, the GoC decided to scale up to three more provinces. However, at project preparation, the World Bank and GoC did a costing and realized that the project budget was not sufficient to cover the eight provinces. The financing gap was estimated at US$42.0 million for PBF activities. The estimated financial needs for PBF activities, including verification and regulation, in eight provinces currently covered by the parent project for five years is US$127.5 million, while the current allocation to the PBF activities is only US$85.5 million. The table below summarize the gap per PBF activities.

Table 2: Summary of financing gap identified in the parent project.

No.	Activities	Cost (US$ million)	Allocation (US$ million)	Gap (US$ million)
1.	Performance-Based Payments to health facilities	63.5	43.5	20.0
2.	Subsidies for Free Care through PBF	33.9	24.0	9.9
3.	Payment of Regulator	15.8	8.0	7.8
4	Payment for Verification	14.3	10.0	4.3
	Total	**127.5**	**85.5**	**42.0**

18. **To address the financing gap, different options were discussed between the government and the World Bank**. These included: (i) reducing the number of provinces; (ii) reducing the duration of the project; or (iii) seeking additional resources to fill the gap. The GoC and the World Bank decided to leave

the number of provinces and the duration of the project unchanged and to look for additional resources to fill the gap.

19. **The needs in the health sector are widespread and the nutrition crisis has particularly impacted certain provinces that were not supported by the parent project.** There is a need to expand the geographical scope of the project to cover additional regions. The project is currently implemented in eight provinces (Batha, Guéra, Logone Oriental, Mandoul Tandjilé, Mayo-Kebbi Est, Wadi Fira, and Ennedi-Est), which were selected based on their poor maternal and child health indicators, including nutrition indicators. Given the widespread weaknesses of Chad's health system and the limited financial resources, the first selection of provinces could not cover all the provinces with poor maternal and child health indicators or with acute malnutrition rates higher than 15 percent. This AF will help to expand project activities to cover four additional provinces proposed by the government base on their poor nutrition and health indicators (Salamat and Kanem), their geographic position (Moyen Chari) and fragility (Lac).

20. **Based on lessons learned from the previous experience of PBF in Chad (described in parent project PAD)[2], the GoC decided to extend** Salama and Moyen Chari will be grouped under one verification agency. Kamen and Lac will be grouped under another verification agency for PBF activities.

21. **The AF continues to be fully aligned with the GoC's National Health Development Strategy Plan (2022–2030), which has as its main objective to provide the population with universal access to quality, comprehensive, integrated, continuous, and person-centered health care to effectively contribute to the socioeconomic development of the country**. Its strategic priorities are: (i) to strengthen governance, leadership, and coordination; (ii) to improve health sector financing; (iii) to increase human resources for health; (iv) to improve health infrastructure and equipment; (v) to improve health information systems; (vi) to ensure availability of medicines and other health products; and (vii) to improve health service delivery.

22. **The AF remains relevant to the World Bank Group's Country Engagement Note (FY23–FY24)** discussed by the World Bank Board of Executive Directors on November 29, 2022[3]**, which supports promoting human capital development by addressing challenges of education/skills development, early childhood development, and health and nutrition services**. Objective 3(a) of the note emphasizes increasing inclusive access to basic services, including health and nutrition services. In addition, the AF remains fully aligned with the World Bank Group's twin goals to reduce poverty and promote shared prosperity.

23. **Chad is eligible to receive US$50 million from CRW to respond to the emergency**. The Emergency Response Financing (ERF) trigger for food insecurity comprises two rules: (i) The population living in districts categorized as Integrated Phase Classification 3+ (IPC3+,) should reach 3.4 million people, thereby exceeding the percentage-based ERF threshold of 20 percent; and (ii) The 10.1 percent increase of the populations living in IPC3+ districts exceed the Rule 2 threshold of 5.0 percent. Recent published data suggests that food security conditions are worsening in Chad. The absolute number of people in IPC3+ is

[2] *https://documentsinternal.worldbank.org/search/33290265*
[3] Report No.P500092

expected to increase by 17 percent to 2.1 million people compared to the same period last year. These results indicate a progressively worsening situation over the past 4 years.

24. **The AF is aligned with the World Bank Global Crisis Response Framework (GCRF) priorities**. All the four components (Component 1: Scaling up PBF for better health service delivery; Component 2: Strengthening service delivery readiness to deliver quality RMNCAH-N services; Component 3: Project management and verification of results; and Component 4: Contingent Emergency Response Component (CERC) are aligned with pillar 1 (responding to food Insecurity). The AF responds to the client's priorities and needs through supporting sustainable food and nutrition security in the wake of the ongoing nutrition crisis in Chad.

25. **The need for additional resources to respond to the nutrition crisis, to fill the project financing gap, and to extend the project coverage was formally conveyed by the GoC to the World Bank on October 26, 2022.** This AF will provide the needed resources to enable the project to address the nutrition crisis as well as cover the four additional provinces that were not included in the initial project design Moyen-Chari, Salamat, Lac, and Kanem) because of the reasons highlighted above.

II. DESCRIPTION OF ADDITIONAL FINANCING (AF)

Proposed Changes

A. Additional Financing

26. **The objective of the AF is to** respond to the food crisis in Chad. It will: (i) replenish US$50 million taken from Components 1 and 2 of the original project to trigger and activate the CERC to address the country's nutrition crisis; and (ii) provide US$100 million to cover the cost of expanding the original project to four additional provinces and fill the financing gap identified during the preparation of the original project.

27. **The PDO has been revised to reflect the CERC activities. The project components will remain unchanged, but the components' costs will be adjusted to reflect the US$50.0 million allocated to the CERC from the CRW as well as the additional US$100.0 million from IDA national allocation.** The project components' costs have been revised to reflect the replenishment of funds taken from Components 1 and 2 to finance CERC activities, fill the financing gap identified in the parent project, and finance activities in the additional provinces. Under Component 1, a total of US$80.0 million will be allocated from the IDA PBA to fill the financing gap and finance the activities in the new project areas. Out of the US$50.0 million from CRW, US$35.1 million will be allocated to Component 1 and the remaining US$14.9 million will be allocated to Component 2 to replenish resources used to respond to the nutrition crisis through the CERC. In addition, US$10.0 million from IDA PBA will be added to Component 2 to fill the financing gap and finance the new project areas activities Component 3 will be allocated US$10.0 million IDA PBA The AF will finance the activities in the current project areas and also in the four additional provinces. Table 3 shows the revised project cost and financing.

Table 3: Revised Project Cost and Financing (US$ millions)

Project Components	Parent Project Cost US$ million			Parent + Additional Financing US$ million			
	IDA	GFF TF	Total	IDA PBA	IDA CRW	GFF TF	Total
1. Scaling up PBF for better health service delivery	**58.5**	**9.0**	**67.5**	**103.4**	**35.1**	**9.0**	**147.5**
2. Strengthening service delivery readiness to deliver quality RMNCAH-N services	**21.5**	**4.5**	**26.0**	**16.6**	**14.9**	**4.5**	**36.0**
2.1. Strengthening health facilities readiness for service delivery	12.0	1.0	13.0	7.1	9.9	1.0	18.0
2.2. Strengthening community platforms for service delivery	7.0	1.0	8.0	5.0	5.0	1.0	11.0
2.3. TA for health system strengthening	1.5	1.0	2.5	2.5	0.0	1.0	3.5
2.4. Support to build Chad's CRVS system	1.0	1.5	2.5	2.0	0.0	1.5	3.5
3. Project management and verification of results	**10.0**	**3.0**	**13.0**	**20.0**	**0.0**	**3.0**	**23.0**
3.1. Project management	2.0	1.0	3.0	3.0	0.0	1.0	4.0
3.2. Verification and supervision of PBF	8.0	2.0	10.0	17.0	0.0	2.0	19.0
4. CERC	**0.0**	**0.0**	**0.0**	**50.0**	**0.0**	**0.0**	**50.0**
TOTAL PROJECT COST	**90.0**	**16.5**	**106.5**	**190.0**	**50.0**	**16.5**	**256.5**

28. **The original GFF TF allocation to the components will remain the same**. These adjustments, including US$50.0 million IDA CRW for the CERC component, will bring the total project cost from US$106.0 million to US$256.5 million.

B. Restructuring

B.1 Revision of PDO to reflect the activation of CERC

29. The revised PDO is "To improve utilization and quality of service delivery of essential health services with a particular focus on reproductive, maternal, child and adolescent health, and nutrition services for the population of Chad in project-supported areas, and to provide immediate and effective response to an eligible crisis or emergency". The CERC has been activated and based on the IPF guidelines, the PDO and the results indicators need to be revised as part of the project restructuring.

B.2 Expansion of project coverage area to four provinces

30. **The AF proposes to expand the project coverage area to four additional provinces** (Moyen-Chari, Salamat, Lac, and Kanem). These provinces were selected by the GoC based on their poor health and nutrition indicators and their geographical locations. These provinces were among those identified during project preparation as potential beneficiaries but were not finally chosen because of budget limitation. Table 4 presents the original and additional project areas.

Table 4: Project areas and population

Project Area	Provinces	Population (2022)	Health Districts	Health Centers	Hospitals (District and Provincial Hospitals)	Total number of Health facilities: Health Centers + Hospitals
Current Project Area	Mandoul	989,067	9	91	8	99
	Ennedi-Est	158,099	4	22	5	27
	Guéra	635,822	7	88	6	94
	Mayo-Kebbi Est	1,146,679	10	129	6	135
	Tandjilé	996,203	10	133	9	142
	Batha	689,835	8	97	3	100
	Logone Oriental	1,161,153	10	137	11	148
	Wadi Fira	754,740	6	108	7	115
Additional Project Area	Moyen-Chari	935,234	8	84	10	94
	Salamat	479,993	3	45	4	49
	Lac	680,466	6	104	7	111
	Kanem	530,883	7	158	6	164
TOTAL		**9,158,174**	**88**	**1,196**	**82**	**1278**

B.3 Reallocating funds between expenditure categories

31. **The proposal is to reallocate IDA resources from Categories 1 and 2 to Category 3 (Emergency Expenditure for Part 4 of the financing agreement of the parent project)**. Table 5 shows the reallocation of funds between expenditure categories.

Table 5: Revised expenditure categories of the parent project financing

Category	Original Allocation		Revised Allocation	
	Amount of the grant allocated (SDR)	Percentage of expenditure to be financed	Amount of the Grant Allocated (expressed in SDR)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, and consulting services, Training and Operating Costs for Parts 2 (except Part 2.1(b), Part 3 of the Project	14,000,000	75%	6,049500	55%
(2) PBF Payments under Part 1 and Part 2.1(b) of the Project	48,000,000	87.9%	18,000,000	73%

(3) Emergency Expenditures for Part 4.1 of the Project	0		38,200,000	100%
(4) Refund of Project Preparation Advance	600,000	100%	350,500	100%
(5) Emergency Expenditures for Part 4.2 of the Project			0	100%
TOTAL AMOUNT	62,600,000		62,600,000	

B.4 Introduction of CERC activities based on the approved CERC action plan

32. **The activities designed under the parent project components include** Component 1: Scaling up PBF for better health service delivery, Component 2: Strengthening service delivery readiness to deliver quality RMNCAH-N services, and Component 3: Project management and verification of results which remains the same. Under Component 4: CERC (US$50.0 million IDA), the following activities have been added under the approved CERC Action plan.

