

Document of  
**The World Bank**

**FOR OFFICIAL USE ONLY**

Report No: PAD5543

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED ADDITIONAL CREDIT

IN THE AMOUNT OF EUR 47.2 MILLION  
(US\$50.0 MILLION EQUIVALENT)

FROM THE  
CRISIS RESPONSE WINDOW EARLY RESPONSE FINANCING (CRW-ERF)

TO THE

REPUBLIC OF CONGO

FOR THE

CLIMATE-RESILIENT AND INCLUSIVE LIVELIHOODS PROJECT

October 30, 2023

Environment, Natural Resources and The Blue Economy Global Practice  
Western and Central Africa Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

## CURRENCY EQUIVALENTS

(Exchange Rate Effective September 30, 2023)

Currency Unit = CFA Franc (CFAF)

Euro

CFAF 619 = US\$1

Euro 0.94259591 = US\$1

## FISCAL YEAR

January 1– December 31

Regional Vice President: Ousmane Diagana

Country Director: Cheick Fantamady Kante

Regional Director: Chakib Jenane

Practice Manager: Lia Sieghart

Task Team Leaders: David Maleki, Guylain Kayembe Ngeleza, Hala Ballout

## ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
CE	Citizen Engagement
CERC	Contingent Emergency Response Component
CPF	Country Partnership Framework
CRW	Crisis Response Window
CSA	Climate-Smart Agriculture
EFA	Economic and Financial Analysis
EIRR	Economic Internal Rate of Return
ERF	Early Response Financing
ESCP	Environmental and Social Commitment Plan
ESF	Environment and Social Framework
ESMF	Environmental and Social Management Framework
ESRS	Environmental and Social Review Summary
ESS	Environmental and Social Standard
EWRS	Early Warning and Response System
FAO	Food and Agriculture Organization (United Nations)
FCV	Fragility, Conflict, and Violence
FSCPP	Food Security Crisis Preparedness Plan
FY	Fiscal Year
GBV	Gender-based Violence
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GHI	Global Hunger Index
GRM	Grievance Redress Mechanism
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IDP	Internally Displaced Persons
IMF	International Monetary Fund
ICB	International Competitive Bidding
IPs	Indigenous Peoples
IPC	Integrated Phase Classification
IPF	Investment Project Financing
IPP	Indigenous Peoples Plan
IPPF	Indigenous Peoples Planning Framework
LIPW	Labor Intensive Public Work
LMP	Labor Management Procedures
M&E	Monitoring and Evaluation
MAEP	Ministry of Agriculture, Livestock, and Fisheries ( <i>Ministère de l'Agriculture, Elevage et de la Pêche</i> )
MAM	Moderate Acute Malnutrition
MPSIR	Ministry of Planning, Statistics and Regional Integration ( <i>Ministère du Plan, de la Statistique et de l'Intégration régionale</i> )
MSMEs	Micro, Small and Medium Enterprises
MUVH	Ministry of Urbanism, Cities, and Housing ( <i>Ministère de l'Urbanisme des Villes et de l'Habitat</i> )
NFSRP	National Food Security Resilience Plan

NGO	Nongovernmental Organization
NPV	Net Present Value
PCU	Project Coordination Unit
PDO	Project Development Objective
PIE	Project Implementing Entity
PIP	Project Investment Plans
PLWG	Pregnant and Lactating Women and Girls
PPP	Project Procurement Plan
PPSD	Project Procurement Strategy for Development
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SORT	Systemic Operations Risk-Rating Tool
STEP	Systematic Tracking of Exchanges in Procurement
TOC	Theory of Change
TPMA	Third Party Monitoring Agency
TSF	Targeted Supplementary Feeding
UN	United Nations
WFP	World Food Programme

Republic of Congo

Additional Financing to the Climate-Resilient and Inclusive Livelihoods Project

**TABLE OF CONTENTS**

<b>I.</b>	<b>BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING</b> .....	<b>8</b>
<b>A.</b>	<b>Introduction</b> .....	<b>8</b>
<b>B.</b>	<b>Original Project Objective, Design, and Scope</b> .....	<b>8</b>
<b>C.</b>	<b>Current Status of the Parent Project</b> .....	<b>9</b>
<b>D.</b>	<b>Context and Rationale for Additional Financing</b> .....	<b>9</b>
<b>II.</b>	<b>DESCRIPTION OF ADDITIONAL FINANCING</b> .....	<b>11</b>
<b>III.</b>	<b>KEY RISKS</b> .....	<b>18</b>
<b>IV.</b>	<b>APPRAISAL SUMMARY</b> .....	<b>20</b>
<b>A.</b>	<b>Economic and Financial Analysis</b> .....	<b>20</b>
<b>B.</b>	<b>Greenhouse Gas (GHG) Accounting</b> .....	<b>21</b>
<b>C.</b>	<b>Paris Alignment</b> .....	<b>21</b>
<b>D.</b>	<b>Financial Management</b> .....	<b>22</b>
<b>E.</b>	<b>Procurement</b> .....	<b>22</b>
<b>F.</b>	<b>Legal Operational Policies</b> .....	<b>23</b>
<b>G.</b>	<b>Environmental and Social</b> .....	<b>23</b>
<b>H.</b>	<b>Gender</b> .....	<b>24</b>
<b>I.</b>	<b>Citizen Engagement (CE)</b> .....	<b>24</b>
<b>V.</b>	<b>WORLD BANK GRIEVANCE REDRESS</b> .....	<b>25</b>
<b>VI</b>	<b>SUMMARY TABLE OF CHANGES</b> .....	<b>26</b>
<b>VII</b>	<b>DETAILED CHANGE(S)</b> .....	<b>26</b>
<b>VIII.</b>	<b>RESULTS FRAMEWORK AND MONITORING</b> .....	<b>30</b>
	<b>ANNEX 1: ECONOMIC AND FINANCIAL ANALYSIS</b> .....	<b>53</b>
	<b>ANNEX 2: CLIMATE CHANGE</b> .....	<b>61</b>



**BASIC INFORMATION – PARENT (Climate-Resilient and Inclusive Livelihoods Project (ProClimat Congo) - P177786)**

Country Congo, Republic of	Product Line IBRD/IDA	Team Leader(s) David Maleki		
Project ID P177786	Financing Instrument Investment Project Financing	Resp CC SAWE4 (10142)	Req CC AWCC1 (6544)	Practice Area (Lead) Environment, Natural Resources & the Blue Economy

Implementing Agency: Republic of Congo - Ministry of Planning, Statistics, and Regional Integration

Is this a regionally tagged project?  No				
Bank/IFC Collaboration  No				
Approval Date  23-Mar-2023	Closing Date  31-May-2028	Expected Guarantee Expiration Date	Environmental and Social Risk Classification  Substantial	

**Financing & Implementation Modalities**

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



**Development Objective(s)**

To strengthen landscape management and increase the use of improved livelihood activities in targeted communities

**Ratings (from Parent ISR)**

	Latest ISR
	09-Jun-2023
Progress towards achievement of PDO	S
Overall Implementation Progress (IP)	S
Overall ESS Performance	S
Overall Risk	S
Financial Management	S
Project Management	S
Procurement	S
Monitoring and Evaluation	S

**BASIC INFORMATION – ADDITIONAL FINANCING (Additional Financing to the Climate-Resilient and Inclusive Livelihoods Project - P181184)**

Project ID	Project Name	Additional Financing Type	Urgent Need or Capacity Constraints
P181184	Additional Financing to the Climate-Resilient and Inclusive Livelihoods Project	Restructuring, Scale Up	Yes
Financing instrument	Product line	Approval Date	
Investment Project Financing	IBRD/IDA	10-Nov-2023	
Projected Date of Full Disbursement	Bank/IFC Collaboration		
30-Sep-2028	No		






Is this a regionally tagged project?

No

**Financing & Implementation Modalities**

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

**Disbursement Summary (from Parent ISR)**

Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed
IBRD	70.00	0.17	69.83	 .2 %
IDA				 %
Grants				 %

**PROJECT FINANCING DATA – ADDITIONAL FINANCING (Additional Financing to the Climate-Resilient and Inclusive Livelihoods Project - P181184)****FINANCING DATA (US\$, Millions)****SUMMARY (Total Financing)**

	Current Financing	Proposed Additional Financing	Total Proposed Financing
<b>Total Project Cost</b>	82.00	50.00	132.00
<b>Total Financing</b>	82.00	50.00	132.00
<b>of which IBRD/IDA</b>	70.00	50.00	120.00





<b>Financing Gap</b>	0.00	0.00	0.00
----------------------	------	------	------

**DETAILS - Additional Financing**

**World Bank Group Financing**

International Development Association (IDA)	50.00
IDA Credit	50.00

**IDA Resources (in US\$, Millions)**

	Credit Amount	Grant Amount	SML Amount	Guarantee Amount	Total Amount
<b>Congo, Republic of</b>	50.00	0.00	0.00	0.00	50.00
Crisis Response Window (CRW)	50.00	0.00	0.00	0.00	50.00
<b>Total</b>	<b>50.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>50.00</b>

**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	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

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

**INSTITUTIONAL DATA**

**Practice Area (Lead)**

Environment, Natural Resources & the Blue Economy

**Contributing Practice Areas**

Agriculture and Food  
Social Sustainability and Inclusion

**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
David Maleki	Team Leader (ADM Responsible)		SAWE4
Guyslain Kayembe Ngeleza	Team Leader		SAWA1
Hala Ballout	Team Leader		SAWS1
Lanssina Traore	Procurement Specialist (ADM Responsible)		EAWP2
Francis Tasha Venayen	Financial Management Specialist (ADM Responsible)		EAWG2
Albert Francis Atangana Ze	Environmental Specialist (ADM Responsible)		SAWE4
Fabena Divine Babindamana Nee Niemet Gampika	Social Specialist (ADM Responsible)		SAWS1
Alfred Jean-Marie Borgonovo	Team Member		WFACS
Amour Freddy Bilombo Bazedimba	Team Member		SAWE4
Asha Nequia Johnson	Team Member		SAWDR
Aurore Simbananiye	Team Member		SAWE4
Erwan Jean Georges Morand	Team Member		SAWE4
Hira Channa	Team Member		SAWA1
Jesse Dieuveil Milandou	Team Member		SAWS1
Lelia Croitoru	Team Member		SAWE4
Ludovic Miaro III	Team Member		SAWA1
Macha Petronella Kemperman	Team Member		SENGL
Marouan Maalouf	Team Member		LEGAM
Muhammad Najeeb Khan	Team Member		SENGL
Mundele Wavelellah	Team Member		AWMCG
Murat Cengizlier	Counsel		LEGAM
Peter Goodman	Team Member		SAGGL



Rohan G. Selvaratnam	Team Member		SAWA1
Sara El Choufi	Team Member		SENCR
Timothy H. Brown	Team Member		SENGL
<b>Extended Team</b>			
Name	Title	Organization	Location

---



## I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

### A. Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide an International Development Association (IDA) credit in the amount of US\$50 million as Additional Financing (AF) to the Climate-Resilient and Inclusive Livelihoods Project (ProClimat Congo, P177786). The Project Paper also includes a restructuring of the parent project to reflect a revision in the formulation of the Project Development Objective (PDO) and a change in the cost structure. The proposed credit, to be financed out of the IDA—Crisis Response Window (IDA-CRW), would be the first AF to the Project. The AF will be used to address the deteriorating food security in the country. The credit will cover costs associated with (i) provision of emergency food and nutrition support to the most vulnerable and food insecure people, including refugees, host communities, school children, and Internally Displaced Persons (IDPs); (ii) provision of agricultural inputs, technology, and advisory services to eligible beneficiaries, in support of increased local food production; and (iii) strengthening of community-based food security early warning and information systems. The additional resources will provide food support to approximately 356,000 vulnerable beneficiaries, including pregnant and lactating women and children, and support 100,000 farmers and agro-processors with inputs, small equipment, and technical assistance to help increase production. This AF is being processed under the application of Paragraph 12 of Section III of the Investment Project Financing (IPF) Policy (Situations in Urgent Need of Assistance or Capacity Constraints), including the application of condensed procedures.

### B. Original Project Objective, Design, and Scope

2. ProClimat was approved by the World Bank Board on March 23, 2023, for a total of US\$82 million (including a US\$70 million the International Bank for Reconstruction and Development (IBRD) loan and a US\$12 million grant from the Global Partnership for Sustainable and Resilient Landscapes—PROGREEN). The PDO is to strengthen landscape management and increase the use of improved livelihood activities in targeted communities. ProClimat primarily addresses economic development needs, sustainable natural resource use, and conservation in three distinct landscapes that were prioritized based on their conservation value, proximity to protected areas, and comparatively higher levels of exclusion and fragility. It is designed around the following components:

- i. **Component 1: Strengthening Capacity of Institutions and Promoting Social Cohesion (US\$11.5 million equivalent):** This component seeks to build institutional and community capacity to promote inclusive livelihoods in a changing climate. It supports strengthening the capacity of relevant ministries for sustainable and resilient agriculture and natural capital management, as well as analytical work and advisory services to underpin climate change adaptation and mitigation and natural capital management in Project landscapes. Additionally, this component supports activities targeted at ensuring inclusive participation of beneficiaries in Project activities as a transparency and accountability mechanism, as well as a community-based Early Warning and Response System (EWRS) to foster farmers' climate preparedness.
- ii. **Component 2: Strengthening Investments in Sustainable and Resilient Agriculture and Natural Capital Management (US\$40.0 million equivalent):** This component is designed to build resilience in Project landscapes. It finances infrastructure for sustainable and resilient agriculture and natural capital management while leveraging these for livelihood improvement.



- iii. **Component 3: Promoting Inclusive, Climate-resilient Livelihoods and Value Chains (US\$23.5 million equivalent):** Under this component, the Project finances climate-resilient economic activities, including agriculture, community forestry, and non-timber forestry products, through a value chain approach, targeting groups at different stages of professionalization (i.e., Micro, Small, and Medium Enterprises (MSMEs), cooperatives, and resilient livelihood groups). In the case of agriculture, the focus is on activities that increase farmers' incomes, reduce vulnerability to climate change, and improve food security through increased production and trade.
- iv. **Component 4: Project Management, Monitoring, and Evaluation (US\$7.0 million equivalent):** This component is designed to defray costs related to Project management, including financial management, procurement, environmental and social safeguards management, and monitoring, reporting, and evaluation of activities under the Project.
- v. **Component 5: Contingent Emergency Response (US\$0 million):** The objective of this component is to enable the provision of immediate response to an eligible crisis or emergency, as needed.

### C. Current Status of the Parent Project

3. The parent project was approved on March 23, 2023, signed on April 14, 2023, and declared effective on October 13, 2023. Key effectiveness conditions included ratification of the financing agreement by the Republic of Congo's Parliament and recruitment of key Project Implementation Unit (PIU) staff. The financing agreements were ratified by Parliament on August 12, 2023, and enacted into law by the president on September 28, 2023. The recruitment for key PIU staff was finalized on October 12, 2023.

