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Report No: PAD3057

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED FOREST INVESTMENT PROGRAM GRANT
IN THE AMOUNT OF US$3.575 MILLION

AND A

PROPOSED FOREST INVESTMENT PROGRAM CREDIT
IN THE AMOUNT OF US$12 MILLION

TO THE

REPUBLIC OF CONGO

FOR A

NORTHERN CONGO AGROFORESTRY PROJECT

January 14, 2022

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

CURRENCY EQUIVALENTS

(Exchange Rate Effective September 30, 2021)

Currency Unit =	CFA Francs (CFAF)
CFAF 567 =	US$1

FISCAL YEAR
January 1 - December 31

ABBREVIATIONS AND ACRONYMS

AFD	*Agence Française de Développement* (French Development Agency)
B/C	Benefit-Cost
CAFI	Central African Forest Initiative
CERC	Contingent Emergency Response Component
CGDC	*Comités de Gestion et de Développement Communautaire* (Community Development Management Council)
CIB-Olam	*Congolaise Industrielle des Bois* (Congolese Industrial Wood)
CNIAF	*Centre National d'Inventaire et d'Aménagement des Ressources Forestières et Fauniques* (National Center for the Inventory and Management of Forest and Wildlife Resources)
CNSEE	*Centre National de la Statistique et des Etudes Economiques* (National Center for Statistics and Economic Studies)
CPF	Country Partnership Framework
CSAIP	Climate Smart Agriculture Investment Plan
DDA	*Directions Départementales de l'Agriculture* (Departmental Directorates of Agriculture)
DDEF	*Direction Départementale de l'Economie Forestière* (Departmental Directorate of Forest Economy)
DGM	Dedicated Grant Mechanism
eMBeD	Mind, Behavior, and Development Unit at the World Bank
ERPA	Emission Reductions Payment Agreement
ERPD	Emission Reductions Program Document
ERP-SL	Emission Reductions Program - Sangha and Likouala
FCPF	Forest Carbon Partnership Facility
FDL	*Fonds de développement local* (Local Development Fund)
FIP	Forest Investment Program
FM	Financial Management
FPIC	Free, Prior, and Informed Consent
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GEF	Global Environmental Facility

GIEC	*Groupements d'interet économique commun* (Common Economic Interest Group)
GIS	Geographic Information System
GRM	Grievance Redress Mechanism
ICB	International Competitive Bidding
IPs	Indigenous Peoples
IPLCs	Indigenous Peoples and Local Communities
IPP	Indigenous Peoples Plan
IPPF	Indigenous Peoples Planning Framework
LUCF	Land-Use Change and Forestry
M&E	Monitoring and Evaluation
MAEP	*Ministère de l'Agriculture, de l'Elevage, et de la Pêche* (Ministry of Agriculture, Livestock and Fisheries)
MAFDP	*Ministère des Affaires Foncières et du Domaine Public* (Ministry of Land Affairs and Public Land)
MEF	*Ministère de l'Économie Forestière* (Ministry of Forest Economy)
MFI	Microfinance Institution
MRV	Measurement, Reporting, and Verification
NG-ACBP	Next Generation Africa Climate Business Plan
NGO	Nongovernmental Organization
NPV	Net Present Value
NTFP	Non-Timber Forest Product
OM	Operations Manual
PADEC	*Projet d'Appui au Développement des Entreprises et à la Compétitivité* (Support to Enterprise Development and Competitiveness Project)
PANC	*Projet Agroforesterie Nord Congo* (Northern Congo Agroforestry Project)
PDAC	*Projet d'appui au Développement de l'Agriculture Commerciale* (Commercial Agriculture Project)
PES	Payments for Environmental Services
PFDE	*Projet Forêt et Diversification Économique* (Forest and Economic Diversification Project)
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PND	*Plan national de développement* (National Development Plan)
PPSD	Project Procurement Strategy for Development
PSG	*Plan simple de gestion* (Simple Management Plan)
REDD+	Reducing Emissions from Deforestation and Forest Degradation and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries
RPF	Resettlement Policy Framework
SBD	Standard Bidding Document
SDC	*Série de Développement Communautaire* (Community Development Zone)
SESA	Strategic Environmental and Social Assessment
SIVL	*Système informatique de vérification de la légalité* (Computerized Legality Verification System)

STEP	Systematic Tracking of Exchanges in Procurement
ToR	Terms of Reference
UFA	*Unité Forestière d'Aménagement* (Forest Management Unit)
UNHCR	United Nations High Commissioner for Refugees

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Congo, Republic of	Northern Congo Agroforestry Project	
Project ID	**Financing Instrument**	**Environmental Assessment Category**
P166189	Investment Project Financing	B-Partial Assessment

Financing & Implementation Modalities

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

Expected Approval Date	Expected Closing Date
08-Feb-2022	31-Jan-2027

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To strengthen climate-smart agriculture and conservation practices in Community Development Zones in the departments of Sangha and Likouala

Components

Component Name	Cost (US$, millions)

Involving indigenous peoples and local communities in climate-smart agroforestry and sustainable forest resource management	10.44
Paying for environmental services in Sangha and Likouala	3.03
Project management, monitoring, and evaluation	2.11
Contingent emergency response	0.00

Organizations

Borrower:	Republic of Congo - Ministry of Finance, Budget and Public Portfolio
Implementing Agency:	Republic of Congo - Ministry of Forest Economy

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	15.58
Total Financing	15.58
of which IBRD/IDA	0.00
Financing Gap	0.00

DETAILS

Non-World Bank Group Financing

Trust Funds	15.58
Climate Investment Funds	15.58

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026	2027
Annual	0.60	2.60	5.00	4.00	2.00	1.38
Cumulative	0.60	3.20	8.20	12.20	14.20	15.58

INSTITUTIONAL DATA

Practice Area (Lead)	Contributing Practice Areas
Environment, Natural Resources & the Blue Economy	Agriculture and Food

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

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

COMPLIANCE

Policy

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

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Performance Standards for Private Sector Activities OP/BP 4.03		✓

Natural Habitats OP/BP 4.04	✓	
Forests OP/BP 4.36	✓	
Pest Management OP 4.09	✓	
Physical Cultural Resources OP/BP 4.11	✓	
Indigenous Peoples OP/BP 4.10	✓	
Involuntary Resettlement OP/BP 4.12	✓	
Safety of Dams OP/BP 4.37		✓
Projects on International Waterways OP/BP 7.50		✓
Projects in Disputed Areas OP/BP 7.60		✓

Legal Covenants

Sections and Description
(a) The Recipient shall, not later than one (1) month after the Effective Date and, thereafter, maintain at all times during the Project implementation period, a Project Implementation Unit ("PIU") within the Recipient's MEF, with composition, mandate, staffing and resources decided by the Recipient and satisfactory to the Bank. (Section I.A.3.(a) of Schedule 2 of the Loan Agreement and the Grant Agreement)

Conditions

Type	Financing source	Description
Effectiveness	Trust Funds	The FIP Loan Agreement has been executed and delivered and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled. (Article 4.01.(b) of the Grant Agreement)
Effectiveness	Trust Funds	The FIP Grant Agreement has been executed and delivered and all conditions precedent to its effectiveness or to the right of the Borrower to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled. (Article 4.01.(a) of the Loan Agreement)
Effectiveness	Trust Funds	The Borrower has recruited the following key staff for the Project Implementation Unit, each on the basis of terms of reference, qualification and experience acceptable to the World Bank and in

		accordance with the provisions of Section I.A.3 of Schedule 2 to this Agreement: (i) a Project coordinator; (ii) a financial management specialist; (iii) a procurement specialist; (iv) a social development specialist; (v) an environmental specialist; and (vi) an agroforestry specialist. (Article 4.01.(b) of the Loan Agreement and Article 4.01.(c) of the Grant Agreement)
Type Effectiveness	Financing source Trust Funds	Description The Borrower has adopted a Project Implementation Manual, in form and substance satisfactory to the World Bank, in accordance with the provisions of the Legal Agreements. (Article 4.01.(c) of the Loan Agreement and Article 4.01.(d) of the Grant Agreement)

I. STRATEGIC CONTEXT

A. Country Context

1. **The Republic of Congo is a lower-middle-income country in Central Africa with gross domestic product (GDP) per capita of US$2,011 (2019).** Located in the Congo River basin, it is neighbored by Gabon (to the west), Cameroon (northwest), Central African Republic (northeast), the Democratic Republic of Congo (southeast), and Angola (enclave of Cabinda, to the south). Congo's population of 5.4 million inhabitants is growing rapidly, at around 2.5 percent per year. Two-thirds of its people are concentrated in urban areas. At a total surface area of 342,000 km^2, Congo has one of the lowest population densities in the world (15.8 people per km^2).

2. **Congo has yet to fully leverage its natural resource endowments in the pursuit of inclusive and sustainable development outcomes.** With an average growth rate of −5.2 percent between 2015 and 2020, the country's economy has contracted in five of the past six years, mostly due to a high dependency on oil revenues. In 2020, Congo's economy was hit by the containment measures in response to the COVID-19 pandemic and by the loss of oil export revenues due to the slump in external demand. Initially projected to grow at 4.4 percent in 2020, GDP is estimated to have contracted by 7.9 percent in 2020. Both oil and non-oil sectors were severely affected, contracting by an estimated 7.7 percent and 8.3 percent, respectively. The economic outlook remains challenging, with the economy expected to contract by 0.1 percent in 2021, and subject to heightened risks including the duration and severity of the COVID-19 pandemic, the COVID-19 vaccine rollout, potential internal social unrests due to falling incomes, and the Government's ability to put in place fiscal consolidation measures to address its debt accumulation.

3. **Reducing poverty and achieving shared prosperity remains challenging.** The poverty rate at the national poverty line was estimated at 41 percent based on the 2011 national household survey, varying from 69.4 percent in rural areas to less than 22 percent in Brazzaville and Pointe-Noire. Simulations based on the Multiple Indicator Cluster Survey 2014–2015 show a decline by 4.7 percentage points in 2015.[1] Projections of extreme poverty estimated at the international poverty line of US$1.90 per day (2011 purchasing power parity) suggest an increase from 39 percent in 2015 to nearly 53 percent in 2020 as a result of the economic crisis triggered by the oil-price shock of 2014–2016, which was exacerbated by the COVID-19 pandemic. Inequality levels also remain high by global comparison: non-inclusive growth has contributed to high inequality as seen in Congo's Gini coefficient of 0.489.[2]

4. **Income inequality is borne out spatially in the starkly different living standards experienced in Congo's urban and rural areas.** The poorest segments of the population experienced a deterioration in their standard of living, whereas those in the middle of the distribution and the wealthiest households experienced a substantial increase in welfare. The poverty reduction experienced between 2005 and 2011 was concentrated in urban areas, primarily in the two largest cities: Brazzaville and Pointe-Noire. At the same time, the depth and severity of poverty was increasing in rural areas. Although the overall number of poor people decreased from 1.8 million in 2005 to

[1] World Bank. 2019. *Country Partnership Framework (CPF) for the Republic of Congo for the period FY20-FY24, Report No. 126962-CG*. World Bank: Washington, DC.
[2] Data come from World Bank World Development Indicators, https://data.worldbank.org/indicator/SI.POV.GINI?locations=CG.

1.6 million in 2011, it rose in rural areas from 795,000 to 951,000 where the poverty headcount increased from 64.8 percent to 69.4 percent.[3]

5. **The COVID-19 pandemic and measures taken to mitigate spread of the disease are likely to intensify stresses on the local economy, with poor and vulnerable populations affected most.** High urbanization rates enhance the risk that the proportionately smaller rural population may receive less attention, exacerbating pre-existing urban-rural inequalities. Inflationary pressures on food resulting from trade disruptions and restricted markets may impose an additional burden on poor households due to the relatively higher share of household resources they must spend on food. In the absence of public mitigation measures, the proportion of people living below the international poverty line (US$1.90 a day in 2011 PPP[4]) is expected to increase from 40 percent to 43 percent over 2020–2022. Marginalized groups—for example, youth, women, people with disabilities, people with albinism, and the elderly—are likely to be particularly affected by the socioeconomic impacts of the COVID-19 pandemic, with longer-term implications for human capital accumulation and fragility. Women especially have seen increased burdens and responsibilities due to mobility restrictions and mitigation measures linked to COVID-19. Globally, data show more women have lost jobs. Women may have been also forced to disengage from part-time work to provide domestic work and family care.[5]

6. **The lack of shared prosperity is detrimental to Congo's human capital.** The World Bank Group's Human Capital Project and its associated Human Capital Index show that a child born in Congo today will be 42 percent as productive as s/he would have been if s/he enjoyed complete education and full health in early years. By way of comparison, this figure is above the Sub-Saharan Africa average of 40 but below the Lower-Middle-Income Country average of 48. Additionally, 21 out of 100 Congolese children are stunted and therefore at greater risk of cognitive delays and lifelong limitations in skills acquisition and employability. Stunting rates are higher in rural areas than urban ones, underlining Congo's deep spatial inequality.[6]

7. **Congo ranks 138 out of 177 countries on the United Nations Development Programme Gender Inequality Index,[7] a metric which measures reproductive health, empowerment, and labor market participation.** Women earn less than men and are more likely to be self-employed, with a clear gender gap in access to services and ownership and control of economic assets. Labor market analyses show that gender employment gaps result from unequal access to education and skills. Social norms define women's societal role—with a focus on subsistence farming, family, and child-rearing (the average woman bears approximately five children)—while men are encouraged to gain skills and become economically active. These norms limit women's ability to access productive resources such as land and credit. Moreover, limited education opportunities and large household sizes, which weigh heavily on their ability to join the formal labor market, contribute to the exclusion of women in the economy. The gender gap in the labor market is also linked to significant levels of sexual and gender-based violence (GBV) against women and girls. The latest Demographic and Health Survey found that

[3] World Bank. 2019. *Country Partnership Framework (CPF) for the Republic of Congo for the Period FY20–FY24, Report No. 126962-CG*. World Bank: Washington, DC.
[4] PPP = Purchasing Power Parity.
[5] Azcona, Ginette, Antra Bhatt, Jessamyn Encarnacion, Juncal Plazaola-Castaño, Papa Seck, Silke Staab, and Laura Turquet. 2020. *From Insights to Action: Gender Equality in the Wake of COVID-19*. United Nations: New York.
[6] World Bank. 2019. *Country Partnership Framework (CPF) for the Republic of Congo for the Period FY20–FY24, Report No. 126962-CG*. World Bank: Washington, DC.
[7] The Gender Inequality Index's reproductive health index is based on two indicators: the maternal mortality ratio and the adolescent fertility rate. The empowerment index is based on the share of parliamentary seats held by women and women's attainment in secondary education and above. The labor market participation dimension accounts for paid work, unpaid work, and actively looking for work. See http://hdr.undp.org/en/content/table-5-gender-inequality-index-gii.

a large share of women ages 15–49 suffer from recurrent GBV, which in three out of four cases is committed by husbands, partners, or boyfriends.[8]

8. **Congo is a host country for refugees and asylum seekers, in particular those from the Democratic Republic of Congo, Central African Republic, and Rwanda.** As of August 2021, the United Nations High Commissioner for Refugees (UNHCR) estimated that there were about 58,000 refugees living in Congo, 71 percent of whom were in the department of Likouala. The presence of refugees exacerbates poverty and human development issues in Northern Congo, a region which already suffers from high levels of poverty and vulnerability. Likouala is a remote and isolated department where human development indicators are very low, poverty levels high, and access to basic services severely limited. As of 2021, the refugee population accounts for 14 percent of the population in Likouala, putting significant pressure on social services delivery as well as on natural resources such as water, forest, and cultivable land. There are very few employment opportunities beyond subsistence agriculture and sawmilling. Despite competition over access to services and resources, the relationship between refugees and the Congolese living in Likouala has been relatively unproblematic compared to other departments.

9. **Congo is one of the most vulnerable countries to climate change in the world.** Congo is not well equipped to respond to climate and natural disaster-related shocks, ranking 165 out of 182 in the 2019 rankings of the Notre Dame GAIN Country Index.[9] Temperature projections under the high-emission representative concentration pathway 8.5 scenario of the Intergovernmental Panel on Climate Change indicate an increase of 0.5°C to 1°C by 2020, around 1.5°C by 2040, and from 2°C to 3.5°C by 2070 for Congo.[10] The annual number of hot days and nights is expected to increase, while the number of cold days and nights is expected to decrease. Mean annual precipitation has decreased between the 1950s and 1980s, and greater fluctuations in intra-seasonal precipitation patterns have been observed in recent years. By the middle to the end of the twenty-first century, mean annual precipitation is expected to increase. The poor are particularly vulnerable to climate-related changes in living and livelihood conditions as well as climate-related shocks. Analytical work from the World Bank (P149919)[11] shows that during climate-related disasters, women face additional risks, due in large part to gender inequities that result in women bearing the disproportional brunt of disaster impacts. Women in poverty are most reliant on natural resources for their livelihoods and have fewer resources to cope and adapt to climate shocks and natural hazards such as hurricanes, food shortages, droughts, and landslides.

10. **Climatic changes are projected to have a heavy impact on Congo's forestry and agriculture sectors.** Congo's first and second National Communications to the United Nations Framework Convention on Climate Change (2001 and 2009) identified forestry, agriculture, and water resources as some of the sectors most vulnerable to the adverse effects of climate change. Projected impacts include elevated flood risks, increased vulnerability of rain-fed agriculture (due to more erratic rainfall), and changes in pest and disease vectors (due to

[8] CNSEE (*Centre Nationale de la Statistique et des Études Économiques*) and ICF International. 2013. *Enquête Démographique et de Santé du Congo (EDSC-II) 2011-2012*. Calverton, Maryland, USA: CNSEE and ICF International.
[9] For the complete list of rankings, see https://gain.nd.edu/our-work/country-index/rankings/.
[10] IPCC (Intergovernmental Panel on Climate Change). 2013. *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Stocker, T. F., D. Qin, G.-K. Plattner, M. Tignor, S. K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex, and P. M. Midgley, eds). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535.
[11] Hallegatte, Stephane, Mook Bangalore, Laura Bonzanigo, Marianne Fay, Tamaro Kane, Ulf Narloch, Julie Rozenberg, David Treguer, and Adrien Vogt-Schilb. 2016. *Shock Waves: Managing the Impacts of Climate Change on Poverty. Climate Change and Development.* Washington, DC: World Bank.

rising temperatures). Observed changes in Congo's climate have already affected the country's main agricultural zone. As temperatures continue to rise, increased rates of evapotranspiration are expected to affect certain crops more than others. The poor are the most affected by such shocks, as agriculture is their main source of income. Moreover, there are significant differential impacts between men and women in their vulnerability and capacity to cope with climate change effects. Climate change not only affects women's health, productivity, and development but also contributes to intensify gender gaps. For example, women have less access to inputs such as quality land, training, and technologies that boost climate change resilience.

B. Sectoral and Institutional Context

11. **Congo has yet to fully leverage its natural resource endowments in the pursuit of inclusive and sustainable development outcomes.** Agriculture, forestry, and fishing are of major importance to the economy and food security but remain far below their potential, having contributed an average of 5.4 percent to GDP over the past decade (2010–2019).[12] Only 2 percent of the 10 million ha of arable land are cultivated. Agricultural exports, in palm oil, sugar, and cocoa, are stagnant, and the country suffers from a rapidly deteriorating trade balance for food with food imports amounting to nearly US$1 billion annually. About 14 percent of families are food insecure and hunger remains at serious levels according to the Global Hunger Index, at 26.6 percent, a figure that is high compared to middle-income peers.

12. **Congo's forests are at once a source of livelihoods for remote populations and an important reservoir of tropical forest biodiversity and carbon.** An estimated 575,000 Congolese live in forest areas, which house a diverse range of biomes, ecosystems, and habitats, including evergreen, semi-deciduous, and alluvial and mangrove forests, as well as a rich fauna. Congo's indigenous peoples (IPs) depend almost exclusively on natural resources found in forests for their livelihoods and nutrition. Concentrated in the north of the country, the indigenous population is semi-nomadic and relies on forests for hunting and non-timber forest products (NTFPs). In areas with few formal income sources aside from industrial logging, local communities in forest areas conduct slash-and-burn agriculture, engage in artisanal timber extraction, harvest NTFPs, and hunt both legally and illegally. Many of these practices are unsustainable and growing human populations in forest areas pose challenges to protection of the forest stock and biodiversity conservation.

13. **The agriculture, agroforestry, and food processing sectors have particularly strong growth and poverty reduction potential in Congo.** The agriculture sector is a major source of employment, providing about 40 percent of jobs. Most of Congo's poor are either unemployed or rely on agriculture and the informal sector for their livelihoods. About 27 percent of the population lives in a household whose head works in agriculture, a segment that has Congo's highest poverty rate. The rural population relies heavily on agriculture as a main source of income, as do Congolese women who face barriers in accessing credit, tools and other inputs, land, and labor. Despite lower levels of agricultural productivity compared to men, 41 percent of women ages 15–30 rely on agricultural income (for men, it is 28 percent).[13] Factors that would likely contribute to a structural transformation toward equity include improved agricultural productivity and sustainable natural resource management, improved access to credit (including long-term finance for individual farmers and producer groups), access to markets and integration into value chains, and improvements to infrastructure.

[12] Data from World Bank World Development Indicators (2019), https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=CG.
[13] World Bank. 2019. *Country Partnership Framework (CPF) for the Republic of Congo for the period FY20–FY24, Report No. 126962-CG.* World Bank: Washington, DC.

14. **Recent and future development trends may undermine efforts to reduce emissions from deforestation and forest degradation and ensure the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries (REDD+) and achieve sustainable growth.** Despite Congo's deforestation rate—0.052 percent per year from 2000 to 2012—being among the lowest annual net deforestation rates in Africa, land-use change and forestry (LUCF) contributed 83 percent of the total 2017 emissions of 48.39 million metric tons of carbon dioxide equivalent (tCO_2e).[14] In the absence of mitigating measures, current trajectories and development plans indicate that the country's LUCF emissions may rise in the future. During the period of high oil prices, accelerated development led to major infrastructure projects that opened up previously remote forest areas to economic activity. The recent dramatic drop in oil prices has lent urgency to the Government's drive to diversify its economy away from overwhelming dependence on hydrocarbons, making further forest exploitation likely. This represents a potential threat to the forest stock, as agriculture, forestry, and mining are among the key alternative sectors identified for development. This is in line with the finding of Congo's 2018 Emission Reductions Program Document (ERPD)[15] that historical emission baselines are inadequate to capture the future risk of forest loss due to land use trends after 2012, population growth, activation of forest concessions that were previously not operational, and expansion of industrial agriculture. However, if Congo can maintain its high forest cover/low deforestation (HFLD) profile, there is potential for reducing emissions further. Congo's 2015 Intended Nationally Determined Contribution, for example, estimates that, with international support, net emissions from deforestation could be reduced to 0 tCO_2e by 2035.