(a) Procurement and distribution of RUTFs and drugs to ensure availability of inputs, such as Plumpy Nut, Plumpy Sup, F100 milk, F75, CSB+, and medications (antibiotics, deworming, micronutrient supplementation, and ReSoMal). Contracts have been signed between the Government and UN agencies (UNICEF and WFP) to procure these nutrition Inputs and distribute to malnutrition treatment centers.

(b) Community mobilization with a focus on increasing nutrition services coverage by strengthening community platforms and addressing demand-side barriers that impede access to nutrition services. Training of community relays and communication campaigns will be an integral part of this activity. Community mobilization will be done by NGOs and CHWs.

(c) Procurement and distribution of small agricultural equipment and improved seeds to strengthen the production capacity of smallholders who risk consuming their seeds for the next production cycle. The project will collaborate with the Agriculture Global Practice (GP) on this activity. This assistance will mainly benefit approximately 12,500 poor agricultural households with priority given to (i) households that lack financial resources to meet their needs; (ii) female-headed households (widowed, divorced) with children under the age of five; and (iii) households with physically disabled heads and/or internally displaced households.

33. **CERC activities will be implemented in the affected provinces of Ennedi Est, Ennedi West, Barh El Ghazal, Kanem, Lac, Tibesti, Tandjilé, Salamat, Ouaddai and Wadi Fira and will be supervised jointly by the health and agriculture GP**. The MPHP will remain the implementation agency and has signed contracts with UNICEF, WFP, and FAO to procure Nutrition RUTFs and drugs, small agricultural equipment, and improved seeds, using the procurement template agreed between the World Bank and UN agencies. These contracts have been reviewed and approved by the World Bank before signature.

34. The three UN agencies will use the following mechanisms to implement the CERC activities:

(a) **UNICEF**: At the central level, UNICEF will collaborate with the Directorate of Nutrition and Food Technology (DNTA) of MPHP and the Nutrition Cluster on planning of therapeutic input needs based on caseloads of children with SAM. UNICEF will also manage the RUTF supply chain by providing the requisite logistics. It will collaborate with the 23 Provincial Health Delegations to develop and validate distribution plans to facilitate distribution of RUTFs to the beneficiary health facilities' housing Ambulatory Nutritional Units , the Therapeutic Nutritional Units to manage cases of SAM with complications. As part of improving the quality of care as well as integrating optimal management of inputs at the last mile, UNICEF will use its strategic partnership with national and international NGOs to strengthen systems' capacity.

(b) **WFP**: At the central level, WFP has signed a memorandum of understanding with the MPHP to collaborate with the DNTA and the Provincial Health Delegations and the districts in the planning and distribution of inputs. WFP has also set up offices at the provincial level to facilitate the organization and distribution of inputs. At the community level, WFP will partner with NGOs to support and facilitate access to food in the hard-to-reach areas of the country.

(c) **FAO**: At the central level, FAO will sign a memorandum of understanding with the National Rural Development Support Agency (NRDSA) for the acquisition and distribution of seeds and agricultural tools. In close collaboration with its local branches of NRDSA, FAO will build the capacity of the beneficiaries in ITK (technical routes). It will also collaborate with the Directorate of Seeds and Plants (DSP) of Ministry of Agriculture in the certification of seeds. At the local level FAO will enter partnerships with NGOs to identify the beneficiaries, ensure post-distribution monitoring and evaluation of the project's impact.

B.5 Modification to the Results Framework

35. **The results framework has been modified and updated to reflect the activation of the CERC and the expansion of the project in four additional provinces**. One CERC PDO indicator and three CERC intermediate indicators are added to the result framework (see Table 6 below). The end targets of some indicators of the parent project have been revised to reflect the increase in the population coverage (see Table 7) below.

Table 6. CERC PDO and intermediate indicators added to the results

Indicator	Data source	End Target	Indicator description
New PDO indicator			
CERC implemented according to the emergency response action plan (no/yes)	MPHP	Yes	The activities described in the emergency response plan completed
New Intermediate Result Indicators			
Cartons of Plumpy'Nut Procured and distributed (number)	MPHP, UNICEF	243,733	The indicator will track the availability of Therapeutic Foods for SAM in the target areas
Tons of Plumpy' sup Procured and distributed (number)	MPHP, WFP	3,043	The indicator will track the availability of Therapeutic Foods for Moderate acute malnutrition in the target areas
Farmers reached with agricultural assets or services (number)	MPHP, FAO	12,500	This indicator will track the availability of agricultural inputs in the target areas.

Table 7: Changes in the end target of some indicators of the parent project

Indicator	Origional Target	New Target
PDO Indicators		
People who have received essential health, nutrition, and population (HNP) services (CRI, Number)	749,123	1,598,000
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement) (CRI, Number)	464,032	928,000
Number of children immunized (CRI, Number)	167,304	334,000
Number of women and children who have received basic nutrition services (CRI, Number)	408,561	917,000
Number of deliveries attended by skilled health personnel (CRI, Number)	167,304	347,000
Women in the project area who are currently using any modern method of contraception (Number)	289,188	502,751
Girls in the project area, aged 15–19, who are currently using any modern method of contraception (Number)	12,202	20,994
Women in the project area, aged 20–49, who are currently using any modern method of contraception (Number)	276,986	481,757
Pregnant women in the project area who have received at least 4 antenatal care visits from skilled health providers (Number)	137,135	274,270
Intermediate Results Indicators		
The national population covered by the PBF program (Percentage)	32	45
Supervision visits in the project area in which the digital supervision tool was fully completed (Number)	300	518
Consultations provided to the poor free of charge in the project area (Number)	401,370	802,740
Gender-based violence (GBV) survivors who have received health care from a trained health worker at a health care facility in the project area (Number)	12,880	20,938
People referred by a CHW to a health facility in the project area (Number)	140,479	280,958
Personnel in the project area who have received clinical training (Number)	1,300	2,011
Children under 5 years of age in the project area that have been registered in the civil registry (Number)	334,475	565,822
Children 6–59 months of age in the project area that have received vitamin A supplement in the last six Months (Number)	842,876	850,000

36. **The institutional arrangements will remain the same**. However, the UN agencies contract, including their respective implementation arrangements have been reviewed and approved by the World Bank before signature.

Sustainability

37. **Technical sustainability will be ensured by continuous capacity building, knowledge sharing, and learning on the job throughout the project.** Some capacity already exists for implementing World Bank-financed health projects and for the implementation of PBF through previous experience in the

country since 2011. Thanks to the parent project, the GoC organized five international courses in Chad, each of 12-day duration, to train more than 188 staff from the central, regional, and district levels of the health system in PBF. Subsequently, cascade trainings are organized to ensure capacity at all levels of the health system. Training and coaching of health staff and community workers on PBF at the operational level are done continuously by the CDVAs and district medical teams throughout the project. The in-country capacity will continue to be strengthened during project implementation, through on-the-job training, coaching, and mentoring. Senior leadership from MPHP and the MFB will continue to be trained in PBF high-level courses organized in Chad or abroad. Training of trainers will create a pool of knowledgeable PBF trainers who will then train additional trainers.

38. **Financial sustainability of the project, and especially of the PBF component, can be reasonably achieved given the limited cost of this mechanism and the commitment of the GoC to institutionalize this approach.** Applying PBF to allocate public resources to health facilities will improve the flow of funds to the frontline health facilities. The salient benefits to service delivery will be threefold. Firstly, it will improve the efficiency of public health spending by allocating financial resources to frontline health facilities based on results achieved. This, in turn, will enhance the availability, accessibility, and quality of essential services. Secondly, the availability of resources will strengthen facilities' autonomy, which will have a positive impact on staff members' motivation and their capacity to respond timeously to stock-outs and emergencies. Thirdly, resources available at the lower level also allow supportive supervision to take place, which can have a positive impact on the quality of health services delivered. The project will also help improve the efficiency of health spending by improving the outcomes obtained from the current total health expenditure of US$32 per capita. By spending US$4–US$5 per capita per year (including overhead costs), the cost is likely to be affordable and sustainable in the long term.

39. **Additionally, the GoC has adopted PBF as one of the financing mechanisms for Universal Health Coverage (UHC) and is committed to institutionalizing this approach.** During 2017–2019, a strategic plan for UHC was developed. On June 3, 2019, the National Assembly unanimously adopted the UHC Act to include PBF as one of the financing mechanisms to be scaled up to improve coverage of essential health services while protecting the population from financial hardship due to accessing health care.

40. **Furthermore, the GoC is working on reforms required to operationalize its effort to institutionalize PBF.** Analytical work needed for this reform has been done with support from the GFF and the World Bank. This support assessed the current budgeting system, financial flow, and Public Financial Management (PFM) procedures, and identified the reforms to be made at different levels to allow the GoC to institutionalize the PBF and to use it effectively and efficiently to allocate financial resources directly to health facilities at the service delivery level.

III. KEY RISKS

41. **Chad is a Fragility, Conflict, and Violence (FCV) country, and the overall risk to the proposed project is rated Substantial, based on the descriptions below of each risk.** Political, governance, and fiduciary risks are High, while macroeconomic risk is Substantial, despite the proposed mitigation measures. Sector strategies and policies, technical capacity, institutional capacity, social and environmental risks, and the stakeholders' risks are Moderate after mitigation measures.

42. **Political and governance risk is High after mitigation.** Security risks exist mostly in the northern part of the country, particularly in the northeast, where the GoC has been containing insurgencies. Increasing attacks from Boko Haram have been observed in the west of the country, the Lake Chad area, where three MPHP staff were kidnapped in October 2019. Violent crimes, such as armed robbery, carjacking, and muggings have been reported. With the tragic death of President Idriss Deby and the suspension of the country's constitution, the World Bank triggered the World Bank Policy OP7.30 "Dealing with de facto government" on April 20, 2021. This resulted in the suspension of processing of new disbursement requests as of April 20, 2021, as well as operations under preparation. The World Bank conducted the OP 7.30 mission assessment from July 3 to 11, 2021. The assessment concluded that Chad meets the requirement under paragraph 4 of the World Bank OP 7.30 Policy and, therefore, recommended a full resumption of all existing operations as well as the requirement under paragraph 5 of the World Bank OP 7.30 Policy for new lending operations. These political issues could affect the implementation of the project; however, the de facto government, in recognition of the country's past international obligations, has committed to ensuring the continued implementation of the relevant project or program by authorizing a representative for the purpose of requesting withdrawals.