### D. Context and Rationale for Additional Financing

4. **The Republic of Congo (ROC) is a lower-middle-income country in Central Africa with a gross domestic product (GDP) per capita of US\$2,214 (2021).** Located in the Congo River Basin, it covers an area of 342,000 km<sup>2</sup>. Its population is 5.7 million, 47 percent of whom are under the age of 18. More than half of the population is concentrated in the two main cities of the country: Brazzaville and Pointe-Noire. The territory is one of the least dense in Africa, with 14.8 inhabitants per square kilometer.

5. **The Republic of Congo's economic activity improved in 2022 but has yet to recover from the fallout of the recent crises.** Economic activity in the Republic of Congo is estimated to have increased by 1.5 percent in 2022, following the contraction of 2.2 percent recorded in 2021<sup>1, 2</sup>. The share of the population living below the international extreme poverty line increased slightly from 52 percent in 2021 to 52.5 percent, in 2022<sup>3</sup>. Headline inflation is projected to remain under control at 3.5 percent<sup>4, 5</sup> in 2023, although food prices have witnessed a 4.6 percent average increase.

<sup>1</sup> Economic and Monetary Community of Central Africa Quarterly Economic Barometer, World Bank, October 2022.

<sup>2</sup> Republic of Congo Economic Update, World Bank, 2023.

<sup>3</sup> Republic of Congo, Poverty and Equity Brief, World Bank, April 2023.

<sup>4</sup> *Perspectives économiques au Congo*, African Development Bank 2023.

<sup>5</sup> Republic of Congo Economic Context, World Bank, 2023.



6. **The Republic of Congo is experiencing high levels of food/nutrition insecurity.** The 2022 State of Food Security and Nutrition in the World<sup>6</sup> reported that 55.5 percent of the population of ROC is affected by severe food insecurity. This is corroborated by an Integrated Phase Classification (IPC) analysis initiated by the World Food Programme (WFP) covering January to March 2022, which established that 23 percent of the population was experiencing high levels of acute food insecurity, classified as Crisis and Emergency (IPC3+). This share of the population experiencing high levels of acute food insecurity is likely an underestimate since the analysis did not include Brazzaville and Pointe-Noire (the two biggest cities of the country) where about 56.5 percent of the population live<sup>7</sup> and where the prevalence of food insecurity is the highest. Additionally, an estimated 21.2 percent of children under five are experiencing chronic malnutrition.<sup>8</sup>

7. **A confluence of several factors is contributing to the high levels of food insecurity in the Republic of Congo.** These include (i) chronically low agricultural productivity; (ii) the high cost of agricultural inputs; (iii) the high incidence of poverty; and (iv) recurrent climatic shocks, mainly floods. The food security situation was exacerbated by the COVID-19 pandemic and Russia's invasion of Ukraine,<sup>9</sup> which increased prices of agricultural inputs and food, driving even more people into extreme poverty and acute food and nutrition insecurity. The Republic of Congo relies heavily on food imports for domestic food consumption (80 percent of the food consumed), and a rapid assessment by United Nations (UN) agencies in May 2022<sup>10</sup> indicates that the disruption of imports because of Russia's invasion of Ukraine led to a 40 percent increase in food commodity prices.

8. **It is expected that food insecurity will increase in the future.** The WFP Hunger Map shows that, despite a decline, the number of people with insufficient food consumption remains persistently high, representing about 32 percent of the population. In addition to this high proportion, the number of people using crisis or above-crisis food-based coping strategies is rising. During the period May–August 2023, it increased by 17 percent. This trend, in combination with the recent food price increase, suggests that the number of food insecure people is likely to rise in the future.<sup>11</sup>

9. **Considering the poor food security situation, the government of the Republic of Congo prepared a National Food Security Resilience Plan (NFSRP) covering the period 2022–2023 to boost food and nutrition security.** The NFSRP was approved in July 2022 and comprises the following thematic areas: (i) promoting alternatives to food imports; (ii) facilitating food supply across the country from production areas to consumers; (iii) stabilizing food prices; (iv) supporting smallholder farmers to increase production; (v) enforcing laws related to prices and taxes; and (vi) protecting and assisting vulnerable people. The budget required to implement the NFSRP is estimated at US\$242.84 million. In addition, the United Nations High Commissioner for Refugees (UNHCR) requires US\$37.40 million to provide food and humanitarian assistance to refugees and people displaced due to flooding. Due to fiscal constraints, the government is unable to fully finance the NFSRP and has reached out to donors, development partners, and the private sector for support. While other partners are still clarifying their support, a financing gap

<sup>6</sup> FAO, International Fund for Agricultural Development, UNICEF, WFP and WHO. 2022. The State of Food Security and Nutrition in the World 2022.

<sup>7</sup> PND 2022-2026 document.

<sup>8</sup> <https://hungermap.wfp.org/>.

<sup>9</sup> Russia is the Republic of Congo's main grain supplier with 35 percent share of the market.

<sup>10</sup> *Système des Nations Unies : Effets socio-économiques de la guerre ukrainienne sur l'économie congolaise (mai, 2022)*

<sup>11</sup> <https://hungermap.wfp.org/>.



of US\$127.16 million remains to date. The proposed AF will contribute to narrowing this financing gap and will focus on the “protecting and assisting vulnerable people” and “supporting smallholder farmers to increase production” themes of the NFSRP.

10. **The AF is consistent with the World Bank’s Country Partnership Framework for the Period FY20–FY24** (CPF; Report No. 126962-CG) objective of increasing social protection coverage to a larger number of vulnerable people (i.e., Objective 2.3 under Focus Area 2—“Reduce Fragility and Build Human Capital for Improved Social Inclusion”) and also aligned with the interventions proposed under Objective 1.3 (Improved Agricultural Productivity and Commercialization) of Focus Area 1—“Strengthen Economic Management to Create an Improved Climate for Private Sector–Led Growth.”

11. **The AF is consistent with and will contribute to Congo’s 2021 Nationally Determined Contribution, which lays out the main strategic axes to enhance the country’s ambitions in the fight against climate change and counts agriculture as a priority sector for mitigation and adaptation.** It is also consistent with Congo’s first and second National Communications to the United Nations Framework Convention on Climate Change (2001 and 2009), which identified agriculture and water resources as some of the sectors most vulnerable to the adverse effects of climate change. The AF is also aligned with the recommendations of the 2023 Republic of Congo Country Climate and Development Report, which lays out the links between the economic diversification and climate change agendas and identifies the agriculture sector as key to ensure sustainable growth and reduce vulnerability, with Climate-Smart Agriculture (CSA) among the Top 10 climate-smart investments proposed.<sup>12</sup>

## II. DESCRIPTION OF ADDITIONAL FINANCING

12. **The AF augments Parent Project activities through a combination of an immediate short-term response focused on improving access to food for the most vulnerable, and a more medium-term response focused on increasing food availability through increased local production.** Several Parent Project activities were already designed to contribute to addressing food insecurity in the medium to long term. These include support to the establishment of early warning systems for farmers’ climate preparedness under Component 1, investments in sustainable and resilient agriculture under Component 2, and activities targeting increased food production and trade under Component 3 as part of the value chain support to agriculture.

13. **Three office memoranda were processed during preparation of the AF.** These include (i) a request for an exception to proceed with AF preparation even though the Parent Project has not yet been under implementation for at least 12 months (approved on September 28, 2023); (ii) a request to proceed under Paragraph 12 of Section III of the Bank Policy on Investment Project Financing (Situations in Urgent Need of Assistance or Capacity Constraints) to expedite preparation (approved on September

---

<sup>12</sup> World Bank. 2023. Republic of Congo Country Climate and Development Report - Diversifying Congo's Economy: Making the Most of Climate Change. CCDR Series. Washington, DC: World Bank. <http://hdl.handle.net/10986/40433> License: CC BY-NC-ND 3.0 IGO.





12, 2023); and (iii) a request to authorize the financing of food expenditures under the AF (approved on October 16, 2023).

14. **As part of the AF, the following changes will be made to the Parent Project:** (i) modification of the PDO and Project activities; (ii) changes in Project costs; (iii) changes in the results framework; and (iv) changes to target areas.

15. **Changes to Project Development Objective (PDO):** The development objective of the Parent Project is “to strengthen landscape management and increase the use of improved livelihood activities in targeted communities.” The AF introduces new activities to improve food security in the short to medium term. To reflect this added explicit focus on food security, the proposal is to revise the PDO as follows: “to strengthen landscape management, increase the use of improved livelihood activities, and reduce food insecurity in targeted communities.”

16. **Changes to Project Components/Activities:** The following changes to components and activities are introduced with the Additional Financing:

17. **Component 1: Strengthening Capacity of Institutions and Promoting Social Cohesion (Total US\$16.5 million equivalent, of which US\$9.8 million IBRD, US\$1.7 million PROGREEN, and US\$5.0 million IDA).** Under this component, the Parent Project finances activities supporting institutional and community capacity to build inclusive livelihoods in a changing climate and ensure inclusive participation in such processes. An estimated US\$5 million in AF resources will be used to expand the scope of subcomponent 1.1 (Building Institutional Capacity on Sustainable and Resilient Agriculture and Natural Capital Management at the National, Departmental, and Local Levels). This work will aim at strengthening the government’s capacity and information system on monitoring food security crises and market prices. The Project will strengthen the capacity for inter-institutional coordination on monitoring food security and climate risk to facilitate early warning and early action and minimize the costs of future food security crises. The AF will finance (i) intergovernmental coordination and capacity building within the Ministry of Agriculture, Livestock, and Fisheries (*Ministère de l’Agriculture, de l’Élevage, et de la Pêche*, MAEP) and other government institutions involved in food security crisis preparedness; (ii) preparation of the Food Security Crisis Preparedness Plan (FSCPP); (iii) collection, processing, and publication of agro-meteorological information; and (iv) introduction of the *Cadre Harmonisé (CH)*<sup>13</sup> among the national surveys on food security conducted in the country. The information on food security crises and market prices will also be disseminated through the community-based EWRS for climate preparedness that is part of the parent project design under Subcomponent 1.2.

18. **Component 3: Promoting Inclusive, Climate-resilient Livelihoods and Value Chains (Total US\$50.5 million equivalent, of which US\$20.1 million IBRD, US\$3.4 million PROGREEN, and US\$27.0 million IDA).** Under this component, the Parent Project provides support to MSMEs, cooperatives, and livelihood groups engaged in agriculture, forestry, non-timber products, and ecotourism as economic/livelihood activities, targeting beneficiaries in specific landscapes. The proposal is to allocate US\$27 million in AF resources to expand such livelihood support to food-insecure people under a new Subcomponent 3.4 (Supporting Food-Insecure Households) that will target smallholder farmer households.

<sup>13</sup>The *Cadre Harmonisé* is a unifying tool that helps to produce relevant, consensual, rigorous, and transparent analyses of current and projected food and nutrition situations. It classifies the severity of food and nutrition insecurity based on the international classification scale through an approach that refers to well-defined functions and protocols.



19. The proposed activities under the new subcomponent will allow the Project to specifically reach the households most affected by the food crisis, in line with the rationale of Crisis Response Window (CRW) financing. Beneficiaries will be identified through community consultations and social mobilization tools. In line with the Parent Project's focus on inclusive development, selection criteria will be designed to prioritize households that are part of particularly vulnerable and marginalized groups. The new subcomponent will finance the procurement and distribution of inputs for sustainable and resilient agriculture at production and post-harvest storage. It will reach at least 100,000 smallholder farmers with improved, drought-resistant seed varieties; organic fertilizers, and pesticides, livestock and fish feed; basic tools for primary production; small-scale drainage and irrigation infrastructure; and small facilities for storage and value addition. Priority will be given to women farmers. The subcomponent will also finance technical assistance to improve the capacity of farmers to aggregate, store, process, and add value to food products, and promote sustainable and resilient agriculture techniques to reduce producers' vulnerability to climate change. Implementation will be done by competitively selected service providers, as under the parent project. Activities under this subcomponent will be implemented only within the landscape areas of the Parent Project and to the largest extent possible aligned with its Project Investment Plans (PIPs) in communities where they will be developed.

**20. Component 6: Responding to Immediate Food and Nutrition Security Needs (Total US\$13.0 million equivalent, of which US\$0.0 million IBRD, US\$0.0 million PROGREEN, and US\$13.0 million IDA).**

As part of the AF, a new Component 6, estimated at US\$13 million, is proposed to address immediate food and nutrition needs of the vulnerable. Support under this component will prioritize hotspots of food insecurity and will therefore potentially be extended to areas outside the landscapes prioritized under the parent project. Within the landscape areas, synergies with Components 2 and 3 of the parent project will be leveraged to the extent possible to help beneficiaries graduate from short-term to medium-term support. Component 6 will be implemented in its entirety by the WFP as a Project Implementing Entity (PIE) through the signing of output agreements, goods, and related services delivery contracts, and/or Technical Assistance (TA) agreements with the government, as applicable. This is based on its track record in addressing food insecurity in the country and its ability to rapidly scale up activities. Component 6 will consist of the following subcomponents:

**21. Subcomponent 6.1: Distributing Food and Food Vouchers (Total US\$4.0 million equivalent, of which US\$0.0 million IBRD, US\$0.0 million PROGREEN, and US\$4.0 million IDA).**

This subcomponent will support provision of food using two different modalities, the application of which would be decided based on market conditions and specific needs of different locations and communities. Direct food distribution will be considered where the food supply is limited and the logistics for such distribution exist. Vouchers will be considered in situations of functioning and well-supplied markets from which beneficiaries could redeem their entitlement. The size and composition of food baskets will be tailored to local preferences, demographic profiles, activity levels, local coping capacity, and existing levels of malnutrition and disease, considering supply constraints and availability. Relevant assessments that have already been conducted by UN agencies will be used and will be complemented through additional work, as needed. Beneficiaries will be identified by communities through a participatory process involving local leaders. This activity is expected to benefit 9,000 beneficiaries, 60 percent of whom will be women.

**22. Subcomponent 6.2: Labor-Intensive Public Works (LIPW) (Total US\$7.0 million equivalent, of which US\$0.0 million IBRD, US\$0.0 million PROGREEN, and US\$7.0 million IDA).**

This subcomponent will support the payment of six months of daily wages for 68,000 participating laborers selected among the



most food insecure (this is expected to also benefit their households). The goal is to give immediate income to the most food insecure so that they can access food in exchange for their labor. Daily wages will be provided in cash or value vouchers as this activity would only be implemented where food is available in the market. The key differences between this subcomponent and similar activities under the Parent Project (Subcomponent 2.1) include: (i) inclusion of areas (based on prevalence of food insecurity) beyond the geographical boundaries of the parent project; (ii) the selection criteria for works to be supported (which will be defined in the Project Implementation Manual) will focus primarily on improving food security; (iii) works selected will be conducted by the most vulnerable, food-insecure households whose selection may build on vulnerability criteria used by the WFP (while the Parent Project relies on service providers that are encouraged to use local labor); (iv) works will be smaller in scale compared to works financed under the Parent Project; and (v) works will be selected among those that have already been identified by the communities or that can be identified at the early stages of developing the local PIPs. WFP has already been implementing such activities in the Republic of Congo, particularly in the Pool Department, where it has been targeting 1,500 households under the rubric of “Food for Assets”. The AF will enable WFP to scale up this engagement.