15. **At the request of the Government, the World Bank drafted a policy note on agriculture (Agriculture Policy Note, P160644).** One of them recommended a climate-smart agroforestry model for Northern Congo, due to the region's higher deforestation risk. The model proposes production systems that allow cocoa, which is one of the biggest potential deforestation drivers if not properly implemented, to become part of the solution to deforestation. The resulting REDD+-focused cocoa production approach is receiving closely coordinated support from the Global Environment Facility through additional financing to the World Bank-supported Forest and Economic Diversification Project (*Projet Forêt et Diversification Économique*, PFDE; P124085), the IDA-funded Commercial Agriculture Project (*Projet d'appui au Développement de l'Agriculture Commerciale*, PDAC; P159979), the French Development Agency (*Agence Française de Développement,* AFD), and the Food and Agriculture Organization (FAO) of the United Nations.

16. **To prioritize investments that meet the challenges of the agriculture sector in a changing climate, the Government endorsed a Climate Smart Agriculture Investment Plan (CSAIP) that was supported by the World Bank and other development partners.** The plan is based on Congo's institutional and policy framework and was developed through a participatory process. It proposes investments amounting to CFAF 134.4 billion to increase sustainably agricultural sector productivity, to strengthen climate resilience while reducing greenhouse gas (GHG) emissions, and to increase food security. The CSAIP identifies as key, the adoption of new agricultural practices, the building of climate resilient infrastructure, and support for relevant research. The development of agroforestry, particularly intercropping of cassava, maize, and banana, is a priority under the plan. The Ministry of Agriculture, Livestock and Fisheries (*Ministère de l'Agriculture, de l'Elevage, et de la Pêche,* MAEP) is currently preparing a Ministerial Order (*arrêté*) to define reduced impact, climate-smart agricultural activities within forest ecosystems eligible for the sharing of benefits from emission reductions, such as those that Congo is set to receive

[14] Data from World Resources Institute's ClimateWatch, https://www.climatewatchdata.org/countries/COG.
[15] Available at https://www.forestcarbonpartnership.org/system/files/documents/Revised%20ER-PD_English_1.pdf

under the recently approved Emission Reductions Program in Sangha and Likouala (ERP-SL; P163361) financed by the Carbon Fund of the Forest Carbon Partnership Facility (see below).

17. **REDD+ represents an opportunity to enable forest-smart development while contributing significantly to climate mitigation goals.** A cross-sectoral approach to address the multiple drivers that contribute to deforestation offers the Government the opportunity to address simultaneously the challenges of climate change, poverty reduction, natural resources management, and biodiversity protection by mobilizing significant foreign financial resources. Forest-friendly agriculture on degraded forest lands can provide sustained growth and rural poverty reduction. Perennial agroforestry crops, such as cocoa, coffee, rubber, fruits, and village oil palm, can be an alternative to slash-and-burn agriculture and can reduce small-scale agriculture's footprint on the forest, particularly if complemented by intensified subsistence agriculture and payments for environmental services, as well as simplified local management planning and investments in value chains.

18. **Congo successfully applied to the Forest Investment Program (FIP) for REDD+ support.** In December 2017, it received the FIP Sub-Committee's endorsement of its investment plan, which falls under the National REDD+ Strategy and provides access to up to US$24 million. The investment plan covers the strategy's priority options for achieving the Government's vision of a low-carbon development pathway. The Government intends to implement US$15.575 million through the Northern Congo Agroforestry Project (*Projet Agroforesterie Nord Congo*, PANC; P166189). Emission reductions generated under the PANC will be eligible for payments under the Emissions Reduction Program in Sangha and Likouala (ERP-SL; P163361). The PANC constitutes a key building block of Congo's REDD+ Strategy as it seeks to address shifting agriculture as a driver of deforestation, while enabling small farmers to benefit from the ERP-SL. The PANC is accompanied by and closely linked with the Dedicated Grant Mechanism for Indigenous Peoples and Local Communities (DGM; P169610) approved by the World Bank in July 2021, which has been prepared in parallel, and will support community engagement in REDD+. A third FIP-funded project, the Community Agroforestry and Wood Energy Project, will be implemented in central Congo by the African Development Bank.

C. Description of the Project Area

19. **The PANC project area consists of Congo's two northernmost departments, Sangha and Likouala, covering 12.4 million ha, 11.7 million (or 94 percent) of which are forested.** This represents 52 percent of the national forest area. The forest cover of Sangha Department is estimated at 5,557,100 ha, 49 percent of which is primary forest (at least 75 percent canopy cover including old growth terra firma and semi-deciduous forests), 4 percent degraded forest (forest with less than 75 percent canopy cover), and 44 percent swamp forest (along major rivers temporally or permanently inundated, and characterized by soils with poor drainage). In Likouala, forest cover is estimated at 6,172,900 ha, 33 percent of which is primary forest, 1 percent degraded forest, and 65 percent swamp forest. Annex 7 includes a map of the project area.

20. **The population in Sangha and Likouala is mostly poor and forest dependent.** The departments of the project area have an estimated population of 239,853 (85,738 in Sangha and 154,115 in Likouala),[16] placing population density at a mere 2.0 people per km^2. Living conditions of Indigenous Peoples and Local Communities (IPLCs) residing in these areas remain precarious. Poverty rates stand at 64.4 percent in Sangha and 66.7 percent

[16] *Centre National de la Statistique et des Etudes Economiques* (CNSEE), *Recensement Général de la Population* (RGPH), 2011.

in Likouala, compared to the national rate of 40.9 percent.[17] Homes are most often made of clay; the main source of household energy is fuelwood and the main source of water is from rivers and other untreated sources. Due to the absence or degradation of sanitary structures and the lack of qualified health personnel in most villages, people are exposed to and suffer from many diseases, the most common being gastrointestinal disorders. Conditions are better in the settlements surrounding sawmills, where concession holders provide much-needed infrastructure.

21. **Poor households lack the economic means to access a variety of foods**. A 2015 World Food Programme study sampling of 1,580 households primarily in urban areas (Brazzaville, Pointe-Noire, and Ouesso)[18] indicates increasing numbers of households with poor or limited dietary diversity. In Sangha, the percentage of households facing poor or limited dietary diversity was 15 percent in 2015 (up from 4.6 percent just two years prior).

22. **The majority of land in Sangha and Likouala has been allocated through concessions and permits.** The two departments contain 17 forest concessions operated by 12 firms (6.6 million ha), two agro-industrial concessions operated by two firms (200,000 ha), and 13 mining exploration and research concessions distributed among 13 firms (including overlapping claims with forest concessions and national parks). Large-scale agro-industrial clearing and mining are likely to become more significant drivers of forest loss in the future. In addition, the area includes three national parks, a community conservation reserve (2.7 million ha), and 2.9 million ha of unattributed areas. Concession and protected status both imply that the local population faces access restrictions in these areas.

23. **Under Congolese law, forestry companies have to prepare management plans in which they identify residential areas for communities.** These areas, called Community Development Zones (*Séries de développement communautaire*, SDC), are typically a set of settlements or villages clustered around natural resources likely to contribute to livelihoods, such as natural forests, agricultural land, and fishing and hunting areas. The communities have a large degree of control over the use of these resources. SDCs cover about 257,426 ha in Sangha and Likouala and are home to an estimated 73,520 people residing in 162 villages.

24. **In the project area, the main income-generating activity outside of the formal forestry sector is shifting agriculture.** The most common crops are cassava and maize, though most communities also rely on NTFPs and informal forestry for household consumption. Traditional agricultural practices—rainfed subsistence agriculture and slash-and-burn rotation—do not result in competitive yields, which generally limits incomes. The practices being extensive and land being abundant, smallholder agriculture represents one of the major drivers of deforestation and forest degradation, and is therefore an important contributor to GHG emissions.

25. **The significant indigenous population mostly relies on hunting and gathering as a livelihood, with limited small-scale agriculture.** IPs are occasionally hired by Bantu communities as day laborers, often under precarious conditions. Halting deforestation and integrating agroforestry are in the interest of the region's hunter-gatherer populations due to their reliance on forest resources.

[17] The percentages are based on 2011 data collected by the *Enquete Congolaise aupres des Ménages* and were calculated as background information of the following report: World Bank Group. 2017. *Republic of Congo Poverty Assessment Report : Education, Jobs and Social Protection for a Sustainable Reduction of Poverty.* World Bank, Washington, DC.

[18] World Food Programme/*Programme Alimentaire Mondiale*. 2015. *Evaluation rapide des outils de la fortification: cas de la farine de manioc (enquête FRAT)*. Rome.

26. **Sangha and Likouala represent a potential future deforestation hotspot.** Between 2003 and 2012, the area saw forest loss of 155,208 ha (0.14 percent per year). The main drivers of deforestation and forest degradation are (a) unsustainable shifting agriculture; (b) unsustainable as well as illegal logging; (c) industrial agriculture development; and (d) unsustainable mining practices. These direct drivers are exacerbated by indirect factors: (a) weak natural resources governance; (b) lack of policy coordination and land use planning; (c) poverty and insufficient enabling conditions for sustainable economic activities; and (d) population growth; and (e) building of infrastructure. Changes in these indirect factors will affect the rate and type of future deforestation and degradation. It is noteworthy that according to a recent study,[19] an estimated 48.2 percent of forest disturbance in Congo is due to small-scale, non-mechanized clearing for agriculture.

27. **Maintaining soil fertility and reducing the pressure on the forest require interventions at the scale of individual plots.** Farmers must be enabled to engage in practices that are both profitable and sustainable. Soils in the project area are generally ferralitic, hydromorphic, and swampy and therefore require careful maintenance to preserve their fertility. Farmers generally do not practice organic fertilization due to a lack of means and knowledge. Although shifting agriculture has traditionally enabled the restoration of fertility through fallow periods, rotation cycles have accelerated with increasing population pressure, leading to declining soil fertility. Field observations have indicated that yields may not be sustainable due to nitrogen loss. This poses a risk to the forest cover as populations are forced to move into previously untouched forest areas. Due to demographic pressures, shifting agriculture is gradually spreading within the forest areas of the SDCs.

28. **Insufficient conditions for sustainable economic development, including weak service delivery and inadequate infrastructure, contribute to poverty in the project area.** Rural access to markets is limited as these are situated in urban centers that are often far away from smaller villages. SDCs are connected to villages and towns outside the concessions by roads built and maintained to varying degrees by forestry companies. Transporting goods on these roads is risky. The weak infrastructure contributes to the challenge of local producers having only few buyers for their products, leading to low prices and an expansion of the area under agricultural cultivation to increase household income. In theory, Local Development Funds (*Fonds de développement local*, FDL), which are funded by a tax on concession holders, could support village development activities, including those laid out in Simple Management Plans (*Plans simples de gestion*, PSGs) that prioritize their investment needs. However, the FDLs are generally not functional due to poor governance structures and lack of skills.

29. **Climate-smart agroforestry constitutes an appropriate strategy to change the status quo and gain the triple wins of storing carbon, increasing climate resilience, and reducing poverty.** Research emphasizes the positive impacts of agroforestry in terms of environmental, climate resilience, economic, social, and food security

[19] Tyukavina, Alexandra, Matthew C. Hansen, Peter Potapov, Diana Parker, Chima Okpa, Stephen V. Stehman, Indrani Kommareddy, and Svetlana Turubanova. 2018. "Congo Basin Forest Loss Dominated by Increasing Smallholder Clearing." *Science Advances* 4 (11): eaat2993.

benefits.[20] The project will therefore encourage the adoption of climate-smart agroforestry practices that consume less area, generate higher yields, and use diversified crops resilient to climate change. The approach will promote the cultivation of cash crops including, but not limited to, cocoa, subsistence crops, and a mixture of fruit trees and tubers (banana, cassava, and African plum). The intercropping of fruit trees, tubers, and cocoa trees will enhance cocoa tree growth by providing shade to saplings and diversify income streams to help compensate for demand and price fluctuations.[21] Ultimately, this approach will (a) increase the productivity and resilience of crops in a sustainable way (adaptation); (b) promote the reduction of GHG emissions (mitigation); and (c) improve national food security and contribute to the achievement of Congo's development objectives.

30. **The project will promote the inclusion of vulnerable populations, especially women, IPs, and refugees.** It will facilitate women's access to agricultural education, skills training, new technologies, improved seeds, advice and guidance, and entrepreneurship training, with the aim of contributing to gender equality in the project area. Equally, the project will strive to address issues focusing on the intersection of natural resource management and social norms. The project will provide targeted support to IPs by also promoting livelihood activities that are of particular interest to them, particularly beekeeping. Finally, the project will work with refugee populations through activities involving market gardening and food processing.

D. Relevance to Higher Level Objectives

31. **The PANC is aligned with Congo's 2018–2022 National Development Plan (*Plan national de développement*, PND) and the World Bank's FY20–24 Country Partnership Framework (CPF) for Congo,[22] which itself is aligned with the PND.** The PND lays out Congo's medium-term development framework through the Medium-term Macroeconomic and Budgetary Policy and Programming Framework Document (*Document-cadre de Politiques et de Programmation Macroéconomique et Budgétaire à Moyen Terme*) , which focuses on improving governance and institutional capacity, strengthening human capital, and diversifying the economy. The PND seeks rapid economic recovery with sustained and inclusive growth to generate higher incomes and improved well-being in line with the Sustainable Development Goals, the African Union 2063 Agenda, and the Central African Economic and Monetary Community (CEMAC) Regional Economic Program. Pillar 3 of the 2018–2022 NDP includes agriculture as a key sector and forestry as an intervention sector to diversify the economy, highlighting REDD+ as an element to obtain its objectives. Likewise, the first focus area of the FY20–24 CPF aims to strengthen economic management to create an improved climate for private sector-led growth. This includes support for improved agriculture productivity and commercialization (Objective 1.3) and addresses climate resilience and productivity

[20] Garrity, Dennis P., Festus K. Akinnifesi, Oluyede C. Ajayi, Sileshi G. Weldesemayat, Jeremias G. Mowo, Antoine Kalinganire, Mahamane Larwanou, and Jules Bayala. 2010. "Evergreen Agriculture: A Robust Approach to Sustainable Food Security in Africa." *Food Security* 2 (3): 197–214; Kumar, Vikas. 2016. Multifunctional Agroforestry Systems in Tropics Region. *Nature Environment and Pollution Technology* 15 (2): 365; Mbow, Cheikh, Pete Smith, David Skole, Lalisa Duguma, and Mercedes Bustamante. 2014a. "Achieving Mitigation and Adaptation to Climate Change through Sustainable Agroforestry Practices in Africa." *Current Opinion in Environmental Sustainability* 6: 8–14; Mbow, Cheikh, Meine Van Noordwijk, Eike Luedeling, Henry Neufeldt, Peter A. Minang, and Godwin Kowero. 2014b. "Agroforestry Solutions to Address Food Security and Climate Change Challenges in Africa." *Current Opinion in Environmental Sustainability* 6: 61–67; Rahman, Syed Ajijur, Jette Bredahl Jacobsen, John Robert Healey, James M. Roshetko, and Terry Sunderland. 2017. "Finding Alternatives to Swidden Agriculture: Does Agroforestry Improve Livelihood Options and Reduce Pressure on Existing Forest?" *Agroforestry Systems* 91 (1): 185–199.; Waldron, A., D. Garrity Y. Malhi, C. Girardin, D. C. Miller, and N. Seddon. 2017. "Agroforestry Can Enhance Food Security While Meeting Other Sustainable Development Goals." *Tropical Conservation Science* 10: 1940082917720667.

[21] Jagoret, Patrick, Hervé Todem Ngnogue, Eric Malézieux, and Isabelle Michel. 2018. "Trajectories of Cocoa Agroforests and their Drivers Over Time: Lessons from the Cameroonian Experience." *European Journal of Agronomy* 101: 183–192.

[22] World Bank. 2019. *Country Partnership Framework (CPF) for the Republic of Congo for the Period FY20–FY24, Report No. 126962-CG*. World Bank: Washington, DC.

of subsistence farmers. The second focus area of the CPF seeks to build human capital and enhance resilience for social inclusion and sustainable growth. In the context of improving the sustainable management of natural resources (Objective 2.4), it recognizes REDD+ as an opportunity to align Congo's economic development imperatives with its sustainability goals. Forest-smart development and sustainable agriculture are thus highlighted in the CPF as important sectors to support the Government's strategy of economic diversification.

32. **The PANC represents an important phase in Congo's design, development, and testing of REDD+ activities and ultimately its ability to receive and distribute payments for carbon performance.** Between 2010 and 2018, Congo embarked on the path of REDD+ readiness (CG-FCPF REDD Readiness, P124292) to equip itself with the institutional, policy, and technical foundation necessary for receiving payments for carbon sequestration and to prepare the ERP-SL. The Emission Reductions Payment Agreements (ERPAs), signed in April 2021, lay the foundation for the transfer of performance-based payments from the FCPF Carbon Fund to the Government of Congo for the purchase of up to 8.4 million tons of carbon dioxide-equivalent (tCO_2e) at US$5 per tCO_2e. Incentivizing the participation of smallholder farmers in reducing emissions from deforestation and forest degradation is an important element of meeting the emission reductions goals.

33. **The project is also in line with Congo's new CSAIP.** The investment plan prioritizes the development of resilient agroforestry systems that incorporate banana with manioc and maize for small producers. The CSAIP targets 3,600 ha of agroforestry for the Sangha and Likouala departments alone. This is roughly the same level of coverage the PANC intends to have by project end.

34. **The project has been harmonized with Congo's 2018–2025 Strategy for the Sustainable Development of Indigenous Peoples and Local Communities in Central Africa.** Forests are the primary income source for a large portion of the IP community. The project will assist indigenous communities not only through livelihood support but also by promoting inclusiveness in natural resource management, including through land access and participation in decision-making. To ensure coordinated support to IPs, the PANC is closely linked with and will be implemented in parallel to the DGM. Further details on this alignment are provided in Section II.B.

35. **The project also aligns with the World Bank Group's 2016 Forest Action Plan (FAP).** This strategic document defines a programmatic approach to combine various instruments (technical assistance, investments, and performance-based payments) for sustainable forest management. In Congo, the World Bank has been supporting this approach by facilitating REDD+ Readiness through the FCPF Readiness Fund (US$8.6 million) and strategically bundling financing from the FIP through the PANC (US$16 million) as well as from the Global Environmental Facility (GEF) (US$6.5 million), Central African Forest Initiative (CAFI) (US$20 million), and IDA (a portion of the US$100 million Commercial Agriculture Project [P159979] and US$1.5 million from the Integrated Public Sector Reform Project [P160801]) in support of institutions relevant for the REDD+ process.

36. **The PANC is in line with and contributes directly to several Strategic Directions of the World Bank's Next Generation Africa Climate Business Plan (NG-ACBP).**[23] The NG-ACBP, like its predecessor the Africa Climate Business Plan, is designed to render the key motors of Africa's development—natural capital, agriculture, and infrastructure—resilient to climate change while simultaneously fixing them on low-carbon growth pathways. The PANC addresses three of the NG-ACBP's five Strategic Directions: food security and a resilient rural economy, ecosystem stability and water security, and climate shocks and risk governance. The project engages smallholder

[23] World Bank. 2020. *The Next Generation Africa Climate Business Plan: Ramping Up Development-Centered Climate Action.* World Bank, Washington, DC.

farmers to reduce deforestation and forest degradation, using agroforestry systems, agricultural value chain strengthening, and payments for conservation to work toward integrated landscape management in Northern Congo. This will contribute to improved food security and hence a more robust and resilient rural economy and greater stability within the various ecosystems across Sangha and Likouala. The project also tests the potential of payments for environmental services (PES) to help build a social safety net to buffer against inevitable climate shocks and their impacts on household income.

37. **Finally, the project aligns well with the World Bank Group's Gender Strategy FY2016–2023.** It includes activities that seek to help close gender gaps in human endowments, provide more and better jobs for women, strengthen women's ownership and control of assets, and promote women's voice and agency.

II. PROJECT DESCRIPTION

A. Project Development Objective

38. **The Project Development Objective (PDO) is to strengthen climate-smart agriculture and conservation practices in Community Development Zones in the departments of Sangha and Likouala.**

39. **The proposed PDO indicators are as follows (refer to the Results Framework for more details):**

- **For climate-smart agriculture:**
  - (a) Area under climate-smart agriculture management practices (ha)
  - (b) Households that have adopted climate-smart agriculture practices (number):
    - (i) Of which led by women (percentage)
    - (ii) Of which indigenous peoples' households (percentage)
- **For conservation practices:**
  - (a) Area of forest preserved (ha)
  - (b) Net greenhouse gas emissions mitigated (metric ton)

B. Project Components

40. **The project will be divided into three main components to provide adequate and comprehensive support to agroforestry and forest conservation; it includes a fourth component for emergency response.** Component 1 provides smallholders with inputs, services, and technical support for implementing agroforestry systems in degraded forest areas. It also seeks to strengthen agriculture value chains through a microproject scheme for producer groups. Component 2 pilots PES that incentivize forest conservation. Component 3 is dedicated to project management and monitoring and evaluation (M&E). The project includes a Contingent Emergency Response Component (CERC) as Component 4. While the Ministry of Forest Economy (*Ministère de l'Économie Forestière*, MEF) is the implementing agency of the PANC, activities will be carried out in synergy with the MAEP, particularly the ministry's cocoa, banana, and cassava programs.

41. **The project activities are closely linked to Congo's emission reductions program, the ERP-SL (P163361), which was approved in April 2021 and will be implemented until December 2025.** First, PANC activities will be eligible to generate emission reductions and thus produce carbon benefits. Second, the project will establish and test mechanisms that may be used to channel carbon benefits from the ERP-SL to local beneficiaries, not only through implementing agroforestry microprojects, a value chain microproject scheme, and individual and community PES but also by strengthening local institutions and service providers that will play a role in other ERP-SL activities.

42. **The PANC has been designed in close coordination with its accompanying DGM.** Major synergies will include the following:

(a) **Beneficiary database.** The PANC's Project Implementation Unit (PIU) and the DGM's National Executing Agency (NEA) will create a joint beneficiary database with PFDE, PDAC, the Support to Enterprise Development and Competitiveness Project (PADEC), and the Lisungi Safety Nets Project to avoid the overlapping of support to beneficiaries already receiving benefits from one of the active projects.