43. **Political tension remains High because the national dialogue headed by the President, which was organized from August to October 2022, extended the transition period for the transition government by 24 months**. This did not go down well with the main opposition parties, leading to demonstrations. This situation may impact the implementation of the project and its results. These issues could also reduce government resources available for health service delivery, which could have an impact on the project's results. To mitigate this risk, the World Bank team will give its No Objection to all key activities, even if they are 'post review', and will closely monitor their implementation. A security management plan to prevent and mitigate security risks in project areas will be developed. The security risk is Moderate, as some mitigation measures are in place, including working closely with the UN, especially the United Nations Department of Safety and Security based in Chad. Decentralization of powers to local government started a long time ago, but the central GoC still holds most of the powers. The lack of complete decentralization and the poor quality of service delivery are symptoms of wider governance problems. Additional mitigation measures are the following: (i) Granting of more autonomy to the frontline health facilities, which shifts the decision making on resource utilization from the central level to the operational level; and (ii) Supporting the GoC to adopt PBF mechanism to allocate its resources to the frontline health facilities.

44. **Macroeconomic risk is Substantial after mitigation measures.** Chad's economy is highly dependent on oil, which constitutes about 20 percent of GDP, 56 percent of revenue, and 90 percent of exports in 2022[4]. A potential decline in oil prices may result in drastic cuts to public expenditure, risking core development spending, derailing long-term development objectives, and hampering growth. The uncertainty regarding future oil prices and oil production, as well as the volatile security situation, also jeopardizes progress along the structural reform path. The most recent International Monetary Fund (IMF)–World Bank Debt Sustainability Analysis (December 2021) concluded that Chad's debt is unsustainable. Chad has a history of commercial borrowing and liquidity constraints that resulted in periods of external and domestic arrears accumulation. Moreover, the fallout from the COVID-19 shock is adding to the country's debt challenges. Considering mounting financing and debt challenges, the

[4] Source: World Bank Staff estimates from World Bank Macro Projection Outlook from October 2022.

authorities requested debt restructuring under the G20 Common Framework to restore debt sustainability; the discussions are currently ongoing. Unpredictable security costs and potential economic disruptions could also divert resources away from important social programs. The HSPSP will mitigate this risk by ensuring that all health facilities have their own bank accounts to secure their financial resources and avoid fungibility of funds in the Treasury account, where the GoC could potentially use the funds for other priorities. All PBF payments from the project will be made only to the health facilities' bank accounts.

45. **Sector strategies and policies risk is rated Moderate after mitigation.** The sector strategies and policies risk are rated as Substantial. This is related to the fact that most of the sector strategies and policies are yet to be updated. For a key sector policy that has a direct bearing on the project – free health care – the PDO is underfunded and not financially sustainable. Funding for the sector has been decreasing and is usually inadequate and varies from year to year. The main mitigation measure is to include the free health care strategy in the PBF scheme to improve effectiveness and efficiency.

46. **Technical design risk is Moderate after mitigation.** The design of the project is complex, involving the complex division of labor between the different institutions and stakeholders. A PBF verification mechanism has been built into the national system for the first time. The weak capacity in the MPHP could impact the implementation of PBF and institutional capacity activities will be undertaken, for example, training, development of norms and protocols, procurement of equipment, and input for nutrition and community activities. This risk is mitigated through: (i)Training of staff involved in the implementation of the project at different levels of the health system; and (ii) Close support by the World Bank team and strong TA from UN agencies and national organizations within the country that have experience working with such projects. Recruitment of staff at the CDVAs and in the PBF Technical Unit is done through a competitive process and targets people who have already gained some experience from the previous PBF project in the country. International consultants are hired to work in the CDVAs and the PBF Technical Unit as TA. UN agencies will be contracted to support the implementation of capacity-building activities.

47. **Institutional capacity for implementation and sustainability risk is Moderate after mitigation.** There is limited implementation capacity in Chad. Supporting implementation of the project outside N'djamena is infrequent, given the security situation and the long travel distances on bad roads. In the past, the PBF project had depended on expensive third-party external TAs and capacity-building activities implemented by the UN agencies. To mitigate this risk, the project will: (i) Prepare a plan to facilitate project implementation and supervision; (ii) Build the capacity of GoC staff as necessary; (iii) Rely on skilled consultants and UN agencies to support project implementation; and (iv) Ensure that non-state actors, such as the civil society, communities, and the private sector, are all involved in project implementation.

48. **Fiduciary risk is rated High despite the mitigation measures.** The risks of corruption are High regarding leakage of domestic resources as well as for DP-funded programs. Both the internal and external control systems remain weak. Mitigation measures include using an experienced coordination team within the MPHP that has successfully managed other World Bank projects. The existing FM arrangements contribute to building capacity within the ministries through the recruitment of an Internal Auditor within the project, and the recruitment of an External Auditor to audit the accounts of the project at the end of each fiscal year. Furthermore, there are regular FM supervision missions. Regarding procurement, the project is also following the World Bank's New Procurement Policy and the New Procurement Framework.

To further mitigate risks in this area, the Project Procurement Strategy for Development (PPSD) has been prepared to support and guide the fiduciary risk management. Overall, the FM and procurement procedures are well spelled out in the Project Implementation Manual (PIM).

49. **Environmental and social risks are Moderate after mitigation measures.** The project is prepared under the new Environmental and Social Framework (ESF) guidelines. Although the risks are manageable, the capacity to address and manage these risks is weak. To mitigate the risks, an E&S Safeguard Specialist will be recruited in the PIU to assist the project implementers on a day-to-day basis. A GBV Specialist will also be recruited to reinforce the capacity of the PIU. Given that the project focuses on improving health, with a wide coverage of the population, the project is well received by the communities and the direct beneficiaries. Further, the project is expected to have a positive impact on women in Chad, since the main objective of the project is to improve reproductive, maternal, and child health and nutrition. Improving women's health is an essential component of this intervention. Care is taken to ensure the active participation of women in project implementation, especially regarding health choices and care at the community level. The PIU will update the E&S instruments – Environmental and Social Management Framework (ESMF), Environmental and Social Commitment Plan (ESCP), and Stakeholder Engagement Plan (SEP) – to consider the geographical extension.

50. **Stakeholder risk is Moderate.** Apart from the UN agencies, there are not many donors active in the health and nutrition sector in Chad. However, there is a risk of fragmentation and duplication of effort in the health sector, with the risk for the GoC implementing contradictory approaches supported by different partners. To mitigate this risk, the World Bank is working collaboratively with other partners active in the health sector in Chad. The GFF process in Chad favors the coordination and alignment of partners. The World Bank has taken the lead in policy dialogue and fostering connections. A Project Steering Committee that involves other partners has been put in place and is functional.

51. **Other risk is moderate.** Particular attention is paid to security issues for project implementation and supervision, and a monitoring mechanism within the framework of the FCV is considered. The World Bank Health Team is exploring an initiative to see how innovative technology can help to achieve a breakthrough in the programmatic approach by working in an FCV context like Chad. This includes the use of tools that have proved to meaningfully contribute to project supervision, such as Geo-Enabling Initiative for Monitoring and Supervision (GEMS). In addition, the GoC is recruiting a consultant to assess the security risks in the project areas along the border with the Central African Republic and Cameroon and in the provinces of Lac, Ennedi-Est, and Wadi Fira. The outcome of this assessment will determine whether or not a Security Management Plan (SMP) is needed. The SMP stipulates the responsibilities of security forces and explicitly addresses the potential risks related to security personnel behavior and impacts. Furthermore, the SMP should set up mechanisms to monitor the local security situation and establish clear procedures for emergency preparedness.

IV. APPRAISAL SUMMARY

A. Economic and Financial Analysis

52. **The development impact of the parent project and the proposed AF, including rationale for public investment, and World Bank value added are provided the following sections.**

Development impact

53. **The project is expected to contribute significantly to increasing Chad's human capital Index (HCI) (0.30) through improvements in the health status of the population. With the healthy population, productivity is expected to increase which in turn would lead to an increase in economic growth.** The PBF investments in health systems at the primary health care level, complimented by substantial input-based financing, would help address key constraints to service delivery and enhance the health facilities' readiness to deliver quality essential health services in the target facilities; thereby, contributing to reductions in maternal and mortality ratio and under-fine mortality rates.

54. **Economic analysis undertaken to ascertain economic viability of the parent project and AF investments provides a justification for economic and financial viability of the project's investments**. The parent project and AF activities are expected to accrue direct and indirect benefits to target beneficiaries (women, children, and adolescents) in the beneficiary twelve provinces, particularly those from vulnerable population through high utilization of quality reproductive, maternal, child and adolescent health and nutrition services. In accordance with the PDO, a cost-benefit analysis (CBA) that compares monetized costs and benefits of the project's interventions was carried out. The analysis covered both the parent project and AF. Therefore, it replaces the original analysis conducted during the preparation of the parent project. The results of the analysis show a net present value (NPV) of US$58.9million and internal rate of return (IRR) of 24.68 percent in a base case scenario where a 20 percent reduction of disability-adjusted life year (DALY) was assumed (Table 8). The positive NPV means that the project would generate the expected benefits and that Parent Project and the proposed AF investments are economically viable (see Annex 1 for a detailed analysis).

Table 8: Project NPV and IRR

	20% reduction of DALYs* (Base case scenario)
NPV (US$ million)	US$58.9
IRR (%)	24.68%

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

55. **Further analysis (sensitivity analysis) conducted to test some of the assumptions used in the analysis** also revealed positive NPV of US$127.9 million and IRR of 42.20 percent when the impact on DALYs averted in high case scenario (i.e., 25 percent reduction in DALYs) and NPV of US$5.2million and IRR of 9.93 percent in low case scenario (i.e., 15 percent reduction in DALYs) as show in Table 9.

Table 9: Sensitivity analysis

	25% reduction of DALYs (Higher case scenario)	**15% reduction of DALYs (Lower case scenario)**
NPV (US$ million)	US$127.9	US$5.2
IRR (%)	42.20%	9.93%

Rationale for Public Sector Involvement

56. **The rationale for public intervention in this project is based on the role of the GoC in promoting economic and social goals and their spillover effects.** Investments funded through the parent project and the AF will improve health system performance through PBF as well as strengthen health services delivery and institutional capacity. Hence, it will increase utilization and quality of health services, including for the most vulnerable, and will contribute to UHC and to improving the HCI of Chad. Public sector investment is also key to providing and promoting preventive health services and supporting equity improvements to access high-quality RMNCAH-N services. Moreover, these interventions have positive externalities and important spillovers (societal returns on investing in women's and children's health for economic growth).

Value Added by the World Bank Group

57. **The value added by the World Bank support to Chad lies in addressing both critical demand- and supply-side bottlenecks in the delivery of essential services.** The comparative advantages of the World Bank include:

(a) Technical input, based on international experience on health systems strengthening, including on PBF, and the capacity to mobilize a wide range of technical expertise to support key strategies and reforms (for example, RMNCAH-N IC and health financing strategy); and

(b) Financial and convening power to support the mobilization and channeling of additional resources to scale up the delivery of effective and efficient RMNCAH-N services from other DPs allowing it to mobilize additional resources from the GFF in support of Every Woman Every Child.