23. **Subcomponent 6.3: Managing Malnutrition (Total US\$2.0 million equivalent, of which US\$0.0 million IBRD, US\$0.0 million PROGREEN, and US\$2.0 million IDA):** This subcomponent will support an integrated nutrition security intervention, targeting children under the age of five, and pregnant and lactating women and girls (PLWG). The nutritional needs of children and of pregnant and lactating women will be addressed through specialized feeding programs such as Blanket Supplementary Feeding (BSF)<sup>14</sup> and Targeted Supplementary Feeding (TSF).<sup>15</sup> Where necessary, support will also be extended to the integrated management of severe acute malnutrition (SAM) through screening and treatment of SAM children and infants and young child feeding. Specific nutrition programs and eligible beneficiaries will be identified based on surveys and predetermined criteria, which are to be implemented through a facilitated community targeting process.

24. Activities under Component 6 will be implemented by the WFP as a PIE through the signing of output agreements, goods and related services delivery contracts, and/or Technical Assistance agreements with the government, as applicable, under supervision of the PIU and in partnership with key government agencies such as MAEP, the Ministry of Social and Humanitarian Affairs (*Ministère des Affaires Sociales, de la Solidarité et de l’Action Humanitaire*), and the Ministry of Planning, Statistics and Regional Integration (*Ministère du Plan, de la Statistique et de l’Intégration régionale—MPSIR*). Under this component, the Project will finance food purchases. As per World Bank procedures, an authorization to finance food expenditures was approved by the Regional Vice President.

25. Table 1 shows the revised Project component structure and costs.

**Table 1: Costs by Component (US\$, millions)**

Component	Original cost	Changes with AF	Revised total cost
1. Strengthening Capacity of Institutions and Promoting Social Cohesion	11.50	5.00	16.50

<sup>14</sup> BSF is one of the approaches used to support food insecure households and help prevent wasting in children under five during periods where food availability may be insufficient.

<sup>15</sup> TSF is a program where regular (every three or six months) nutritional screening is done in the community, followed by provision of blended food.



Component	Original cost	Changes with AF	Revised total cost
2. Strengthening Investments in Sustainable and Resilient Agriculture and Natural Capital Management	40.00	0.00	40.00
3. Promoting Inclusive, Climate-resilient Livelihoods and Value Chains	23.50	27.00	50.50
4. Project Management, Monitoring, and Evaluation	7.00	5.00	12.00
5. Contingent Emergency Response	0.00	0.00	0.00
6. Responding to Immediate Food and Nutrition Security Needs	—	13.00	13.00
<b>Total</b>	<b>82.00</b>	<b>50.00</b>	<b>132.00</b>

26. **Changes to the Results Framework:** Table 2 shows the proposed changes to the results framework.

**Table 2: Changes to RF Indicators**

Indicator	Original target	Revised target
<b>PDO-level (outcome) indicator</b>		
Area under sustainable and resilient agriculture practices (Hectare)— Revised upwards	25,000	35,000
Land area under sustainable landscape management practices (Hectare)	1,176,000	1,176,000
Beneficiaries using improved livelihood activities supported by the Project (Number)—Revised upwards	23,250	123,250
Net greenhouse gas emissions mitigated (Ton CO2 eq/year)—Revised	3,400,000	4,457,609
People reached with emergency food assistance (Number)— <b>New</b>	—	356,667
<b>Intermediate results indicators by components</b>		
<b>Component 1: Strengthening Capacity of Institutions and Promoting Social Cohesion</b>		
Project Investment Plans that incorporate climate change considerations (Percentage)	100	100
Beneficiaries reporting that Project Investment Plans reflect their needs (Number)	200,000	200,000
Beneficiaries reporting improved participation in local decision-making because of Project activities (Number)	150,000	150,000
Grievances registered related to delivery of Project benefits that are actually addressed through the Grievance Redress Mechanism (Percentage)	100	100
Index for improvement of agriculture practices, food production, and prevention of food security crisis because of the EWRS (Scale 1–10)	6	6
Adoption of a Food Security Crisis Preparedness Plan (Yes/No)— <b>New</b>	—	Yes
<b>Component 2: Strengthening Investments in Sustainable and Resilient Agriculture and Natural Capital Management</b>		
Beneficiaries that have access to infrastructures (built and/or rehabilitated by the Project) in targeted communities, disaggregated by types of service and infrastructure (Number)	350,000	350,000
Protected areas under improved management for conservation and sustainable use (Hectare)	1,175,000	1,175,000
<b>Component 3: Promoting Inclusive, Climate-resilient Livelihoods and Value Chains</b>		

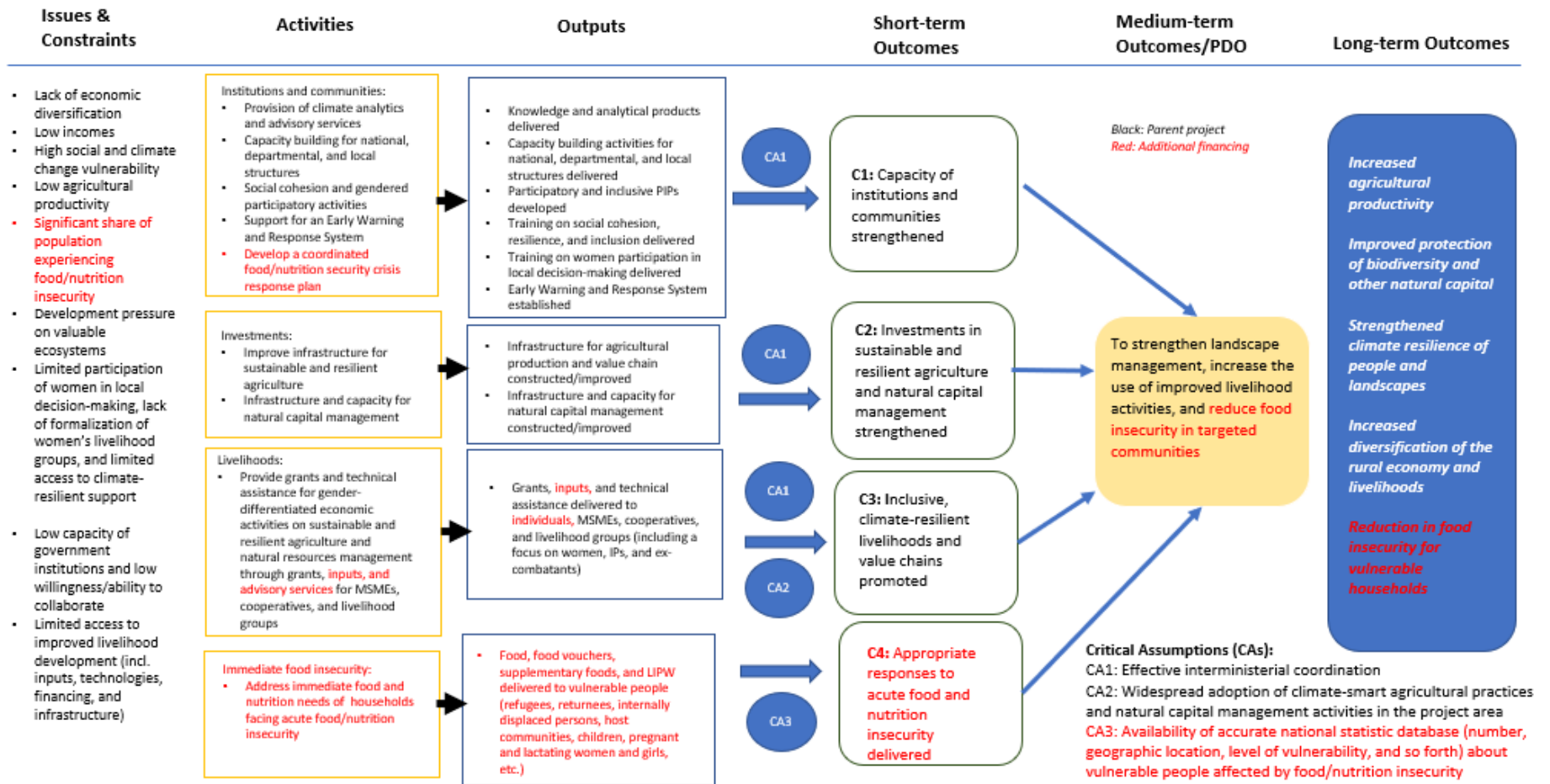


Indicator	Original target	Revised target
Employees in Project-supported MSMEs (Number)	300	300
Cooperatives with Project-facilitated partnership agreements with MSMEs (Number)	20	20
Geospatial platform established and operational (Yes/No)	Yes	Yes
Livelihood groups reporting an increase in profit of 20% or more due to grant support or training provided by the Project (Number)	150	150
Individual beneficiaries receiving agriculture inputs, equipment, and advisory services (Number)— <b>New</b> - of which women (percentage)	—	100,000 Women: 40%
<b>Component 6: Responding to Immediate Food and Nutrition Security Needs (New)</b>		
Vulnerable people (children, pregnant and lactating women, host community residents, refugees, and flood-affected people) having received immediate food and nutrition support (Number)— <b>New</b> - of which women (percentage) - of which children (percentage)	—	18,000 Women: 60% Children: 30%
Beneficiaries conducting labor-intensive works— <b>New</b>		68,000 Women: 20%
Beneficiaries of social safety net programs (Number)— <b>New</b> - Beneficiaries of Safety Nets programs - In-kind transfers (number) - Beneficiaries of Safety Nets programs - Cash-for-work, food-for-work and public works (number) - Beneficiaries of social safety net programs – Female (percentage)		86,000 18,000 68,000 Women: 30%

27. **Revised theory of change (ToC).** The revised ToC reflecting the new activities under AF is presented in Figure 1 below.



Figure 1: Theory of Change





28. **Changes to Project areas/beneficiaries:** The Parent Project will target three specific landscape areas in the northern, central, and southern parts of the country. The AF support will target these same areas based on demonstrated need. However, given the more widespread nature of food insecurity, the AF will also implement activities of Component 6 in areas outside these landscape areas, depending on food security needs, using a targeting process to be outlined in the Project Implementation Manual.

29. **Changes to implementation arrangements:** The MPSIR will continue to be the Project implementing agency, acting through a PIU. To facilitate timely and efficient implementation of Project activities, the Parent Project PIU will be strengthened with additional staff, including a Food Security Specialist, as part of the effectiveness conditions of the AF. A Financial Management Assistant, a Procurement Assistant, and a Food Security Assistant shall be recruited within three months after effectiveness. The PIU will also be supported by the WFP as PIE. This will guarantee both the timely and effective implementation of planned activities given the WFP's sufficient capacity and substantial experience. Within 3 months following effectiveness of the AF, the following staff will be recruited: (i) an accountant; (ii) an infrastructure specialist; (iii) a conservation specialist; (iv) a livelihoods specialist; (v) a monitoring and evaluation specialist; (vi) financial management assistant; (vii) a procurement assistant; and (viii) a food security assistant.

### III. KEY RISKS

30. **The overall risk is deemed Substantial.** The risk analysis using the Systemic Operations Risk-Rating Tool (SORT) points to substantial residual macroeconomic, institutional capacity, fiduciary, and environmental, and social risks. In addition, the technical design risk, which was considered **Moderate** under the parent project, is increased to **Substantial** due to increasing complexity.

31. **Macroeconomic risk is Substantial.** The Republic of Congo's economy is highly commodity and oil price dependent, which poses a substantial risk given the slowdown in global economic growth<sup>16</sup> due to the ripple effect of COVID-19 and Russia's invasion of Ukraine. Reduced demand from the Republic of Congo's main trading partners (United Arab Emirates [UAE], China, and European Union [EU]) risks affecting the country's macroeconomic outlook. The country's public debt burden is one of the heaviest in the region. The International Monetary Fund (IMF) assessed the debt as sustainable in its 2022 report, but it is classified as "in distress" due to significant arrears. With current tight global financial conditions and the higher financing costs, the Republic of Congo is deemed at a high risk of being unable to fulfill its financial obligations and thereby potentially creating high risk to achievement of the PDO. To reduce borrowing costs and contain debt risks, the country has prepared a new medium-term debt management strategy 2023–2025. This strategy includes loan projections for different ministries aligned with a new procurement template and an annual borrowing plan.<sup>17</sup>

**Technical design risk is Substantial.** With the AF, the technical complexity of the Parent Project increases further due to the following factors: (i) the Project area is increased from the Parent Project's landscape areas to the entire country; (ii) new activities are being introduced to specifically address food insecurity, partly with new implementation modalities (for example, distribution of inputs and food);

<sup>16</sup> According to the IMF World Economic Outlook (2023), the Global real GDP is forecasted to grow by 2.8 percent in 2023, down from 3.4 percent in 2022. A further slowing to 3 percent is expected in 2024.

<sup>17</sup> IMF Country Report No. 23/89, February 2023.



and (iii) new stakeholders will need to be engaged in implementation as food security and crisis responses need to involve actors that were not included in the parent project (for example, the Prime Minister's Office; the Ministry of Trade, Procurement, and Consumption (*Ministère du Commerce, des Approvisionnements et de la Consommation*); the Ministry of Social and Humanitarian Actions; and the Ministry of Health and Population (*Ministère de la Santé et de la Population*). To mitigate this additional complexity, the government is expected to expand its steering committee to ensure that all relevant actors are involved. In addition, implementation arrangements will be strengthened to assure that the PIU can manage the additional complexity (see next paragraph).

**32. Institutional capacity for implementation and sustainability risks are assessed as Substantial.** Key ministries for Project implementation (MPSIR and MAEP) have limited management capacity, with relevant key units being underfunded and understaffed. Low capacity is also an issue for many local service providers and decentralized government institutions. The Project will use a PIU with satellite offices in target areas. To ensure a fast delivery of the emergency response supported by the AF, the Project will collaborate with the WFP, which will serve as a PIE through the signing of output agreements, goods and related services delivery contracts, and/or Technical Assistance agreements with the Government, as applicable. The Project will continue to build capacity among key stakeholders so that the functions fulfilled by the PIU and service providers can be progressively integrated into the local, departmental, and national institutions in the longer term. Cross-ministry coordination and collaboration will be ensured through the steering committee and multistakeholder platforms.

**33. The overall fiduciary risk rating for the Project is assessed as Substantial.** The procurement and financial risks initially assessed for the Parent Project cover risks associated with the new activities proposed under the AF. Mitigation measures such as the recruitment of qualified fiduciary staff and the establishment of adequate financial and contract management systems are put in place.