(b) **Activities.** The activities of the PANC and the DGM complement and support one another. Agroforestry production support and PES of the PANC are open to households with a plot size of up to 5 ha, while the DGM sets a limit of 1 ha to sharpen its focus on the most vulnerable groups, including IPs. As the DGM is scheduled to launch three months before the PANC, it will lay some of the groundwork for the larger project by generating information and piloting approaches on beekeeping, capacity-building modules, and additional consultations with IPs. Throughout project implementation, the two projects, though implemented through different entities, will closely coordinate their activities and benefit from each other's experiences. The DGM will develop a needs assessment to design income-generating activities targeting IPs, which can be scaled up under the PANC once effective. The same approach may be applied to mapping of IPLC lands, which the DGM will undertake in areas with IPs and which the PANC may adopt in additional areas. Some of the DGM's training activities will be tailored to the specific needs of IPs, including basic skills development such as literacy, thus complementing the PANC's focus on professional skills. This also holds true for the DGM's support to strengthening the organizational and governance capacities of IPs. Furthermore, the DGM will identify and promote indigenous knowledge, for example on traditional techniques for rejuvenating soils, preventing erosion, and cultivating useful wild plants, which can then be disseminated under the PANC. Generally, the DGM's strong focus on working with IPs will inform the PANC's approach on integrating these populations into its broader activities. The two projects will also coordinate the geography of their interventions to avoid duplication. For example, the DGM will implement its beekeeping activities mainly in savannah areas, while the PANC will conduct such activities in forested areas. Finally, for cost-efficiency purposes, the DGM may take advantage of nurseries established under the PANC to obtain seeds and seedlings for its own agricultural activities.

(c) **Safeguards and grievance redress mechanism (GRM).** Though the two projects use different environmental and social risk management standards—the PANC follows the Safeguard Policies and the DGM applies the newer Environmental and Social Framework—safeguards arrangements will be closely coordinated. This will include the development of a common GRM and its joint

implementation in overlapping project intervention areas. In line with national legislation and the DGM, the PANC will apply the concept of free, prior, and informed consent (FPIC).

43. **Further details on the complementarity and synergies between the projects are provided in Annex 3.**

44. **The PANC is designed as an intermediate stage to bridge the gap between the phases of REDD+ readiness and performance-based payments.** In line with the FIP's objectives of promoting transformational change and piloting replicable models to generate understanding and learning in the forestry sector, this will allow Congo to test activities that promote carbon sequestration and reduce deforestation and explore institutional arrangements that help channel future emission reductions payments, for example PES mechanisms. According to the Advanced Draft Benefit Sharing Plan of the ERP-SL, IPLCs must be involved in the implementation of the following activities to participate in the program: (a) climate-smart agroforestry and sustainable management of forest areas assigned to local development; (b) climate-smart sustainable management of NTFPs in peatland areas and other wetlands; (c) conservation of forests and biodiversity of community lands; or (d) management of forest fires, peatlands, and other wetlands. As will be explained in the following sections, these activities are at the heart of the PANC.

Component 1: Involving indigenous peoples and local communities in climate-smart agroforestry and sustainable forest resource management (US$10.4 million)

45. **The overarching objective of this component is to reduce the footprint that itinerant slash-and-burn agriculture leaves on the forest while improving local livelihoods.** FIP financing will scale up activities initiated under PFDE, seizing upon the PSGs to expand climate-smart cocoa, subsistence agroforestry, and sustainable forest resource management to additional households in the Sangha and Likouala departments. The establishment of tree nurseries will allow for the continuous provision of seedlings. To complement these activities and, in particular, support refugees (who typically lack access to land for agroforestry), the project also supports market gardening. The component also seeks to strengthen the business case for climate-smart agroforestry and sustainable forest resource management by working with producer groups to bolster tree crop, NTFP, and related value chains, and by improving institutional capacity in the public and private sectors to support agroforestry's commercial viability.

Subcomponent 1.1: Promoting climate-smart agroforestry production (US$7.4 million)

46. **The project will scale up ongoing agroforestry activities to reduce deforestation and forest degradation from traditional slash-and-burn agriculture.** Simultaneously, the project seeks to improve community livelihoods by increasing and diversifying income streams and nutrition. This will involve the provision of agroforestry production packages with inputs, services, and training in new agricultural techniques. Participation in activities will be voluntary and will focus on small farmers cultivating no more than 5 ha of land. Approximately 3,000 households will be targeted. Priority will be given to vulnerable populations.

47. **Site selection database and atlas.** The project will prepare a beneficiary database and atlas that will provide a clear understanding of ecological, demographic, and land tenure dynamics to guide the selection of target villages in the SDCs for all project activities. The database will include (a) mapping of the settlements in the

SDCs of the targeted Forest Management Units (*Unités forestières d'aménagement*, UFAs)[24] and (b) a characterization of these population groups.[25] The atlas will equally look at soil properties, forest type, state of degradation, and potential for human-wildlife conflict in the project area. The database will build on existing studies and institutional knowledge to identify priority sites for agroforestry investments. It will take stock of and, to the extent feasible, update (a) remote sensing carried out by the National Center for the Inventory of Forest and Wildlife Resources (*Centre National d'Inventaire d'Aménagement des Ressources Forestières et Fauniques*, CNIAF), including forest degradation maps developed for Congo's emission reductions program; (b) analytical work conducted under PFDE, including (i) PSGs developed in some of the SDCs under PFDE and (ii) the October 2018 Baseline Cartography Study to Inform Community Microproject Site Selection under PFDE's additional financing;[26] (c) supplementary studies such as the 2011 agriculture study undertaken by *Centre d'Etudes et de Recherche sur les Analyses et Politiques Economiques/Société Française de Réalisation, d'Etude et Conseil* (CERAPE/SOFRECO), and the AFD's cocoa feasibility study. Additional institutions with which the project will work to collect data necessary for compiling the database are the MEF, MAEP, Ministry for the Promotion of Women and the Integration of Women in Development, Ministry of Land Affairs and Public Domain (*Ministère des Affaires Foncières et du Domaine Public,* MAFDP), and forest concession management units of targeted UFAs. Database creation has been started as part of project preparation with the project preparation grant.

48. **Beneficiary eligibility criteria.** Farmers in the selected sites will signal their willingness to convert a portion of their smallholding into climate-smart agroforest by submitting an expression of interest to the service providers contracted by the project. Service providers and decentralized (*déconcentrée*) forest and agriculture administration officials will inform beneficiaries of this opportunity and provide guidance on how to express interest and on the design of agroforestry systems best suited to farm site conditions, as well as individual household needs and objectives. Data from the site selection database will be used to advise farmers on suitable agroforestry models to pursue. The beneficiaries will be selected by a commission comprising the PIU, the Departmental Directorates of Forest Economy (*Directions Départementales de l'Economie Forestière*, DDEFs), the Departmental Directorates for Agriculture (*Directions Départementales de l'Agriculture*, DDA), and IPLC representatives. Beneficiaries will be identified and selected according to the following criteria: (a) geography: resides within one of the UFAs in Sangha and Likouala;[27] (b) no prior support:[28] has not been a beneficiary of a previous World Bank project in the sector; (c) landholding: has no more than 5 ha and is accessible with minimal burden for routine monitoring; (d) state of forest degradation: limited to farmers operating on land already deforested or largely degraded; and (e) demographic profile. The project will aim to pre-identify candidate households using a needs and conditions assessment based on socioeconomic characteristics. To do so, the PANC will work in concert with the Lisungi Safety Nets System Project (P145263/P166143) to leverage and complement existing socioeconomic analysis at the household level, (including vulnerability and poverty analysis) with the aim

[24] The maps will include, among other attribute data, the borders of forest concessions, borders of SDCs, administrative borders, size and location of settlements, markets, hydrographic network, and infrastructure.
[25] For each population group, descriptive attributes will include (a) name, (a) type of locality (for example, group, village, sub-prefecture, and prefecture), (c) population, (d) number of voters, (e) number of Congolese indigenous persons, (f) number of Congolese (non-indigenous peoples, that is, Bantu), (g) number of foreigners (non-Congolese), (h) number of foreigners (non-Congolese) considered as asylum seekers or refugees, and (i) number of land chiefs.
[26] PFDE (*Projet Forêt et Diversification Economique*). 2018. *Rapport final de Cartogrpahie: Étude de Base d'Identification des Sites Beneficiaires des Microprojets Communautaires*, by Rufin Mikala Mussavu. Consultant report, Brazzaville.
[27] There are 17 UFAs in Sangha and Likouala. In Sangha they are Jua-Ikié, Kabo, Ngombe, Pikounda Nord, Pokola, Tala-Tala, and Karagoua. In Likouala they are Bétou, Bonvouki, Ipendja, Lopola, Loundoungou-Toukoulaka, Mimbeli-Ibenga, Missa, Mobola Mbondo, Mokabi-Dzanga, and Moungouma.
[28] The CGDC will compile a list of potential beneficiaries, which the PIU will compare with the beneficiary lists of other World Bank projects (that is, Lisungi, PADEC, DGM, PDAC, and PFDE) to avoid double-funding.

of improving targeting of those households most in need of external assistance. Specific attention will be paid to inclusion and participation of vulnerable populations—women,[29] IPs, unemployed youth, people with disabilities, and people with albinism—in project activities. At least 30 percent of beneficiaries must be in households led by women and at least 20 percent must be IPs. Land tenure will be verified and secured through the documentation process described below (see 'land tenure' paragraph). Following validation, farmers will receive the package of inputs and assistance described below. The technical specifications are outlined in Box 1.

49. **Agroforestry microprojects.** Farmers supported in agroforestry will receive a support package that includes inputs for the first growing cycle, extension services, and capacity-building support through training. The project will ensure the purchase and transport of inputs, support for the preparation of fields, and the necessary logistics for training activities. To facilitate the inclusion of women, the project will, to the extent that it is culturally appropriate, promote community-driven childcare support to help mothers fully participate particularly in training activities. As human-wildlife conflict poses a risk to farmers' yields in Northern Congo, which is home to a significant number of large mammals particularly near protected areas, care will be taken to adjust activities to minimize human-wildlife conflict. For example, banana or maize production will not be supported in certain areas and cocoa cultivation favored instead. The project will also identify and support appropriate control measures, including chili and electric fencing (in suitable locations and with adequate signage) and beekeeping (an activity that is particularly popular among IPs and that can simultaneously increase crop fertility and serve as an income stream).

50. **Supported agroforestry microprojects will fall into two broad categories:**

(a) **Mixed agroforestry-subsistence systems.** These systems aim to provide both nutritional and income improvements for households. Farmers will receive a package providing access to high-quality inputs for crop planting (that is, seed material), growing (that is, organic fertilizer and compost, and materials for integrated pest and soil fertility management), and harvesting, depending on the specific crops produced in the different project locations. Supported only on previously deforested land close to settlements (see Box 1), these systems combine subsistence crops with cash crops, mixing a rotation of annuals (peanuts, beans, eggplants, peppers, and corn), medium cycle (cassava and yam), perennials (citrus, avocado, kola, and African plum), and leguminous, nitrogen-fixing varieties (*Leucaena leucocephale, Glyricidia sepium, Albizzia lebbeck, Brachiaria brizantha*, and so on) in hedgerows to delimit plots and maintain soil fertility. Priority will be given to the following combinations as identified in the CSAIP funded under PDAC: corn-pigeon peas, cassava-acacia, and banana-legumes. Fast-growing timber species (moringa, acacia, nipa and other woods useful for structural timber, electric pilons, and wood energy) will also be available among the menu of choices. The activity is expected to support 2,100 households.

(b) **Cocoa mosaic agroforestry.** This line of activities will support the planting of climate-smart cocoa varieties exclusively in degraded or deforested areas. Participants will receive access to a package including inputs for planting, growing, and harvesting. In particular, they will gain access to high-quality hybrid cocoa seedlings produced following strict production standards under the National

[29] Congo's gender gap is borne out through the low number of female entrepreneurs in the commercial agriculture/agroforestry sector and related value chains (particularly, in more upstream activities), which is due to inadequate access to finance, lack of business development skills, market links, and so on. The project attempts to close this gap by targeting agroforestry assistance to women (Subcomponent 1.1) and providing business skills for female-led forest and agroforestry-related economic groups (Subcomponent 1.2).

Cocoa Development Plan.[30] The forms of mixed agroforestry that the project will promote include combinations of cocoa, banana, and fruiting trees—citrus varieties, kola, papaya, and safou (*Dacryodes edulis*). The project will build upon and scale up the approach used under PFDE, where agroforestry activities have focused on mixed cocoa-banana systems (some of which are already under implementation in the project area of Sangha and Likouala). Intercropping banana trees permits a return on investment to the farmer during the first three to four years that it takes for the cocoa trees to be brought into production. It is recommended to plant one banana tree for every cocoa tree. Thus, the banana tree will serve as a source of shade for the cocoa plant during its juvenile phase and then, once its production cycle has been completed, will provide supplementary fertilizer while decaying. The activities will target approximately 1,100 households, with emphasis on supporting communities with a history of cocoa production and routine access to markets. Contractual agreements with farmers and routine monitoring will ensure that cocoa activities are coordinated with applicable cocoa production strategies and that they do not lead to increased deforestation.

Box 1. Climate-smart Conditions to Receive Support from the Project

Site selection: Choosing appropriate planting sites reduces the risk of deforestation from new cocoa planting. From a forest conservation standpoint, sites that are already degraded are preferable. A 2017 World Bank study[31] defines five classes of degradation, incorporating both the national forest definition and the minimum non-anthropogenic degradation threshold (75 percent) defined in Congo's ERPD: non-degraded, lightly degraded, moderately degraded, severely degraded, and deforested (see Figure 1).

To preserve 'non-degraded' forest, as defined in the ERPD, the project will implement climate-smart agroforestry only in the last three categories of degradation levels, that is, areas with 0–60 percent forest cover. Cocoa is best suited for moderately degraded areas (that is, 40–60 percent forest cover) and food crop-based agroforests are most suited for severely degraded zones (that is, 0–40 percent forest cover) due to their need for sunlight. A first mapping of suitable areas for cocoa plantation was undertaken during the preparation of the ERPD, which estimated available area highly suitable for cocoa at 17,215 ha across 16 SDCs in seven concessions. Areas with 60–75 percent tree cover can regenerate easily and are too shady for cocoa production. They will be the focus of agroforestry activities. This approach is compatible with cocoa certification and even stricter than the Rainforest Alliance standard.

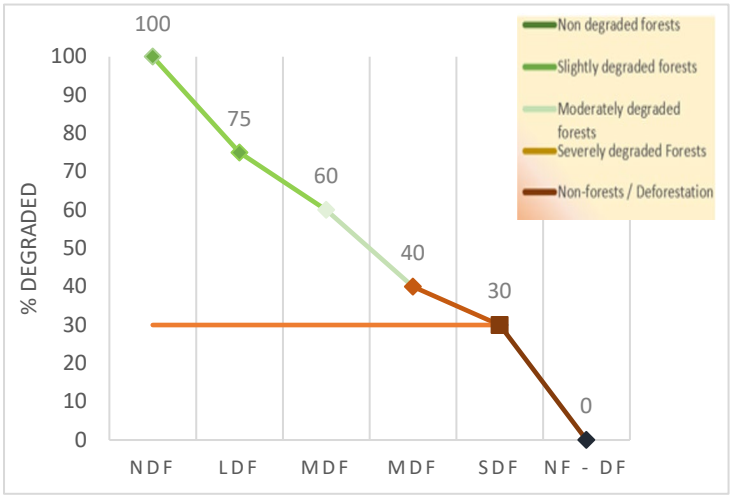
To ensure land tenure is respected, the project will draw on the experience of PFDE, working closely with customary and local authorities and relying on the arbitration of the Community Development Management Committees[32] (*Comité de Gestion et de Développement Communautaire*, CGDCs) responsible for ensuring the implementation of the PSGs in the SDCs. The agroforestry activities will therefore be carried out with an authorization of agricultural production issued by the customary authorities.

Plot size. The average household in Sangha-Likouala cultivates up to 5 ha of land through shifting cultivation, rotating between clearing new land and leaving it fallow. The proposed agroforestry systems will reduce average cultivated areas using the incentives described below, resulting in higher yields and profits. Farmers would be free to choose their preferred

[30] The second phase of the plan is currently under development by the Government through technical assistance financed through the Commercial Agriculture Project. A feasibility study on relaunching the country's cocoa sector has already been developed.
[31] World Bank. 2017. *Proposals for a Strong and Vibrant Agriculture Sector in Republic of Congo: Agriculture Policy Notes*. Report No: ACS22550, World Bank: Washington, DC.
[32] CGDCs are local governance structures provided for by Congolese law (Decree n° 2013-280 of June 25, 2013). Organized at the village or neighborhood level, they are responsible for the development and implementation of PSGs in the community development zones of forest concessions. About 48 of these bodies received initial support from the PFDE and played an active role in the development of the 15 PSGs that the project sponsored.

ratio of cocoa-based agroforestry and subsistence crop-based agroforestry systems on the 5 ha, provided the area meets the above site selection criteria.

Figure 1. Levels of Degradation



Plantation density for the cocoa-based agroforestry system. Conventionally, cocoa is planted at relatively high densities of about 1,100–1,300 trees per ha. However, this practice only maximizes production for the first few years. After four to five years, competition between cocoa trees is exacerbated, leading to stagnating or even decreasing production. The project will limit planting density to 950 per ha for cocoa trees (with a final density of 850 per ha estimating a 90 percent survival rate) and 100 per ha for forest trees.[33] The long-term objective is to have a common cocoa planting density across the three categories of plantation sites (deforested, severely degraded, and moderately degraded) that reflects the optimal mix of economic and environmental benefits. Moving toward a common planting density will both create a sustainable, realistic environmental standard and help control any eventual rebound effect.[34]

Intercropping and integrated rotations. The climate benefits and economic profitability of cocoa systems can be enhanced through intercropping. Intercropping with different species will ensure both ecological viability and profitability as several of these species (a) mature in the first years after plantation and can provide economic benefits while cocoa is still growing and (b) may provide NTFPs, such as caterpillars or pharmacopoeia, in addition to their use as agricultural crops. These species can also cover firewood needs. Finally, combining shade-grown cocoa production with food crops is expected to stimulate and diversify household incomes and improve food security.

To maintain soil fertility, the proposed approach for climate-smart agroforestry production of subsistence crops and fruit trees includes a one-hectare rotating system, with cassava planted on half the land for two years and then on the other half hectare for two years. To replenish soil fertility, non-cassava areas would alternate between fallow (one-quarter hectare) and nitrogen-rich legumes, such as beans (one-quarter hectare). Legumes not only enrich the soil with essential nutrients, they also meet the nutritional needs of the local population. Beans can be consumed or sold as a cash crop. The total rotation cycle for the plot area is 4 years.

Conditions for remaining in the program. To encourage and sustain uptake of agroforestry and good agricultural and environmental management practices, participants will sign and abide by a contract with the project. Assistance will continue each year based on an assessment of criteria, such as (a) the number of trees planted and the percentage of those remaining alive; (b) effective maintenance of trees planted; and (c) compliance with recommended sustainable forest management practices, such as establishment of fire breaks (manual and/or vegetative), use of organic fertilizer, and no-tilling. Verification of the performance will be ensured by the DDEFs/DDAs, CNIAF, and service providers and will be reported to the PIU.

51. **Market gardening microprojects.** Along the border with the Democratic Republic of Congo and Central African Republic, refugees represent a large segment of the population. This holds particularly true in the Bétou UFA in Likouala where refugees—mainly from Central African Republic—number over 12,000. Many hold experience and expertise in market gardening, an activity little practiced in the forest zone of the Republic of

[33] World Bank. 2017. *Proposals for a Strong and Vibrant Agriculture Sector in Republic of Congo: Agriculture Policy Notes*. Report No: ACS22550, World Bank: Washington, DC.

[34] In this case, the rebound effect would consist of inspiring such an interest in cocoa production that participation becomes a driver of deforestation.

Congo, which involves short to ultra-short cycle crops cultivated near consumption centers with ready access to labor. The project will support combinations of market gardening crops intermixed with fruit and forest tree species with the aims of rehabilitating degraded forest areas in proximity to refugee camps, diversifying local vegetable production and improving nutrition, and increasing revenues for vulnerable households. As not all combinations of market gardening crops and tree species are viable in terms of water needs and pests, the project will ensure that combinations are chosen that increase system productivity. The project will finance necessary inputs and irrigation. To ensure that gardening activities do not promote deforestation or forest degradation, garden areas will be established in non-forested or highly degraded lands in the periphery of settlements. The project will work with municipalities where refugee populations reside to assist in land use planning for the selection of garden sites, ensuring that the land reserved for market gardening is of low commercial value and possibly allowing it to be purchased by the municipality or the state to then rent it to market gardeners (thus ensuring land security for refugees to the extent possible). These activities will target 500 households, especially for refugees in the UFAs of Bétou, Missa, and Kabo. Work with unemployed youth will be promoted.

52. **Nursery microprojects/seed banks.** The subcomponent will develop nurseries to provide seeds and seedlings for climate-smart agroforestry species. The project will rehabilitate four abandoned nurseries (in Kabo, Pokola, Ngombe, and Bene) and establish four new nurseries in additional forest concessions (Bétou, Ipendja, Mokabi-Dzanga, and Jua-Ikié). For all nurseries, the project will finance the rehabilitation or construction works necessary to providing continuous water supply throughout the year. Testing and propagation of improved, climate-smart seeds will be led by the national Agricultural Research Institute (*Institut de Recherche Agricole*), the National Center for Improved Seeds (*Centre National des Semences Améliorées*), and agricultural extension centers. The project will assure close coordination with the DGM, whose beneficiaries the nurseries will support as well, and with PDAC, to take advantage of synergies in supporting the nurseries, distributing plants, providing capacity building, and other activities. Additional synergies will be developed with projects researching improved seeds such as the World Bank's Eastern and Central Africa Agriculture Transformation Project (P162416), which focuses on maize, rice, beans, and cassava, AFD's Cocoa Sector Recovery Project, the FAO's PREFOREST project, and activities that may be supported under the CSAIP. Collaboration with international research organizations that have studied improved seeds, for example, the French Agricultural Research Centre for International Development (*Centre de coopération internationale en recherche agronomique pour le développement*), as well as with private companies will be encouraged.

53. **Bushfire management.** Activities will also cover bushfire management in the two departments targeted by the project. To help address bushfires as a significant driver of forest degradation, the project will support (a) the establishment of vegetative firebreaks, which comprises the planting of multiple rows of fruiting trees, such as mango or cashew, to prevent the growth of underbrush and limit/forestall the spread of fire and (b) firelines, consisting of hand-dug trenches and removal of vegetation to cut off the supply of fuel to burning embers, sparks, and flames. The project will further facilitate agreements with CGDCs to conduct regular ground patrols and lend support for bushfire suppression. It will support the acquisition of material sufficient to effectively carry out community patrols, including boots, waterproof jackets, and other equipment.