58. **Additionally, the MPHP in Chad has been successfully supporting the GoC to implement key reforms under PBF, which is one of the GoC's key strategies to move toward UHC**. The World Bank is playing a key role to promote innovative approaches and reforms in the health sector to improve the health outcome of the population.

B. Technical

59. **This AF is designed to respond to the nutritional crisis in Chad. The CERC was triggered on July 25, 2022, to mobilize US$50.0 million to respond to the nutrition emergency that Chad is undergoing**. The GoC has signed contracts with UN Agencies (WFP, UNICEF, and FA) to implement the CERC activities in the affected provinces. Specifically, WFP and UNICEF will procure and distribute ready to use therapeutic food and other food supplements and FAO will procure and distribute agricultural inputs. The community mobilisation activities will be carried out by local NGOs and CHWs. The selected UN agencies have comparative advantage in working on nutrition and food security in Chad and are familiar with communities.

60. **The Technical analysis undertaken for the parent project is still valid for this AF because there are no significative changes in project activities and design. The AF will bring more resources to strengthen the supply side** of the health system by expanding PBF activities to additional provinces. It will also increase institutional development activities, such as capacity building and reforms to improve

service delivery. Furthermore, the AF will finance expansion of demand side activities such as community-based interventions and intensive Communication for Development (C4D) in new provinces to improve RMNCAH-N and other health-related activities needed to improve Chad's HCI. The design of this AF is the same as the parent project which is built on previous World Bank investment in Chad's health sector, especially the MCHSSP Project, which closed on June 15, 2020, and other successful PBF projects in the region. This AF is aligned with the GoC's priorities, which is to institutionalize PBF as a health financing strategy to move it towards achievement of UHC in Chad. In support of this agenda and to ensure sustainability of PBF, the project has built in-country capacity in contract development and verification. In addition, the government has allocated CFA35 million of the 2022 national budget to PBF. The government is expected to use the funds used to finance PBF related costs incurred by the health facilities, potentially helping it to implement the needed reforms by channeling resources to health facilities.

61. **PBF arrangements in Chad are based on best practices and are designed to facilitate government ownership.** The arrangements are based on lessons learned from previous PBF experience in Chad and in the region. A strong cascade training program is embedded in its design to train health personnel at different levels of the health system from the operational to the central level. More than 180 staff from regional and central level and more that 900 staff form health centers and hospitals in parent project area were trained before the beginning of the project. The AF will also support the capacity building in new provinces before the launch of PBF activities in health facilities. The PBF mechanism is clear and can easily be understood by policymakers, health workers, and communities. There will be close collaboration with DPs such as UNICEF, UNFPA, WHO, and NGOs, and non-state actors to monitor project results.

62. **Community-based interventions, which will be expanded in new provinces by this AF, are recognized as cost-effective strategies to improve health services utilization and health outcome.** Delivering an integrated basic package of preventive and curative health services is commonly used in the provinces with improvements in child and maternal mortality. The priorities in the health sector have called for a stronger focus on community-based approaches to complement facility-focused service delivery, especially reaching the poorest and the most disadvantaged segments of the population. The AF will support the GoC to intensify community-based activities in project areas and draw lessons to help scale up and institutionalize community interventions.

C. Financial Management (FM)

63. FM arrangements are the same as the parent project (P172504) with no changes. The PIU of the parent project will have overall accounting responsibility for the AF expenditure and resources. The FM system under the parent project meets the minimum fiduciary requirements of the World Bank's Policy and Directives for IPF and will be replicated for the proposed AF. For food security activities, a CERC manual was developed by the government and approved by the Bank. The Government through the PIU is responsible for the management of CERC activities. The Contracts signed between the Government and UN Agencies implicated in the implementation of CERC activities are based on standard contract models agreed between Bank and UN Agencies.

D. Procurement

D.1 Applicable Policies and Procedures

64. **Applicable procurement rules and procedures.** Procurement for the proposed project will be carried out in accordance with the procedures specified in the World Bank "Procurement Regulations for IPF Borrowers (Procurement Regulations)", dated November 2020, and the World Bank's "Anti-corruption Guidelines: Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants" (revised as of July 1, 2016), as well as the provisions stipulated in the Financing Agreement.

D.2 Procurement Arrangements

65. **Procurement risk assessment.** The last procurement performance rating of the parent project was satisfactory. A summary procurement risk assessment of the PIU was carried out. The overall project risk for procurement is rated Substantial before mitigation. The risks are associated with the current country procurement system, delays experienced in various World Bank-financed projects with approval of bids evaluation reports, possible delays in approval of contracts, and the experience of overall poor management of contracts, despite the strong arrangements in place at the level of the PIU. Due to existing weaknesses in Chad's national procurement system, which tend to cause substantial delay in the procurement process, the World Bank team recommends the following measures for the swift implementation of project activities, and through these measures expects to reduce this risk to Moderate:

(a) Reinforcement of the procurement staff by recruiting additional Procurement Assistant dedicated to the current project;
(b) Training of the procurement team on the New Procurement Policy for investment projects; and
(c) Putting in place a contract management plan and contract execution mechanism.

66. **Institutional arrangements. The institutional arrangements for procurement remains the same as the parent project (P172504).** The PIU, which is based in the MPHP will continue to be responsible for the implementation of all fiduciary activities comprising procurement and FM for the current project.

67. **National procurement arrangement**. In accordance with paragraph 5.3 of the Procurement Regulations, when approaching the national market as specified in the Procurement Plan tables in Systematic Tracking of Exchanges in Procurement (STEP), the country's owns system may be used. When the Recipient uses its own national open competitive procurement arrangement as set forth in Public Procurement Code, such arrangements shall be subject to paragraph 5.4 of the Procurement Regulations and the followings conditions:

(a) The procurement is open to eligible firms from any country;
(b) The request for bids/request for proposals document will require that bidders/proposers submitting bids/proposals present signed acceptance at the time bidding, to be incorporated in any resulting contracts, confirming application of and compliance with the World Bank's inspection and audit rights; and
(c) Maintenance of records of the procurement process.

68. **When national procurement arrangements other than national open competitive procurement arrangements** are applied by the Recipient, such arrangements shall be subject to paragraph 5.5 of the Procurement Regulations.

69. **PPSD and Procurement Plan.** The PPSD and a draft procurement plan of the AF have been prepared, reviewed, and approved prior to negotiations. The PPSD ensures that procurement activities will be prepared and implemented effectively while minimizing the risk. The PPSD and Procurement Plan have provisions to determine whether or not:

(a) The national and international environment is favorable for the procurement of goods, works, and non-consulting and consulting services needed for project implementation;
(b) The national market is able to supply the needed inputs for goods, works, and non-consulting services, etc., that will be purchased according to the relevant procedures;
(c) The same applies to the market for consulting services; and
(d) The contracts are open to the subregional and international market for specific supplies and services that may require the participation of international companies.

70. In accordance with paragraph 5.9 of the Procurement Regulations, the Recipient shall use the World Bank's online procurement planning and tracking tools (STEP) to prepare, clear, and update its procurement plans and conduct all procurement transactions.

E. Legal Operational Policies

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

F. Environmental and Social (E&S)

71. **The E&S risk rating is Moderate**. Impacts associated with the implementation of activities financed by this project are expected to be site specific, primarily associated with:

(a) Hiring of external consultancy support;
(b) Purchase of goods and equipment;
(c) Training of human resources; and
(d) Purchase of medicines.

72. **E&S risks include:**

(a) Environmental and community health-related risks from inadequate storage, transportation, and disposal of medical waste;
(b) Occupational health and safety issues related to the availability and supply of personal protective equipment (PPE) for health care workers, including risks related to COVID-19;
(c) Possible social exclusion from health facilities and services, especially for the poorest and most marginalized who have a limited ability to pay, and for the elderly or those with underlying medical conditions who would be most at risk in the event of a disease or pandemic outbreak;
(d) Sociopolitical risks related specifically to insecurity especially in the Lac province, the northern and central provinces of the country, as well as the borders with neighboring countries; and
(e) Low trust in the GoC that could lead to the rejection of public health interventions.

These impacts are not envisaged to be highly significant or irreversible.

73. **The project is expected to have overall positive E&S impacts** as it will contribute to improvement in the health service delivery of essential health care, institutional capacity building, and the institutionalization of PBF, especially in rural areas where current services are quite limited. It builds on lessons learned from the MCHSSP.

74. **The World Bank's review and E&S due diligence considered:**

(a) The anticipated E&S risks related to the project;
(b) The E&S management requirements;
(c) Relevant national E&S regulatory framework (including health care waste management); and
(d) The project's capacity to manage environmental, social, safety, and health risks in compliance with the Environmental and Social Standards 1 (ESS1).

75. **The Environmental and Social Framework (ESMF) prepared for the parent project** is under review by the PIU to consider the extended area of the project. For this AF, the PIU will revise the relevant instruments (ESMF, Environmental and Social Management Plan (ESMP), Biomedical Waste Management Plan (BMWMP)) to consider the E&S risks and impacts in the new extension area, as well as update and disclose one month after AF effectiveness.

76. **The project will identify the specific risks of Sexual Exploitation and Abuse (SEA) or Sexual Harassment (SH) linked with project activities that could increase risks for SEA** – such as women from vulnerable populations being seen by male health care workers with limited supervision – as part of the social assessment and reflect them in key safeguard instruments, contractual obligations, and other key documents, such as Codes of Conduct to regulate project implementation. As part of the social assessment, the Recipient will map GBV services in areas of implementation and will develop response protocols for the timely, safe, and ethical referral of all survivors that may disclose GBV/SEA/SH incidents from the project to the grievance mechanism.

77. **During the preparation of the ESMF, the Recipient conducted several consultations with various stakeholders**, including groups of women, youth, adolescents, and other vulnerable and disadvantaged members of the community. Meaningful and inclusive consultations will continue throughout the life cycle of the project.

78. **Additionally, the PIU has updated the SEP and the ESCP.** The SEP has been disclosed in-country on November 24, 2022 and published on the World Bank's website on November 18, 2022.

79. **A fully functional grievance redress mechanism (GRM) is in place in the original provinces and will be updated to include the new provinces.** The GRM is part of the SEP that has been prepared for the project and it is described in more detail therein. The GRM is based on the existing local complaint management systems and will draw lessons from the GRM in place under the MCHSSP. The GRM is also accessible to local stakeholders and beneficiaries. The sensitization of the project's stakeholders and beneficiaries is ongoing. Furthermore, specific arrangements will be made to ensure that SEA/SH-related complaints are appropriately handled and referred to specialized SEA/SH service providers. The GRM has a complaint tracking and recovery system at all levels and has also been receiving and addressing

complaints. Efforts will also be made to build synergy and integrate the project's GRM with other World Bank-financed projects in the country.