**34. Environmental and social risks are rated Substantial.** The environmental risk rating is **Substantial and** mainly linked to the new activities proposed under Components 3 and 6, which might include small-scale construction and road rehabilitation, water harvesting, soil improvement, and moisture retention. This could lead to (i) occupational health and safety risks for workers, including beneficiaries from LIPW programs, as well as safety risks related to the works for surrounding communities; (ii) encroachment on crops in the vicinity of work sites; and (iii) noise pollution, maintenance of rural roads, building of small-scale food storage facilities, and so forth. The social risk rating has also been classified as **Substantial**. Key drivers of the substantial social risk classification are (i) limited Environmental and Social Framework (ESF) capacity and experience of PIU to manage project-related environmental and social (E&S) risks and impacts in a manner consistent with the Environmental and Social Standards (ESSs); (ii) high risks of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) during Project implementation given the weak capacity and vacant regulatory framework at the country level; (iii) the very high prevalence of Gender-based Violence (GBV) in the Republic of Congo; and (iv) potential elite capture, considering Project objectives related to supporting increased food crop production, rehabilitating critical infrastructures, and improving household nutrition for the most vulnerable in the rural communities. To mitigate the risk linked to the AF, the Environmental and Social Commitment Plan (ESCP) was negotiated and finalized. The Borrower will accordingly update all safeguard instruments of the Parent Project, that is: the Environmental and Social Management Framework (ESMF); the Resettlement Policy Framework (RPF); the Stakeholder Engagement Plan (SEP); the Labor Management Procedures (LMP); the Process Framework (PF); and the Indigenous Peoples Planning Framework (IPPF). These instruments will be disclosed prior to effectiveness. The GBV/SEA/SH action plan will be developed no later than 6 months after effectiveness.





## IV. APPRAISAL SUMMARY

### A. Economic and Financial Analysis

35. In line with the Parent Project, the development objective of strengthening landscape management and increasing the use of improved livelihood activities in targeted communities in the Republic of Congo is expected to lead to two main quantifiable, mutually reinforcing benefits. First, the ProClimat-AF will lead to increased agricultural income thanks to increased productivity and the sale of the surpluses. The higher productivity will directly result from several project outcomes, such as higher availability of improved climate- and nutrition-smart technologies and innovations (i.e., improved inputs, landscape management practices, irrigation, and other infrastructure), widespread provision of improved research and extension services, and greater access and use of quality, timely information on environmental hazards (i.e., extreme weather events). Second, the ProClimat-AF will increase climate change resilience and adaptation. By enhancing the national systems for agriculture and food crises prevention and management, including the effective dissemination of relevant information and advisory services to end users, such systems will secure the food production and livelihoods of the affected population. In addition, producers' resilience and adaptive capacity will be strengthened through the increased availability of the abovementioned climate-smart agriculture technologies and practices.

35. The ProClimat-AF will also have other positive impacts, non-quantifiable at this stage due to data availability. These include employment growth, particularly women employment, as all project components incorporate gender-focused interventions (e.g., prioritizing their access to technologies and practices). Additionally, the project will lead to increased food security, improved nutrition and health (e.g., resulting from greater, stable access to diversified, nutrition-dense food), enhanced institutional capacity and policy and regulatory frameworks, greater community participation, lower country's dependency on food imports, and so forth.

36. Based on the standard cost-benefit analysis methodology recommended by the World Bank, all financial models of the proposed activities of the ProClimat-AF demonstrate the profitability of the investments. As shown in Annex 1, all activities will generate positive additional benefits, ranging from US\$126 for traditional poultry production to US\$3,916 for layer production. Looking at the 10 or 20-year net present value (NPV) at a discount rate of 10.7 percent, the results are more than satisfactory, ranging from US\$263 for traditional poultry production to US\$10,139 for layer production.

37. Overall, the economic results of the proposed ProClimat-AF are positive, generating an NPV (at 6 percent social discount rate) of US\$83.3 million and an Economic Internal Rate of Return (EIRR) of 22.6 percent (over a 20-year period and for an IBRD/IDA budget of US\$50 million), not accounting for environmental externalities. In addition, these economic results are robust when testing several sensitivity scenarios, including delays in implementation, cost overruns, and reductions in benefits.

38. The valuation of environmental externalities further enhances the economic justification of the ProClimat-AF. As described in Annex 2, the project will also generate some positive environmental externalities (a total mitigation of 1,400,214 tCO<sub>2</sub>eq over 20 years, or about 70,011 tCO<sub>2</sub>eq per year). When evaluating these environmental benefits using the 2022 updated estimates of the social price of carbon, the overall economic results of the project increase: assuming the low estimate range of carbon social price, the EIRR is 36.6 percent and the NPV is US\$49.6 million higher; assuming the high estimate range, the EIRR becomes 62.35 percent and the NPV is US\$99.1 million higher.



## B. Greenhouse Gas (GHG) Accounting

39. In its 2012 Environment Strategy, the World Bank has adopted a corporate mandate to conduct greenhouse gas (GHG) emissions accounting for investment lending in relevant sectors and has adopted the Ex-Ante Carbon-balance Tool (EX-ACT), which was developed by the Food and Agriculture Organization of the United Nations (FAO) in 2010. EX-ACT allows the assessment of a project's net carbon balance, defined as the net balance of CO<sub>2</sub> equivalent GHG that was emitted or sequestered as a result of Project implementation compared to a without-Project scenario. EX-ACT estimates the carbon stock changes (emissions or sinks), expressed in equivalent tons of CO<sub>2</sub> (tCO<sub>2</sub>-eq) per hectare and year. The EX-ACT results indicate that the Project activities will lead to mitigation of a total of 24,308,794 tons of CO<sub>2</sub>eq over a period of 20 years. The details of the GHG assessment are available in Annex 2.

## C. Paris Alignment

40. The operation is aligned with the goals of the Paris Agreement on both mitigation and adaptation and was specifically screened for short- and long-term climate change and disaster risks.

- i. **Assessment and reduction of adaptation risks:** Droughts, floods, strong winds, and increased impacts of pests and diseases from extreme temperatures are the main climate and disaster risks likely to affect the Project investments in the agriculture value chain and food system. The Project design takes into consideration the drought, floods, and related climate risks that threaten the outcomes of the project. Specifically, climate change risks and vulnerability to floods, strong winds, droughts, and pests and diseases will be managed and mitigated through targeted adaptation measures by combining structural, nature-based, and soft adaptation solutions, including following climate-resilient design standards to reduce land degradation and water- and temperature-related diseases (Components 3 and 6), as well as the promotion of sustainable and resilient practices and strong capacity building for farmers on such practices (Components 1 and 3). The Project will disseminate sustainable and resilient agriculture practices. The promotion of climate-smart crops and livestock that combine adapted seeds, breeds, and pasture with soil and water management practices to make more efficient use of the resources and biodiversity, and increased crop diversification, will enhance the resilience of farmers and ecosystems to unreliable rains, high temperatures, droughts, and floods. In addition, the Project's investment in small-scale irrigation equipment under Subcomponent 3.4 will contribute to reduce negative impacts of droughts on crop yields. Therefore, the operation adequately reduces the physical climate risks to the Project outcomes to an acceptable level through appropriate climate resilience and adaptation design considerations.
- ii. **Assessment and reduction of mitigation risks:** The operation supports activities that are neutral, universally aligned, or encourage the country's progress toward low-carbon development. Under Component 2, LIPW will contribute to land rehabilitation through afforestation and reforestation to increase carbon sequestration. This restoration of degraded land is considered universally aligned and consistent with low-GHG development pathways. Under Component 3, the promotion and adoption of CSA practices and technologies (which are included under sustainable and resilient agriculture as defined by the parent project), crop and livestock production using sustainable and resilient approaches, conservation agriculture aimed at improving soil health, waste recycling, afforestation, and reforestation are on the Universally Aligned list and considered to be fully consistent with low GHG development pathways. Project design also integrates sustainable and resilient advisory services and TA for Project beneficiaries. These capacity building



activities are also universally aligned. The restoration of degraded lands and soils through reforestation and afforestation will contribute to increasing carbon sequestration under the Project. Thus, the mitigation risks have been reduced to a low level, and the operation is aligned with the mitigation goals of the Paris Agreement.

#### D. Financial Management

41. **The AF will rely on the Parent Project's fiduciary arrangements, which are deemed adequate.** The World Bank will ensure that the PIU's fiduciary team operates in accordance with the World Bank Directive on the Financial Management Manual for World Bank IPF Operations and the World Bank Guidance Reference Material on Financial Management in World Bank IPF Operations. The arrangements in the parent project ensure that the PIU (i) uses Project funds only for the intended purposes and in an efficient and economical way; (ii) prepares accurate and reliable accounts and timely periodic financial reports; (iii) safeguards assets of the project; and (iv) has acceptable auditing arrangements. Before a UN agency will be contracted by the Project as an Implementing Entity, the necessary fiduciary assessment will be conducted at the corporate and country levels. Based on this and Project requirements, the funding ceiling, payment schedule, and specifics on financial reporting will be defined. In case of payments to UN agencies for expenditures of the project, disbursements would be made through the payment mechanisms defined in the contract with the UN agency (UN commitment, direct payment, or special commitment). In case the UN commitment disbursement mechanism is used, an application for issuance of UN commitment is to be submitted by the Recipient. Subsequent payment and documentation of expenditures would be as per the commitment letter to be issued by the association and the agreement between the Recipient and the UN agency. The verification exercise will be implemented by the WFP, in collaboration with the PIU and with technical inputs from the World Bank, and subject to a technical evaluation by the independent third-party monitoring agency (TPMA) to be hired under the Project.

#### E. Procurement

42. **The procurement activities for the AF will follow the same rules and procedures as the Parent Project, as outlined in The World Bank Procurement Regulations for IPF Borrowers (dated November 2020).** The PIU will carry out all procurement activities, except where these are delegated through corresponding agreements with service providers. The Project will be subject to the World Bank's Anti-Corruption Guidelines, dated October 15, 2006, revised in January 2011, and as of July 1, 2016. The Project will use the Systematic Tracking of Exchanges in Procurement (STEP) tool to plan, record, and track all procurement transactions. Procurement will be carried out using the World Bank's Standard Bidding Document (SBD) or Standard Request for Proposals, for all international competitive bidding (ICB) for goods and all recruitment of international consultants, respectively. For national competitive bidding, the Borrower will use the World Bank's SBD for ICB for goods and the World Bank's Standard Request for Proposals for the recruitment of consultants. Annual procurement audits will be carried out throughout the duration of the project.

43. **The government prepared a Project Procurement Strategy for Development (PPSD) and a Project Procurement Plan (PPP) for the parent project and for the AF.** The updated PPSD provides the basis and justification for procurement decisions, including the approach to market and selection methods. Findings of the PPSD confirm the presence of service providers suitable for implementing Project activities and underline the importance of bundling activities into procurement packages to



make them attractive to high-quality providers. The PPP for the first 18 months of the parent project was submitted to and approved by the World Bank on January 31, 2023. The PPP for the first 18 months of the AF was submitted to and approved by the World Bank on October 10, 2023. All goods, works, and non-consulting services will be procured in accordance with the requirements set forth or referred to in Section VI. Approved Selection Methods: Goods, Works, and Non-Consulting Services of the Procurement Regulations. The consulting services will be procured in accordance with the requirements set forth or referred to in Section VII. Approved Selection Methods: Consulting Services of the Procurement Regulations, the PPSD, and the PPP.

**F. Legal Operational Policies**

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

44. **Operational Policy (OP) 7.50 “Projects on International Waterways”** is triggered for this operation as it was for the parent project. The reason is that Project activities may involve the use or potential pollution of water resources from the Congo-Oubangui-Sangha basin, which is an international waterway as per OP 7.50. Like the parent project, the exception to the riparian notification requirement according to paragraph 7(a) of the policy applies because activities are limited to small-scale rehabilitation/upgrade of existing, small-scale schemes which will not adversely change the quantity and quality of water flows to other riparians. The Regional Vice Presidency granted an exception to the riparian notification requirement on February 17, 2023, for the Parent Project. The scope of investments in relation to the use or risk of pollution of international waterways remains within the boundaries of the original design and falls within the scope of the exception memo approved for the Parent Project. As such, no additional step is required as per OP 7.50.

**G. Environmental and Social**

45. **The Project will apply the ESF.** The relevant Environmental and Social Standards (ESSs) that have been identified under the parent project include ESS1: Assessment and Management of Environmental and Social Risks and Impacts; ESS2: Labor and Working Conditions; ESS3: Resource Efficiency and Pollution Prevention and Management; ESS4: Community Health and Safety; ESS5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement; ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities; ESS8: Cultural Heritage; and ESS10: Stakeholder Engagement and Information Disclosure.

46. **Overall, the Project is expected to have positive impacts.** It aims to improve communities’ livelihood activities through (i) provisioning food to the most affected and vulnerable households to address their immediate food needs; (ii) supporting smallholder farmers to enhancing productivity and diversification through provision of agricultural inputs and advisory services; and (iii) strengthening food security and building community-based early warning and information systems. However, some activities such as small-scale irrigation and building small infrastructure (food storage facilities, etc.) are likely to result in negative risks and impacts.



47. **The safeguards instruments of the Parent Project (ESMF, RPF, SEP, LMP, PF, and IPPF) will be updated and disclosed prior to the effectiveness of the Additional Financing.** The GBV/SEA/SH Action Plan will be developed no later than 6 months after effectiveness.

#### H. Gender

48. **Although women play a critical role in agriculture in the Republic of Congo, they face gender-specific barriers that limit their economic productivity and put them at a higher risk of vulnerability and food insecurity.** The AF will therefore maintain the Parent Project's approach to address multiple gender gaps through its design. The AF, in line with the Parent Project, will aim to address social and economic barriers that affect women's productivity in the Republic of Congo. Like the Parent Project, the AF will ensure women's integration in the various proposed activities. The AF will particularly promote the participation of women under Subcomponent 3.4 and Component 6. Women farmers will be prioritized under Subcomponent 3.4. The indicator used to measure the outcomes of this activity is "Individual beneficiaries receiving agriculture inputs, equipment, and advisory services," which will be disaggregated by the various target vulnerable groups of the Project, given its focus on inclusion. The target value for women is 40 percent, meaning that 40 percent of the beneficiaries receiving inputs as per the indicator should be women. Women at risk of food insecurity will be encouraged to participate in the LIPW activities through community consultations and social mobilization tools. The AF will make efforts to accommodate the needs of the women by adapting working conditions, such as flexible working hours for childcare and safety considerations. The AF will ensure that at least 20 percent of the LIPW beneficiaries will be women. Under the proposed Component 6, the remaining activities, such as the integrated nutrition security interventions that will be provided to pregnant women and girls to address acute malnutrition, will target women.

#### I. Citizen Engagement (CE)

49. **Community participation and citizen engagement remain integral to the design of the AF, with people being at the center of its implementation.** The AF will adopt the same approach as the Parent Project which aims to strengthen CE through bottom-up and top-down means. Community members will be empowered to participate in decision-making and planning. Local authorities will be supported to include community members in the planning and execution of Project activities. The AF will therefore rely on the same mechanisms of the parent project. In addition to the development of an accessible and robust GRM under the parent project, the AF will follow the original design by ensuring periodic and inclusive consultations will be conducted for all new activities throughout Project implementation. Consultations will be used to inform and strengthen implementation of project activities. The AF under Subcomponent 3.4 and Component 6 will also ensure that the process of social mobilization and participatory planning is inclusive so that the voices of disadvantaged and vulnerable groups are enhanced and all social groups, particularly women, Indigenous Peoples (IPs), ex-combatants, refugees, and youth, are involved. With the AF adopting a Community-Driven Development (CDD) approach in line with the parent project, the AF will aim to strengthen citizen participation in the newly introduced activities, namely under Components 3 and 6. It will ensure beneficiaries will be in the driver's seat at the department, municipal, and district levels, and promote inclusive participation of all stakeholders, including vulnerable groups, in local decision-making. Finally, beneficiaries of the new proposed activities will take advantage of the capacity building provided under the parent project for CE to strengthen their



participation in local decision-making. They will also be subject to the citizen perception surveys that will be conducted on an annual basis under the Parent Project.