54. **Trainings and extension support.** Interested farmers, as well as harvesters of NTFPs, in the program area may sign up for capacity building in sustainable forest management and climate-smart agroforestry, which will take place continuously throughout the project life span. Specific training programs, trials, demonstrations, and participatory learning plots will cover a range of practices tailored to the local context, including the use of improved varieties, agroforestry systems and intercropping, soil conservation techniques, integrated soil fertility management (including mulching, composting, and burying of biomass, in particular of leguminous species), pest

management (especially for cassava), storage, and wildfire management. The farmer training program established under the first phase of PFDE will be replicated and brought to scale, focusing on production techniques that maximize yield and quality to enable farmers to sell at a premium. Trainings will concentrate on field preparation (for example, optimal shading strategies using high-value trees), planting (for example, patterns of intercropping with banana and other crops), maintenance (for example, disease prevention, tree grafting techniques), and harvesting (for example, optimal maturity). The support will also complement Subcomponent 1.2 by providing guidance on processing and marketing for local and (where applicable) international markets (including achievement of international production standards, which in the case of cocoa requires adequate post-harvest practices, particularly drying). To assure quality standards and supervise the sustainability of the activities, extension services will be provided, including support on clearing, staking, hole-drilling, sowing, transport and reception of seedlings, planting, harvest, collection and transport of production, processing, and marketing. To encourage adoption of production techniques and management activities by women and IPs, trainings will incorporate the insights from the gender assessment described below (see paragraph on Gender). The project will coordinate with UNHCR to disseminate information and provide awareness-raising activities on refugee rights, for example, by inviting UNHCR representatives to workshops organized by the project.

55. **Awareness raising.** To promote agroforestry techniques and sustainable forest management beyond the households supported through agroforestry microprojects, the project will sensitize farmers on the benefits of agroforestry systems through the following activities:

56. **Farmer field schools.** The benefits of agroforestry systems will also be promoted by working with existing 'champion' farmers and providing exposure to sustainable agroforestry management practices through farmer field schools. Because the adoption of agroforestry practices by small producers is conditioned upon their belief in future economic and environmental performance, placing practical demonstrations of agroforestry systems and their rewards (in terms of yields, adaptation to extreme events, and so on) as close as possible to producers is the best way to convince them of their benefits. To facilitate local awareness raising and training in agroforestry and agricultural best practices, community demonstration plots will exhibit and promote practices such as alley cropping and pruning, as well as soil fertility techniques including the use of organic fertilizers and nitrogen-fixing species.

57. **Communication.** Communication campaigns will take place particularly in forms accessible to illiterate people. The project will fund forest and agroforestry-related environmental theater and rural 'edutainment' TV, radio, and media campaigns, especially highlighting women's key role in agroforestry, land restoration, and climate change resilience and mitigation efforts. Communication activities will largely be carried out by service providers, most likely nongovernmental organizations (NGOs), to be recruited by the PIU.

58. **Nutrition.** Local diets rely primarily on cassava and meat (essentially carbohydrates and proteins). The project will promote nutritional awareness through education (see next paragraph) and strengthen capacity for producing diverse food and culinary practices for improved health. Market gardening activities can also be encouraged to complement the diet and improve child nutrition.

59. **Addressing concerns related to gender and vulnerable populations.** To identify bottlenecks inhibiting the participation of women in income-generating activities, the project will conduct a gender assessment and a GBV action plan, both informed by behavioral sciences through the partial or complete application of a behavioral diagnostics toolkit for REDD+ projects, focusing on psychological, social, contextual, and procedural factors that

could prevent beneficiary women from accessing and participating in climate-smart agroforestry activities.[35] Additionally, capacity-building exercises will feature awareness raising on identifying and responding to GBV affecting project beneficiaries. It will discuss how to offer essential services to the affected, for example, through health and psychosocial counseling and legal support. Among the service providers included in the training will be NGOs and other institutions where those affected by GBV can go for help. Awareness-raising activities will also seek to address the needs of other vulnerable population groups, particularly IPs.

60. **Capacity building for oversight and monitoring.** The project will ensure that there is adequate field presence for implementation and monitoring of activities. The institutional arrangement for monitoring activities under this subcomponent is as follows: (a) decentralized MEF officials, specifically agents from the DDEF, will have a supervisory role and will monitor activities at the local level; (b) decentralized agents from the MAEP will provide technical guidance to ensure that supported households undertake agroforestry schemes that are technically viable; (c) agriculture, environment, and natural resource management service providers (typically NGOs) will provide implementation support; and (d) community-level focal points, reporting to village committees, will assist in monitoring of implementation. Further details on the project's implementation arrangements are available in Section III.A.

61. **Capacity building for service providers.** Though the capacity of service providers in Sangha and Likouala (most importantly local NGOs) is generally weak, their role is indispensable. To make their actions more effective and sustainable, the project will strengthen the capacity of the service providers that are involved in project implementation. The project will offer trainings, tools, and methodologies to improve service provider efficiency, including through the integration of new technologies. Areas of focus will include technical capacity, project management skills, and development of effective partnerships with producer groups and community institutions, including through the identification of and collaboration with focal points to which responsibility can be delegated. The project will facilitate knowledge exchanges with peers and foster relationships with service providers of international repute who can serve as mentors or senior partners in project implementation.

62. **Capacity building for decentralized forest management and extension services.** The project will support public institutions at the departmental and local level as they are key to providing a suitable enabling environment for service delivery for agroforestry and forest resource management at the local level. Within the public sector, capacity building is needed so that officials can provide guidance and services and actively develop tools to support farmers, producer organizations, and related enterprises, for example, input dealers and financial intermediaries. Due to the heightened requirements of monitoring inherent to the project's activities, it will provide new technologies and enhance technical capacity within the DDEFs. First, the project will strengthen the capacities of agricultural agents in villages to optimize and monitor interventions (in collaboration with NGOs, producer groups, and other associations). Second, DDEFs and their agents will be sensitized in the identification of GBV cases among the project's target population and trained to apply intervention protocols to address such cases. Third, the project will lend financial support to connect the DDEFs in Sangha and Likouala to the internet, which will facilitate

[35] The toolkit is currently being developed by the World Bank's Poverty and Equity Global Practice and funded by the FCPF project 'Behavioral Science Approach to Empowering Women in Forest Landscape' (P171421).

collaboration between DDEFs and CNIAF by allowing the transfer of remote sensing data in the project area.[36] Fourth, it will finance geographic information system (GIS) hardware and software applications for use in offline and low-bandwidth settings to enable data collection and map analytics. Finally, the project will finance the purchase of drones for imaging and analysis of intervention areas, which will allow forestry administration agents to conduct distance M&E, lowering the expenses for field missions. One drone will be purchased per department in the intervention zone. The project will ensure that the usage of all drones purchased with project funds conforms to national legislation pertaining to their operation. To ensure this is strictly followed, at least one member of each DDEF will be trained and certified in the piloting of drones. The PIU will ensure maintenance as needed, including by identifying and establishing contact with technicians capable of drone repair and providers able to provision replacement parts. In purchasing the drone, the MEF takes sole responsibility for how the drone is employed, the purpose of which is limited to monitoring of project implementation, forest surveillance and, as the case may arise, humanitarian/crisis assistance.

63. **Land tenure activities.** The existence or lack of land tenure affects whether land is used sustainably, particularly with a view to relatively long-lived investments such as planting cocoa and other agroforestry species. To address challenges in this regard in the project area, the PANC will support efforts to ensure that adequate assurances on land tenure coincide with planting activities. Customary land tenure prevails in the project area. Under PFDE, beneficiaries were provided with authorizations to cultivate issued by land chiefs. In villages where there are no land chiefs, the village chief normally assumes a central function in the allocation and documentation of land rights. There are, however, no uniform land administration practices in the project areas, and no standardized mechanisms to allocate and document land rights. The PANC will assess land tenure arrangements and facilitate a dialogue with relevant ministries to help support the establishment of a practical process for providing beneficiaries with land security to the largest extent possible and respecting safeguards policies. The PIU will contract the services of a land tenure consultant for approximately the first two years of the project to provide expert advice on the preparation and implementation of the project's land tenure activities.

64. **Documentation and recording of land rights.** The project will work with the MEF and the MAFDP to pilot a low-cost system to map and record land rights in targeted areas under customary or statutory tenure. The system will help map land right claims and identify land that may be allocated to potential project beneficiaries who currently do not have access to land, particularly IPs. The pilot will build on PFDE's experience with the village of Sombo in Likouala where the village chief instituted a paper-based system to document land rights.[37] The pilot will support the modernization of this system and explore its possible replication in other villages. Given that village committees in the project area have limited capacity, this system may remain paper based at the village level, while procedures would be established to back up land records in a digital database administered by the

[36] In addition, the internet connection will help advance Congo's Computerized Legality Verification System (*Système informatique de vérification de la légalité*, SIVL). As agencies of the MEF, the DDEFs are responsible for the compilation of data for the SIVL. The system includes procedures and requirements to verify and certify that timber and derived products shipped from Congo are legally produced. It will allow the Government to record information concerning the legal status of forestry companies, track their production, and manage the supply chain. It is a key element for implementing the Voluntary Partnership Agreement for Forest Law Enforcement, Governance, and Trade in the Republic of Congo. The required software was delivered in December 2016 and has been installed in the data center of the Ministry of Finance, Budget, and Public Portfolio. Some priority modules of the system have already been installed in the 12 DDEFs in the country, namely those on legal status, taxation, and special permits. However, the system is not operational yet as the DDEFs lack the required internet connection. Connecting the two DDEFs to the internet will allow the SIVL to become fully functional in Sangha and Likouala. This will help the Government manage the timber value chain effectively and facilitate tax collection, which in the long term is expected to also benefit service delivery for agroforestry and forest resource management at the local level.

[37] Mackosso, Gaston. 2019. *Etude sur la Modernisation des Schémas Graphiques (Croquis) du Village Sombo : Création d'un Cahier Parcellaire Villageois (CPV).*

forest concession management units (*cellules d'aménagement*) in partnership with the MEF and MAFDP. The pilot will also support the identification and mapping of IP land and sacred and spiritual sites, according to the provisions of Decree 2019-200 of July 12, 2019. The project will work with the MAFDP and MEF early on to clarify whether and under what terms foreigners established in Congo can participate in the activity.

65. **Sensitization on land laws, institutions, and procedures.** The project will undertake awareness raising on critical issues related to land tenure and titling, beginning with dissemination of information pertaining to Law No. 21-2018[38]—which defines the rules of occupation and acquisition of lands and parcels—and continues with discussions on governing, arbitrating, and resolving land issues with relevant institutions and focal points, for example, the National Commission for the Recognition of Customary Land Rights and Departmental Cadastral Directorates. As feasible, some awareness sessions may be conducted by departmental representatives of the Federation of Landowners of Congo (*Fédération des Terriens du Congo*), a civil society group that advocates for the rights of landholders.

66. **IPs.** In close coordination with the DGM, the PANC will implement activities to protect the land rights of IPs, including (a) the participation of IPs in agroforestry activities supported by the project; (b) the identification, mapping, and securing of sacred sites, spiritual sites, and other places (forests, land, water, trees, abandoned villages, and so on) as defined in Decree 2019-200 described above; and (c) additional activities as part of safeguards implementation. Mapping will be conducted as part of the aforementioned pilot and through PSGs (see below). These activities will strengthen the land right claims of IPs and help ensure that the claims of other project beneficiaries do not infringe upon areas occupied or used by IPs, as well as on protected areas or areas already claimed by others. The additional activities will be defined in the Indigenous Peoples Plans that will be developed during implementation. They will draw on the experience of other countries that have implemented actions to protect the land rights of indigenous populations and, more generally, to regulate the use of common areas (such as the development of 'land charters' in Burkina Faso).

Subcomponent 1.2: Supporting integrated value chains for agroforestry and non-timber forest products (US$3.0 million)

67. **The project seeks to increase productivity and market access along key value chains by providing support to value addition of cocoa, food crops, and NTFPs.** The main factors impeding the advancement of Northern Congo's smallholder agriculture are in value addition and logistics. This holds true particularly for the processing, packaging, storage, transport, and marketing of production. Assisting communities in overcoming these barriers is of vital importance to poverty alleviation. To increase the incomes of farmers and ensure sustained commercial interest in the agroforestry systems, the project will support processing and marketing of their products, both of which are generally underdeveloped in the project area. Investments will take a value chain approach. Given the propensity of citizens in Sangha and Likouala to form community-level commercial associations, the project will prioritize work with farmer producer groups (often known as Common Economic

[38] Law No. 21-2018 marked an important step in the definition of customary land rights. Article 8 stipulates that "to enjoy customary land rights, landholders must first be recognized by the State." This recognition is done at the end of a procedure that can be initiated by interested parties with the Departmental Cadastre Directorates or at the request of the State "in the event of an emergency project of general interest (Decree No. 2018-484)." The recognition of customary land rights is pronounced by an order of the Minister in charge of land affairs. Once these customary lands have been formally recognized by the State, they must be registered by their holders or, exceptionally, they can be registered ex officio by the State. Thus, following the adoption of Law No. 21-2018, holders of customary lands who have not had their lands recognized officially are not considered as landowners in the eyes of Congolese law. They will only become landowners upon official registration of their customary lands.

Interest Groups—*Groupements d'interet économique communautaires*—GIECs). Through technical assistance and microprojects for beneficiary producer groups, activities will explore sustainable intensification of production, establish processing units, support the renovation or construction of storage facilities, and train farmers in professional skills such as budgeting, accounting, and marketing. The main objective is to develop the managerial and technical capacity of producer groups, moving them toward professionalization. A dedicated technical assistance package will train female-led producer groups on business leadership and marketing and explore culturally acceptable options for providing childcare to ensure attendance.

68. **Establishing and strengthening producer groups.** The subcomponent will first catalyze the creation of producer groups, especially among target communities with high adoption rates of the agroforestry and market gardening schemes promoted in Subcomponent 1.1. It will strengthen the capacity of these and existing groups with the help of service providers to address the low education levels in the project area. Specifically, it will (a) identify communities/producer groups suitable for support; (b) carry out pre-investment studies, including on supply chains; (c) assist producer groups in formulating simple proposals to request support for productive investments; and (d) facilitate access to markets by connecting producer groups with buyers and traders. Targeted support to producer groups comprising IPs will seek to transfer and reinforce skills in NTFP value addition, including handicrafts such as the production of baskets or mats woven from rattan or other forest resources. Activities to assist producer groups will include support to agents of the MEF and MAEP in disseminating relevant laws and regulations, particularly those pertaining to professional producer organizations.[39] The latter cover establishing economic interest groups (that is, producer groups) and their umbrella organizations in the cocoa, banana, and other sectors, activities to strengthen these structures, and building relationships with forestry companies and other private sector actors to ensure the inclusion of these economic interest groups in agriculture, forestry, and NTFP value chains. The project will foster dialogue with private sector stakeholders for better coordination and to encourage partnerships to support value chains for agroforestry and forest products, with the goal of providing smallholders in forest concessions with access to capital and new markets.

69. **Value chain microprojects.** Supported by service providers and agricultural extension services, producer groups will draft and submit simple business proposals that clearly identify market demand for their agroforestry products and NTFPs and show the financial sustainability of their operations. Proposals will be evaluated and selected by a department-level committee comprising representatives from IPLCs, civil society, the departmental government, and the PIU. The project will support the implementation of the selected proposals through microprojects. Proposals are expected to cover investments necessary to unlock higher value addition (depending on market requirements, the supply chain, and associated constraints), such as improved access to quality inputs for higher productivity (for example, seeds, cuttings, fertilizer, equipment, and tools); minor on-farm infrastructure (for example, small irrigation systems); off-farm infrastructure for storage, processing, and packaging (for example, warehouses); acquisition of vehicles for transporting goods; introduction of climate-sensitive technologies (for example, climate-resilient seeds and mobile-phone-based dissemination of weather information and market prices); and soil and water conservation measures (to enhance resilience to climate change and variability and improve existing carbon pools). Investments will systematically be accompanied by technical assistance, including training, extension and advisory services, and coaching. Relevant expertise may include installing and maintaining infrastructure and machinery investments, as well as improving marketing skills and management of businesses and finances. Assistance is expected to reduce the risk of the investments and to improve their returns and impacts by (a) preparing producers groups for receiving the investment and (b)

[39] This includes Law n° 47-1775 of 10/09/1947, relating to the cooperative movement, the Uniform Act relating to the Law of Cooperative Companies, and the Revised Uniform Act relating to the Rights of Commercial Companies and Economic Interest Groupings.

accompanying them during the investment period to help resolve strategic, marketing, financial, operational, and technical challenges that may hinder performance. Synergies will be established with other World Bank and donor-funded projects, in particular PDAC and PFDE.

70. **Further examples of the types of activities that will be promoted for financing are included in Annex 1.**

71. **The project will preempt concerns stemming from a potential lack of fairness and transparency, including gender discrimination in the procedure for providing grants.** Results indicators under the subcomponent aim at a minimum proportion of beneficiaries who are female, inclusive of female-led GIECs. Additionally, a singular attention will be paid to matters of GBV. Specific measures to mitigate these threats will incorporate awareness raising and communications campaigns targeting laborers at worksites before and during construction activities.

Component 2: Paying for environmental services in Sangha and Likouala (US$3.0 million)

72. **The PANC will pilot a PES scheme for carbon sequestration in Congo that could be scaled up under the ERP-SL.**[40] The project will develop criteria for receiving payments and a system to monitor compliance and distribute payments to beneficiaries. The core activities of the scheme will be implemented by a service provider.

Subcomponent 2.1: Piloting household payments for environmental services for forest conservation (US$1.6 million)

73. **In tandem with the support to agroforestry, the project will implement a PES mechanism in the form of conditional cash transfers for beneficiary households conserving natural forest area.** The mechanism will be modeled on lessons learned from notable PES interventions in other parts of the world, such as the GEF-funded Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda (GEF Project ID: 3682) (2010-2014) and the *Bolsa Floresta* in Brazil, a regional program co-financed by the State of Amazonas and the Amazon Fund for Forest Conservation and Climate (a REDD+ mechanism to finance forest protection projects), and adapted to local conditions.

74. **The terms of PES contracts will be set in consultation with technical experts to allow for continued use of the forest in a manner consistent with conservation principles, including the avoidance of deforestation and degradation.** For example, contractual clauses may allow for some cutting of trees for domestic use. The contracts will be deliberately kept simple to facilitate comprehension by beneficiaries and compliance monitoring.

75. **The exact payment amount will be determined based on research to quantify the opportunity cost of keeping forests intact.** Payment amounts in PES programs vary widely. As a point of reference, other PES schemes

[40] Under the BSP of the ERP-SL (advanced draft of December 2020), the *Conseils Départementaux* will sign, on behalf of their communities, protocols with the MEF to formalize community participation in the program. A share of the program's carbon benefits is to be reinvested in community projects for agricultural and agroforestry models, climate-smart cocoa cultivation in degraded areas, community management, and conservation of natural resources. Expected non-monetary benefits include technical support (for the implementation of agroforestry, conservation, and reforestation) and capacity building for governance and project development. A service provider will administer the funds allocated to IPLCs as compensation for their achieved emission reductions and support the development and implementation of community projects.

have used approximately US$25–65 per ha per year.[41] The minimum value to induce participation is set by the opportunity costs, which depend on both the value of foregone uses (for example, felling for timber and clearing for agriculture) and on allowed uses of conserved forests. Deforestation risk is low when the value of alternative uses for forest land (and, hence, the opportunity cost of foregoing them) is low. In these cases, a low payment may be sufficient or a payment not even be needed. However, deforestation risk varies across a landscape, often in fairly predictable ways. For example, it may be higher on better-quality arable land and near access roads. Conserving specific forests located in high-deforestation risk areas (for example, because they form part of a biodiversity corridor or are hydrologically important) will thus require a payment that reflects the relatively higher value of these forests. Consequently, the project may use differential payments—for example, having two levels of payment to reflect low- versus high-value forests—with clear yet simple criteria to identify areas receiving higher payments. The exact payment amount and the criteria for differentiation will be defined in the Project Implementation Manual (PIM).

76. **Project beneficiaries will have their forest land verified, measured, and validated for eligibility.** The validation will be performed with CGDCs or other relevant authorities, customary or otherwise. The service provider will explain and help fill out the PES contract forms. It will also verify, through ground-truthing, forest integrity to hold beneficiaries to account in case of breach of agreement.

77. **Eligibility criteria.** Eligibility for household PES payments for conservation will be based on the principle of cross-compliance. To qualify for PES payments, candidate households must first be enrolled and in good standing[42] in the agroforestry activities described in Subcomponent 1.1. If a household fails to respect either the best practices under the agroforestry activities or the conservation of their forest area, they may be declared ineligible for further assistance under the project. The severity is meant to ensure that households abide by their pledge of sustainable agroforestry practices as well as avoiding deforestation. As explained above, there are some exceptions to the sustainable use of land under conservation, but actions outside of the bounds of those clearly determined and communicated rules may be grounds for dismissal from all project support. To capitalize on international lessons learned,[43] the project will prioritize implementing the PES mechanism in areas that are more vulnerable to deforestation/forest degradation and have the highest poverty rates.

78. **Monitoring and enforcement**. Continued forest integrity will be monitored through (a) remote sensing and drone footage (conducted by CNIAF and DDEFs), (b) ground-truthing through in-person spot checks from the service provider on a monthly or bimonthly basis, and (c) self-reporting by the beneficiary. Data, including visual proof of compliance, will be recorded in a database expressly created for the said purpose, such as those offered by KoboToolbox.

79. **Payment modality.** Payments to beneficiary households will be made by the service provider in annual installments in the form of cash transfers based on the verification protocol described above. Partnerships with telephone companies allowing payments by phone (mobile money/cash transfer) will be promoted. One of the

[41] Under the instructive GEF-funded Chimpanzee Sanctuary and Wildlife Conservation Trust case study in Uganda, forest owners were paid US$28 per ha per year for conservation, while Costa Rica's *Pago por Servicios Ambientales* program and Mexico's *Pagos de Servicios Ambientales Hidrologicos* make annual cash payments of US$65 and US$27–36, respectively (Jayachandran et al. 2016). *Bolsa Floresta*, in Brazil's Amazon forest, offers similar payments to households at about US$15 per ha per year.