80. **The SEA/SH risk level for this project is rated Moderate.** Drivers of risk include context-specific GBV risks, such as high acceptability of wife beating, general social acceptability of GBV, conflict, low rates of help-seeking behavior, high rates of child marriage, high risks of human trafficking, and lack of legislation on SH in education and public places. These drivers of risk at the context level interplay with project-specific risks, which include the close contact that health personnel will have with women and girls, given the focus of the project interventions. In response to these realities and aligned with the ESF requirements and a survivor-centered approach, the project will identify the specific risks of SEA/SH linked with project activities that increase risks for SEA – such as women from vulnerable populations being seen by male healthcare workers with limited supervision – as part of the social assessment and reflect them in key safeguard instruments, contractual obligations, and other key documents, such as Codes of Conduct to regulate project implementation. As part of the social assessment, the Recipient will map GBV services in areas of implementation and will develop response protocols for the timely, safe, and ethical referral of all survivors who may disclose GBV/SEA/SH incidents to the grievance mechanism. Specific protocols will be developed to manage GBV/SEA/SH grievances (intake forms that ensure confidentiality, a GBV/SEA/SH focal point to treat GBV/SEA/SH complaints, processes that ensure immediate referral of survivors, and information-sharing protocols that ensure confidentiality). CHWs will also support the project in ensuring that survivors of GBV/SEA/SH are aware of where they can report any project-related instances of GBV/SEA/SH. Awareness-raising activities on project-related risks of GBV/SEA/SH and mitigation strategies will be included in the SEP and will target communities and project workers, while contractual obligations in terms of SEA/SH mitigation will be enforced through the integration of specific provisions on Codes of Conduct addressing GBV/SEA/SH and the training of all workers considered to be project staff as outlined in the project's Labor Management Procedures[5]. Responsibility for the management of GBV/SEA/SH risks has been outlined in the ESCP. Furthermore, as part of project preparation, the Recipient will develop a GBV/SEA/SH Action Plan with a budget in the ESMP, which will outline the project's prevention strategies, response protocol, and accountability mechanisms (AMs). The Recipient's supervision capacity will be strengthened throughout implementation by building the capacity of the implementing agency's Social Specialist in GBV and the timely engagement of expert consultants for key activities as needed.

81. **Other risks (security) are considered Moderate.** Security risks may have a negative effect on the implementation of the project and the achievement of project objectives and results. Indeed, security risks are noted in northern, northeastern, eastern, and central areas of Chad, which continue to be volatile and unpredictable. In the project implementation area, the intensity of the conflict varies greatly. Thus, the north, northeast, and east of the country are the most affected areas. For many years, the nature of the conflicts in this part of the country included insurgencies by armed groups and violent crimes, such as armed robberies, carjacking, and assaults, which are generally believed to be associated with poverty and social exclusion. The central region of Chad has not experienced any armed conflicts. However, intercommunity conflicts related to the scarcity of natural resources, such as water and plant cover, have been recorded on a recurring basis. The security crisis observed in this part of the country had serious social and humanitarian consequences on local communities. Intercommunity/farmers' conflicts in their

[5] *https://documentsinternal.worldbank.org/search/32937260*

current form are continually spreading to the south of the country, which could increase the risk of project activities being disrupted. As such, continuous security risk assessment and management will be critical to the achievement of the project's development outcomes.

82. **The first of three measures to mitigate the potential security risks is an assessment prepared by the Recipient.** A Security Risk Assessment (SRA) will be carried out to evaluate the security situation in the project areas within thirty days of the AF effectiveness. Based on the outcome of the assessment, a security management plan (SMP) will be prepared by the Recipient within 90 days after the AF effective date, if needed. The SMP will describe how and by whom security will be managed and delivered, the resources required, and the behavior that is expected of security personnel if armed forces, police, or gendarmerie are involved in any project-related activities. It will also stipulate clear emergency procedures to be followed by PIU staff in case of any incident. Second, the project will maximize flexibility in design and implementation, including the selection of intervention areas and types of investments correlated with levels of insecurity and potential negative impacts for the project. Third, the project will also use geospatial data and other information and communication technology tools for supervision and M&E, which will help to ensure successful project implementation. There will also be regular and consistent dialogue with partners involved in security-related activities.

Gender

83. **Chad's poor performance in the Gender Inequality Index (2018) is explained by a myriad of factors.** Some of these directly relate to the health sector, such as women's low utilization of health service and the high prevalence of GBV. Other factors relate to other sectors, such as the access to education, economic opportunities, and women's participation in society. Furthermore, some factors are multisectoral and deeply engrained in Chad's culture. This project will focus on the potential contributions of the health sector to addressing the main factors that explain the gender gap in Chad and will finance activities to close this gap.

84. **In terms of access and utilization of health service, the low demand for health services is largely driven by insufficient knowledge and weak health literacy.** These are particularly low among women. A common practice in Chad, which contributes to this unequal exposure to the health system and subsequent gap in awareness and literacy, is the requirement that women have their husbands' authorization to visit a health facility. While a recent decree establishes that this is not needed, efforts are needed to disseminate this information and advocate for its implementation. The awareness of family planning, for example, is particularly low among women, with a gender gap of more than 10 percentage points; according to the Demographic and Health Survey (DHS) 2014–2015, 64.2 percent of women knew about family planning methods, compared to 76.9 percent of men. To close the gap in awareness and health literacy, the project will finance C4D and Social and Behavioral Change (SBC) campaigns. These will target girls and women and cover issues such as family planning alternatives, Female Genital Mutilation (FGM), maternal health, and GBV prevention. The end goal of this support is to increase the use of family planning, so the project will measure progress toward closing this gap by measuring the number of girls and women who use modern contraceptive methods. It should be noted that the project will include a gender-disaggregated indicator on overall service utilization to see the extent to which the increased awareness and literacy contribute to addressing demand-side barriers to utilization of health services among women.

85. **The prevalence of GBV in Chad is very high.** It is estimated that 28.6 percent of women nationwide have experienced physical or sexual violence by an intimate partner at some point in their lives. The share of men who experienced physical violence (as reported by their partners) was significantly lower, estimated at 6.5 percent. Wife beating was seen as justified by 73.5 percent of women, and 43.5 percent of women who have experienced Intimate Partner Violence (IPV) have never sought help to stop the violence and never told anyone (DHS Multiple Indicator Cluster Survey (MICS) 2014–2015). While C4D and SBC campaigns will include messages on the prevention of GBV and raise awareness about referral pathways for women who experience GBV, the project will also finance other activities to close this gender gap. The project will sensitize and train frontline health workers to recognize early signs and symptoms of domestic violence, as the health system can be the first contact point for the survivors. Further, facilities supported by this project will provide counselling and advice for survivors of domestic violence. Counselling will include advice on how to access other services like protection, shelter, and legal advice, if available. The delivery of quality services (preventive and curative) for survivors will be incentivized through the PBF program and integrated into the package of services that need to be available at health facilities. The project will monitor progress toward the closure of this gender gap by measuring the number of GBV survivors who have received care from a trained health care worker in a health facility.

Complaint Management Mechanism and Citizen Engagement

86. **The ESMF proposes a GRM.** The GRM prepared under the parent project, in consultation with local communities and stakeholders in the areas of implementation of subproject activities during the preparation of the safeguard instruments, will be updated to include the new provinces. The project will also partner with civil society and NGOs for the implementation of activities and awareness raising campaigns. More specifically, all grievances received must be resolved at the local level within a well-defined time frame. Grievances received will be divided into two groups –sensitive and non-sensitive grievances. The non-sensitive ones are treated at the local level, while the sensitive ones are confidentially sent to the national level. The details are provided in the SEP. In addition, the project will work with NGOs not only in the implementation of the expansion of activities, but also in the monitoring of activities and GBV.

87. **The project will strengthen citizen engagement in the activity zones**, using the PBF tools and community surveys that are used to assess the perceived quality of care by beneficiaries. The project will monitor the percentage of grievances that are registered and addressed, as established in the PIM. Furthermore, the project will also monitor the percentage of beneficiaries who say that they are satisfied with the project. Further, community-based NGOs and local elected officials will be involved in quarterly assessments of facilities' performance, which will take into consideration feedback and patient satisfaction survey's results.

88. **Users' opinions, statements, and judgments will be included in the PBF project database.** This feedback will be discussed during facilities' quarterly assessments, and the main recommendations and actions to address citizen's concerns will be displayed in the relevant health facility's bulletin and on the project's website. The PIM will be updated to include strategies on implementation of the actions and recommendation to improve facilities' performance.

89. **Community-based NGOs and local elected officials will be involved in the PBF program.** They will be involved in communicating and monitoring the quality of services, sensitizing communities, and promoting demand for better use of health services by communities, especially mothers and children.

Climate Change (Co-Benefits)

90. **Climate exposure.** This project has been screened for climate and disaster risks and found to be at High risk from the impacts of climate change due to drought, extreme heat events, and extreme precipitation events associated with flooding. These events already affect the Chadian health sector with potential risks on project activities assessed as "moderate," and their impact is expected to continue or increase during the life of the project. This exposure risk is assessed at this level for both the current and future timescales. Given its geographical location as a landlocked country, topographical and geological conditions, Chad is one of the most vulnerable countries in the world that is exposed to the adverse risks of natural disasters, climate change and disease outbreaks. Rainfall in Chad follows a gradient from north to south, with rainfall decreasing at lower latitudes. The three primary climatic zones follow this rain gradient, with the northern part of Chad in the arid Saharan Desert, transitioning into the subtropical, semi-arid Sahel region in central Chad, and converting to tropical savannah in the south. Mean annual temperatures are projected to increase significantly between 1.0°C and 3.4°C over the next four decades and between 1.6°C and 5.4°C by the end of the century. Projections for mean annual rainfall are highly varied and difficult to predict with changes across the whole country varying between −15 mm and +9 mm per month by the end of the century. In southern Chad, model projections for precipitation during the wet season (July–September) indicate a projected increase in rainfall. In addition to the global drivers of climate change, Chad faces severe environmental degradation, exemplified by the drying up of Lake Chad, increased desertification, declining fish stocks, the disappearance of certain animal and plant species, and soil degradation. All these add to reducing the resilience of the system and the increased climate vulnerability of the population.

91. **Climate vulnerability.** Chad is ranked last (out of 182 countries) in vulnerability to climate disruptions and readiness for adaptive actions in the 2020 Notre Dame Global Adaptation Initiative, which shows that the country has a high vulnerability and low readiness. The population of Chad is vulnerable to several climate-related health impacts due to the changing climate exposures. There are five main channels through which climate change affects Chad's health sector:

(a) Increased prevalence of water- and vector-borne diseases in flooded areas.
(b) Increasing risks of heat stress, particularly in the northern provinces.
(c) Increased violence due to changes in crop yield and changes in pastoralist practices that lead directly to injuries, and increasing prevalence of GBV, domestic violence, poverty, and migration.
(d) Increased risk of malnutrition caused by the reduced availability of food during droughts and the increased prevalence of water- and vector-borne diseases in the rainy season; and
(e) Reduced access and destruction of health facilities due to flooding, which can lead to unsafe water, sanitation, and hygiene (WASH).

90. In particular, the GoC declared a food and nutrition state of emergency on June 1, 2022 with an estimated 1.67 million children under the age of five suffering from acute malnutrition between June and September 2022. It is also estimated that 250,000 pregnant women will suffer from malnutrition as this crisis continues. It is clear that decreasing rains due to climate variability and change has reduced the crop yield, which is leading to higher levels of malnutrition. In the absence of appropriate measures being put

in place to enhance system resilience and adaptation to climate, ever-increasing numbers of people are at risk from the changing climate through increasing poverty and declining ecosystem and land conditions.