50. **The AF will also use the same CE-specific indicators as the parent project through the Results Framework.** Intermediate indicators that would apply to the AF will include (i) beneficiaries reporting improved participation in local decision-making because of Project activities; and (ii) grievances registered related to the delivery of Project benefits that are addressed through the GRM.

## V. WORLD BANK GRIEVANCE REDRESS

51. **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 in order to address project-related concerns. Project-affected communities and individuals may submit their complaints to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank noncompliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of World Bank management and after management has been given an opportunity to respond. For information on how to submit complaints to the 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	✓	
Disbursements Arrangements	✓	
Implementing Agency		✓
Loan Closing Date(s)		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Legal Covenants		✓
Financial Management		✓
Procurement		✓
Implementation Schedule		✓
Other Change(s)		✓

**VII DETAILED CHANGE(S)**

**PROJECT DEVELOPMENT OBJECTIVE**

**Current PDO**

To strengthen landscape management and increase the use of improved livelihood activities in targeted communities

**Proposed New PDO**

To strengthen landscape management, increase the use of improved livelihood activities, and reduce food insecurity in targeted communities.



**COMPONENTS**

Current Component Name	Current Cost (US\$, millions)	Action	Proposed Component Name	Proposed Cost (US\$, millions)
Strengthening Capacity of Institutions and Promoting Social Cohesion	11.50	Revised	Strengthening Capacity of Institutions and Promoting Social Cohesion	16.50
Strengthening Investments in Sustainable and Resilient Agriculture and Natural Capital Management	40.00	Revised	Strengthening Investments in Sustainable and Resilient Agriculture and Natural Capital Management	40.00
Promoting Inclusive, Climate-resilient Livelihoods and Value Chains	23.50	Revised	Promoting Inclusive, Climate-resilient Livelihoods and Value Chains	50.50
Project Management, Monitoring, and Evaluation	7.00	Revised	Project Management, Monitoring, and Evaluation	12.00
Contingent Emergency Response	0.00	No Change	Contingent Emergency Response	0.00
	0.00	New	Responding to Immediate Food and Nutrition Security Needs	13.00
<b>TOTAL</b>	<b>82.00</b>			<b>132.00</b>

**DISBURSEMENT ARRANGEMENTS**

Change in Disbursement Arrangements  
Yes

**Expected Disbursements (in US\$)**

Fiscal Year	Annual	Cumulative
2023	0.00	0.00
2024	22,000,000.00	22,000,000.00
2025	32,000,000.00	54,000,000.00
2026	32,000,000.00	86,000,000.00





2027	27,000,000.00	113,000,000.00
2028	14,000,000.00	127,000,000.00
2029	4,000,000.00	131,000,000.00

**SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)**

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

**LEGAL COVENANTS – Additional Financing to the Climate-Resilient and Inclusive Livelihoods Project (P181184)**

Sections and Description
Schedule 2, Section I.B.4.: The Borrower, through the PIU shall, not later than three (3) months after the Effective Date of the Original Financing Agreement, recruit and retain at all times during Project implementation: (i) a social safeguards specialist; (ii) an environmental safeguards specialist; and (iii) a GBV specialist; all with terms of reference, qualifications and experience satisfactory to the Association.
Schedule 2, Section I.B.5: The Recipient, through the PIU, shall, not later than three (3) months after the Effective Date, or such later date as agreed with the Association, recruit and retain at all times during Project implementation: (i) an accountant; (ii) an infrastructure specialist; (iii) a conservation specialist; (iv) a livelihoods specialist; (v) a monitoring and evaluation specialist; (vi) financial management assistant; (vii) a procurement assistant; and (viii) a food security assistant; all with terms of reference, qualifications and experience satisfactory to the Association.
Schedule 2, Section I.F: For purposes of assisting the Recipient in the provision of PIP Microprojects, Sub-grants, Matching Grants, LIPW Cash Transfers or Vouchers under the Project, the Recipient shall appoint, no later than



nine (9) months after the Effective Date of the Original Financing Agreement, a TPM Agency or TPM Agencies, as applicable, with terms of reference, qualifications and experience satisfactory to the Association. To this end, the Recipient shall: (a) require the TPM Agency to prepare and submit yearly monitoring reports on the performance in the implementation (in particular fiduciary aspects) of: (i) PIP Microprojects by the PIP Providers under Part 2.1 of the Project; (ii) Subprojects by the Grant Beneficiaries under Part 3 of the Project; and (iii) the LIPW Cash Transfers or Vouchers to LIPW Beneficiaries under Part 6.2 of the Project, which shall be promptly made available to and discussed with the Association; and (b) promptly take any actions, as may be requested by the Association upon its review of the TPM Agency’s reports.

Schedule 2, Section I.H: The Recipient shall ensure that not later than twelve (12) months after the Effective Date of the Original Financing Agreement, the Food Security Crisis Preparedness Plan (“FSCPP”) is prepared and adopted in form and substance acceptable to the Association.

**Conditions**

Type	Financing source	Description
Effectiveness	IBRD/IDA	Article IV, Section 4.01(a) : the Original Financing Agreement has been executed and delivered and all conditions precedent to the effectiveness of said agreement have been fulfilled;
Effectiveness	IBRD/IDA	Article IV, Section 4.01(b) : the Recipient has established the Project Implementation Unit and recruited its key staff, namely (i) a Project coordinator; (ii) a procurement specialist; (iii) a financial management specialist; and (iv) a food security specialist; each on the basis of terms of reference, qualification and experience acceptable to the Association; and
Effectiveness	IBRD/IDA	Article IV, Section 4.01(c) : the Recipient has updated the ESMF, IPPF, LMP, SMP, the RPF, and the SEP, adopted and disclosed when appropriate, all under terms satisfactory to the Association.
Disbursement	Financing source	Schedule 2, Section III.B.1.: No withdrawal shall be made under Category (5) until and unless the Association has received evidence that: (i) the Recipient has prepared and adopted the LIPW Manual, in coordination with the Project Implementing Entity, in form and substance satisfactory to the Association; and (ii) the Recipient has entered into Cooperation Agreements with the Project Implementing Entity, in form and substance satisfactory to the Association.



VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Congo, Republic of

Additional Financing to the Climate-Resilient and Inclusive Livelihoods Project

Project Development Objective(s)

To strengthen landscape management, increase the use of improved livelihood activities, and reduce food insecurity in targeted communities.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<b>Strengthen landscape management</b>							
Area under sustainable and resilient agriculture practices (Hectare(Ha))		0.00	7,500.00	15,500.00	20,000.00	25,000.00	35,000.00
<i>Action: This indicator has been Revised</i>							
Land area under sustainable landscape management practices (CRI, Hectare(Ha))		0.00	117,600.00	352,800.00	705,600.00	940,800.00	1,176,000.00
<b>Increase the use of improved livelihood activities in targeted communities</b>							
Beneficiaries using improved livelihood activities supported by the project (Number)		0.00	25,000.00	75,000.00	75,000.00	100,000.00	123,250.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<b>Action: This indicator has been Revised</b>	<b>Rationale:</b> The revised indicator takes into account the beneficiaries under the new Subcomponent 3.4. The original target covered only Subcomponents 3.1, 3.2, and 3.3, counting the group members supported and their households. For 3.4, only direct recipients of support have been added (not their households) given the smaller scale of the support for each beneficiary.						
of which women (Percentage)	0.00	10.00	20.00	30.00	50.00	50.00	
<b>Action: This indicator has been Revised</b>							
of which ex-combatants (Percentage)	0.00	2.00	4.00	6.00	8.00	10.00	
of which IP (Number)	0.00	2.00	4.00	6.00	8.00	10.00	
of which youth (Percentage)	0.00	5.00	10.00	15.00	20.00	30.00	
of which people with disability (Percentage)	0.00	2.00	4.00	6.00	8.00	10.00	
MSMEs reporting an increase in profit of 20% or more from grants supported by the project (Number)	0.00	5.00	10.00	20.00	30.00	35.00	
of which women-led (Number)	0.00	10.00	20.00	30.00	40.00	50.00	
<b>Crosscutting</b>							
Net greenhouse gas (GHG) emissions (CRI, Metric tons/year)	0.00	1,300,000.00				4,457,609.00	
<b>Action: This indicator has been Revised</b>	<b>Rationale:</b> The target value was adjusted to take into account an additional reduction of 1,057,609 metric tons in metric tons of carbon dioxide equivalent to be						



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<i>generated under the AF.</i>							
<b>Reduce food insecurity in targeted communities (Action: This Objective is New)</b>							
People reached with emergency food assistance (Number)		0.00	356,667.00				356,667.00
<b>Action: This indicator is New</b>	<b>Rationale:</b> <i>This indicator measures the number of beneficiaries from the short-term emergency response involving distribution of food or food vouchers under Component 6.</i>						

**Intermediate Results Indicators by Components**

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<b>Strengthening Capacity of Institutions and Promoting Social Cohesion</b>							
Project Investment Plans that incorporate climate change considerations (Percentage)		0.00	100.00	100.00	100.00	100.00	100.00
Beneficiaries reporting that Project Investment Plans reflect their needs (Number)		0.00	40,000.00	80,000.00	120,000.00	160,000.00	200,000.00
of which women (Percentage)		0.00	10.00	20.00	30.00	50.00	70.00
of which ex-combatants (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
of which IP (Percentage)		0.00	5.00	10.00	15.00	20.00	30.00
of which youth (Percentage)		0.00	5.00	10.00	15.00	20.00	30.00
of which people with disability (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
Beneficiaries reporting improved participation in local decision making because of project activities (Number)		0.00	10,000.00	40,000.00	85,000.00	115,000.00	150,000.00
of which women (Percentage)		0.00	10.00	20.00	30.00	50.00	70.00
of which ex-combatants (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
of which IP (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
of which youth (Percentage)		0.00	5.00	10.00	15.00	20.00	30.00
of which people with disability (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
Grievances registered related to delivery of project benefits that are actually addressed through the Grievance Redress Mechanism (Percentage)		0.00	100.00	100.00	100.00	100.00	100.00
Index for improvement of agriculture practices because of the EWRS (Number)		0.00	2.00	3.00	4.00	5.00	6.00
Adoption of a Food Security Crisis Preparedness Plan (Yes/No)		No	No	No	No	No	Yes



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<i>Action: This indicator is New</i>							
<b>Strengthening Investments in Sustainable and Resilient Agriculture and Natural Capital Management</b>							
Beneficiaries that have access to infrastructures (built and/or rehabilitated by the project) in targeted communities, disaggregated by types of service and infrastructure (Number)		0.00	35,000.00	105,000.00	175,000.00	280,000.00	350,000.00
of which women (Percentage)		0.00	10.00	20.00	30.00	50.00	70.00
of which ex-combatants (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
of which IP (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
of which youth (Percentage)		0.00	5.00	10.00	15.00	20.00	30.00
of which people with disability (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
Protected areas under improved management for conservation and sustainable use (Hectare(Ha))		0.00	100,000.00	335,000.00	570,500.00	922,500.00	1,175,000.00
<b>Promoting Inclusive, Climate-resilient Livelihoods and Value Chains</b>							
Employees in project-supported MSMEs (Number)		0.00	30.00	90.00	150.00	240.00	300.00
of which women (Percentage)		0.00	10.00	20.00	30.00	50.00	70.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
of which ex-combatants (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
of which IP (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
of which youth (Percentage)		0.00	5.00	10.00	15.00	20.00	30.00
of which people with disability (Percentage)		0.00	1.00	4.00	6.00	8.00	10.00
Cooperatives with project-facilitated partnership agreements with MSMEs (Number)		0.00	2.00	6.00	10.00	16.00	20.00
of which women-led (Percentage)		0.00	10.00	20.00	30.00	45.00	60.00
Livelihoods groups reporting an increase in profit of 20% or more due to grant support or training provided by the project (Number)		0.00	15.00	45.00	90.00	135.00	150.00
of which women-led (Percentage)		0.00	10.00	20.00	30.00	45.00	60.00
Geo-spatial platform established and operational (Yes/No)		No	No	Yes	Yes	Yes	Yes
Beneficiaries having received agriculture inputs, equipment, and advisory services (Number)		0.00	15,000.00	30,000.00	40,000.00	80,000.00	100,000.00
<b>Action: This indicator is New</b>	<b>Rationale:</b> <i>This indicator measures the beneficiaries under the new Subcomponent 3.4.</i>						





Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<b>Emergency Responses to Food and Nutrition Insecurity (Action: This Component is New)</b>							
Vulnerable people (children, pregnant and lactating women, host community residents, refugees, and flood-affected people) having received immediate food and nutrition support (Number)		0.00	18,000.00				18,000.00
<b>Action: This indicator is New</b>	<b>Rationale:</b> <i>This indicator measures the beneficiaries under Subcomponents 6.1 and 6.3.</i>						
of which women (Percentage)		0.00	10.00	20.00	30.00	50.00	60.00
<b>Action: This indicator is New</b>							
of which children (Percentage)		0.00	5.00	10.00	20.00	25.00	30.00
<b>Action: This indicator is New</b>							
Beneficiaries of labor-intensive public works (Number)		0.00	10,000.00	30,000.00	40,000.00	50,000.00	68,000.00
<b>Action: This indicator is New</b>	<b>Rationale:</b> <i>This indicator measures the number of beneficiaries under the new Subcomponent 6.2.</i>						
of which are women (Percentage)		20.00					20.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<b>Action: This indicator is New</b>							
Beneficiaries of social safety net programs (CRI, Number)		0.00					86,000.00
<b>Action: This indicator is New</b>	<b>Rationale:</b> <i>The target of this core indicator is the sum of the indicators “Vulnerable people (children, pregnant and lactating women, host community residents, refugees, and flood-affected people) having received immediate food and nutrition support” and “Beneficiaries conducting labor-intensive works”. This allows these figures to be captured by the World Bank at the corporate level.</i>						
Beneficiaries of Safety Nets programs - In-kind transfers (number) (CRI, Number)		0.00					18,000.00
<b>Action: This indicator is New</b>							
Beneficiaries of Safety Nets programs - Cash-for-work, food-for-work and public works (number) (CRI, Number)		0.00					68,000.00
<b>Action: This indicator is New</b>							
Beneficiaries of social safety net programs - Female (CRI, Number)		0.00					30.00
<b>Action: This indicator is New</b>							
Beneficiaries of Safety Nets programs - Unconditional cash transfers (number) (CRI, Number)		0.00					0.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<b>Action: This indicator is New</b>							
Beneficiaries of Safety Nets programs - Social Pensions (number) (CRI, Number)		0.00					0.00
<b>Action: This indicator is New</b>							
Beneficiaries of Safety Nets programs - Other cash transfers programs (number) (CRI, Number)		0.00					0.00
<b>Action: This indicator is New</b>							
Beneficiaries of Safety Nets programs – School feeding programs (number) (CRI, Number)		0.00					0.00
<b>Action: This indicator is New</b>							
Beneficiaries of Safety Nets programs - Other social assistance programs (number) (CRI, Number)		0.00					0.00
<b>Action: This indicator is New</b>							



**Monitoring & Evaluation Plan: PDO Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Area under sustainable and resilient agriculture practices	<p>The indicator measures the area in which agricultural activities are implemented by beneficiaries that adopt/follow a sustainable and resilient approach supported by the project through grant support or training. For the purpose of this PAD, a "sustainable and resilient" approach is understood to only refer to practices that are at the same time agroecological and climate-smart. Agroecology is a holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of sustainable agriculture and food systems. Examples of these land-related agroecological activities include, but are not limited to, agroforestry,</p>	Annually.	Project reports.	The list of activities eligible to be counted for this indicator will be defined further in the PIM.	PIU.