[42] 'Good standing' is defined as following the sustainable forest management and agroforestry best practices that permit the beneficiaries to continue participating in the project-supported activities.

[43] See Cisneros, Elías, Jan Borner, Stefano Pagiola, and Sven Wunder. 2019. "Impacts of Conservation Incentives in Protected Areas: The Case of Bolsa Floresta, Brazil." PES Learning Paper 201 9 – 1, World Bank, Washington, DC.

prerequisites of joining the program will be the opening of a traditional or mobile banking account. The project will condition payment on the opening of the account in the name of the female household head or wife while also requiring that a male partner, if part of the household, is informed of and accepts the program conditions.[44] The service provider will assist beneficiaries with the administrative requirements for opening accounts, for example obtaining identify cards. Banking transaction costs will be covered by project funds to avoid placing an additional burden on beneficiaries.

Subcomponent 2.2: Piloting community payments for environmental services for forest conservation (US$1.5 million)

80. **The purpose of this second type of PES incentive is to offer economic alternatives to activities that may be a threat to sustainable forest management on communal lands (for example, illegal logging, illegal mining, and overextraction of fuelwood).** Similar to the household payments, the community payments will be based on the number of hectares of forest preserved. Communities will designate conservation areas in accordance with the PSGs that have been developed or will be developed. As in the case of the household PES, these areas can still be used in accordance with conservation principles, for example, harvesting NTFPs. The aim of the community payments is to create community incentives for conservation and compliance with the PSGs and agricultural best practices. The monitoring arrangements will correspond to those for the household PES mechanism.

81. **The CGDCs will be the primary bodies accountable for designating and upholding the integrity of the conservation area.** The process of designating the communal areas for conservation will be participatory and formalized through a written agreement between the project and the CGDCs. The CGDCs will interact with the PIU and the service provider for purposes of monitoring and reporting that the conservation area remains intact. Generally, as decentralized governance units under the responsibility of the *Conseil Départemental*, the CGDCs are responsible for (a) implementing and monitoring local development projects of public interest; (b) mobilizing the population to develop a village or neighborhood action plan to submit to the departmental or municipal council; (c) creating all the conditions necessary for the management, maintenance, and development of basic social infrastructure and natural resources; (d) participating alongside the village chief in finding solutions to the problems of village land management, particularly in the areas of land, environment, education, health, culture, and preservation of peace; (e) contributing to the development and implementation of PSGs; (f) contributing to the mobilization of the human and financial resources necessary for the implementation of the actions selected in the PSGs; (g) contributing to the establishment of mechanisms allowing the widest possible participation of all segments of the population in local development; and (h) contributing to the civic awareness of the population and to its mobilization around the socioeconomic actions of the village. A CGDC comprises a coordination committee, an executive board, and an M&E committee. The village chief and the secretary of the village chief are not members of the CGDC. The coordination committee's resources consist of allocations from the ministerial or municipal budget, community participation in projects, financing of development partners, resources to support local development, revenues resulting from the committee's own activities, donations, and bequests.

82. **Supported by the service provider, CGDCs will draft PES subproject proposals for spending the annual PES payments, which may complement other funds mobilized by CGDCs as well as the contributions of private**

[44] Only in the case where there is no female household head/wife will the project direct payments to the male household head.

concession holders to FDLs.[45] Subprojects do not have to directly contribute to environmental goals but must be in line with the PSGs (if already available), sustainable forest resource management practices, and social development goals. They may include a wide variety of activities that benefit the community, including, but not limited to, the construction of health centers, community pharmacy, schools, irrigation systems, warehouses, processing units, and other community infrastructure. They may also include, for example, inputs for higher productivity (for example, equipment and tools) and soil and water conservation measures. Proposals will be assessed and approved by the PIU to ensure that the aforementioned requirements, as well as all environmental and social safeguards are met. The implementation of the projects will be managed by the service provider implementing the PES mechanism. The PIU will have a general oversight role.

83. **Drafting and updating PSGs.** Continuing on the path embarked upon by PFDE, the PANC will help SDC communities create PSGs to identify and prioritize development needs. Under the PSGs, the communities will delineate which areas will be dedicated to sustainable land use practices, which will be retained as forest, and what complementary activities, such as value chain support, might be needed. The information contained in the PSGs will help determine the contours of the community PES contracts, such as where the conservation areas will be situated and how payments can be invested. The remaining PSGs that need to be completed are (a) in Likouala: Bonvouki, Mimbeli-Ibenga, Mobola Mbondo, and Moungouma and (b) in Sangha: Jua-Ikié, Pikounda-Nord, Tala, and Karagoua. As necessary, the project will also update existing PSGs in the project area.

84. **Capacity building for CGDCs and FDLs.** The project will provide organizational capacity-building support to the CGDCs and FDLs through service providers to strengthen local capacity to implement the community PES scheme and enable these institutions to better promote the socio-economic interests of the populations they serve. The project will support the CGDCs to draft community proposals and to oversee that approved proposals are carried out in a transparent and efficient manner. For the FDLs, the project will provide operational support to increase the flow of available funds from their accounts and enable them to better fulfill their mission to reduce poverty. This will build on work done under PFDE by continuing to provide technical support to the coordination committees to improve the governance of the FDLs, including their ability to guide beneficiaries in vetting, structuring, implementing, and monitoring their microprojects or subprojects. Efforts will be made to increase the role that women play in decision-making. Where feasible, additional debiasing training will be offered to community leaders to promote inclusion of women and IPs in conservation and livelihood activities.

Component 3: Project management, monitoring, and evaluation (US$2.1 million)

85. **This component will finance project management and M&E.** It will also provide support to MAEP and MEF capacity building for oversight and monitoring. The project will also explore the feasibility of conducting an assessment of the impact and efficiency of project activities regarding incentivizing and sustaining the adoption of REDD+ activities and improving livelihoods, using an impact evaluation that would be conducted in

[45] FDLs have the mandate to finance community microprojects within their respective SDCs. Each forest concession has an FDL, which is supplied by an annual tax that the concession holder pays on the volume of timber extracted, priced at CFAF 200 per cubic meter. An FDL is under the direction of the Conseil Départemental and managed by (a) a consultation committee responsible for managing the SDCs and validating microproject proposals (Ministerial Decree No. 2719/MEFDDD/CAB) and made up of departmental authorities (president of the departmental council, sub-prefect, departmental sector directors) and representatives of forest concessions and communities and (b) a technical coordination committee made up of local representatives (communities, heads of sector, and forest concession) and responsible for identifying the needs of IPLCs and developing microproject proposals. Proposals are made public and presented during the consultation committee meeting.

collaboration with the World Bank's Development Impact Evaluation (DIME) unit.[46] The component will also finance an expert for the purpose of independent third-party monitoring of project implementation once per year.

Component 4: Contingent emergency response (US$0.0 million)

86. **Designed as a mechanism to implement the Government's rapid response to an emergency, this component will allow the project to finance emergency recovery activities and reconstruction sub-projects under an agreed CERC Manual.** It will enable the immediate disbursement of funds and allow the Government to request a reallocation of project funds to partially cover an eligible crisis or emergency. A crisis or emergency eligible for financing is an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact to the client, associated with a natural or man-made crisis or disaster. If no such event occurs during the lifetime of the project, the component will not be activated.

87. **Conditions to trigger the CERC.** The component may be triggered if the following conditions are met: (a) the Government has determined that an eligible crisis or emergency has occurred and has furnished to the World Bank a request to include emergency response activities in the CERC; (b) the Government has prepared and disclosed all safeguards instruments required for the said activities; and (c) the Client has adopted the CERC Manual in form, substance, and manner acceptable to the World Bank. The CERC Manual will detail FM, procurement, safeguards, and any other necessary implementation arrangements.

88. **Implementation of the CERC.** Disbursements are expected to be in the form of two types of expenditures, namely, critical imports and rehabilitation or reconstruction activities, including civil works and related goods and services. Disbursements would be made against a positive list of eligible critical imports or the procurement of goods, works, and consultant services needed for the client's economic recovery. In addition to reallocation of funds from other components in this project, the CERC may also serve as a conduit for additional financing in the event of an emergency.

89. **CERC Manual.** The CERC Manual will describe (a) the actions to be taken by the Government when a crisis or emergency occurs and (b) the M&E and reporting arrangements for the emergency response. In addition, the manual will provide information on (a) the coordinating authority for the CERC; (b) the roles and responsibilities of implementing and oversight bodies in the context of the CERC; (c) the arrangements on procurement, FM, safeguards, and disbursement for the activities financed under the CERC; (d) eligible expenditures under the CERC; (e) a positive list of eligible goods, if applicable; and (f) criteria to determine that a crisis or emergency has occurred. The manual will also include a template for the Emergency Action Plan that is required for activating the CERC. Approval of the CERC Manual by the World Bank and adoption by the Client is required for the CERC to be effective.

Additional Remarks

90. **'Do not finance' list**. To minimize adverse impacts to local populations and ecosystems, the project will not provide support in any of the following cases:

(a) Activities not approved by IPLCs or otherwise lacking broad support through a process ensuring FPIC.

[46] Effectiveness of activities may also be evaluated through smaller-scale and rapid evaluation methods, such as nimble Randomized Control Trials (RCTs) or AB tests.

(b) Activities restricting access to natural resources for IPLCs, unless evidence is provided demonstrating that these restrictions have been agreed to through FPIC or other transparent and inclusive participatory community decision-making processes that identified measures to mitigate adverse impacts on the most vulnerable members of the community and have broad community support.

(c) Removal of any cultural property (tangible or intangible).

(d) Any activity employing child labor or forced labor of vulnerable people, especially IPs: any beneficiary employing such labor will no longer be eligible for project support.

(e) Land purchases, except for the provision assistance for the acquisition and development of land in the context of involuntary resettlement.

(f) Activities with negative impacts on biodiversity or primary forests, or which can degrade natural areas.

(g) Commercializing of illegal timber, timber products, or NTFPs.

(h) Slash-and-burn agriculture.

(i) Political or electoral campaigns.

(j) Purchase of tobacco or alcohol.

91. Additionally, all project beneficiaries and service providers must complete the project's GBV training. Any beneficiaries or service providers who have not completed the module within a reasonable time frame will no longer be eligible for project support or providing services until they have completed the package.

92. **Criteria for avoiding resettlement.** Activities will be limited to exclusively supporting (a) producers holding a maximum of 5 ha of land (Subcomponents 1.1 and 2.1); (b) producers living close to their fields (to avoid supporting large landowners wishing to develop intensive agriculture) (Subcomponents 1.1 and 2.1); (c) agroforestry and microproject/subproject activities in areas considered degraded as defined by the project; and (d) sites that can be monitored by a focal point financed by the project to be certain that (i) the area is degraded (for agroforestry and microproject/subproject activities); (ii) the land is not owned, claimed, or used by other parties; and (iii) the traditional land chief (or, where unavailable, the village chief) has given his consent to use this land.

C. Project Beneficiaries

93. **The beneficiaries of the project will be rural households and communities residing in the various SDCs of the Sangha-Likouala region.** The project is expected to reach approximately 37,000 direct and indirect beneficiaries living in the SDCs of the 17 UFAs targeted.[47] The population of the project area can be divided into three main categories: Congolese Bantu peoples, IPs, and refugees/asylum seekers. The main form of agriculture is low-productivity shifting agriculture for staple crops such as cassava, peanuts, and bananas.

94. **Particular attention will be paid to the inclusion and participation of women, IPs, and other vulnerable populations.** The latter will include people with disabilities and people with albinism. Only small-scale farmers with a maximum of 5 ha will be able to receive household-level support. The project will also benefit the local

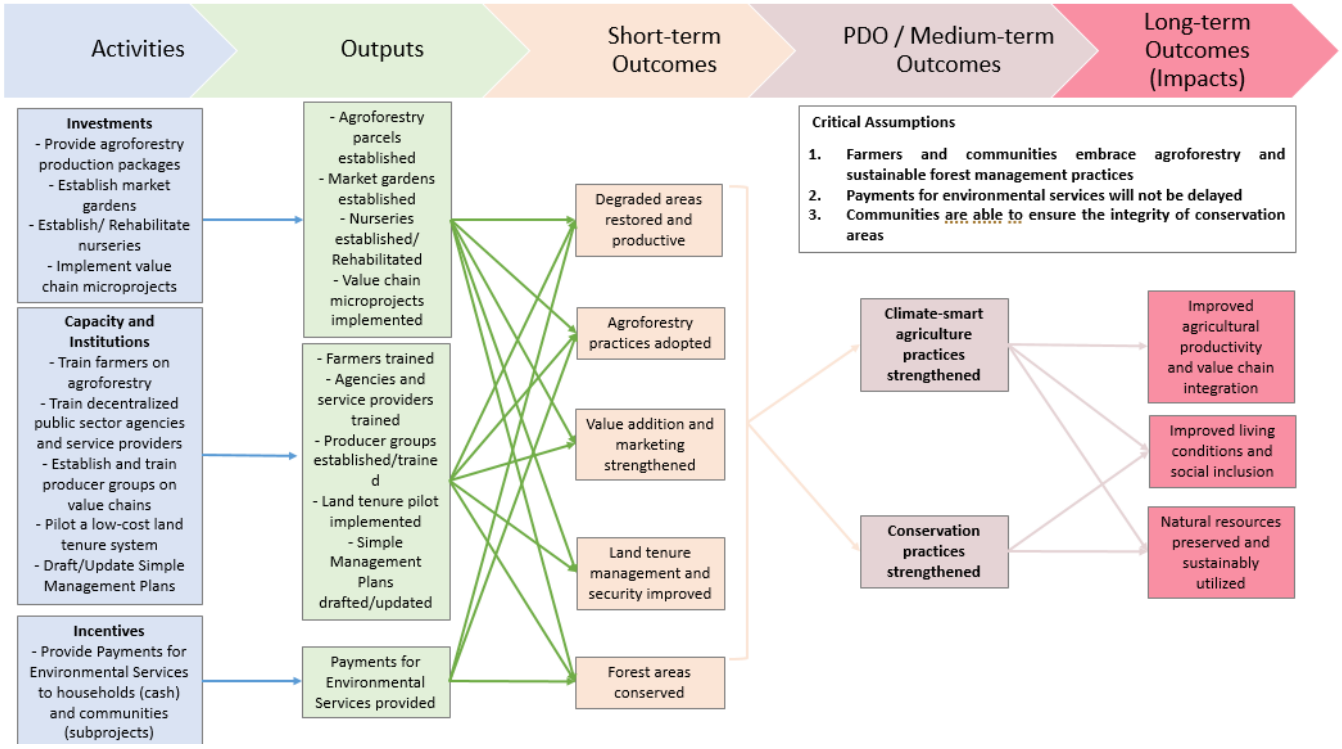
[47] Note that this beneficiary figure applies conservative estimates for the people that are expected to be reached through capacity-building and communication activities to avoid double-counting and ensure meaningful beneficiary numbers.

refugee and asylum seeker population. According to UNHCR, 19,195 refugees and asylum seekers currently live in Sangha and Likouala. About 98 percent of refugees are originally from the Central African Republic and the Democratic Republic of Congo, while the remainder are from Rwanda and Cameroon. As feasible, the design and implementation of specific project activities will incorporate insights from behavioral sciences to further increase the inclusion and participation of potential beneficiaries.

D. Results Chain

95. **The project's results chain illustrates the links between its activities and the expected outcomes, including the PDO.** The project is designed to achieve three major impacts: to improve the conservation and sustainable use of natural resources, the living conditions for IPLCs, and agricultural productivity and value chain integration. Impacts will be achieved through activities that contribute to the two elements of the PDO, namely strengthening (a) climate-smart agriculture and (b) conservation practices in Community Development Zones in the departments of Sangha and Likouala. The short-term outcomes of the activities are the restoration of degraded areas, conservation of forest areas, adoption of climate-smart agroforestry practices, strengthened value addition and marketing for producer groups, and improved land tenure management and security. The outcomes of the project are expected to be reinforced through the activities under PFDE, ERP-SL, DGM, and PDAC. Figure 2 below visualizes the project's theory of change.

Figure 2. Theory of Change



E. Rationale for World Bank Involvement and Role of Partners

96. **The World Bank is Congo's primary partner in REDD+ policy and implementation.** The World Bank has supported the Government's efforts since 2012 with financing, advice, and analytical support. In particular, it has been assisting the Government in setting up the ERP-SL, to which the PANC contributes. The World Bank's support

to agroforestry aligns well with its involvement in promoting overall improved governance, economic growth, and diversification in the country, as well as with its support to the development of sectors with strong impacts on the forest sector, namely, agriculture. The project will assist the Government in its effort to strengthen its forestry and environmental institutions, including the promotion of more participatory, equitable, and sustainable approaches. It will enhance forest and land management, thus reducing GHG emissions from LUCF.

97. **The World Bank's technical expertise on climate change, forestry, and agriculture places it in a unique position to provide technical advice for improving Congo's natural resource management while supporting livelihoods.** The World Bank's climate change portfolio in Africa focuses on promoting resilience while also helping countries to reduce emissions to mitigate climate change. In Congo, the World Bank developed a series of policy notes on agriculture and supported the recently-launched CSAIP, whose proposals informed the design of this project. The World Bank has considerable experience in supporting governments with the preparation and implementation of large forestry and environmental programs that require coordination across sectors and partners. Close collaboration with other major donors in the country, including AFD, FAO, and CAFI, can be facilitated by the World Bank.

98. **World Bank support, which is partly provided as grants and to the public sector, is justified given the global public goods character of many of the project's expected benefits.** This is particularly the case for its contribution to climate change mitigation and biodiversity conservation.

F. Lessons Learned and Reflected in the Project Design

99. **The project will draw on lessons from the implementation of different World Bank-financed projects in Congo, particularly PFDE, PDAC, and Lisungi.** For example, based on lessons learned from implementation of PFDE, where the cost of transporting seedlings was extremely high, a value for money analysis necessitated changing strategies. PFDE resolved to set up a nursery in each Forest Management Unit, making it possible to reduce the cost of transport and create local jobs, as well as to transfer production technology from the nurseries to the local level. The exchange of experience will continue during implementation both at the level of the World Bank's task teams and the Government's PIUs.

100. **The approach to supporting rural livelihoods in Congo's forests through building the capacity of local institutions will be informed by the corresponding lessons learned during the implementation of PFDE.** PFDE demonstrated the potential of partnering with local NGOs to deliver services to rural populations in the absence of strong community and government institutions at the local level. The PANC will draw from this experience by providing focused support to these local institutions, with activities dedicated to strengthening them in coordination with experienced service providers (most likely NGOs). The PANC will focus on establishing partnerships with such institutions to accompany activities with IPLCs. It will further build on Lisungi's experience with cash transfers to establish links with mobile money/banking providers.

101. **The PANC will work with the Lisungi Safety Nets project to improve targeting of the poorest households and most vulnerable populations in the project area.** The PANC will leverage Lisungi's collaboration with the Ministry of Social Affairs and Humanitarian Action (*Ministère des Affaires Sociales et de l'Action Humanitaire*, MASAH) to gain information relevant to targeting poor households. The two projects also expect to coordinate and exchange experiences in areas such as working with refugees and promoting income-generating activities. The PANC will also rely on Lisungi's experiences in transferring payments in Likouala and in tailoring communication strategies to IPLC audiences.

102. **The potential of agroforestry production for reducing deforestation and improving livelihoods has been demonstrated in Congo through several initiatives upon which the project will build.** For example, in 2012, Congo started a partnership with the company Congolaise Industrielle des Bois (CIB-Olam) to relaunch the cocoa sector through the promotion and implementation of sustainable productive orchards in degraded zones, providing support to 707 small producers, pre-funding shade cocoa production with small farmers, and providing fertilizer. Jointly with the government, CIB-Olam gave micro-credit loans to 400 small producers and provided them with agricultural tools. Trainers were also recruited to provide the 'proof of concept' for the commercialization of cocoa in line with international quality standards. The partnership further supported research and development to improve agronomic practices. Three 'Office Café Cocoa' shops in the Sangha Department were rebuilt and technical support and training were provided to 500 small producers to manage cocoa plantations. The initiative resulted in the production of 418 tons of cocoa between 2012 and 2015. The World Bank and PIU teams are in contact with the stakeholders of this initiative and have already collaborated with them under PFDE.

103. **The project will work with the World Bank's Mind, Behavior, and Development (eMBeD) unit to use findings from their emerging research[48] to improve inclusiveness of women and other sensitive populations in the project's design.** The project will coordinate with eMBeD to use a behavioral lens to identify bottlenecks and behavioral barriers for participating in project activities. To foster women's participation in natural resource management the project will apply eMBeD's toolkit for gender diagnostics. Understanding the barriers to inclusiveness will help the project refine project implementation through the PIU, public authorities, and service providers, thus allowing impact to percolate into population segments that are more difficult to reach. During implementation, the project will conduct debiasing training for leaders as feasible to promote inclusion of women and IPs. In addition, the design of project procedures, training activities, and outreach materials will incorporate recommendations drawn from the behavioral diagnostic and apply simplification practices informed by behavioral sciences.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

104. **The institutional arrangements proposed for this project, under the supervision of the MEF and in partnership with the MAEP, include the following institutions**: (a) a Steering Committee (see below); (b) a PIU; and (c) technical service providers (particularly NGOs) that will particularly implement agroforestry activities, value chain microprojects, and the PES scheme. The organizational chart of the MEF can be found in Annex 5.

105. **A high-level Steering Committee will be officially established before effectiveness.** It will be responsible for the strategic direction, operational oversight, communication, and overall good governance of the project. The committee will be chaired as follows: the President will be a representative from the Ministry of Economy, Planning, Statistics, and Regional Integration; the Vice-President, a representative of the Ministry of Finance, Budget and Public Portfolio; and the Rapporteur, a representative of the MEF. The secretary will be the PIU's project coordinator. Members of the committee will comprise the following, each of which will delegate one representative: MAEP; MAFDP; Ministry of Tourism and the Environment; Ministry of Scientific Research and Technological Innovation; Ministry of Commerce, Supplies, and Consumption; Ministry of Justice, Human Rights,

[48] For example, World Bank. 2018. *Closing the Gender Gap in Natural Resource Management Programs in Mexico*. Washington, DC: World Bank.

and the Promotion of Indigenous Peoples; Ministry of Small and Medium-Sized Enterprises, Artisanship, and the Informal Sector; Ministry in Charge of Women's Empowerment and Integration into Development; Ministry of Finance, Budget and Public Portfolio; MEF; Ministry of Economy, Planning, Statistics, and Regional Integration; the Sangha DDEF; the Likouala DDEF; the Departmental Council of Sangha; and the Departmental Council of Likouala. Additionally, there will be one representative from each of the forest concession holders in Sangha and Likouala, one representative from the mining sector, four representatives from civil society, one representative from the Agricultural Research Institute, and one representative from the National Center for Improved Seeds.