91. The project intends to implement measures to adapt and mitigate climate change. The project's climate adaptation and mitigation measures are outlined in Table 10 below.

Table 10: Climate action and contribution to adaptation and mitigation

Subcomponent	Climate-related action	Climate Action and Contribution to Adaptation and Mitigation
Component 1: Scaling up PBF for better health service delivery (AF: US$80.0 million equivalent, IDA PBA and IDA CRW).		
	PBF for strengthened health system coverage and quality, improving climate adaptation	Strengthened health service coverage and quality will help the health system more effectively adapt to the impacts of climate change by: (i) increasing the number of people who have access to health services, improving the health of the population before climate shocks and access to health services in the event of climate shocks; (ii) improving the quality of the services provided, improving population health prior to and in the event of climate shocks; (iii) improving the coverage and quality of services for climate-sensitive for climate sensitive conditions such as malnutrition and malaria; and (iv) improving access to health services for people with health conditions, such as NCDs, that are exacerbated in climate shocks, particularly high temperatures. **Adaptation**
	Health center and referral hospital PBF for climate-sensitive conditions and climate shocks	The PBF program includes measures for the following areas which are directly climate related: (i) Malaria and Nutrition, which are climate-sensitive in Chad's context; (ii) Tuberculosis, whose incidence is increased with rising temperatures based on biologic and global research[6]; (iii) Laboratory, including diagnostics of climate-sensitive diseases such as malaria, diarrheal diseases, and tuberculosis; (iv) management of essential medicines and availability of pharmaceuticals, which includes medicines for climate sensitive diseases such as malaria and diarrheal diseases and will also help the health system to effectively adapt to the impacts of climate change; (v) infection prevention and control including water and sanitation which will help prevent the spread of infectious disease in case of climate shocks; and (vi) community PBF which will strengthen community health systems and strengthen climate change adaptation. **Adaptation**
	Improving community level nutrition to address nutritional crisis	**Support for community health and nutrition** will help to address the nutritional crisis, which is climate related in Chad's context. Community level nutrition interventions and community engagement will help support effective identification of undernourished children. The use of CHWs to deliver services will help to reach all community members, including underserved community members, more effectively. These interventions will strengthen community resilience to climate change. **Adaptation**
	Improving availability and quality of climate-sensitive infrastructure and equipment	Measures will be included in the PBF to improve the quality of infrastructure and equipment. This will include standards for rehabilitation of health centers and referral hospitals such as climate-friendly building designs (thermal insulation and solar reflective roofs against extreme heat) and low Global Warming Potential (GWP) below 125 energy-efficient equipment (i.e., LED lighting) and light control measures such as diming and occupancy sensors). This will also include purchasing of climate-sensitive waste equipment to improve efficiency and efficacy of medical waste management. **Mitigation**
	PBF for climate emergency preparedness and response	A climate adaptation measure will be included in both the primary and secondary level PBF programs. While the exact definition of the measure is to be identified, this is expected to assess the availability of climate emergency preparedness and response plans and micro plans at primary level facilities and referral hospitals to improve the adaptation of facilities to climate shocks and to prevent disruptions to service delivery. Contingency measures to help guide healthcare workers and healthcare facilities during climate-related events such as power outages from flooding and extreme heat will also be integrated. **Adaptation**
	Improving access to basic health and	**Vouchers for RMCHN services for pregnant women and children under five** will ensure women and young children have access to nutrition services as well as basic health

6 *https://www.nature.com/articles/s41558-022-01284-*

	nutrition services to adapt to impacts of climate change	services for vector and waterborne diseases such as malaria and diarrheal disease, which are climate sensitive in Chad. This will help communities adapt to the impacts of climate change. **Adaptation**
Component 2: Strengthening service delivery readiness to deliver quality RMNCAH-N services (AF: US$10.0 million equivalent, IDA PBA and IDA CRW)		
Subcomponent 2.1: Strengthening health facilities' readiness for service delivery (AF: US$5.0 million equivalent, IDA PBA and IDA CRW) **&** **Subcomponent 2.2: Strengthening community platforms for service delivery (AF: US$3.0 million equivalent, IDA PBA and IDA CRW).**	Improving competence levels to adapt to climate change	**Trainings for frontline health workers on nutrition service provision** will help to strengthen nutrition services, which in Chad's context where undernutrition is climate related, will help communities adapt to the impacts of climate change. **Adaptation**
	Ensure readiness through plans in case of climate emergency	**Trainings on climate emergency preparedness and response** will be incorporated into frontline health worker trainings. Specific modules on climate emergency preparedness and response will be included. Incorporation of these modules in frontline health worker trainings will help to improve the resilience of primary level health service delivery to climate shocks. It will also increase healthcare workers competency levels on climate change and health promotion/prevention activities to raise awareness among their patients as well as to improve their coping strategies for heat-stress and exhaustion during hotter days. **Adaptation**
	Ensuring back-up systems in place during a climate emergency	Health Centers and referral hospitals will be equipped with electricity back-up systems that will include solar energy (i.e., purchase of solar panels) and battery technology. These will mitigate greenhouse gas emissions by reducing the use of diesel-powered generators. **Adaptation and Mitigation**
	Improving supply chain management to ensure access to medicines and other essential health supplies	Improved supply chain management will lead to efficiencies in motorized transport of medicines and other supplies. This will include the financing of fuel-efficient vehicles (electric) and route optimization will be considered for transportation of medicines and other medical supplies by adjusting routes for vehicles depending on weather and road conditions. This will improve fuel mileage and fuel efficiency of the vehicles. **Mitigation**
	Improving WASH infrastructure to withstand climate disasters	This subcomponent will finance improved WASH infrastructure in fixed and mobile facilities which will improve access to sanitation services during the country's climate shocks, particularly flooding, to help reduce the incidence of waterborne diseases. **Adaptation**
Subcomponent 2.3: TA for health system strengthening (AF: US$1.0 million equivalent, IDA PBA)	Climate and Health Vulnerability Assessment to assess known risk and adaptive capacity	The development of a Climate and Health Vulnerability Assessment to identify known risk factors (socioeconomic, environmental, pre-existing health conditions), acquire information on health outcomes, assess adaptive capacity. For instance, data on whether households have been impacted by climate shocks to better understand the profile of climate-impacted households and the relationship between climate shocks and other variables (such as undernutrition and other health outcomes) will be collected. This will enable the project to provide targeted TA in districts as it relates to the impacts of climate change. **Adaptation**
Subcomponent 2.4: Support to build Chad's Civil Registration and Vital Statistics (CRVS) system (AF: US$1.0	Strengthening Health Management Information Systems (HMIS) for climate emergencies	The strengthening of the HMIS to enhance preparedness and response capacity to respond to climate-related extreme events and to understand changes in the disease burden due to climate change is critical. Supporting the CRVS will enable the country to have real-time statistics to properly plan and delivery assistance during a climate emergency. Data from the HMIS can be used in conjunction with the CRVS to properly identify populations during a climate emergency to receive the healthcare that they need. **Adaptation**

x.epdf?sharing_token=DSGReaBPMkXoXetkf0jKPNRgN0jAjWel9jnR3ZoTv0PFwMZzlzMH8X2V_lztCkyVeSFRqOALB60A0I_QzzP0N3SxzfiX0j0kDCjSzXH1DwFlXh7QZB4QsWMw6jjqRrrlkVQ19V92upE2St5x15ZvzrkyjkufoOZ49O069U7dX-4%3D

million equivalent, IDA PBA)	Strengthening data for better climate change adaptation	**Strengthening use of health and nutrition data** will help the MoPH identify progress more effectively on interventions for nutrition and climate sensitive diseases (such as Malaria and diarrheal diseases), the status of health and nutrition outcomes. This will help more effectively address nutritional and climate sensitive health issues, strengthening the country's resilience to climate change. **Adaptation**
		Overlaid Nutrition / Food Security and Meteorologic Data: Nutrition and food security data will be overlaid with meteorologic data to better understand the relationship between undernutrition and climate change. This will help the Government to more effectively implement interventions to improve resilience to climate change related food insecurity and undernutrition. **Adaptation**
Component 3: Project management and verification of results (AF: US$10.0 million equivalent, IDA PBA).		
Subcomponent 3.1: Project management (AF: US$1.0 million equivalent, IDA PBA).	Monitoring of climate activities	Monitoring Project's Climate Activities: This subcomponent will monitor the project's activities including climate activities and should be assessed at the same rate as the project's respective climate activities, particularly those in Component 1 (PBF activities). **Adaptation**
Component 4: CERC (AF: US$50.0 million IDA).		
Component 4: CERC (AF: US$50.0 million IDA).	Behavioral change communications to reduce vulnerability to climate change	**Climate Shock Preparedness and Response Communication:** BCC messages to be delivered through this subcomponent will include messages on climate emergency preparedness and response, including messages on nutritional impacts of climate shock, how to mitigate these, and reduce their personal and household vulnerability. Specific messages and materials on climate emergency preparedness and response will be included. Incorporation of these messages in BCC aim to improve community resilience to climate shocks. **Adaptation**
	Support of nutritional activities to adapt to climate change	**Promotion of vegetable gardens in communities** through counseling, capacity building in locally appropriate crops, and provision of equipment aims to reduce food insecurity and improve nutrition towards reduced undernutrition. The gardens will model use of climate and nutrition sensitive agriculture including use of farming practices and seeds that are resilient to drought. **Adaptation**
		Support for small-scale agriculture projects will be included and prioritized by the project to improve access to nutritious food while providing income, to contribute to reductions in undernutrition. Support will include TA, training, planning support, and financial / material support. Trainings and support for agricultural practices will include both a focus on nutrition sensitive agriculture to address undernutrition and climate sensitive agriculture including farming practices and seeds that are resilient to drought. **Adaptation**

V. WORLD BANK GRIEVANCE REDRESS

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

VI SUMMARY TABLE OF CHANGES

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

VII DETAILED CHANGE(S)

PROJECT DEVELOPMENT OBJECTIVE

Current PDO

The Project Development Objective is to improve the utilization and quality of service delivery of essential health services with a particular focus on reproductive, maternal, child and adolescent health, and nutrition services for the population of Chad in project-supported areas

Proposed New PDO

To improve utilization and quality of service delivery of essential health services with a particular focus on reproductive, maternal, child and adolescent health, and nutrition services for the population of Chad in project-

supported areas, and to provide immediate and effective response to an eligible crisis or emergency

COMPONENTS

Current Component Name	Current Cost (US$, millions)	Action	Proposed Component Name	Proposed Cost (US$, millions)
Scaling up Performance-Based Financing for better health service delivery	67.50	Revised	Scaling up Performance-Based Financing for better health service delivery	147.50
Strengthening service delivery readiness to deliver quality RMNCAH-N services	26.00	Revised	Strengthening service delivery readiness to deliver quality RMNCAH-N services	36.00
Project management and verification of results	13.00	Revised	Project management and verification of results	23.00
Contingent Emergency Response Component	0.00	Revised	Contingent Emergency Response Component	50.00
TOTAL	**106.50**			**256.50**