	<p>intercropping, and market gardening. This indicator is used to report on the following PROGREEN indicators: Area of production landscapes under sustainable use (ha); Area under agroecological food production (ha); and Area of food production systems with improved climate resilience (ha).</p>				
<p>Land area under sustainable landscape management practices</p>	<p>The indicator measures, in hectares, the land area for which new and/or improved sustainable landscape management practices have been introduced. Land is the terrestrial biologically productive system comprising soil, vegetation, and the associated ecological and hydrological processes; Adoption refers to change of practice or change in the use of a technology promoted or introduced by the project; Sustainable landscape management (SLM) practices refers to a</p>	<p>Annually.</p>	<p>Project reports</p>	<p>Data for this indicator will be collected through the aggregation of data from individual subcomponents. Due to porosity of data, the preliminary target will be confirmed through field-level surveys conducted in the first year of implementation. For the purpose of the project, this indicator is considered a climate indicator. This indicator is used to report on the PROGREEN indicator: Landscapes with improved climate resilience (ha)</p>	<p>PIU.</p>



	combination of at least two technologies and approaches to increase land quality and restore degraded lands for example, agronomic, vegetative, structural, and management measures that, applied as a combination, increase the connectivity between protected areas, forest land, rangeland, and agriculture land.			(adaptation).	
Beneficiaries using improved livelihood activities supported by the project	Beneficiaries are defined as individuals that use (in the sense of adopting) livelihood activities that have been supported by the project through grant support or training. Livelihood activities include, among others, agriculture (agroforestry, market gardening, poultry, fisheries), community forestry (forest plantations, particularly for fuel wood), NTFPs (for example, honey and mushroom production), and tourism (including hospitality and	Annually.	Project reports.		PIU.



	cultural activities). This indicator will state in its comment section the number of farmers adopting agroecological agricultural practices in order to report on the corresponding PROGREEN indicator.				
of which women					
of which ex-combatants					
of which IP					
of which youth					
of which people with disability					
MSMEs reporting an increase in profit of 20% or more from grants supported by the project	Profit is defined as sales minus fixed and variable costs. The indicator is considered a gender indicator as it explicitly measures and sets a target for the participation of women.	Annually.	Project reports.		PIU.
of which women-led					
Net greenhouse gas (GHG) emissions	Project net greenhouse gas (GHG) emissions are calculated as an annual average of the difference between project gross	To be estimated at the MTR and at the end of the	Project reports.	Application of the Ex-ACT tool. This indicator is considered a climate indicator. Its absolute value is used to report	PIU.



	(absolute) emissions aggregated over the economic lifetime of the project and the emissions of a baseline (counterfactual) scenario aggregated over the same time horizon. They are reported in metric tons of carbon dioxide equivalent per year.	project based on activity data.		on the PROGREEN indicator: GHG emissions reduced in targeted landscapes (tons of CO2 equivalent). The target represents emission mitigation reduction results and are estimated based on the GHG assessment that was conducted for the project.	
People reached with emergency food assistance					

**Monitoring & Evaluation Plan: Intermediate Results Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Project Investment Plans that incorporate climate change considerations	PIPs are defined as the planning instruments developed under Subcomponent 1.2. The details of the climate change screening will be determined in the PIM but is expected to ensure that activities proposed in the PIPs are in line with climate	Annually.	Project reports.		PIU.





	change objectives, particularly with a view to adapting to the negative impacts of climate change.				
Beneficiaries reporting that Project Investment Plans reflect their needs	The indicator measures the participation of beneficiaries in informing and evaluating project activities and thus considered a citizen engagement indicator. In addition, it is considered a gender indicator as it explicitly measures and sets a target for the participation of women. The target value for women is 70%, meaning that 70% of the beneficiaries reporting on the indicator should be women.	Annually.	Project reports.		
of which women					
of which ex-combatants					
of which IP					
of which youth					
of which people with disability					
Beneficiaries reporting improved participation in local decision making	The indicator measures the participation of	Annually	Project reports.		PIU.



because of project activities	beneficiaries in informing and evaluating project activities and thus considered a citizen engagement indicator. In addition, it is considered a gender indicator as it explicitly measures and sets a target for the participation of women.				
of which women					
of which ex-combatants					
of which IP					
of which youth					
of which people with disability					
Grievances registered related to delivery of project benefits that are actually addressed through the Grievance Redress Mechanism	The indicator encourages the participation of beneficiaries in informing and evaluating project activities and is thus considered a citizen engagement indicator.	Annually.	Project reports.		PIU.
Index for improvement of agriculture practices because of the EWRS	The indicator is measured based on farmer surveys and expressed on a scale from 1-10.	Annually.	Project reports.		PIU.
Adoption of a Food Security Crisis Preparedness Plan					



Beneficiaries that have access to infrastructures (built and/or rehabilitated by the project) in targeted communities, disaggregated by types of service and infrastructure	The indicator is considered a gender indicator as it explicitly measures and sets a target for the participation of women. It is used to report on the PROGREEN indicator: People in targeted landscapes with increased benefits (number).	Annually.	Project reports.		PIU.
of which women					
of which ex-combatants					
of which IP					
of which youth					
of which people with disability					
Protected areas under improved management for conservation and sustainable use	Protected Areas Management refers to the assessment of how well protected areas are being managed considering context and planning, appropriateness of management systems and processes, and delivery of protected area objectives. The area of a targeted protected area will be considered to be under improved management	Annually.	Project reports.		PIU.



	when its METT score has increased by 40% (as compared to baseline values). This indicator is used to report on the PROGREEN indicator: Area of conservation landscapes under sustainable use (ha). In addition, it will state in its comment section the number of key habitats protected (which is assumed to correspond to the number of protected areas under improved management) in order to report on the PROGREEN indicator: Key habitats protected (number).				
Employees in project-supported MSMEs		Annually.	Project reports.		PIU.
of which women					
of which ex-combatants					
of which IP					
of which youth					
of which people with disability					
Cooperatives with project-facilitated partnership agreements with MSMEs		Annually.	Project reports.		PIU.



of which women-led					
Livelihoods groups reporting an increase in profit of 20% or more due to grant support or training provided by the project	The indicator is considered a gender indicator as it explicitly measures and sets a target for the participation of women.	Annually.	Project reports.		PIU.
of which women-led		Annually.	Project reports.		PIU.
Geo-spatial platform established and operational		Annually.	Project reports.		PIU.
Beneficiaries having received agriculture inputs, equipment, and advisory services	This indicator measures the number of farmers who were provided with agricultural assets or services as a result of World Bank project support. "Agriculture" or "Agricultural" includes: crops, livestock, capture fisheries, aquaculture, agroforestry, timber, and non-timber forest products. Assets include property, biological assets, and farm and processing equipment. Biological assets may include animal agriculture breeds (e.g.,	Annually	Project reports	Data for this indicator will be collected through the aggregation of data from field surveys and consultations of stakeholders	PIU



	<p>livestock, fisheries) and genetic material of livestock, crops, trees, and shrubs (including fiber and fuel crops). Services include research, extension, training, education, ICTs, inputs (e.g., fertilizers, pesticides, labor), production-related services (e.g., soil testing, animal health/veterinary services), phyto-sanitary and food safety services, agricultural marketing support services (e.g., price monitoring, export promotion), access to farm and post-harvest machinery and storage facilities, employment, irrigation and drainage, and finance. Farmers are people engaged in agricultural activities or members of an agriculture-related business (disaggregated by men and women) targeted by the project.</p>				
<p>Vulnerable people (children, pregnant and lactating women, host community residents, refugees, and flood-affected</p>		<p>Annually</p>	<p>Project reports</p>	<p>Data for this indicator will be collected through the aggregation of data</p>	<p>PIU</p>



people) having received immediate food and nutrition support				from field surveys and consultations of stakeholders.	
of which women					
of which children					
Beneficiaries of labor-intensive public works	Includes the number of workers who participated in labor-intensive public works for resilience and their household members.	Annually	Project reports	Data for this indicator will be collected through the aggregation of data from technical reports, field surveys, and consultations of stakeholders.	PIU
of which are women					
Beneficiaries of social safety net programs		Annually	Project reports	Data for this indicator will be collected through the aggregation of data from technical reports, field surveys, and consultations of stakeholders. It is considered to be the sum of the indicators “Vulnerable people (children, pregnant and lactating women, host community residents, refugees, and flood-affected people) having	PIU



				received immediate food and nutrition support” and “Beneficiaries conducting labor-intensive works”.	
Beneficiaries of Safety Nets programs - In-kind transfers (number)					
Beneficiaries of Safety Nets programs - Cash-for-work, food-for-work and public works (number)					
Beneficiaries of social safety net programs - Female					
Beneficiaries of Safety Nets programs - Unconditional cash transfers (number)					
Beneficiaries of Safety Nets programs - Social Pensions (number)					
Beneficiaries of Safety Nets programs - Other cash transfers programs (number)					
Beneficiaries of Safety Nets programs – School feeding programs (number)					
Beneficiaries of Safety Nets programs - Other social assistance programs (number)					







## Annex 1: Economic and Financial Analysis

1. **This annex presents the economic and financial analysis (EFA) for the proposed Additional Financing to the Climate-resilient and Inclusive Livelihoods Project (ProClimat-AF) in the Republic of Congo.** The evaluation is built on the cost-benefit analysis (CBA) approach applied to the core project interventions: (i) the strengthening of food security and community-based early warning and information systems, (ii) the support to smallholder farmers to increase and diversify local food production, and (iii) the emergency response to food and nutrition insecurity. Part I of this annex introduces the identification of benefit streams, followed by Part II which describes the methodology and assumptions used for the CBA analysis. Part III presents the economic analysis for the first component of the proposed AF, while Part IV describes the financial analysis for the other interventions. Finally, Part V summarizes the economic results of the project, including a sensitivity analysis under different scenarios.

2. **Overall, the ProClimat-AF interventions are economically justified, generating a net present value (NPV) of US\$83.3 million (at 6 percent discount rate) and an economic internal rate of return (IRR) of 22.6 percent over a 20-year period, not accounting for environmental externalities.** These economic results are satisfying, given that several other project benefits could not be quantified due to the difficulty of assigning them a monetary value. In addition, these economic results are robust when testing several sensitivity scenarios, including delays in implementation, cost overruns, and reductions in benefits.

3. **The valuation of environmental externalities further enhances the economic justification of the ProClimat-AF.** As described Annex 2, the project is estimated to reduce GHG emissions production by about 70,011 tons of CO<sub>2</sub>eq per year. As such, when evaluating these environmental benefits using the 2022 updated estimates of the social price of carbon, the overall economic results of the project increase to an NPV of US\$132.9 million and an EIRR of 36.6 percent (assuming the low-range pricing), and to an NPV of US\$182.4 million and an EIRR of 62.3 percent (assuming the high-range pricing).

### I. Identification of Benefits

4. **In line with the Parent Project, the objective of strengthening landscape management and increasing the use of improved livelihood activities in targeted communities in the Republic of Congo is expected to lead to two main quantifiable, mutually reinforcing benefits.** First, the ProClimat-AF will lead to *increased agricultural income* thanks to increased productivity and to the sale of the surpluses. The higher productivity will directly result from several project outcomes, such as higher availability of improved climate- and nutrition-smart technologies and innovations (i.e., improved inputs, landscape management practices, irrigation and other infrastructure), widespread provision of improved research and extension services, greater access and use of quality, timely information on environmental hazards (i.e., extreme weather events).

5. Second, the ProClimat-AF will *increase climate change resilience and adaptation*. By enhancing the national systems for agriculture and food crises prevention and management, including the effective dissemination of relevant information and advisory services to end users, such systems will allow to secure the food production and livelihoods of the affected population. In addition, producers' resilience and adaptive capacity will be strengthened through the increased availability of the abovementioned climate-smart agriculture technologies and practices.



6. **The ProClimat-AF will also have other positive impacts, non-quantifiable at this stage due to data availability.** These include employment growth, particularly women employment, as all project components incorporate gender-focused interventions (e.g., prioritizing their access to technologies and practices). Additionally, the project will lead to increased food security, improved nutrition and health (e.g., resulting from greater, stable access to diversified, nutrition-dense food), enhanced institutional capacity and policy and regulatory frameworks, greater community participation, lower country's dependency on food imports, and so forth.

## II. Methodology and Assumptions

7. **This CBA follows the standard methodology recommended by the World Bank, as described in Gittinger (1982) and Belli et al. (2001) and is aligned with the recent guidelines for economic and financial analysis.** The financial analysis was conducted to assess the profitability of the proposed project activities (with-project [WP] situation), modelled from the perspective of the target beneficiaries, and compared with the without-project (WOP) situation. Where data availability allowed seven models have been prepared for indicative crops and livestock, with computed costs and benefits experienced by the beneficiaries, using market prices. Across the models, the analysis assumed a gradual uptake of improvements over 2 to 5 years. The opportunity cost of capital used in the financial analysis is in line with the World Bank guidelines, that is, 10.7 percent.<sup>18</sup> Moreover, the financial models for the present analysis are mostly developed over either a 10 or 20-year period, depending on the nature of the investment.

8. **The economic analysis follows a similar approach, aggregating the results at the level of the program and from the society viewpoint.** The economic analysis uses the incremental benefits, aggregated across the expected total number of beneficiaries, and assumes a different adoption rate, depending on the activity.<sup>19</sup> The number of hectares for agricultural production and the total number of livestock producers have been estimated based on the expected number of beneficiaries of the AF. Conversion factors have been calculated for different product categories and have been used to convert financial prices into economic ones. The total project economic costs have been adjusted to avoid double-counting and are subsequently subtracted from the additional benefits to determine the overall economic viability of the Project. The discount rate used for the economic analysis, that is 6 percent, is in line with the World Bank guidelines and the practice of recent projects.<sup>20</sup> Given the nature of the investments of the program, their benefits have been evaluated over a 20-year period.

---

<sup>18</sup> Based on the average interest rate charged to SMEs in the Republic of Congo in 2022. [https://www.beac.int/wp-content/uploads/2023/07/Rapport\\_TEG\\_T4\\_2022.pdf](https://www.beac.int/wp-content/uploads/2023/07/Rapport_TEG_T4_2022.pdf).