106. **The project will be implemented by a new PIU that will be established under oversight of the MEF, within one month after project effectiveness.** A brief overlap between PFDE and the PANC is expected to allow for a smooth transition between the two projects. The PIU will be responsible for project implementation, management, coordination, supervision, social and environmental safeguards monitoring, and M&E. The PIU will be led by a coordinator and will include a treasurer (who may also serve as an administrative assistant), an accountant, an FM specialist, a procurement specialist, a social development specialist with experience in GBV and communications (also responsible for social safeguards), an environmental specialist with experience in M&E and agroforestry (also responsible for environmental safeguards), and an agroforestry specialist. These positions will have been recruited through a competitive process or will have been filled by civil servants seconded for this purpose. The PIU will prepare each year an annual work plan and budget and submit them to the World Bank for approval. It will submit a project report to the World Bank each calendar quarter not later than 45 days after the end of the period covered. The PIU will ensure that interim unaudited financial reports are furnished to the World Bank not later than 45 days after the end of each calendar quarter. Audited financial statements for each fiscal year of the Government shall be submitted not later than six months after the period covered. The PIU will also submit a completion report to the World Bank not later than six months after the project closing date.

107. **To support and monitor project activities, the PIU will rely on the decentralized structures of the MEF.** A DDEF is located in each of the two departments. The two DDEFs coordinate 16 *Brigades Forestières*, which are small outposts located across the departments and will be able to further strengthen the project's permanent field presence.[49] Supported by project funds, the DDEFs and the *Brigades Forestières* will make staff and equipment available for regular site visits and also support the PIU's supervision role logistically. A focal point in each DDEF will act as liaison person in the field between the PIU, the DDEF, the Brigades Forestières, the service providers, the FDLs, the CGDCs, and the GIECs. They will facilitate the work of the service providers implementing project activities through technical, logistical, and administrative support. They will also support beneficiaries directly, for example by providing technical advice and facilitating the submission of complaints to the GRM. Field M&E will be carried out regularly by the PIU to coordinate and guide these structures as effectively as possible.

108. **All investment activities and technical assistance, particularly the support for activities with IPLCs, will be provided through service providers.** These will be contracted through competitive processes. Based on the experience from PFDE's implementation, it is expected that the service providers for community-level activities will most likely be local NGOs, though the process will also be open to private sector actors and international governmental and nongovernmental organizations. The project's procurement strategy has bundled several activities to packages to allow for synergies through larger contracts. The service providers will support agroforestry, value chain, and PES activities as well as capacity building for individuals, groups (for example, producer associations), and local institutions such as CGDCs. Also, the preparation of proposals for activities with

[49] The *Brigades Forestières* are in the following locations: Souanke, Sembe, Tala-Tala, Mokeko, Kabo, Pikounda, Liranga, Bouanela, Toukoulaka, Epena, Doungou, Enyelle, Berandjokou, Dzanga, Betou, and Enyelle.

IPLCs will be accompanied by these service providers as described in Section II.B. Service providers will report to the PIU according to requirements that will be defined in the PIM in line with best practices. Figure 3 visualizes the implementation arrangements of the PANC.

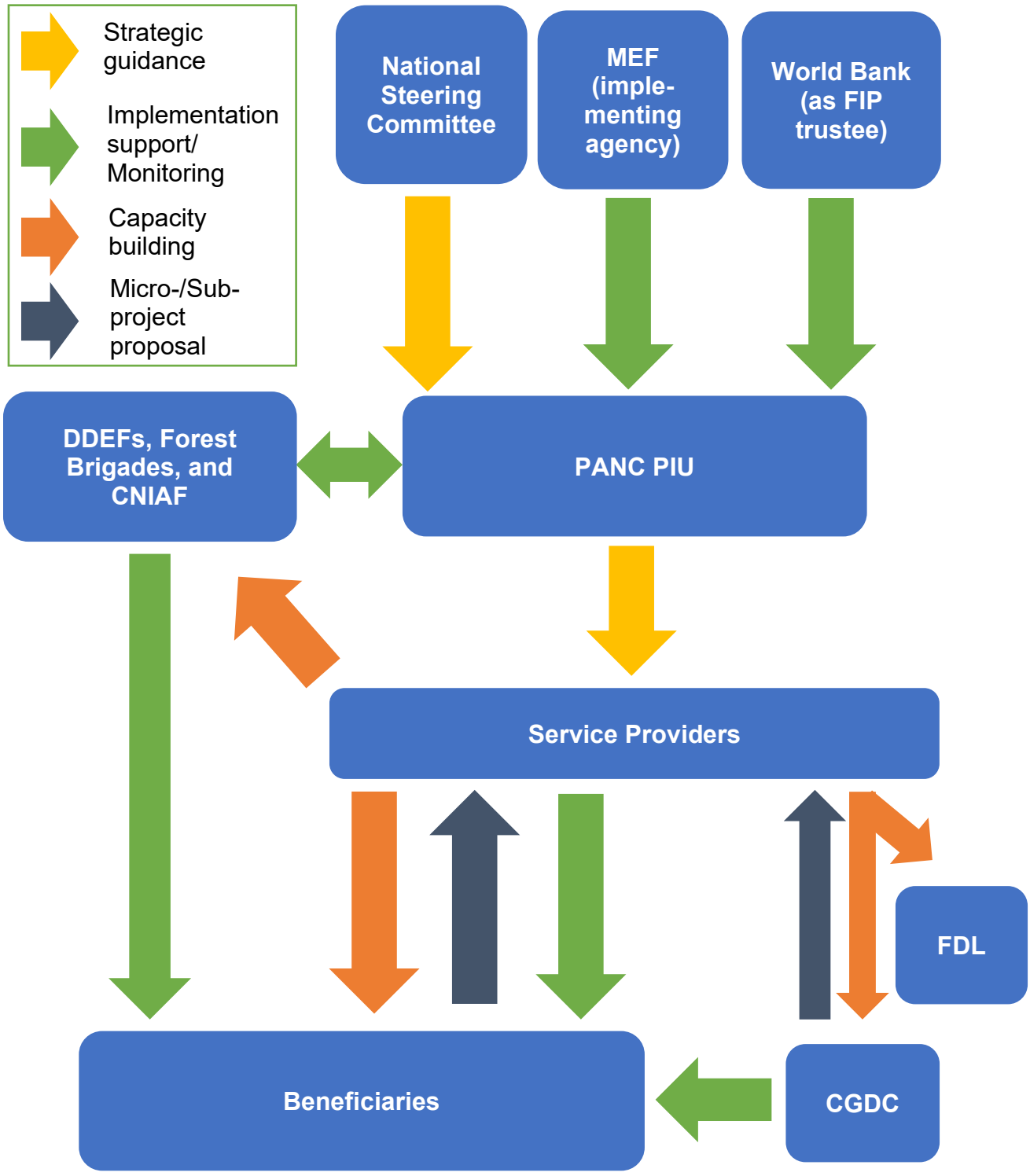
109. **A PIM will be prepared.** It will lay out the implementation arrangements, including (a) institutional coordination and day-to-day execution of the project; (b) budgeting, disbursement, and FM; (c) procurement arrangements; (d) monitoring, evaluation, reporting, and communication arrangements; (e) environmental and social safeguard guidelines; (f) the GRM; (g) personal data collection and processing arrangements in accordance with applicable national law and good international practice; (h) beneficiary selection, implementation, payment arrangements, and M&E for all activities; (i) measures to mitigate child labor risks; and (j) any other administrative, financial, technical, and organizational arrangements and procedures needed. The PIM will be a living document that is expected to be updated periodically to refine project procedures. It will draw from relevant sections of the PIM of PFDE, PDAC, and Lisungi.

110. **A project preparation grant of US$425,000 was provided to the Government to prepare the project.** The grant was allocated to the PFDE PIU, which has been using it particularly to contract studies on project site selection, the cocoa value chain, and land management and to develop the safeguards instruments of the project.

111. **The Government institutions and local institutions involved in implementing the PANC typically suffer from low management capacity, underfunding, and personnel issues.** The project seeks to build capacity among key stakeholders through targeted training. Implementation of the National REDD+ Investment Plan and ERP-SL are expected to contribute to capacity building in parallel with the project's implementation.

112. **The project will seek synergies with the community activities of forest concession holders.** The management unit of each concession is responsible for monitoring the application of the procedures and measures defined in the concession's management plan and the company's operating manual. The units comprise a management team that monitors logging activities and a social team responsible for supporting social development in the SDCs by implementing investments, trainings, and awareness-raising sessions. Though the level of commitment to and capacity for such activities vary widely across concession holders, they can be important partners for activity implementation because they (a) are present in the field on a daily basis; (b) know the social and environmental dynamics of their respective SDCs; and (c) have the means to support and monitor community activities.

Figure 3. Implementation Arrangements for the PANC



B. Results Monitoring and Evaluation Arrangements

113. **The PIU will assume overall responsibility for the M&E of the PDO-level and intermediate results indicators for the project.** It will assure data collection and analysis. An M&E system for geolocated activities will be set up, mainly based on information from communities or community representatives, collected in collaboration with service providers. The approach of the Geo-Enabling Initiative for Monitoring and Supervision (GEMS) for using digital data is expected to be applied to enhance implementation support and monitoring. For field monitoring, the KoBoToolbox software will be used to collect and process data relating to the location of IPLC-level activities. This mechanism, possibly supported by others, should also help strengthen the synergies and complementarity of interventions with those of other World Bank-financed projects and other development partners, such as AFD, FAO, and CAFI.

114. **Agroforest parcels and areas under conservation will be delineated and georeferenced before providing support to farmers.** Regular monitoring will be undertaken by DDEFs and service providers, ideally in collaboration with forest concession management units. The results from this monitoring will be reported to the PIU. The PIU will perform a sample verification at least twice a year. Independent third-party monitoring will be conducted annually.

115. **Data will be disaggregated by gender and will consider vulnerable groups.** During implementation, the reasons for low productivity of the high proportion of women working in the agricultural sector (70 percent) will be explored in the project area and solutions will be sought. Women are said to be half as productive as men because they face additional obstacles in accessing land and devote more of their time to raising children and doing domestic chores.

C. Sustainability

116. **The project is designed to replace behaviors that lead to deforestation and forest degradation with those that derive value from managing the standing forest in a sustainable manner.** Agroforestry is a long-term investment in a plot of land that could otherwise be dedicated to alternative activities that necessitate clearing forest. The planting of cocoa and other tree crops is economically viable provided that farmers can find a regular market for their products, which is why the project dedicates a subcomponent to supporting local value chains. Cultivating these links will be key to keeping project gains sustainable. Encouraging the growth of producer groups that can pool resources and carry more weight in negotiations with buyers and traders, is an additional attempt to invest farmers in the agroforestry schemes that the project promotes. To prevent the project from 'becoming a victim of its own success' and causing a rebound effect that perversely incentivizes deforestation of natural forests for replacement with agroforestry mosaics, the project puts in place an innovative payment mechanism for forest conservation.

117. **The project also dedicates significant efforts to institutional capacity building in the public, private, and non-profit sectors.** All three sectors contribute to creating the proper enabling environment for commercializing agroforestry and NTFPs. The project aims to build sufficient local capacity in terms of service provision to permit the public and non-profit sectors to offer useful, informed, and forward-looking technical support to farmer producers who may lack the knowledge to make evidence-based decisions that reflect the realities of market demands and conditions. Given the capacity constraints in the remote departments of Sangha and Likouala, the project seeks to affect incremental change by forging links between the public sector, technical and financial service providers, and the population that can eventually catalyze a self-sustaining cycle that leverages local assets

(knowhow, finance, and products) and connects them to regional, national, and international supply and value chains.

118. **The project seeks to contribute to sustainable agroforestry and forest management by piloting mechanisms that would allow channeling carbon finance, including from the FCPF project, to local beneficiaries.** This is particularly the case for the agroforestry microprojects, the value chain microprojects, and the PES activities, which emphasize the role that IPLCs can play in generating emission reductions in Sangha and Likouala. Lessons learned and best practices from the implementation of these activities will help ensure that carbon benefits reach local beneficiaries. The pilot will allow Congo to better incorporate IPLCs into emission-reducing activities and to incentivize forest-dependent populations to conserve their forest areas for monetary and non-monetary benefits, eventually supported by international carbon markets.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

(a) Technical Analysis

119. **Project design incorporates international good practices and adjusts them to country conditions and local capacity.** These adjustments were made based on stakeholder consultations and experience from previous World Bank operations in Congo. The support to local beneficiaries by leveraging public institutions and service providers, with involvement of NGOs, follows good practices in participatory forest management.

120. **The value chain microproject scheme will follow a competitive process supported by technical assistance to (potential) beneficiaries.** Proposals will be selected based on simple criteria that take into account feasibility as well as social and environmental benefits.

121. **For households, the project introduces cash transfers as opposed to payments in-kind for environmental services rendered.** Cash transfers will be ex post payments, conditional on the participant having completed satisfactorily the agreed activity, that is, conserving existing forest. Because payments are made ex post, there is no danger that the payment will be diverted toward non-project activities. If the intended activities are not completed, there is no payment. In-kind payments at the household level would create important logistical challenges for the project, which would have to procure and then distribute a wide range of products.[50]

122. **The use of new technologies will be explored to facilitate implementation support and the monitoring of project activities.** Congo has been an innovator in the use of global positioning systems (GPS) by IPs to demarcate areas within concessions to be excluded from timber harvesting. Options for technology-based monitoring will be explored to link project activities to the requirements of performance-based payment systems, particularly through carbon finance. Mobile money transfer and mobile banking, with their greater ability to reach people in remote areas, will be leveraged.

[50] It is also worth noting that an ex post payment that is in kind rather than in cash would generally be seen by recipients as being of lower value and so create weaker incentives for project participation, everything else equal. If an in-kind payment is made, it must generally be of higher value than the cash equivalent to provide an equivalent incentive. This could be avoided by having the intended recipient choose the nature of the in-kind payment, but this would pose formidable procurement challenges.

Economic and Financial Analysis

123. **The project is likely to realize significant economic benefits resulting from reduced emissions from deforestation and forest degradation, increased carbon sequestration, and diversification of income streams for populations residing within forest concessions in Northern Congo.** The project's investments will generate a combination of immediate, medium-term, and long-term benefits given the potential of continued development outcomes beyond its lifetime. Moreover, the project follows an inclusive approach, as evidenced by the activities fostering increased participation of underrepresented and excluded groups, including women and vulnerable populations. Within the broader development context, expected benefits attributed to the project include, but are not limited to, increased productivity and crop resilience, reduction of GHG emissions, improved national food security, biodiversity conservation, increased household income, and poverty reduction. These benefit streams will significantly contribute toward the achievement of Congo's development objectives.

124. **The overall project benefits are estimated based on the potential benefits associated with agroforestry and improved natural resources management.** Project benefits are anticipated from successful implementation of the subcomponents that will finance climate-smart agroforestry activities and sustainable forest resource management practices. The analysis estimates crop yields for crop-based subsistence agroforestry (cultivation of cassava, beans, and fruit trees) and cocoa agroforestry (cocoa, bananas, fruit trees). The estimates also capture expected emission reductions and the corresponding climate benefits based on high and low carbon pricing as outlined in the World Bank's 2017 Guidance Note on the Shadow Price of Carbon in economic Analysis.[51]

125. **The cost-benefit analysis indicates that the project will derive positive returns.** Given the unpredictable nature of the agriculture sector, the analysis considers low-, moderate-, and high-yield scenarios at 6 percent, 10 percent, and 20 percent discount rates. The simulation generated positive results at a 6 percent discount rate under the moderate yield scenario. Estimates without climate benefits show that the net present value (NPV) is US$39.3 million while the benefit-cost ratio is assessed at 4.01 over a 20-year horizon (see Annex 2). The project benefits cover project costs in all scenarios, implying that the overall benefits including non-quantifiable benefits are likely to be much larger than the costs. Agroforestry and conservation activities attributed to PES are expected to generate emission reductions and thus climate benefits. Assuming high carbon prices, the simulation generated a positive NPV of US$70.5 million and a benefit-cost (B/C) ratio of 6.4 at the 6 percent discount rate. Total project benefits including low-price carbon benefits resulted in an NPV of US$54.2 million with a B/C ratio of 5.15 when economic benefits from a moderate yield scenario are discounted at 6 percent.

126. **Public sector support is justified for this project.** The project will improve livelihoods of the beneficiaries and contribute toward Congo's development outcomes. The expected benefits in terms of biodiversity conservation and climate change mitigation are considered global public goods.

B. Fiduciary

127. **FM, such as technical project management, will be led by the PIU that will be established under the MEF.** During implementation, FM and procurement assessments of this PIU will be carried out, particularly to ensure that qualified fiduciary staff have been recruited, an adequate PIM as well as project software are in place and functioning well, and fiduciary staff have been trained in the use of these tools and in World Bank fiduciary procedures. The assessment will ensure that the PIU's fiduciary cell will be operating in accordance with the World

[51] See: http://pubdocs.worldbank.org/en/911381516303509498/2017-Shadow-Price-of-Carbon-Guidance-Note-FINAL-CLEARED.pdf.

Bank Directive on the Financial Management Manual for World Bank Investment Project Financing Operations and the World Bank Guidance Reference Material on Financial Management in World Bank Investment Project Financing Operations. Arrangements have to ensure that the PIU (a) uses project funds only for the intended purposes and in an efficient and economical way; (b) prepares accurate and reliable accounts as well as timely periodic financial reports; (c) safeguards assets of the project; and (d) has acceptable auditing arrangements.

128. **During preparation, the World Bank team determined that for the FM arrangements of the new PIU to be acceptable, the following requirements will need to be met:** (a) opening a Designated Account in a financial institution acceptable to the World Bank; (b) agreeing with the World Bank on the terms of reference (ToRs) for the recruitment of an experienced FM specialist and subsequent recruitment; (c) agreeing with the World Bank on minimal financial and accounting procedures to be included in the PIM that will consider the grant and loan specificities, as well as the World Bank's FM guidelines; (d) agreeing with the World Bank on the ToRs for the recruitment of an external professional practice firm to implement the internal audit function and subsequent recruitment; and (e) agreeing with the World Bank on the ToRs for the recruitment of an external auditor and subsequent recruitment. The aforementioned FM assessment will review whether these requirements have been fulfilled.

129. **Procurement for the project will be carried out in accordance with the World Bank's Procurement Regulations for IPF Borrowers for Goods, Works, Non-Consulting and Consulting Services, 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 Anticorruption 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) system to plan, record, and track all procurement transactions. Procurement will be carried out using the World Bank's Standard Bidding Documents (SBD) or Standard Request for Proposals respectively for all international competitive bidding (ICB) for goods and all recruitment of international consultants. For national competitive bidding (NCB), 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.

130. **Major procurement activities are expected to include the contracting of service providers (particularly NGOs) that will implement the agroforestry activities, value chain microprojects, and the PES scheme with the beneficiaries.** The project contains numerous activities that will necessitate several small- and medium-size contracts with service providers, a design which requires robust procurement capacity and close supervision. A significant amount of money will be spent on many smaller items, such as seedlings, which presents an opportunity for funds to be diverted if not followed closely. The Borrower prepared a Project Procurement Strategy for Development (PPSD) and a Procurement Plan during project preparation, which have both been approved by the World Bank. The PPSD provides the basis and justification for procurement decisions, including the approach to market and selection methods. 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 Procurement Plan.

131. **Procurement supervision.** In addition to the prior review and the implementation support missions carried out by the World Bank, post review of contracts will be scheduled once a year for procurement activities

subject to post review. The post review will be carried out based on the information and documentation filed in STEP and project site visits.

132. **Fiduciary risk, before considering mitigation measures, is rated High.** Given (a) the country context and associated risk; (b) the fact that this project will be implemented under the World Bank's New Procurement Framework of which the new PIU may have limited knowledge; and (c) the importance of adequate contract management capacity of the new PIU, the project's FM and procurement risks before the mitigation measures is rated High. The risk can be considered Substantial provided that the mitigation measures contained in the corresponding action plan are implemented (see Table 1).

Table 1. Action Plan on Mitigation Measures for Procurement Risk

Risks	Mitigation Measures
Country context and associated risk (fraud and corruption and procurement noncompliance)	(a) Mandatory use of STEP as daily tool to manage procurement activities (b) Update of the procurement procedures and arrangements for the project in the PIM
Limited knowledge of the World Bank's Procurement Framework	Recruit a qualified and experienced procurement specialist as part of the new PIU based on the ToRs agreed with and the selection process approved by the World Bank.
Weak contract management capacity	Develop a contract management system to ensure that all contracts under the project are effectively and efficiently managed.

133. **Disbursement categories.** The total project amount (US$15.6 million) will be allocated as follows across disbursement categories: (a) goods, works, non-consulting services and consulting services, training and operating costs: US$10.3 million; (b) agroforestry, market gardening, nursery, and value chain microprojects, and PES cash transfers and subprojects: US$5.3 million; and (c) CERC emergency expenditures: US$0.

C. Environmental and Social Safeguards

134. **The project is being implemented under the safeguards policies.** The project is not likely to have significant adverse environmental or social impacts. Potential adverse impacts are expected to be site-specific and manageable. The project is therefore classified as Environmental Assessment Category B. This classification considers the capacity of the implementing entities, the sector-specific risks and other stakeholders involved, and the previous experience in managing related World Bank projects under the safeguards policies (including the Forest and Economic Diversification Project; P124085/P158604).

135. **The PANC was developed in alignment with the National REDD+ Strategy and the Strategic Environmental and Social Assessment (SESA).** SESA was conducted in an iterative process with participation from civil society and other stakeholders. Furthermore, Congo has defined its principles, criteria, and indicators for social and environmental aspects of REDD+ (PCI-REDD+), which are in compliance with the Cancún Safeguards, World Bank Operational Policies, and Forest Stewardship Council principles and indicators. The consultations on the PCI-REDD+ were also held in the project area and included capacity-building activities throughout the country in local languages with IPLC representatives, civil society, departmental authorities, and the private sector. The PANC will apply the safeguards instruments that have been developed during preparation and are in line with the national standards. All project activities will also need to comply with national COVID-19 prevention measures, particularly the health authorities' sanitary guidance to prevent the spread of the disease.