REALLOCATION BETWEEN DISBURSEMENT CATEGORIES

Current Allocation	Actuals + Committed	Proposed Allocation	Financing % (Type Total)	
			Current	Proposed
IDA-D8070-001 | Currency: XDR				
iLap Category Sequence No: 1	Current Expenditure Category: GD,WK,N/CS,TRN&OC Pt.2 exp Pt2.1b&3			
14,000,000.00	2,605,322.44	6,049,500.00	75.00	55.00
iLap Category Sequence No: 2	Current Expenditure Category: PBF Payments Pt 1&Pt 2.1b			
48,000,000.00	415,487.53	18,000,000.00	87.90	73.00
iLap Category Sequence No: 3	Current Expenditure Category: Emergency Expenditure Pt 4			
0.00	0.00	38,200,000.00	100.00	100.00

iLap Category Sequence No: 4		Current Expenditure Category: Refund of Project Preparation Advan			
	600,000.00		350,498.64	350,500.00	
Total	**62,600,000.00**		**3,688,080.02**	**62,600,000.00**	

Expected Disbursements (in US$)

Fiscal Year	Annual	Cumulative
2021	0.00	0.00
2022	7,585,410.33	7,585,410.33
2023	80,000,000.00	87,585,410.33
2024	53,000,000.00	140,585,410.33
2025	60,000,000.00	200,585,410.33
2026	55,914,589.67	256,500,000.00
2027	0.00	256,500,000.00
2028	0.00	256,500,000.00

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

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

LEGAL COVENANTS – Additional Financing-Health System Performance Strengthening Project (P180039)

Sections and Description
Not later than three (3) months after the Effective Date, the Recipient shall cause the PIU to recruit and thereafter retain an additional environment specialist and a gender-based violence specialist, with qualifications and experience satisfactory to the Association, and in accordance with the Procurement Regulations.
The Recipient shall update not later than one (1) month after the Effective Date and thereafter publicize, maintain and operate an accessible, the grievance mechanism, to receive and facilitate resolution of concerns and grievances of Project-affected people, andtake all measures necessary and appropriate to resolve, or facilitate the resolution of, such concerns and grievances, all in a manner acceptable to the Association.
The Recipient shall not later than one (1) month after the Effective Date update and redisclose the ESMF, the BMWM to reflect this Financing under terms satisfactory to the Association
The Recipient shall ensure that not later than twelve (12) months after the Effective Date, a Preparedness Plan is prepared and adopted in form and substance acceptable to the Association.
The Recipient shall not later than one month after the Effective Date update the arrangements with the Independent Internal Verifiers in a manner satisfactory to the Association and thereafter maintain the Independent Internal Verifiers, in accordance with the Procurement Regulations to act as internal verifiers of the proper implementation and delivery of the PHS under Part 1 and the Coordination Activities under Part 2.1(b) of the Project
Adopt the SEA/SH Action Plan at the same timeframe as for the adoption and implementation of the ESMPs and thereafter implement the SEA/SH Action Plan throughout Project implementation.
Prepare the SRA no later than 30 days after the Effective Date of the Financing Agreement.
Prepare and adopt Security Management Plan if needed 90 days after the Effective Date of the Financing Agreement.

Conditions

Type	Financing source	Description
Disbursement	IBRD/IDA	Under Category (2), until and unless the Recipient shall have entered into new contracts or updated existing contracts with the Independent External Verifiers to reflect this Financing and under terms and conditions and in form and substance satisfactory to the Association.

VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Chad
Additional Financing-Health System Performance Strengthening Project

Project Development Objective(s)

To improve utilization and quality of service delivery of essential health services with a particular focus on reproductive, maternal, child and adolescent health, and nutrition services for the population of Chad in project-supported areas, and to provide immediate and effective response to an eligible crisis or emergency

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
To improve the service delivery of essential health services in project-supported areas							
People who have received essential health, nutrition, and population (HNP) services (CRI, Number)		410,109.00	477,911.00	545,713.00	613,515.00	681,317.00	1,598,000.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement) (CRI, Number)		265,529.00	305,229.00	344,929.00	384,629.00	424,329.00	928,000.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Number of children immunized (CRI, Number)		115,046.00	125,497.00	135,948.00	146,398.00	156,848.00	334,000.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Number of women and children who have received basic nutrition services (CRI, Number)		160,384.00	210,020.00	259,655.00	309,290.00	358,925.00	917,000.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Number of deliveries attended by skilled health personnel (CRI, Number)		115,046.00	125,497.00	135,947.00	146,397.00	156,847.00	347,000.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Average health facility score on the quality evaluation of health care using a quality checklist among facilities in the project area (Percentage)		0.00	30.00	40.00	50.00	60.00	65.00
Women in the project area who are currently using any modern method of contraception (Number)		187,650.00	207,957.00	228,264.00	248,571.00	268,878.00	502,751.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Girls in the project area, aged 15-19, who are currently using any modern method of contraception (Number)		6,101.00	7,321.00	8,721.00	10,021.00	11,100.00	20,994.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Women in the project area, aged 20-49, who are currently using any modern method of contraception (Number)		181,549.00	203,076.00	224,603.00	246,130.00	267,657.00	481,757.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Pregnant women in the project area who have received at least 4 antenatal care visits from skilled health providers (Number)		85,023.00	95,445.00	105,867.00	116,289.00	126,711.00	274,270.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
To improve CERC Activity Implementation *(Action: This Objective is New)*							

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
CERC implemented according to the Emergency Response Action Plan (Yes/No)		No					Yes
Action: This indicator is New							

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Scaling up Performance-Based Financing for better health service delivery							
The national population covered by the PBF program (Percentage)		12.00	32.00	32.00	32.00	32.00	45.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Supervision visits in the project area in which the digital supervision tool was fully completed (Number)		0.00	60.00	120.00	180.00	240.00	518.00
Health centers in the project area which offered at least 75 percent of the package of services defined in their PBF contract (Percentage)		0.00	5.00	15.00	25.00	35.00	40.00
Consultations provided to the poor free of charge in the		0.00	80,274.00	169,548.00	240,822.00	321,096.00	802,740.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
project area (Number)							
Hospitals (district and provincial) in the project area that have achieved at least 80 percent of the score on the quality of maternity services (Percentage)		0.00	15.00	25.00	35.00	45.00	50.00
Health centers in the project area that had a revenue and an expense book available and up to date (Percentage)		0.00	15.00	25.00	35.00	45.00	50.00
GBV survivors who have received health care from a trained health worker at a health care facility in the project area (Number)		0.00	2,576.00	5,152.00	7,728.00	10,304.00	20,938.00
Strengthening service delivery readiness to deliver quality RMNCAH-N services							
People referred by a CHW to a health facility in the project area (Number)		0.00	28,095.00	56,191.00	84,288.00	112,383.00	280,958.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
CHWs in the project area who have used a digital tool to complete at least one upskilling module in the last three months (Number)		0.00	20.00	40.00	60.00	80.00	100.00
Action: This indicator has been Revised							

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Health facilities in the project area that had 100 percent of the tracer drugs available on the day of the visit (Percentage)		0.00	5.00	15.00	25.00	35.00	40.00
Action: This indicator has been Revised							
Personnel in the project area who have received clinical training (Number)		516.00	672.00	828.00	948.00	1,140.00	2,011.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Children under 5 years of age in the project area that have been registered in the civil registry (Number)		160,548.00	195,300.00	230,000.00	264,800.00	299,553.00	565,822.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Children 6 - 59 months of age in the project area that have received vitamin A supplement in the last six Months (Number)		531,012.00	593,384.00	655,756.00	718,128.00	790,599.00	850,000.00
Action: This indicator has been Revised	***Rationale:*** ***The end target of this indicator has been revised to reflect the additional funding***						
Health facilities in the project area that have reported		0.00	10.00	15.00	20.00	25.00	30.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
through DHIS2 (Percentage)							
Action: This indicator has been Revised							
Grievances that will be registered and addressed as established in the PIM. (Percentage)		0.00	20.00	40.00	60.00	70.00	80.00
Action: This indicator has been Revised							
Patients who say that they are satisfied with the health services received in the project area (Percentage)		0.00	40.00	50.00	60.00	70.00	80.00
Action: This indicator has been Revised							
Project management and verification of results							
Health facilities in the project area that have received PBF payments on time (as defined in the PBF manual) (Percentage)		0.00	60.00	70.00	75.00	80.00	80.00
Action: This indicator has been Revised							
Contingent Emergency Response Component *(Action: This Component is New)*							
Cartons of Plumpy'Nut procured and distributed (Number)		0.00					243,733.00

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Action: This indicator is New							
Tons of Plumpy' sup procured and distributed (Number)		0.00					3,043.00
Action: This indicator is New							
Farmers reached with agricultural assets or services (Number)		0.00					12,500.00
Action: This indicator is New							

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
People who have received essential health, nutrition, and population (HNP) services		Quarterly	Implementation report	Routine data	PIU
People who have received essential health, nutrition, and population (HNP) services - Female (RMS requirement)		Quaterly	Implementation report	Routine data	PIU
Number of children immunized		Quaterly	Implementation report	Routine data	PIU
Number of women and children who have received basic nutrition services		Quaterly	Implementation report	Routine data	PIU

Number of deliveries attended by skilled health personnel		Quaterly	Implementation report	Routine data	PIU
Average health facility score on the quality evaluation of health care using a quality checklist among facilities in the project area		Quarterly	Implementation report	Routine data	PIU
Women in the project area who are currently using any modern method of contraception		Quarterly	Implementation report	Routine data	PIU
Girls in the project area, aged 15-19, who are currently using any modern method of contraception	Total number of Girls in the project area, aged 15-19, who are currently using any modern method of contraception	Quarterly	Implementation report	Routine data	PIU
Women in the project area, aged 20-49, who are currently using any modern method of contraception	Total number of women in the project area, aged 20-49, who are currently using any modern method of contraception	Quarterly	Implementation report	Routine data	PIU
Pregnant women in the project area who have received at least 4 antenatal care visits from skilled health providers	Total number of pregnant women in the project area who have received at least 4 antenatal care visits from skilled health providers	Quarterly	Implementation report	Routine data	PIU
CERC implemented according to the Emergency Response Action Plan	The activities described in the emergency response plan completed	Quarterly	Implementation Report	Routine Data	MPHP