<sup>19</sup> An adoption rate of either 70 percent or 80 percent for crop and livestock production and a 90 percent outreach for the Early Warning and Response Systems.

<sup>20</sup> World Bank. 2016 Discounting of Costs and Benefits in Economic Analysis of World Bank Projects. Washington DC.



### III. Economic Analysis of the Strengthening of Food Security and Community-based Early Warning and Information Systems

9. **In terms of costs, the proposed AF will allocate a total of US\$5 million to expand the work on the Early Warning and Response System focusing on climate preparedness, food security crises, and market prices (Subcomponent 1.2).** It will strengthen intergovernmental coordination, provide capacity building to relevant public institutions, and finance the timely collection, analysis, and publication of early warning and advisory information.

10. **Given that many sectors and activities greatly benefit from the provision of EWRS services, an estimation of its economic consequences is a complex exercise.** While the level of data required to perform a full-fledged analysis is not available at present, it is nonetheless possible to provide an estimation of the main potential benefits for which quantitative information can be obtained and conservative assumptions can be made. Following the standard “value of information” approach, the present analysis assumes that the value of timely, relevant information, forecasts, and warnings is realized only if such information flows through as needed from product creation and dissemination to end users and decision-makers, that is, in this case, food system actors. For this purpose, the study of the potential benefits associated with improved decisions, thanks to better information, requires an estimation of the averted losses.

11. **This analysis estimates the economic value of potential losses by using World Bank data on the agricultural GDP of the Republic of Congo.** As mentioned by the EFA of the Parent Project, the relevant literature reports that most countries lose between 5 and 10 percent of national agricultural production due to weather events<sup>21</sup> and that EWRS can reduce these losses by 10–30 percent.<sup>22</sup> Similarly to the initial EFA, this analysis assumes that only 5 percent of the agricultural production of the Republic of Congo is lost due to weather events. This is applied to the estimated share of the national production interested by the project, that is, 30 percent.<sup>23</sup> However, given that the AF allocation to the EWRS is 10 times more than the initial resources provided by the parent project, the present analysis applies a loss reduction rate of 10 percent, which is still a conservative assumption compared to that reported by the available literature.<sup>24</sup> It is also assumed that the full realization of benefits will happen at year six and that the operation and maintenance costs will amount to 5 percent of the average annual investment costs. As for the adoption rate, given that the literature on West Africa reports that farmers highly value and use such quality services, and given the awareness of climate change impact, this analysis assumes a 90 percent adoption rate. Additionally, it has been assumed that the impact generated by the project will last for 20 years given the nature of the investment.

12. **Based on the above approach and assumptions, the investments of the ProClimat-AF under Subcomponent 1.2 are economically justified.** Indeed, the Project will generate an average annual positive benefit of at least US\$1.70 million per year at full realization and an economic net present value of US\$7.09 million. This estimate could well be significantly higher given that, due to the lack of needed parameters, it does not consider other benefits such as the impact on other correlated sectors

<sup>21</sup> FAO. 2019. Handbook on climate information for farming communities – What farmers need and what is available. Rome.

<sup>22</sup> Tarchiani, V. 2019. Evaluation Report of Metagri Operational Project (2012–2015); Kull, D. et al. 2021. The Value of Surface-Based Meteorological Observation Data. World Bank; and ECOWAS 2021. ECOWAS Hydromet Initiative: Strengthening Weather, Climate and Water Services in West Africa – Analytical Report. Abuja.

<sup>23</sup> Estimated by the EFA of the Parent Project.

<sup>24</sup> The Parent Project allocated US\$0.5 million to the EWRS, and the related EFA assumed a loss reduction rate of 1 percent.



(e.g., energy or health sector).

#### IV. Financial Analysis of the Support to the Increase and Diversification of Local Food Production

13. **The proposed AF aims to expand and complement the investments of the parent project on climate-resilient economic activities that will increase and diversify food production to reduce food imports and to boost food and nutrition security (Component 3).** The choice of crops and livestock have been driven by recommendations of the National Food Security Resilience Plan (NFSRP) for the period 2022–2023, that the proposed AF contribute to finance. They are also based on plausible assumptions arising from the recent experience of other projects of the World Bank, FAO, and the International Fund for Agricultural Development in the Republic of Congo (all aligned with the National Development Plan [NDP] 2022–2026), along with consultations with stakeholders and agricultural statistics. These activities are expected to be refined as the program’s design evolves.

14. **Cassava.** Based on the expected number of beneficiaries of the component and the importance of cassava production in the agricultural sector of the Republic of Congo, the present analysis estimates that about 20,640 hectares will benefit from a mix of improved climate-smart agricultural technologies and practices provided by the project for its production. To estimate the financial returns from such investments, the present analysis develops a cassava farming model by using the data on yields provided by other relevant projects in the Republic of Congo and validated with the project team. Hence, the project will allow its beneficiaries to obtain a yield rate of about 28 t/ha at full realization of benefits against a yield rate of 11.5 t/ha in absence of the project.

15. **Agroforestry.** The development of cocoa-banana agroforestry is one priority practice recommended by the government of the Republic of Congo for agricultural diversification and climate change adaptation. It is estimated that the ProClimat-AF will support about 1,680 hectares for the development of such practices. The financial returns of these investments have been estimated based on the assumptions made in the EFA of the parent project, which assumes the planting of 1,100 banana plants and 1,100 cocoa plants on one hectare against the opportunity cost of cassava farming.

16. **Maize.** Maize is another priority crop for climate resilience and food security in the Republic of Congo. Based on the expected number of the beneficiaries of the component, this analysis assumes that about 1,680 hectares will be supported for maize production. In addition to the provision of climate-smart inputs (e.g., improved drought-resistant seeds, fertilizers), in line with other relevant projects, this analysis assumes that maize production could benefit from the provision of small-scale solar-powered irrigation infrastructure.<sup>25</sup> This new irrigation infrastructure will allow farmers to have two cycles of maize production per year and also one cycle of soy production.<sup>26</sup> To estimate the financial returns from such investments, the present analysis develops a farming model which will allow beneficiaries to obtain a yield rate of about 4.50 t/ha/cycle and 2.25 t/ha/cycle for maize and soy, respectively against a maize yield rate of 1.81 t/ha in absence of the project.

17. **Poultry.** According to FAOSTAT, poultry meat is the first source of animal protein for the Congolese and its growing demand has been met mainly through imports. Hence, increasing poultry production is a

---

<sup>25</sup> This assumption is based on the interventions recommended by the Hand-in-Hand Initiative in the Republic of Congo, a FAO initiative that supports its government in the implementation of its National Development Plan 2022–2026 to whom the ProClimat is aligned. The data are based on the FAO field mission that took place in September 2023.

<sup>26</sup> Farmers will be able to do the following crop rotation: maize, soy, and maize.



major objective to ensure food and nutrition in the Republic of Congo, as highlighted by the NDP 2022–2026, to which the NFSRP is aligned and so is the ProClimat-AF which contributes to its financing. For this purpose, this analysis estimates that the proposed AF will provide about 4,000 local/traditional poultry producers, 3,000 broiler producers, and 3,000 layer producers with a mix of improved, climate-smart technologies and practices (i.e., improved feed, veterinary products, and services). Hence, to estimate the financial returns from these interventions, the present analysis develops three models for each of these production systems. Table A1.1 presents the different assumptions related to the production capacity of each model.

**Table A1.1: Annual Production Capacity of Poultry Activities**

Livestock activity	Unit	Annual production	
		WOP	WP*
Traditional/local poultry production	chicken	40	179
Broiler production	chicken	3,600	4,750
Egg layers	eggs	64,688	82,688

Note: \* At full realization of benefits.

18. **Aquaculture.** Fish consumption plays an important role in food and nutrition security in the Republic of Congo. Similarly to poultry, despite the country’s potential, the national production is far from satisfying the increasingly high fish demand currently satisfied by imports. In line with the country’s needs, the proposed AF plans to support 500 aquaculture producers with climate-smart aquaculture techniques and technologies (e.g., fingerlings, improved feeding practices). The present analysis estimates the returns from these interventions by modelling the activities of an average aquaculture farmer annually producing about 816 kg of tilapia and 1,316 kg of catfish at full realization of benefits against a production of less than 400 kg of tilapia in absence of the project.<sup>27</sup>

19. **Emergency Responses to Food and Nutrition Insecurity.** Considering the deteriorating food security situation in the Republic of Congo, the proposed AF aims to provide short-term relief to the most vulnerable and food insecure people. Different modalities have been considered for the delivery of this support, and discussions with project partners will be needed for their identification and implementation. Hence, at present, the activities related to the emergency component are not yet known in detail. However, for the purposes of this analysis, assumptions on the type of activities and on the number of beneficiaries have been made based on discussions with the project team; on the recent experience of relevant World Bank emergency projects in the region, for example, the Central African Republic Emergency Food Crisis Response Project; and on similar initiatives of the World Food Programme in the Republic of Congo.<sup>28</sup> In particular, the present analysis considers the support provided to the most vulnerable people for their participation in economic activities, such as the establishment of livestock units. In this respect, as done in the abovementioned projects, it is assumed that an estimated 1,000 groups of 20 beneficiaries (for a total of 20,000 beneficiaries) would benefit

<sup>27</sup> The assumptions for fish farming are based on a 2022 study commissioned by FAO to the University Marien Nguabi of Congo (ENSAF. Juin 2022. *Étude des filières agropastorales et halieutiques (manioc, banane, porc, pisciculture)* within the framework of an FAO cooperation project.

<sup>28</sup> <https://docs.wfp.org/api/documents/WFP-0000118984/download/#:~:text=WFP%20also%20provides%20assistance%20through,ponds%20and%20rural%20roads%20rehabilitation.>



from the establishment of a unit of 60 local chickens. Given the specificity of this emergency operation, it has been assumed that the *without-project* situation is null, that is, without the project intervention the targeted activity would not occur because of the difficulties of financing the inputs.



**Table A1.2: Summary of Financial Returns for Crop and Livestock Activities**

	Cassava	Agroforestry	Irrigated maize**	Aquaculture	Traditional poultry production	Broiler production	Layer production	Emergency response-Poultry production***
<b>Net additional revenue* (US\$/ha or producer/year)</b>	265	817	3,256	1,023	126	2,029	3,916	450
<b>Net present value (@10.7%, 10- or 20-year, US\$)</b>	486	4,869	6,806	1,061	263	3,714	10,139	1,338

Note: \*At full realization of benefits, period average; \*\* 2 cycles of maize and one of soy/ha/year; \*\*\* group of 20 beneficiaries.

20. **Based on these parameters, all financial models demonstrate the profitability of the proposed investments.** As presented in Table A1.2, all activities supported by the ProClimat-AF will generate positive additional benefits, ranging from US\$126 for traditional poultry production to US\$3,916 for layer production. Looking at the 10- or 20-year net present value at a discount rate of 10.7 percent, the results are more than satisfactory, ranging from US\$263 for traditional poultry production to US\$10,139 for layer production.

#### V. Economic Results

21. **Overall, the economic results of the proposed ProClimat-AF are positive,** generating an NPV (at 6 percent social discount rate) of US\$83.3 million and an EIRR of 22.6 percent (over a 20-year period and for an IBRD/IDA budget of US\$50 million), not accounting for environmental externalities. These economic results are satisfying, given that several other project benefits could not be quantified due to the difficulty of assigning them a monetary value. These economic results have been tested against several risk scenarios, including reduced adoption rates, delays in implementation, cost overruns, and so forth., as presented in Table A1.3. The sensitivity analysis indicates that results are robust for small to moderate delays, cost overruns, and reduction in benefits. Yet, larger changes in these parameters can affect the project’s economic justification.

22. As described in Annex 2, the project will also generate some positive environmental externalities (a total mitigation of 1,400,214 tCO<sub>2</sub>eq over 20 years, or about 70,011 tCO<sub>2</sub>eq per year). Using the World Bank’s guidance note on the shadow price of carbon in the economic analysis (2022), the social value of these environmental benefits has also been included in the overall economic results, using the low and high estimate range for the social price of carbon. As a result, the economic indicators improve, depending on the carbon pricing scenario: assuming the low estimate range of carbon social price, the EIRR is 36.60 percent and the NPV is US\$49.6 million higher; assuming the high estimate range, the EIRR becomes 62.35 percent and the NPV is US\$99.1 million higher.





**Table A3.3: Sensitivity Analysis**

Scenarios		EIRR	NPV (6%, US\$)
Base scenario		22.6%	83,270,538.0
Costs	+10%	22.1%	81,498,497.6
Costs	+20%	21.6%	79,726,457.2
Costs	+30%	21.1%	77,954,416.8
Benefits	-10%	22.0%	73,171,443.8
Benefits	-20%	21.3%	63,072,349.6
Benefits	-30%	19.8%	51,201,215.0
Benefits delayed	1 year	21.3%	71,659,724.0
Benefits delayed	2 years	19.9%	62,029,948.0
Benefits delayed	3 years	18.3%	51,935,624.9
Benefits delayed	4 years	16.8%	43,490,874.1
Adoption rate	-10%	20.3%	36,469,820.0
Adoption rate	-20%	17.4%	26,754,545.3



## Annex 2: Climate Change

1. In line with the World Bank's corporate guidelines, this annex documents the climate change considerations incorporated in the proposed Additional Financing of the Climate-Resilient and Inclusive Livelihoods Project (ProClimat-AF) in the Republic of Congo. It also provides the preliminary greenhouse gas accounting of the ProClimat-AF (Part B) which shows that the project activities will lead to a carbon sink of about 1,400,214 tons of CO<sub>2</sub>e over a period of 20 years.

### Part A. Climate Change Adaptation and Mitigation Activities

#### I. Climate Change Vulnerability Context

2. The latest ranking of the Notre Dame Global Adaptation Initiative (ND-GAIN) Country Index confirms the Republic of Congo to be **one of the most vulnerable countries to climate change in the world**, ranking two positions lower compared to the previous year.<sup>29</sup> This reflects the continuously higher climatic variability that the country has been experiencing in the last century and its significantly low level of readiness to those events.<sup>30</sup> As highlighted in the PAD of the Parent Project, in the last 100 years, **the impact of climate change in Congo consisted in:**

- a. **Increase in temperature.** As reported by the Climate Change Portal of the World Bank, in the period between 1901–1911 and 2011–2021, mean annual temperatures increased (about 0.6°C higher) as well as average maximum and minimum temperatures (0.76°C and 0.69°C higher, respectively).
- b. **Higher unpredictability in timing and quantity of rainfall.** The World Bank reports that, while mean annual precipitation has not changed significantly, recently there has been greater fluctuations in intra-seasonal precipitation patterns with extreme events.<sup>31</sup> For instance, the risk of drought has increased in the Southern Republic of Congo, while the central and northern parts of the country experienced severe droughts but also more intense rainfall, with flooding now considered a recurring natural hazard in the country. In the period September–December 2022, flooding due to heavy rains and strong winds devastated homes and a large part of the agricultural production, displacing about 164,679 people.<sup>32</sup> At the same time, the below-average rainfall negatively affected the 2022 maize yields.