136. **To help identify and manage any potential adverse impacts, the project triggers the following safeguards policies:** Environmental Assessment (OP/BP OP 4.01), Natural Habitats (OP/BP 4.04), Forests (OP/BP 4.36), Pest Management (OP 4.09), Indigenous Peoples (OP/BP 4.10), Physical Cultural Resources (OP/BP 4.11), and Involuntary Resettlement (OP/BP 4.12). An Environmental and Social Management Framework (ESMF), an Indigenous Peoples Planning Framework (IPPF), a Resettlement Policy Framework (RPF), and a Pest Management Plan (PMP) have been developed, cleared, and disclosed in-country and on the World Bank's website.[52] These frameworks will be used by the Borrower to screen project activities and help prepare Environmental and Social Management Plans, Resettlement Action Plans, and Indigenous Peoples Plans (IPPs) to avoid, minimize, and mitigate adverse impacts. The frameworks define the guidelines to be adopted, specific studies that should be conducted, the compensation to be provided, the procedures to allow people to appeal against the proposed activities, and the procedures for managing such appeals. They also describe the GRM and the M&E process needed to verify the sound implementation of mitigation measures.

137. **The PIU will be responsible for the implementation and monitoring of safeguards, ensuring compliance with all safeguards requirements.** That includes for the PIU to assist implementers, particularly service providers, in conducting environmental and social impact assessments and developing specific safeguards plans as required. The PIU will be responsible that implementers comply with a code of conduct. Implementers will have to ensure the same regarding their contractors. The PIU will compile and analyze safeguards data, prepare safeguards monitoring reports, and incorporate feedback as required. It will assess safeguards risks (including GBV and sexual exploitation, abuse, and harassment) and develop and implement safeguards plans to address them. It will regularly conduct field missions for verification purposes, together with IPLC and civil society representatives. The information provided in the PIU's reports will be made publicly available and communicated through the national Safeguards Information System. Given the remoteness of the project area, the monitoring of environmental and social risks and impacts will be enhanced through remote supervision tools, particularly using the aforementioned KoBoToolbox. To guarantee an efficient environmental and social management system, the PIU will recruit and maintain an environmental specialist and a social development specialist with experience in GBV. These specialists will participate in capacity-building activities offered by the World Bank. The project will also ensure capacity building for all other stakeholders involved in monitoring safeguards implementation.

138. **Environmental and social risk is rated Substantial due to the presence of particularly vulnerable populations, including IPs and refugees.** Still, developed in close cooperation with key stakeholders, the PANC is designed to mitigate environmental and social risks in the forest sector. It supports sustainable forest management, climate-smart agricultural practices, and benefit sharing and strengthens the voice of IPLCs, women, and refugees.

139. **Given its emphasis on reducing the conversion of forest to agricultural land, the PANC is expected to have positive environmental and social impacts.** These include habitat and biodiversity conservation and the support of PES schemes that are expected to reduce erosion and maintain soil fertility, among other benefits. Environmental risks will be managed through the relevant frameworks listed above. The project seeks to improve the livelihoods of local communities and the most underrepresented, disadvantaged, and vulnerable groups. The project is expected to reduce poverty and unemployment generally and specifically among these groups.

[52] The instruments were disclosed on February 25, 2021. Government disclosure can be found at: http://www.mefdd.cg/publications/. World Bank disclosure can be found at: https://projects.worldbank.org/en/projects-operations/document-detail/P166189.

140. **Implementing an agroforestry project has inherent social risks that require prudent management.** This is particularly the case with regard to land tenure and the rights to forest resources. Also, there is potential for social discontent if stakeholders are not satisfied with the distribution of project benefits. This could result from disagreement over the allocation of benefits, misunderstandings regarding the purpose of the project (and particularly the PES), or failure to receive payments within the agreed time period. The safeguards instruments were therefore developed in an inclusive, participatory process to identify social risks and develop mitigation measures. Resettlement risks have been identified and an RPF has been prepared. As Sangha and Likouala are among the departments with the largest number of IPs, an IPPF was prepared to screen activities and guide the preparation of plans that will ensure that project activities will benefit IPs and not negatively affect their rights or culture. The project will coordinate its refugee-related activities with UNHCR to ensure that the project benefits refugees as intended and minimizes potential negative impacts on refugee populations.

141. **Although child labor is prohibited by national law,[53] reports indicate that children under 16 years have been engaged in labor, with indigenous children and children from rural areas being the most affected as they are likely to be subjected to the worst forms of child labor.**[54] The International Labour Organization estimates that close to 85 percent of children in rural regions with IPs are working for very low wages.[55] Indigenous children and children born to foreign parents are disproportionately affected by high rates of child labor. Work performed by children in the agriculture sector commonly involves long hours, physically arduous tasks, carrying heavy loads of firewood, handling of dangerous tools, and a high risk of exposure to occupational health hazards. Children are often involved in the production of manioc, cocoa, peanuts, corn, plantains, cassava, potatoes, and sugarcane, as well as in catching and smoking fish. To mitigate the risk of child labor and to contribute to strengthening the rights of children, the project will include adequate measures in the PIM and safeguards plans, with the goal of ensuring that children under 16 years are not engaged as workers under the project, in accordance with the national Labor and Child Protection Code.[56] Children under the age of 18 years will not be allowed to engage in hazardous work, in line with the code and the safeguards policies. The PIM will establish an age verification system (for example, through a nationally recognized ID card or local committees that could be set up for this purpose) to ensure that children are not employed or otherwise engaged in project activities. To be eligible for project support, beneficiaries will commit to a code of conduct that will include the prohibition of child labor. This document will be annexed to the contractual document between the beneficiaries and the project. Noncompliance with the code will lead to exclusion from the project. The project will use culturally appropriate approaches to create awareness among beneficiaries on the impacts of child labor on the health and education of children. The project will also ensure that all contractors follow a code of conduct that prohibits child labor.

142. **The project includes additional activities that are expected to reduce social risk.** To better manage land tenure challenges in the target area, the project will carry out a study on the land dynamics in the Community Development Zones. The study will recommend measures that the project can implement to protect the land rights particularly of IPs. The IPPs will also set out measures to ensure that (a) IPs affected by the project benefit adequately from its activities and receive culturally appropriate social and economic benefits, and that (b) any potential adverse impacts of the project on IPs are avoided, minimized, mitigated, or compensated for. The IPPs will be submitted to the World Bank during implementation. The project will also develop a GBV assessment and

[53] Article 116 of the Labor Code (26).
[54] UNHCR: https://www.refworld.org/pdfid/57f4e8552.pdf. Specific data breaking down the prevalence of child labor across various sectors and regions are not available.
[55] CULTURAL SURVIVAL (2018) 'Observations on the State of Indigenous Human Rights in Congo Prepared for the 31st Session of the United Nations Human Rights Council' in Cultural Survival Online.
[56] Order 2224 of 1953; Article 68 of the Child Protection Code (5, 27).

a GBV Action Plan to determine (a) which protocols and mechanisms the project needs to put in place to address GBV risks and (b) how to address any GBV incidents that may arise.

V. GRIEVANCE REDRESS SERVICES

143. **The PIU will establish a project-level GRM jointly with the DGM.** The joint mechanism will allow the two projects to work through the same focal points in the departments of Sangha and Likouala. All focal points, probably one per forest concession, will be trained to use the KoboToolbox as the main tool for reporting grievances to the PIUs of the two projects, building on the relevant experience from PFDE. The mechanism will be in line with national legislation and the World Bank's safeguards policies and adapted to the culture of IPLCs. GRM implementation will be the responsibility of the PIU and the other implementing entities. The PIU must ensure that issues like GBV are integrated clearly and according to the scale of risks. The GRM will be open to everyone, including all project beneficiaries, both direct and indirect, in the entire project area. The PIU's safeguards staff will monitor the effective functioning of the GRM and report to the World Bank team periodically and in case of particularly important developments. The PIU shall develop and implement a suitable communication strategy to support safeguards implementation. The strategy shall be targeted to different beneficiaries, particularly IPs and other vulnerable groups.

144. **Communities and individuals who believe that they are adversely affected by a World Bank supported project may freely submit complaints to the project-level GRM or the Bank's Grievance Redress Service (GRS).** The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project-affected communities and individuals may submit their complaint to the Bank's independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of non-compliance of the Bank with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the Bank's attention and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the GRS, please visit www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

145. **The overall risk rating of the project is Substantial.** The rating is based on the nine risk categories summarized in the datasheet. The main risk factors are related to the fiduciary and social risks described above as well as the technical design and institutional capacity risks outlined in the following paragraphs.

146. **Technical design risk is rated Substantial.** There is a danger that improving productivity and profitability of agricultural practices promotes more rather than less deforestation: by making each hectare under agricultural use more profitable, an incentive is created to dedicate more hectares to agricultural use, leading to land use change from natural forest to tree crop. The project will attenuate this risk by generally conditioning continued participation, and hence the receipt of inputs, services, and technical assistance, on not deforesting. Conversely, a second risk is that beneficiaries may maintain the recommended agroforestry practices only as long as they receive project support, and that the long-term adoption of these practices may be jeopardized if beneficiaries experience difficulties, especially if harvest results fail to meet expectations. In addition, if activities do not demonstrate success within a reasonable time frame, beneficiaries might feel discouraged and resort to traditional slash-and-burn agriculture. The project posits that gains from agroforestry will be evident to farmers and sufficient to disincentivize slash-and-burn agriculture. Still, as accompanying measures to further mitigate this

risk, the project will (a) strengthen the capacity of forestry and agriculture officials to work with local populations to discourage itinerant agriculture and (b) demonstrate PES as a viable conservation mechanism in Congo that can be used to support smallholders in maintaining natural forest cover. Another technical risk is that while some project activities may be vulnerable to climate change impacts, the lack of data and the difficulty in modelling atmospheric processes in the region make climate projections, particularly for precipitation, very uncertain. Given the reliance of the local population on agriculture, it is assumed that the project will reduce climate vulnerability by diversifying crops and livelihood options.

147. **Risks related to institutional capacity for implementation and sustainability are rated Substantial.** The MEF and its agencies suffer from low management capacity, with key units relevant to PANC implementation being underfunded and understaffed. Low capacity is also an issue for many local service providers and decentralized government institutions. The project will therefore not only support program implementation but also build capacity among key stakeholders, so that the functions fulfilled by the PIU and service providers can be progressively integrated into the local, provincial, and national institutions in the longer term. The implementation of the National REDD+ Investment Plan and ERP-SL are also expected to contribute to closing capacity gaps over time. To ensure that service providers have sufficient capacity themselves, activities have been grouped into larger procurement packages to attract experienced providers with adequate management capacity that are expected to partner with local NGOs for implementing the activities jointly.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Congo, Republic of
Northern Congo Agroforestry Project

Project Development Objectives(s)

To strengthen climate-smart agriculture and conservation practices in Community Development Zones in the departments of Sangha and Likouala

Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
Climate-smart agriculture in Community Development Zones strengthened			
Area under climate-smart agriculture management practices (Hectare(Ha))		0.00	3,330.00
Households that have adopted climate-smart agriculture practices (Number)		0.00	1,300.00
of which led by women (Percentage)		0.00	20.00
of which indigenous peoples' households (Percentage)		0.00	20.00
Conservation practices in Community Development Zones strengthened			
Area of forest preserved (Hectare(Ha))		0.00	5,780.00
Net greenhouse gas emissions mitigated (Metric ton)		0.00	4,000,000.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	End Target
Involving IPLCs in climate-smart agroforestry and sustainable forest resource management			
Farmers satisfied with the adoption of climate-smart agroforestry practices (Percentage)		0.00	60.00
Women satisfied (Percentage)		0.00	60.00
Indigenous people satisfied (Percentage)		0.00	60.00
Beneficiaries trained in good agroforestry practices (Number)		0.00	17,200.00
Female participants (Percentage)		0.00	30.00
Participants from underrepresented or vulnerable groups (indigenous people, people with disabilities, youth) (Percentage)		0.00	30.00
Nursery facilities established or rehabilitated by the project (Number)		0.00	8.00
Farmers cultivating improved varieties of vegetables (Number)		0.00	500.00
of whom refugees or asylum seekers (Percentage)		0.00	70.00
of whom women (Percentage)		0.00	50.00
of whom youth (Percentage)		0.00	50.00
Producer groups benefiting from value chain microprojects (Number)		0.00	160.00
of which common economic interest groups (GIECs) (Number)		0.00	50.00
of which cooperatives (Number)		0.00	30.00
of which other producer groups (Number)		0.00	80.00
of which led by women (Percentage)		0.00	30.00
Civil servants of the decentralized forest administration with access to up-to-date information and data (as share of the civil servants working in the DDEF connected to internet)		0.00	100.00

Indicator Name	PBC	Baseline	End Target
(Percentage)			
Paying for environmental services in Sangha and Likouala			
Payments to households for environmental services (Amount(USD))		0.00	984,000.00
Infrastructures built for the benefit of communities for payment of environmental services (Number)		0.00	25.00
Local institutions benefiting from capacity building (Number)		0.00	54.00
of which Conseils de concertation (of the Local Development Funds) (Number)		0.00	10.00
of which CGDC (Number)		0.00	20.00
of which DDEF (Number)		0.00	2.00
of which DDA (Number)		0.00	6.00
of which, Brigades Forestieres and Secteurs Agricoles (Number)		0.00	16.00
Number of SDCs with a drafted and validated simple management plan (Number)		9.00	17.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Area under climate-smart agriculture management practices	A plot of land will be considered as having achieved the indicator if it meets a threshold number	Annual	Monitoring and evaluation reports	Field survey and visual assessment of the plots	DDEF agents and agriculture extension agents

	of climate-smart agriculture practices, as defined by FAO, and as indicated in the Project Implementation Manual). The target value is calculated based on unit cost per hectare under agroforestry (AF) and unit cost per person for gardening and is limited by the project's budgetary constraints. Costs over the project's lifetime (5 years) 1 ha of cocoa-banana-fruiting tree AF = $1,005 (based on experience from PFDE and other projects) 1 ha of subsistence-type AF is $861 The amount of budget available for cocoa AF is $1,134,645.00; for subsistence AF it is $1,852,011.00. This leads to the estimates of 1,129 ha of cocoa AF and 2,151 ha of subsistence AF				

	1 person undertaking market gardening = approximately $1,500, or $15,000 ha (to calculate hectares occupied, the project assumes an average of 10 people occupying 1 ha of space (based on interviews with FAO). The budget dedicated to this activity is $750,000, for a total of 50 hectares. Thus, there is a total of 1,129ha + 2,151 ha + 50 ha = 3,380 ha				
Households that have adopted climate-smart agriculture practices	The number of households that have received support from the project and adopted climate-smart agriculture practices. The target of 1,300 households is calculated as the sum of households supported through cocoa agroforestry, subsistence agroforestry, and market gardening (1,709 households), multiplied by 0.75 due to the expectation that not all	Mid-term; end of project	Monitoring and evaluation reports	Field survey and visual assessment of the plotsMonitoring and evaluation reports	DDEF agents and agriculture extension agents

	beneficiaries might fully adopt the new approach, and then rounded from 1,282 to 1,300 for ease of computing.				
of which led by women					
of which indigenous peoples' households					
Area of forest preserved	Hectares of land that are forested and set aside for conservation by individuals and communities in exchange for payments for environmental services	Annual	Implementation reports; GIS	Verification of zero to very low levels of degradation using remote sensing and periodic in situ checks	DDEF or third party service provider; CNIAF for remote sensing
Net greenhouse gas emissions mitigated	Net carbon emissions avoided and/or sequestered owing directly to project activities	Annual	Satellite data with calculation conducted using EX-ACT tool	Areas of deforestation and forest degradation estimated through a stratified sampling approach with visual interpretation by experts of a representative number of sampling units located within different strata. The forest cover change reference condition for each sampling unit will be manually interpreted using a combination of medium	CNIAF

				resolution (e.g. Landsat 7 and 8), high resolution (e.g. Sentinel 2), and very high-resolution imagery (e.g. World View, SPOT 6 & 7, or PLANET). The stratification will be based on forest cover change maps produced by CNIAF's MRV team with a semi-automatized tool that is currently being designed. To quantify the annual GHG emissions in the monitoring period, areas of deforestation will be estimated and the same Emission Factors used as for the REL. The estimated GHG emissions will be subtracted from the REL to determine the ERs. Uncertainty of ERs will be quantified at a 90 percent confidence level using Monte Carlo methods as required by the FCPF	

				Methodological Framework (Indicator 9.1).	

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Farmers satisfied with the adoption of climate-smart agroforestry practices	Positive responses from project beneficiaries as to the effects resulting from the application of climate-smart technologies	Mid-term; end of project	Beneficiaries	Satisfaction survey relating to service delivery	M&E specialist; third party service provider (e.g. NGO, consultant, etc.)
Women satisfied	Positive responses from beneficiaries identifying as women				
Indigenous people satisfied	Positive responses from beneficiaries identifying as belonging to a group defined by law or in the national census as indigenous				
Beneficiaries trained in good agroforestry practices	Number of people who benefit from training activities of the project, including on composting,pest management, seed management, and other relevant issues. The number	Quarterly	Implementation reports	Calculations based on participants lists	DDA, DDEF, and third party service providers

	is calculated based on the available budget and includes the participants of the trainings (4,000) and their household members. The majority of these beneficiaries will also receive support from the cocoa and subsistence agroforestry schemes.				
Female participants	Participants identifying as women. Note that this supplement indicator refers only to the participants trained, not their household dependents.				
Participants from underrepresented or vulnerable groups (indigenous people, people with disabilities, youth)	Beneficiaries identifying as belonging to an indigenous population and participants with a physical or mental disability (including albinism) and participants belonging to the category of youth (being under the age of 30). Note that this supplement indicator refers only to the participants trained, not their household dependents.				
Nursery facilities established or rehabilitated by the project	Completion of the construction of a new nursery or completion of	Quarterly	Implementation reports		Third party service provider

	rehabilitation of an existing nursery				
Farmers cultivating improved varieties of vegetables	Beneficiaries cultivating a garden that incorporates improved vegetable varieties, estimated based on the assumption that the project will finance 50 hectares of market gardens with each hectare benefiting 10 farmers	Annual	Implementation report		Third party service provider
of whom refugees or asylum seekers					
of whom women					
of whom youth					
Producer groups benefiting from value chain microprojects	Common interest economic groups should be formally registered under Congolese law. Cooperatives should be formally registered under Congolese law. Producer groups should maintain a formal governance structure (e.g. President, Treasurer, Secretary) or have written by-laws.	Quarterly	Implementation reports		PIU M&E Specialist; third party service providers
of which common economic interest groups (GIECs)					
of which cooperatives					
of which other producer groups					

of which led by women					
Civil servants of the decentralized forest administration with access to up-to-date information and data (as share of the civil servants working in the DDEF connected to internet)	Any agent working in a decentralized DDEF office with access to internet provided by the project	Annual	Implementation reports		DDEF
Payments to households for environmental services	Payments transferred to beneficiaries that met the conditions of the PES scheme	Annual	Implementation reports		Third party service provider
Infrastructures built for the benefit of communities for payment of environmental services	Community infrastructures are expected to include, for example, drinking water systems, processing units for agricultural products, warehouses, and nurseries.	Annual	Implementation reports		Departmental authorities
Local institutions benefiting from capacity building	Any local institution, such as an FDL or CGDC, having been established or supported with training or other technical assistance	Quarterly	Implementation reports		Third party service provider
of which Conseils de concertation (of the Local Development Funds)					
of which CGDC					
of which DDEF					
of which DDA					
of which, Brigades Forestieres and Secteurs Agricoles					

Number of SDCs with a drafted and validated simple management plan		Annual	Implementation reports	Technical assistance	Third party service providers (e.g. NGO, consultant)

ANNEX 1: Examples of Value Chain Activities Financed through Microprojects for Producer Groups

1. **Connecting producers and sellers.** The marketing of agricultural products is a major hurdle in the project area. The project seeks to improve the flow of products through support for buying/selling channels by linking producer groups to traders, wholesalers, transporters, and sellers in the markets. Activities will also include training on marketing and commercialization (negotiation, budgeting, accounting, marketing, and so on) for small producers. Potential for improvement is particularly significant for cocoa. Currently, cocoa traders pass sporadically with a single truck, and producers have little or no influence over the price they are offered. Potential buyers will be made aware of the growing support particularly for cocoa production and be assured of a stable supply. Producers will need to be connected to more than just one buyer so that they can compare prices and make informed decisions about when and to whom to sell. The project will engage in a dialogue with the two state-approved wholesale traders operating in northern Congo: Cofcaco and Diamant. Given that Diamant operates in Likouala and Cofcaco in Sangha, cocoa production purchases may be divided according to farmer location.

2. **Processing.** To increase the incomes of farmers and ensure sustained commercial interest in the agroforestry systems, the project will support processing of their products. The project will support investments in processing units particularly for cocoa and honey, both of which have strong market potential. Upon identifying and vetting possible candidates, the project will train the selected producer groups and provide them with machinery, for example, simple mechanized processing units. For cocoa, the production of locally consumed products like cocoa butter will be supported. The production of honey, which is commonly consumed and produced in Northern Congo, is particularly significant for IPs. The current production is artisanal and often destructive to the environment as it may involve cutting down trees containing honeycombs to collect the honey. At the same time, there is enormous market potential since the sector is disorganized and urban markets are poorly supplied with locally produced honey. The project will modernize the value chain for honey by setting up production and processing units. This may include the construction of buildings to house the production unit, the acquisition of equipment and machinery as well as jars and labels for packaging, and capacity building for individual beekeepers and their associations, including in sales and marketing. The project will seek to support producers in achieving certification of honey production according to international standards.

3. **Storage.** To enable farmers to reduce losses and benefit from periods of higher prices, the project will support communities in renovating existing storage facilities for basic foodstuffs and train farmers in storage techniques.

4. **Transport and logistics**. The ability of farmers in Northern Congo to profitably bring their product to market is weakened by high transport costs due to the bad state of infrastructure in the areas of production, insufficient competition between traders due to limited access to credit, the geographic dispersion of production, inadequate organization of producers, weak purchasing power of households, and insufficient information on markets. To improve market access, the project will organize farmers into groups that pool their products, providing sufficient volume for transporters (who often double as wholesale buyers) to bring the products to market. The banana sector, which is particularly dependent on efficient transport networks due to the volumes produced, will be a focus of this activity. An example for supported investments would be the acquisition of lower-cost transport vehicles, such as motorized three-wheeled carts or motorcycles, to ease transportation bottlenecks and get products from isolated villages to transport hubs.

ANNEX 2: Economic Analysis

1. **This section presents a preliminary analysis of the quantitative economic benefits expected to be generated by the project.** The overall economic feasibility of the project is assessed by comparing the anticipated economic benefits against project costs over 20 years. Owing to time and data constraints, this ex ante economic analysis considers a few quantitative benefits for the simulation, to assess the economic feasibility of the project.