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
The national population covered by the PBF program	Total number of population covered by the PBF program divided by the total population of the country.	Quarterly	Implementation report	Routine data	PIU
Supervision visits in the project area in which the digital supervision tool was fully completed	Total number of supervision visits in the project area in which the digital supervision tool was fully completed	Quarterly	Implementation report	Routine data	PIU
Health centers in the project area which offered at least 75 percent of the package of services defined in their PBF contract	Number of health centers in the project area which offered at least 75 percent of the package of services defined in their PBF contract divided by the total number of health facilities in the project area with PBF contracts.	Quarterly	Implementation report	Routine data	PIU
Consultations provided to the poor free of charge in the project area	Total number of consultations provided to the poor free of charge in the project area	Quarterly	Implementation report	Routine data	PIU
Hospitals (district and provincial) in the project area that have achieved at least 80 percent of the score on the quality of maternity services	Total number of hospitals (district and provincial) in the project area that have achieved at least 80 percent of the score on the	Quarterly	Implementation report	Routine data	PIU

	quality of maternity services divided by the total number of hospitals in project area.				
Health centers in the project area that had a revenue and an expense book available and up to date	Total number of health centers in the project area that had a revenue and an expense book available and up to date divided by the total number of health centers in the project area.	Quarterly	Implementation report	Routine data	PIU
GBV survivors who have received health care from a trained health worker at a health care facility in the project area	Total number of GBV survivors who have received health care from a trained health worker at a health care facility in the project area	Quarterly	Implementation report	Routine data	PIU
People referred by a CHW to a health facility in the project area	Total number of people referred by a CHW to a health facility in the project area	Quarterly	Implementation report	Routine data	PIU
CHWs in the project area who have used a digital tool to complete at least one upskilling module in the last three months	Total number of CHWs in the project area who have used a digital tool to complete at least one upskilling module in the last three months	Quarterly	Implementation report	Routine data	PIU
Health facilities in the project area that had 100 percent of the tracer drugs available on the day of the visit	Total number of health facilities in the project area that had 100 percent of the tracer drugs available on the day of the visit divided	Quarterly	Implementation report	Routine data	PIU

	by the total number of health facilities in the project area.				
Personnel in the project area who have received clinical training	Total number of personnel in the project area who have received clinical training	Quarterly	Implementation report	Routine data	PIU
Children under 5 years of age in the project area that have been registered in the civil registry	Total number of children under 5 years of age in the project area that have been registered in the civil registry	Quarterly	Implementation report	Routine data	PIU
Children 6 - 59 months of age in the project area that have received vitamin A supplement in the last six Months	Total number of children 6 - 59 months of age in the project area that have received vitamin A supplement in the last six Months	Quarterly	Implementation report	Routine data	PIU
Health facilities in the project area that have reported through DHIS2	Total number of health facilities in the project area that have reported through DHIS2 divided by the total number of health facilities in the project area	Quarterly	Implementation report	Routine data	PIU
Grievances that will be registered and addressed as established in the PIM.	Total number of grievances that will be registered and addressed as established in the PIM divided by the total number of grievances that was registered	Quarterly	Implementation report	Routine data	PIU
Patients who say that they are satisfied with the health services received in the	Total number of patients who say that they are	Quarterly	patient satisfaction	Patient satisfaction surveys	PIU

project area	satisfied with the health services received in the project area divided by the total number of patients interviewed		survey		
Health facilities in the project area that have received PBF payments on time (as defined in the PBF manual)	Total number of health facilities in the project area that have received PBF payments on time (as defined in the PBF manual) divided by the total number of health facilities in the project area	Quarterly	Implementation report	Routine data	PIU
Cartons of Plumpy'Nut procured and distributed	Total number of cartons of Plumpy'Nut procured and distributed	Quarterly	Implementation Report	Routine Data	MPHP/UNICEF
Tons of Plumpy' sup procured and distributed	Total tons of Plumpy' sup procured and distributed	Quarterly	Implementation Report	Routine Data	MPHP/WFP
Farmers reached with agricultural assets or services	Total number of farmers reached with agricultural assets or services	Quarterly	Implementation Report	Routine Data	MPHP/FAO

Annex: Economic Analysis

Introduction

1. To ascertain the economic viability of the project's investment, the project team conducted a CBA using the latest available data at appraisal. This analysis covers both the parent project and AF. Therefore, it replaces the original analysis conducted during the preparation of the parent project.

Project objective and main activities

2. The PDO is to improve utilization and quality of service delivery of essential health services with a particular focus on reproductive, maternal, child and adolescent health, and nutrition services for the population of Chad in project-supported areas, and to provide immediate and effective response to an eligible crisis or emergency. The main activities which will be implemented under parent project and the AF are: (a) scaling up performance-based financing (PBF) for better health service delivery; (b) strengthening service delivery readiness to deliver quality RMNCAH-N services; (c) project management and verification of results; and (d) contingent emergency response which allows a rapid reallocation of project resources in the event of a natural or artificial disaster.

Project Costs and Benefits

3. **Project costs**. Costs are the financial resources used for implementation of a project. Costs included in the analysis are the parent project and the AF funds (US$256.5 million) expected to be disbursed through a prioritized annual work plan. The main drivers of the project costs are the project component costs which include the costs of PBF payments to health facilities, subsidies for free health care, the costs of inputs needed to strengthen the supply side of the health system, and project management and verifications, which are mainly operational costs. It was assumed that the GoC would contribute about US$4million annually to sustain development outcomes after the project closes by continuing with support to health facilities with the needed operating costs.

4. **Benefits.** Benefits are the positive outcomes of a project. In healthcare, benefits are *health gains* accrued to project beneficiaries. They are expressed in the form of *Disability Adjusted Life Years (DALYs[7])*, a key measure of health gains resulting from utilization of health services. A DALY is a common metric that allows direct comparison across diseases as well as diverse types of interventions. It is a standardized quantitative method of a burden of disease. Generally, reductions in DALYs are considered benefits because they would lead to improved health status of a population.

5. **Data sources**. The main source of data used for the analysis is Institute for Health Metrics and Evaluation (IHME) cross-country DALYs database, which contains the latest available DALYs (2019) for Chad (Table A1.1).

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

6. Using Chad's DALYs[8] profile data the team estimated the project's health benefits based on the number of DALY's averted. This analysis used six out of the 10 causes of DALYs, albeit the parent project and the AF are expected to improve several health services. The six selected DALYs were deemed relevant to the country context and were selected based on the project's objective of improving maternal and child health, common illnesses among children and women, and acute nutrition situation in the country. In line with the PDO, the team selected maternal and neonatal morbidity, respiratory infections (including tuberculosis), NTD and malaria, enteric diseases/infections, HIV/AIDS and sexually transmitted infections, and nutritional deficiencies as proxies of the range of services to be financed by the parent project and the AF. The DALYs of the six causes combined constitute 7,512,285 (65 percent) of the total causes of DALYs for Chad, and it includes nutrition deficiency which is a key focus of the AF. The project's interventions and its associated health services to be delivered in the target health facilities would help avoid deaths and disabilities. Therefore, the team assumed that investments from the parent project and AF would lead to a reduction in health-related problems in Chad by 20 percent (DALY reduction rate) under a base case scenario. A well-documented literature shows that reductions in DALYs would results in improved health outcomes. Graham, W., J. Bell, and C. Bullough (2001), estimated that skilled attendance at delivery would avert about 16 to 33 percent of all maternal deaths by preventing obstetric complications. Also, Karing, A. (2018) noted that vaccinations, in many low-income countries, are the main points of contact for monitoring newborns' health and detecting conditions such as malnutrition. High utilization of newborn child and infant immunization and nutrition services driven largely by quality improvement through PBF are expected to reduce child and infant morbidity and mortality. The DALYs reductions would be driven largely by the project's key performance indicators.

7. Project investments are expected to last beyond the life of the project (2027). For that reason, the project team extended the analysis to cover a ten-year period (2022-2032). Project benefits for the parent and the proposed AF would be accrued over the same period as the activities to be financed under the two operations are the same (scaling up PBF for better health service delivery, strengthening service delivery readiness to deliver quality RMNCAH-N services, and project management and verification of results). These activities are expected to improve service delivery at the health facility level. It is expected that a full-blown project benefit would begin when the PBF intervention have significantly led to improvements in the health systems through investment in key maternal and child health services

Table A1.1: Chad's DALYs profile

Cause	DALYs (Number), 2019	% Of Total
Enteric infections	2,576,329.57	22%
Respiratory infections & TB	1,766,539.24	15%
Maternal & neonatal disorders	1,761,469.81	15%
NTDs & malaria	665,672.69	6%
HIV/AIDS & STIs	379,658.13	3%
Nutritional deficiencies	362,616.05	3%
Subtotal (Total DALYs per annum from the six causes)	**7,512,285.49**	**65%**
Other infectious diseases	984,630.35	9%

[8] A DALY is key measure of health gains resulting from utilization of health services, and is common metric that allows direct comparison across diseases as well as diverse types of interventions

Cause	DALYs (Number), 2019	% Of Total
Other non-communicable diseases	693,148.99	6%
Cardiovascular diseases	400,606.42	3%
Unintentional injuries	285,245.59	2%
Others	5,804,861.03	50%
Total	**11,583,341.30**	**100%**

Source : *http://ihmeuw.org/5lpt*

8. The team valued each DALY averted at gross domestic product (GDP) per capita (US$696, World Development Indicators, 2021) after considering inflationary effect, the real value of DALYs averted, investment, and recurrent costs were discounted at a rate of 12 percent, higher than the recommended three percent suggested by the WHO.[9]

9. The value of each DALY averted is US$696 (GDP per capita). To monetize benefits because of DALY averted, the number of DALYs averted per annum was multiplied by the per capita GDP. The monetized value was then discounted at a rate of 12 percent. The discounted costs and benefits were used to estimate the project' NPV and IRR (Table A2). Project benefits were estimated by evaluating all costs associated with the PBF implementation**.** These costs are expected to potentially have significant impact on Chadian's health status in terms of health gains (i.e., DALYs averted).

Summary of Results of the Analysis

10. Based on the above assumptions and taking into consideration the expected project benefits, the estimated NPV of the project is US$58,890,439. The positive NPV means that the project would generate the expected benefits. The IRR is estimated at 24.68 percent. The result of the analysis is shown in Table A1.2.

Table A1.2: Project NPV and IRR

	20% reduction of DALYs* (Base case scenario)
NPV (US$ million)	US$58,890,439
IRR (%)	24.68%

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

Sensitivity Analysis

11. To account for uncertainties associated with the assumptions employed in the analysis, a sensitivity analysis was conducted for selected project interventions through a reduction in DALYs of 15 percent in a low-case scenario and 25 percent in a high case scenario. The results of the sensitivity analysis showed positive NPVs and IRRs. In the high case scenario, the NPV of the project is estimated at US$127,917,598, and its associated IRR is estimated at 42.20 percent. Similarly, the NPV and IRR still stay positive when the impact on DALYs averted is reduced by 15 percent (Table A1.3). These are higher than

[9] World Health Organization. Making Choices in Health: *WHO Guide to Cost-Effectiveness Analysis.2003*.

the assumed discount rate. The results show that the parent project and the proposed AF investments are economically viable.

Table A1.3: Sensitivity Analysis

	25% reduction of DALYs (Higher case scenario)	**15% reduction of DALYs (Lower case scenario)**
NPV (US$ million)	US$127,917,598	US$5,168,161
IRR (%)	42.20%	9.93%