3. **Projections foresee a continued rise in temperatures and more erratic rainfall.** By the end of the century, all three Representative Concentration Pathways (RPCs) of the Intergovernmental Panel on

---

<sup>29</sup> According to the 2021 ND-GAIN index, the Republic of Congo ranks 174 out of 185, that is, the 11th most vulnerable/least resilient country to climate change out of those considered by the index. In 2020, Congo ranked 169 out of 182, that is, the 13th most vulnerable country.

<sup>30</sup> The ND-GAIN index is composed of a vulnerability score and a readiness score. For the Republic of Congo, the readiness score, measuring a country's ability to leverage investments and convert them to adaptation actions, is even lower than the vulnerability score. Indeed, the country ranks 185 out of 192 for its level of readiness, highlighting the urgent need for adaptations actions.

<sup>31</sup> World Bank. 2022. *Republic of Congo: Economic Update, 9<sup>th</sup> Edition: Climate Change Impacts, Adaptation, and Opportunities*. Washington, DC: World Bank.

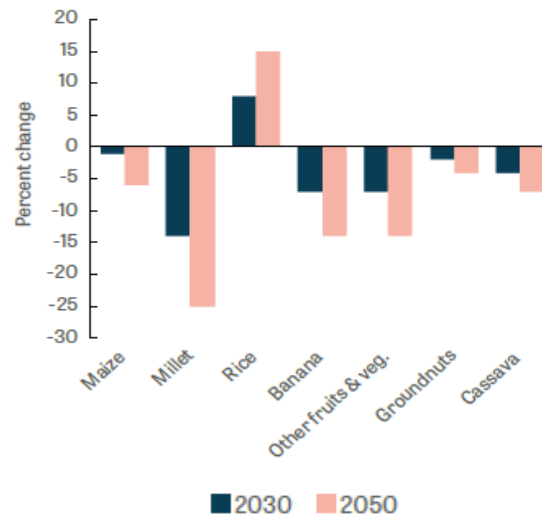
<sup>32</sup> <https://reliefweb.int/disaster/fl-2023-000001-cog>.



Climate Change (IPCC) predict an increase in mean annual temperatures for the Republic of Congo, with the magnitude of the change varying across scenarios: a 1.5°C rise from pre-industrial levels in the optimistic scenario, and a 2° and 5–6°C rise in the moderate and the pessimistic scenarios, respectively. While less clear, the RPCs foresee an increase in the mean annual precipitation. Most importantly, the Republic of Congo will experience a more intense seasonal variation of both temperature and rainfall, with the dry season being drier and the rainy season experiencing higher rainfall, with a considerable spatial variation.

4. **Agriculture, one of the most affected sectors by climate change, will suffer from increasingly negative effects over the coming decades.** According to the 2022 World Bank report, the International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT) developed by the International Food Policy Research Institute (IFPRI), the most widely used model to estimate the effects of climate change on agriculture, estimates losses at about 5 percent of agricultural output in 2030 and at about 10 percent in 2050.<sup>33</sup> These losses will be driven by the negative effects of climate change on crop yields, livestock productivity, growth of trees, and the reproduction, growth, and survival of fish. Agricultural productivity is also affected by the predicted decline in ecosystem services provided by natural and protected areas due to climate change.<sup>34</sup> IMPACT predicts the largest losses in the production of millet and bananas, which are among the most important crops for the Congolese economy. Lower declines in production are also foreseen for other primary crops, such as maize and cassava.

Figure A2.1: Change in Quantity of Output Relative to No Climate Change (%)



Source: World Bank (2022).

<sup>33</sup> The change is measured comparing the pessimistic scenario to a base case, which assumes that social, economic, and technological trends do not shift markedly from historical patterns. World Bank. 2022. *Republic of Congo: Economic Update, 9<sup>th</sup> Edition: Climate Change Impacts, Adaptation, and Opportunities*. Washington, DC: World Bank.

<sup>34</sup> The PAD of the parent project mentions that the negative impact of climate change on ecosystems services is estimated at 3 percent of the country's GDP for 2030.



5. **Climate change will have the most disproportionate effect on the most vulnerable and food insecure people in the Republic of Congo through its impact on agriculture,** as the current food crisis is showing. Agriculture represents the main source of income for the poor, and this makes them more exposed to climate-induced shocks. Climate change will have also a stronger negative impact on women’s livelihoods. Despite their critical role in agriculture, women have fewer, lower-quality resources due to gender-specific barriers, and this makes them more exposed to climate-related disasters.

**II. Intent to Address Vulnerability**

6. By providing support inside and outside the Parent Project’s landscapes, **the proposed additional financing (AF) explicitly targets the rural areas mostly affected by the increased frequency and severity of climate events.** By including an emergency response, it aims to complement the Parent Project by addressing short-term food and nutrition needs against climate stresses and shocks, which are primary drivers of food insecurity. Moreover, by applying and expanding the Parent Project’s landscape approach to agriculture, which simultaneously addresses climate resilience, economic development needs, and conservation to the most poor and vulnerable, it will ensure and reinforce the strong focus of ProClimat on inclusiveness and resilience.

**III. Link to Project Activities**

**As above mentioned, the proposed AF will reinforce the intent of the Parent Project of addressing climate change vulnerability and risks through a landscape approach that harmonizes economic development needs and conservation while building people’s resilience.** It does so by introducing new activities, all related to climate resilience, and, at the same time, expanding those already included in the parent project with high adaptation and mitigation potential. Table A2.1 outlines each of the components/subcomponents supported by the AF for how climate change vulnerability has been addressed.

**Table A2.1: Climate Change Activities of the AF**

Component/ subcomponent	Climate change activities
<p><b>SC1.2:</b> Promoting Social Cohesion and Inclusive Participation</p>	<p>Under this subcomponent, the AF will be channelled to expand the work of the parent project on the <b>early warning and response system (EWRS) for food security and climate preparedness.</b> Specifically, the EWRS will have <u>direct adaptation</u> benefits and <u>indirect mitigation</u> benefits:</p> <ul style="list-style-type: none"> <li>• Strengthen the capacity for inter-institutional coordination in the area of monitoring of food security and climate risk to facilitate early warning and early action</li> <li>• Finance collection, processing, and publication of agro-meteorological information</li> <li>• Support the introduction of the <i>Cadre Harmonisé</i><sup>35</sup></li> </ul>

<sup>35</sup> The *Cadre Harmonisé* is the unified tool for consensual analysis of acute food and nutrition insecurity in the Sahel and West African region. While focused on food and nutrition insecurity, it includes an appreciation of the impact of a relevant contributing factor such as climate hazards and vulnerability.



Component/ subcomponent	Climate change activities
<b>C3:</b> Promoting inclusive, climate resilient livelihoods and value chains	<p>Under this component, the AF will support <u>production activities</u> (agriculture and livestock) ensuring, at the same time, climate change resilience, diversification, and higher farmers’ incomes. They will reach at least 60,000 small farmers, with priority given to women. All component activities provide <u>clear mitigation and adaptation benefits</u>, and can be divided into three groups:</p> <ul style="list-style-type: none"> <li>• The provision of climate-smart inputs such as improved drought resistant seed varieties, small-scale solar-powered irrigation and drainage infrastructure built with consideration of appropriate standards for the expected run-off increase due to climate change</li> <li>• The provision of small facilities for storage and value-addition built with materials providing insulation to extreme heat (e.g., climate-proof warehouses) and reducing carbon emissions</li> <li>• The provision of technical assistance to promote climate-smart agriculture (CSA) and livestock technologies and practices (e.g., sustainable and environmentally friendly fishing practices, CSA management practices for increasing yields) with scientifically proven benefits in terms of climate resilience and climate change mitigation</li> </ul>
<b>SC6.1:</b> Distributing food and food vouchers	<p>Under this new subcomponent, the AF will support the provision of food with different modalities to the most vulnerable people to food insecurity (40,000 beneficiaries, 60 percent of whom will be women). These activities have <u>both direct and indirect adaptation and mitigation benefits</u>:</p> <ul style="list-style-type: none"> <li>• Because climate shocks are a primary driver of food insecurity in the Republic of Congo, beneficiaries will be able to meet their urgent needs and address the negative effects of climate hazards</li> <li>• By supporting the establishment/rehabilitation of economic activities linked to CSA, such as the establishment of backyard gardens and small livestock/fishing units, having both mitigation and adaptation effects</li> </ul>
<b>SC6.2:</b> Labor-intensive public works (LIPW)	<p>Under this new subcomponent, the AF will support the payment of 12 months of daily wages for 20,000 food insecure laborers. In line with the parent project (while at a smaller scale), selected public works will primarily aim to improve food security and climate resilience, such as:</p> <ul style="list-style-type: none"> <li>• Rehabilitating rural roads in accordance with climate-proofed standards for infrastructure design, construction, and maintenance, using pavement mixtures and road drainage systems suitable for extreme heat and rainfall events</li> <li>• Building public infrastructure needed for livelihoods (e.g., solar energy-based water points, climate-proofed warehouses)</li> <li>• Restoring degraded land through nature-based solutions, increasing carbon sequestration (e.g., afforestation, reforestation, assisted natural regeneration), and ensuring biodiversity conservation (e.g., bank stabilization, erosion control)</li> </ul> <p>Hence, activities under this subcomponent will have <u>both direct and indirect adaptation and mitigation benefits</u></p>
<b>SC6.3:</b> Support to management of malnutrition	<p>Under this new subcomponent, the AF will support the provision of food and supplementary foods, and the promotion of locally owned solutions to address and prevent acute malnutrition. As abovementioned, because climate change is one main cause of malnutrition, all these activities have <u>adaptation benefits</u></p>



IV. Link to the MDB List of the Eligible Activities for Climate Mitigation Finance<sup>36</sup>

7. The proposed AF of the ProClimat will complement and expand the investments of the parent projects in activities that contribute substantially to avoid or reduce GHG emissions or to increase GHG sequestration, that is, activities that provide clear climate mitigation benefits. Table A2.2 illustrates the rationale for the eligibility of the activities supported by the AF under the appropriate MDB mitigation categories.

Table A2.2: Summary of AF-supported Activities Eligible for Climate Mitigation Finance

MDB category	Eligible activities	Criteria
<b>Agriculture: energy efficiency</b>	<b>Activities financed by the AF under Component 3 and subcomponent 6.2</b> (Promoting inclusive, climate-resilient livelihoods and value chains and LIPW) include the provision of climate-smart infrastructure (i.e., small-scale solar-powered irrigation, storage facilities, and equipment) or of cash conditional on its construction (i.e., food storage facilities)	Increase energy efficiency of crop production and increase the use of energy-efficient agricultural equipment
<b>Agriculture: carbon sequestration</b>	<b>Activities financed by the AF under subcomponent 6.2</b> support the participation of the most food insecure laborers (about 20,000) to labor-intensive public works for climate resilience such as degraded land rehabilitation through nature-based solutions, increasing carbon sequestration (e.g., afforestation, reforestation, assisted natural regeneration), and ensuring biodiversity conservation (e.g., bank stabilization, erosion control)	Increase the carbon stocks in the soil or avoid loss of soil carbon through erosion control measures
<b>Agriculture, livestock, and fisheries and aquaculture: GHG-emission reduction</b>	<b>Activities financed by the AF under Component 3 and subcomponent 6.1</b> support the provision of climate-smart inputs (i.e., improved drought-resistant seed varieties), climate-smart agricultural and livestock practices (i.e., improved, sustainable feeding techniques), climate-proof warehouse or provide food conditional on their adoption	Reduce GHG emissions from agricultural, livestock, fishery, and aquaculture practices or technologies
<b>Forestry: GHG emission-reduction and carbon sequestration</b>	<b>Activities financed by the AF under subcomponent 6.2</b> support the payment of wages for the participation to labor-intensive public works for climate resilience, such as afforestation and reforestation on previously deforested land, sustainable management of natural resources, agroforestry, biodiversity conservation	Carbon sequestration through sustainable forest management, avoided deforestation, or avoided land degradation

<sup>36</sup> MDBs: Multilateral Development Banks, IDFC: International Development Finance Club.



Part B. Greenhouse Gas Accounting

8. In line with the World Bank’s corporate guidelines, the present analysis is using the Ex-Ante Carbon-balance Tool (EX-ACT) version 9.4.1, developed and updated by FAO since 2010, to assess a project’s net carbon-balance. The carbon-balance is defined as the net balance from all GHGs expressed in CO2 equivalents (CO2e) that are to be emitted or sequestered due to project implementation (WP) as compared to a business-as-usual scenario (WOP). EX-ACT is a land-based accounting system, estimating CO2e stock changes (i.e., emissions or sinks of CO2) expressed in equivalent tons of CO2 per hectare and year. The tool is built using data from the Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories (NGGI-IPCC, 2006) that furnishes EX-ACT with recognized default values for emission factors and carbon values in soils and biomass (the so-called “Tier 1 level” of precision).

9. The calculations have been based on agro-ecological characteristics of the project area in the Republic of Congo (cool temperate moist climatic conditions with low-activity clay [LAC] soils) and on the parameters of land use and crop management practices aligned to the economic and financial analysis (EFA). As summarized in Table A2.3, the changes brought about by the project have been included in the tool’s different modules and include (i) improved crop and livestock productivity and production with less GHG emissions on a total of about 24,000 hectares under different crops (cassava, maize, soy, agroforestry) and with about 18,708,000 chickens and 1,280 tons of fish produced every year; and (ii) increased use of synthetic fertilizers and organic fertilizers.

Table A2.3: Assumptions Used in the EX-ACT Tool

Module	System/crop category	Changes
Crop and Livestock Production	Annual Systems Cassava: 20,640 ha Agroforestry: 1,680 ha Irrigated maize and soy*: 5,040 ha Chicken layers: 1,500,000 Chicken broilers **: 17,208,000 Fish (tilapia and catfish): 1,280 t	Improved agronomical and livestock practices (i.e., SRI), better nutrient management
Inputs	Increased use of synthetic and organic fertilizers	Limestone: 1,730 t Urea: 116 t N- fertilizers: 298 t Phosphorus: 298 t Potassium: 463 t Pesticides: 150 t
	Development of irrigation infrastructure	Hand-moved sprinkler: 1,680 ha

Note: \*The total supported irrigated area for maize production is 1,680 ha, but the project will allow to conduct multiple cycles on those hectares depending on the type of irrigation and the type of crops (e.g., two cycles per year for maize and one additional cycle per year for soy). Given that by default EX-ACT only considers one cycle per hectare per year, it has been inserted the number of irrigated hectares times the number of cycles per year on each hectare. \*\* Broilers include also local poultry production, as EX-ACT does not have two separate options.

10. The carbon balance results indicate that the project activities will lead to a carbon sink of about 1,400,214 tons of CO2e over a period of 20 years, starting from project implementation. Per year, the mitigation potential is roughly 70,011 tons of CO2e, or 51.2 tons of CO2e per hectare. As shown in Table A2.3, overall, the additional emissions generated by the increase in input use and fish production are offset and surpassed by the reductions in emissions due to crop production, ensuring the project’s carbon neutrality.