Methodology

2. **NPV and benefit-cost (B/C) ratio are used as criteria to assess the economic feasibility of the project.** For the harmonization of project benefits and costs through calculation of associated present values, 6 percent, 10 percent, and 20 percent discount rates are applied. Given the fact that the agricultural sector is susceptible to weather shocks, potential benefits need to be evaluated under a range of yield scenarios. The analysis considers three different scenarios (high yield, moderate yield, and low yield) while capturing variant composition of the crop mix in both the subsistence crop-based agroforestry system and cocoa-based agroforestry. The economic analysis spans a duration of over 20 years because economic benefits are likely to continue well beyond the project's lifetime. The analysis also accounts for climate benefits relating to emissions reductions associated with agroforestry activities as well as reduction in forest degradation and deforestation.

Project Assumptions

3. **Land area and agroforestry.** The project targets small farmers who own 0–5 ha of land of which a total area of 2,151 hectares is expected to be used for subsistence agroforestry activities while 1,129 hectares are expected to be utilized for cocoa-based agroforestry. Since landowners typically subdivide their land for various agricultural projects upon their own discretion, it is assumed that on average each participating household will set aside 1 hectare of land for project activities. Among the mixed agroforestry products, cassava and bean cultivation area is expected to take up a larger portion of the land (approximately 70 percent) while the rest would be allocated to fruit trees and apiculture. These assumptions are based on the fact that cassava is one of the staple foods in Congo and farming households would endeavor to attain food self-sufficiency. As for cocoa-based agroforestry, about 60 percent of the cultivated land is assumed to be used for cocoa while fruit trees and bananas would be planted on the rest of the land since cocoa trees take 3–5 years to mature.

Results

4. The simulation results show positive NPVs across a range of discount rates and yield variations. Generally, the B/C ratios also depict that benefits are much larger than the costs and result in an NPV of US$39.3 million and a B/C ratio of 4.01 at a discount rate of 6 percent in the moderate scenario, without accounting for climate benefits. The NPVs significantly increase when carbon benefits are considered, resulting in a positive NPV of US$70.5 million and US$54.2 million under the high and low carbon pricing scenarios, respectively.

Table 2.1. Results without Climate Benefits

	High Yield			Moderate Yield			Low Yield		
Discount rates (percent)	6	10	20	6	10	20	6	10	20
NPV, US$, millions	56.5	38.0	17.1	39.3	25.5	10.3	22.0	13.0	3.6
B/C ratio	5.33	4.25	2.88	4.01	3.18	2.14	2.69	2.11	1.39

Table 2.2. Moderate Yield Results Including Climate Benefits

	High Carbon Benefits			Low Carbon Benefits		
Discount rates (percent)	6	10	20	6	10	20
NPV, US$, millions	70.5	48.2	22.6	54.2	36.2	16.0
B/C ratio	6.40	5.12	3.19	5.15	4.10	2.76

ANNEX 3: Institutional Capacity Assessment

	Mandate and Project Role	Strengths	Weaknesses	Opportunities	Threats	Capacity-building Measures
MEF	Implementing agency of the project Role is to provide close support and guidance to the PIU as well as directives to its decentralized units (DDEFs) in the departments.	The classic functions of a forest administration are taken care of, which allows day-to-day business to be managed at higher and lower operational levels. Institutional and regulatory frameworks are well structured.	Lack of long-term vision and detailed operational policies to guide ministerial structures and employees Ambiguities and overlaps in powers and responsibilities assigned to various agencies Poor office facilities/infrastructure (for example, electricity and IT) Low capacity of human resources to execute workplans; high staff turnover	Improve cooperation between the MEF and other implicated ministries, especially the MAEP Strengthen enforcement of environmental and social safeguard measures within forest concessions Facilitate the process of decentralization	Continued situation of budgetary austerity and a low level of actual compared with planned disbursements Compartmentalization of the various services within the ministry Desire to manage everything from Brazzaville instead of providing support and latitude to the departments to conduct fieldwork	Trainings in the World Bank's safeguards policies with ministry and PIU officials Support to Steering Committee meetings for improved strategic guidance Targeted support to decentralized units in the departments and at the local level, thus improving the ministry's 'antennae'
MAEP	Implementing agency of the project Role is to provide close support and guidance to the PIU as well as directives to its decentralized units (DDAs, *services techniques*) in the departments	Presence in the field through departmental and local representations	System of supervision and advisory support for farmers does not meet the needs on the ground, neither from a quantitative nor from a qualitative point of view Overall weakness in agricultural infrastructure Lack of dynamism of agricultural research institutions	Conduct communication campaigns on national strategies and objectives through the venue of this project, for example, uptake of climate-smart agriculture Facilitate the process of decentralization	Continued situation of budgetary austerity and a low level of actual compared with planned disbursements Desire to manage everything from Brazzaville instead of providing support and latitude to the departments to conduct fieldwork	Targeted support to decentralized units in the departments and at the local level, thus improving the ministry's 'antennae'

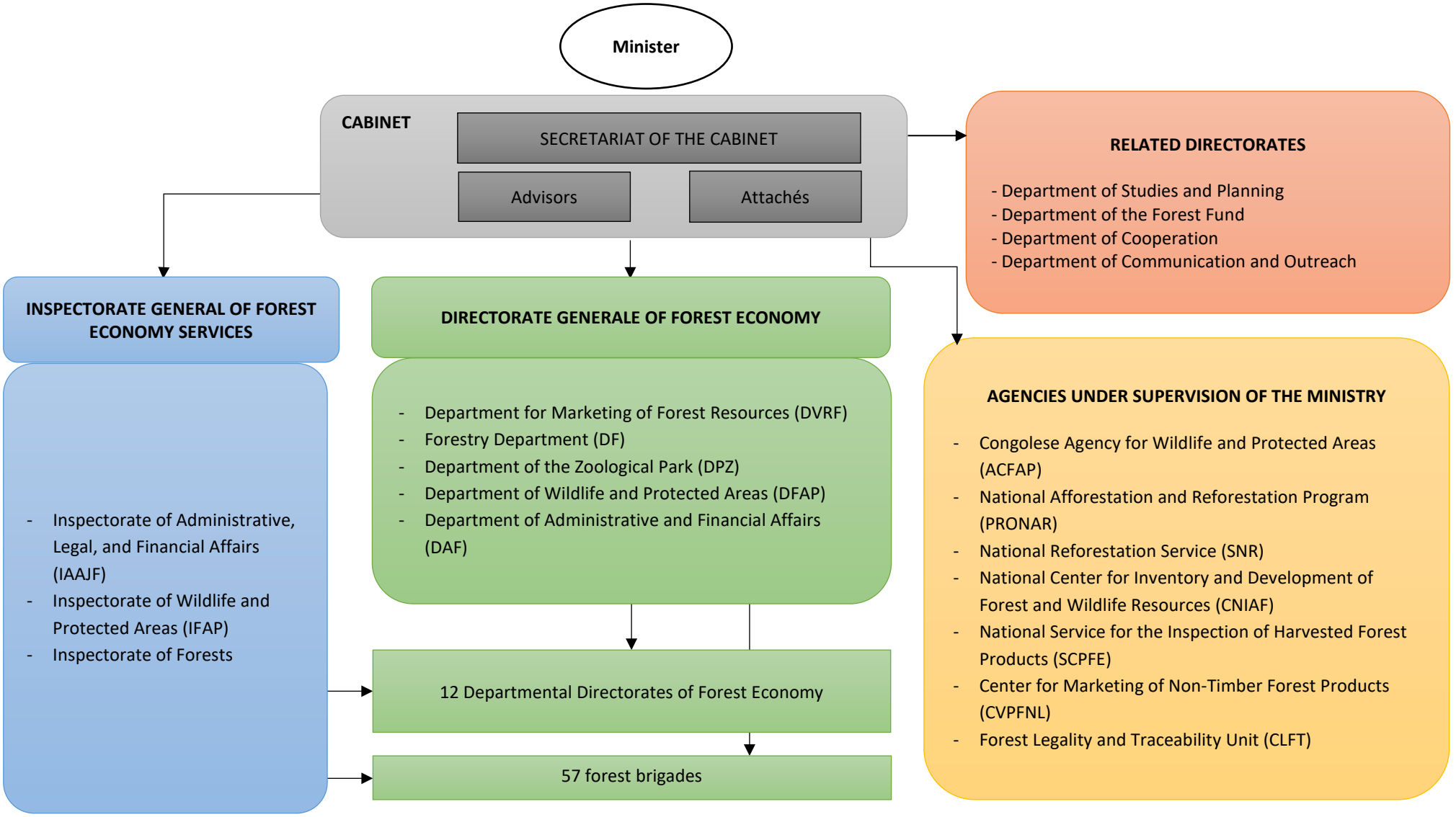
	Mandate and Project Role	Strengths	Weaknesses	Opportunities	Threats	Capacity-building Measures
DDEF/DDAEP	Tasked with implementing at the departmental/local-level policies initiated by the parent ministry in Brazzaville; responsible for executing laws and regulations and government decisions relating to wildlife, forests, and protected areas (DDEF) and to agriculture, livestock, and fisheries (DDAEP) Role of supervision of activities (including logistical support to the PIU during field missions) and of service providers (NGOs and so on) executing certain activities	Respected local authorities Preexisting relationships with forestry companies and IPLCs Of paramount importance in the functioning of the parent ministries and particularly the forest resource management system Intimate knowledge of local deforestation hotspots and drivers in the project zone	Shortfalls in financial and human resources Dependence on concession holders for finance and logistical means, leading to conflicts of interest and weak oversight Lack of agroforestry and sustainable forest management training; lack of familiarity with technologies and inputs Poor office facilities/infrastructure (for example, electricity and IT)	Potential to provide training due to experience in community outreach (including on agroforestry and GBV identification and protocols) Ability to try and learn through experimentation and initiative, if provided the chance	Communication, coordination, and managerial issues with the central administration Conflicts over jurisdiction and responsibility between the DDEF/DDAEP	Upgrade internet connectivity to facilitate collaboration with the ministry, CNIAF, and so on Obtain GIS hardware/software for use in low bandwidth settings to enable data collection and analytics Purchase of drones to enable at-distance M&E Strengthen technical capacity to optimize and monitor interventions, especially in climate-smart agroforestry Awareness raising around GBV
Forest Brigades	Responsible for controlling forest and wildlife products Role of contributing to supervision of project activities at the local level	Presence directly on the ground Strong understanding of community dynamics and political economy within their jurisdictions	Lack of coordination of mobile brigades among themselves and with their DDEFs Physical isolation and lack of connectivity with the central administration Despite a large total, number of brigade units, staffing, equipment, and financing are inadequate.	Potential to provide training in agroforestry and GBV identification and protocols	Mobility and logistics issues Insufficient staff to dedicate to project implementation activities	Strengthen technical capacities to optimize and monitor interventions, specifically in climate-smart agroforestry Mobility/logistics support Awareness raising around GBV

	Mandate and Project Role	Strengths	Weaknesses	Opportunities	Threats	Capacity-building Measures
FDLs, Consultative Councils	Forest concession holders are legally obligated to provide funding to the FDL in their concession through a CFAF 200 annual tax on each cubic meter of timber harvested Role of FDLs is to aggregate funds intended to finance community microprojects for populations within concession limits; role of Consultative Council is that of a multi-stakeholder body supported by technical and evaluation committees, to determine viability of and approve microprojects funded through the community PES scheme	Legal entity with well-defined institutional structure Endowed with access to significant and stable financing	Poor management of funds Large structure that requires significant funding for operations alone Lack of technical support to the beneficiaries of funds Limited impact with few tangible results	Innovative model for benefit sharing and local development Potential to increase synergies between concession holders, communities, and government officials	Elite capture and inequitable distribution of funds Lack of transparency and methodology in selection of microprojects	Technical support to the Consultative Councils to increase the flow of available funds through the FDLs and to improve their governance, including their ability to guide beneficiaries in vetting, structuring, implementing, and monitoring IPLC-level activities
CGDC	Promote and institutionalize the participation of the community in local development within each village or district Role of local governance and decision making,	Legally anchored local governance institutions with recognized legitimacy in decision-making at the village level	Often not operational due to absence of monitoring, funding, and technical assistance	Significant governance potential, especially in forest areas where poverty and inequality are high 19 committees established and	Elite capture Lack of demographic inclusivity	Provide operational support to enable CGDCs to draft community microproject proposals and to oversee that approved proposals are carried out transparently and efficiently

	Mandate and Project Role	Strengths	Weaknesses	Opportunities	Threats	Capacity-building Measures
	specifically in relation to microprojects			strengthened under PFDE Platform to improve citizen engagement, including strengthening the role of women, IPs, youths, and other vulnerable populations in decision-making		Provide debiasing training for community leaders to promote inclusion of women, youth, IPs, and so on
GIEC, cooperatives, producer groups	Represent groups of people wishing to pool resources for commercial objectives Role as recipients/beneficiaries of microproject grants for value chain enhancement	Numerous throughout Congo	Management is typically underdeveloped Often unable to establish and achieve advanced objectives	Economies of scale and improved negotiation position in relation to commodity buyers	Lack of education, low literacy issues Tendency toward individualism	Business services to support drafting of business plans, conducting of business, and FM skills Technical assistance through extension services and technology transfer Building of small infrastructure through microprojects to support viability of business operations
Local NGOs	Technical service providers to execute and oversee project activities on the ground	Some formed after the war and now have several years of experience (including under PFDE), demonstrating significant capacity in implementing complex activities	Those focusing on the field of environmental management are relatively underdeveloped in Congo	Joint assignments with larger, experienced international NGOs to complement skills and expertise	Larger contracts may be overwhelming to manage	Twinning of local NGOs with international NGOs for skills transfer and mentoring

	Mandate and Project Role	Strengths	Weaknesses	Opportunities	Threats	Capacity-building Measures
		while respecting stringent fiduciary requirements of international donors				

ANNEX 4: Organizational Chart of the Ministry of Forest Economy

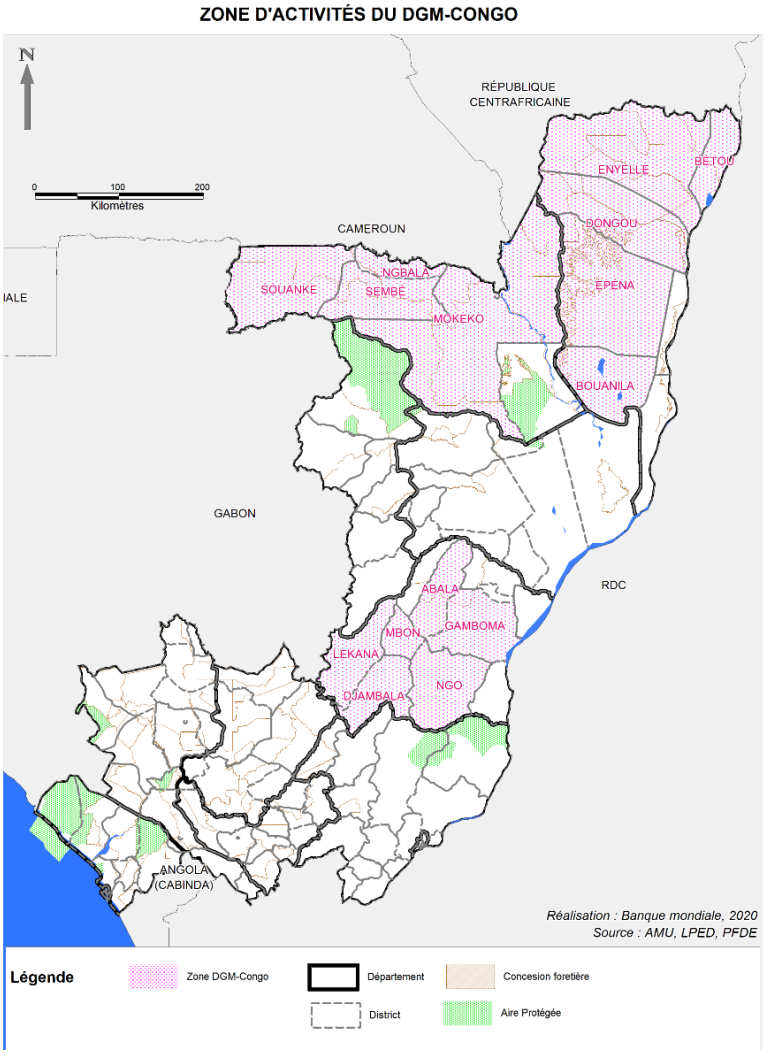


ANNEX 5: Activities Coordinated with the DGM

1. **The PANC has been prepared and will be implemented in close coordination with the DGM (P169610).** The DGM will carry out its activities in three departments and 15 districts or administrative communities. The targeted rural districts are as follows (see also figure 5.1):

- Sangha: in the districts of Mokéko, Sembé, Souanké, and Ngbala
- Likouala: in the districts of Epéna, Doungou, Enyellé, Bétou, and Bouanéla
- Plateaux: in the districts of Djambala, Lékana, Mbon, Abala, Ngo, and Gamboma.

Figure 5.1.: DGM Project Area



Source: AMU, LPED, PFDE.

2. **Table 5.1 illustrates how the activities under the two projects complement each other.**

Table 5.1.: Complementarity between PANC and DGM

Similar activities between PANC and DGM that will be coordinated (common elements in **bold**)

Activities that will be undertaken by only one of the two projects (DGM or PANC)

ID	Activity	Sub-activities	Implementation	
			PANC	DGM
Climate-smart agriculture				
1.1	**Agroforestry and Climate-smart agriculture**	**Mixed agricultural plantations (mixed agroforestry-subsistence systems):** - Subsistence crops (cassava, maize) - Legumes (beans, pigeon peas) to increase crop yields over the long term - Fruit trees (citrus, kola, papaya, avocado, safou, banana, and so on) - Beekeeping (especially for the protected areas). Accord priority to the following combinations: maize-pigeon peas, cassava-acacia, and banana-legumes.	X	X
		Support the development of climate-smart agricultural practices through the use of **mixed agricultural and agroforestry plantations (mixed agroforestry-subsistence systems):** - Fast-growing timber species (moringa, acacia, nipa, and other woods useful for lumber, electric pylons, fuelwood, and so on) - Subsistence crops (cassava, maize) - Legumes (beans) - Fruit trees (citrus, kola, papaya, avocado, safou, and so on) - Beekeeping (especially for the protected areas).	X	X
		Carrying out a preliminary study on the identification of medicinal species available in the project area and their domestication		X
1.2	**Establishment of nurseries**	Operationalize the 4 abandoned cocoa, banana, and fruit tree **nurseries** (Kabo, Pokola, Ngombe, and Bene) and set up new local nurseries (for the production of cocoa plants, bananas, fruit plants, and forest species) and support the moringa sector by building and organizing the management of 2 nurseries for the domestication of medicinal species and 2 fields of experimental medicinal plants. Support also the production of essential/aromatic oils by building and organize the management of **nurseries** for the production of lemongrass, eucalyptus citriadora (lemon-scented gum), aromatic plant fields, Gnetum Africanum, and mushrooms.	X	X
		Sensitization of stakeholders in the project area on the production of essential/aromatic oils and reference studies for the production of these products		X
1.3	**Gardening**	Support market gardening, especially for refugees in the Bétou, Missa, Mokabi, Ngombé, and Kabo UFAs. Promote the planting of market garden crops intermixed with fruit and forest tree species.	X	
1.4	**Beekeeping**	Support the development of the **honey** sector.	X	X
1.5	**Support for the use of improved cookstoves**	Support the use of improved stoves and purchase of energy-saving cookers and solar ovens, by supplying these appliances to households using charcoal as the main source of energy and by accompanying new users through awareness raising.		X
1.6	**Land tenure**	Documentation and analysis of land dynamics in the SDC and support the implementation of a **land tenure pilot**	X	
1.7	**Livestock**	Support the initiatives relating to the breeding of small and large ruminants.		X

Integrated value chains for agroforestry and non-timber forest products				
2.1	**Value chain microprojects**	Provide support to GIECs for the acquisition of equipment to be used for transport, as well as support with processing and marketing and sales (for example, transport equipment such as motorized three-wheeled carts), and for the organization of training sessions (negotiation, budgeting, accounting, marketing, and so on).	X	
Capacity building				
3.1	**Capacity building**	**Capacity building** of decentralized structures of line ministries	X	
3.2	**Awareness raising/ Training**	Organize **awareness-raising sessions for IPLCs** on deforestation and bushfires.	X	X
		Organize training in **composting, pest management, and methods and practices that boost the contribution, absorption, and use of organic nutrients (organic fertilizers, compost), as well as in seed management.**	X	X
3.3	**Training**	For members, representatives of IPLCs, and IPLC organizations; administrative and management capacities to prepare investments; Provide training to IPLC households supported by income-generating activities/microprojects in accounting, managing investment projects, and managing a bank account and in basic administrative procedures for formalizing entrepreneurships.		X
		Entrepreneurship training, including building the financial management skills of IPLCs Organize training for GIECs in negotiation, budgeting, accounting, and marketing techniques		X
		For IPLC NGOs in advocacy and securing of land tenure rights for IPLCs and resources, as well as the implementation of the GRM Organize training for civil society (CGDC, NGO) on land issues, the GRM, and environmental and social safeguards		X
		For IPLCs to improve representativeness in meetings and forums To enhance the visibility, accountability, transparency, and credibility of IPLC organizations and assist NGOs with the management of their institution and communication of their activities		X
3.4	**Promotion of ecotourism**	Organize training for 10 local guides in environmental tourism-related jobs.		X
		Provide support to traditional music/theater groups that promote local culture.		X
3.5	**Literacy and language training**	Support ORA (Observe, Reflect, Act) schools for IPLCs and their representatives.		X
PES				
5.1	**Provide payments for environmental services for forest conservation**	The PANC will offer an incentive to households and communities interested in the conservation of natural forest areas.	X	
Studies				
6.1	**Baseline study**	**Site selection diagnosis** (remote sensing, participatory mapping, and socioeconomic analysis at the household level)	X	X
6.2	**IP mapping**	Mapping of locations of campsites of IPs and of the main seasonal migration movements		X
6.3	**PSGs**	Preparation of **PSGs**	X	

Administrative and financial management				
7.1	**Offices, maintenance, office equipment, and so on**		X	X
7.2	**Human resources**		X	X
7.3	**Financial audits**		X	X
M&E and Safeguards				
8.1	**M&E**	**Supervision missions**	X	X
8.2	**Environmental and Social Safeguards**	**Implementation of the safeguard instruments**	X	X

ANNEX 6: Detailed Map of the Project Area