Document of

The World Bank

FOR OFFICIAL USE ONLY

Report No: PAD2316

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 73 MILLION

(US$100 MILLION EQUIVALENT)

TO THE

REPUBLIC OF CONGO

FOR A

CONGO COMMERCIAL AGRICULTURE PROJECT

June 21, 2017

Agriculture Global Practice

Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2017)

Currency Unit =	CFA Franc
CFA Franc 600 =	US$1
US$1 =	SDR 0.72938396

FISCAL YEAR

January 1 - December 31

ABBREVIATIONS AND ACRONYMS

AFD	*Agence Française de Développement* (French Development Agency)
AfDB	African Development Bank
ARMP	*Agence de Régulation des Marchés Publics* (Regulatory Agency for Public Procurement)
AWP	Annual Work Plan
BP	Bank Policy
CAADP	Comprehensive Africa Agriculture Development Program
CEEAC	*Communauté Economique des Etats de l'Afrique Centrale* (Economic Community of Central African States)
CEMAC	*Communauté Economique et Monétaire des Etats de l'Afrique Centrale* (Central African Economic and Monetary Community)
CERC	Contingency Emergency Response Component
CFA	*Communauté Financière d'Afrique* (Financial Community of Africa)
CG	Congo, Republic of
CICOS	*Commission Internationale du Bassin Congo-Oubangui-Sangha* (International Commission for Congo-Oubangui-Sangha Basin)
CIFA	Country Integrated Fiduciary Assessment
CNSA	*Centre National de Semences Améliorées* (National Center for Improved Seeds)
COMIFAC	*Commission des Forêts de l'Afrique Centrale* (Central African Forest Commission)
CPS	Country Partnership Strategy
CQS	Selection based on Consultant's Qualification
DA	Designated Account
DGCMP	*Direction Générale de Contrôle des Marchés Publics* (Department of Public procurement Procurement Control)
DL	Disbursement Letter
DPCU	Departmental Project Coordination Unit
DRC	Democratic Republic of Congo
ENSAF	*Ecole Nationale Supérieure d'Agronomie et de Foresterie* (National Higher Institute for Agronomy and Forestry)
EOI	Expression of Interest
ESIA	Environmental and Social Impact Assessment

ESMF	Environmental and Social Management Framework
EX-ACT	Ex-Ante Carbon-balance Tool
FAO	Food and Agriculture Organization
FM	Financial Management
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GPN	General Procurement Notice
GRS	Grievance Redress Service
Ha	Hectare
HDM-4	Highway Development and Management Model
IC	Individual Consultants
ICB	International Competitive Bidding
IDA	International Development Association
IDP	Internally Displaced People
IFR	Interim Financial Report
IP	Indigenous People
IPMP	Integrated Pest Management Plan
IPPF	Indigenous Peoples Planning Framework
IRA	*Institut National de Recherche Agronomique* (National Institute for Agricultural Research)
IRR	Internal Rate of Return
M&E	Monitoring and Evaluation
MAEP	*Ministère de l'Agriculture, de l'Elevage et de la Pêche* (Ministry of Agriculture, Livestock and Fisheries)
MFI	Microfinance Institution
MIS	Management Information System
MSME	Micro, Small, and Medium Enterprise
MTR	Midterm Review
MUCODEC	*Mutuelles Congolaises d'Epargne et de Crédit* (Congolese Savings and Credit Mutual Funds)
NCB	National Competitive Bidding
NGO	Nongovernmental Organization
NPCU	National Project Coordination Unit
OHADA	*Organisation pour l'Harmonisation du Droit des Affaires en Afrique* (Organization for the Harmonization of Business Law in Africa)
OM	Operations Manual
OP	Operational Policy
PA	Productive Alliance
PADE	*Projet d'Appui à la Diversification Economique* (Economic Diversification Support Project)
PCRMF	Physical Cultural Resources Management Framework
PCU	Project Coordination Unit
PDARP	*Projet de Développement Agricole et de Réhabilitation des Pistes Rurales* (Agricultural Development and Rural Roads Rehabilitation Project)

PDO	Project Development Objective
PEFA	Public Expenditure and Financial Accountability
PEMFAR	Public Expenditure Management and Financial Accountability Review
PFM	Public Financial Management
PIM	Project Implementation Manual
PLR	Performance and Learning Review
PPD	Public-Private Dialogue
QBS	Quality-Based Selection
QCBS	Quality and Cost Based Selection
R&D	Research and Development
RAP	Resettlement Action Plan
REDD	Reducing Emissions from Deforestation and Forest Degradation
ROC	Republic of Congo
RPF	Resettlement Policy Framework
SBD	Standard Bidding Document
SCD	Systematic Country Diagnostic
SDR	Special Drawing Rights
SoE	Statement of Expenditure
SSS	Single-source Selection
TBN	Transcontinental Business Néerlandais
ToR	Terms of Reference
UN	United Nations
UNOPS	United Nations Organization for Project Services
WFP	World Food Programme

Regional Vice President:	Makhtar Diop
Country Director:	Ahmadou Moustapha Ndiaye
Senior Global Practice Director:	Juergen Voegele
Country Manager:	Djibrilla Adamou Issa
Practice Manager:	Dina Umali-Deininger
Task Team Leader(s):	Amadou Oumar Ba, Jean Edouard Albert Saint-Geours

BASIC INFORMATION

Is this a regionally tagged project?	Country(ies)	Financing Instrument
No		Investment Project Financing

[ ] Situations of Urgent Need of Assistance or Capacity Constraints

[ ] Financial Intermediaries

[ ] Series of Projects

Approval Date	Closing Date	Environmental Assessment Category
13-Jul-2017	31-Jul-2022	B - Partial Assessment

Bank/IFC Collaboration
No

Proposed Development Objective(s)

The Project Development Objective (PDO) is to improve productivity of farmers and market access for producer groups and micro, small and medium agribusiness enterprises, in selected zones of the territory of the Recipient, and provide immediate and effective response in the event of an Eligible Crisis or Emergency.

Components

Component Name	Cost (US$, millions)
Component 1: Direct support to producer groups and agribusiness micro, small and medium enterprises (MSMEs)	25.00
Component 2: Improving public infrastructure and the business climate for commercial agriculture	45.00
Component 3: Strengthening institutional capacity to support the development of commercial agriculture	30.00

Component 4: Contingency emergency response	0.00

Organizations

Borrower :	Republic of Congo
Implementing Agency :	Ministry of Agriculture, Fisheries and Livestock

PROJECT FINANCING DATA (US$, Millions)

[ ] Counterpart Funding	[ ] IBRD	[✓] IDA Credit [ ] Crisis Response Window [ ] Regional Projects Window	[ ] IDA Grant [ ] Crisis Response Window [ ] Regional Projects Window	[ ] Trust Funds	[ ] Parallel Financing

Total Project Cost: 100.00	Total Financing: 100.00 Of Which Bank Financing (IBRD/IDA): 100.00	Financing Gap: 0.00

Financing (in US$, millions)

Financing Source	Amount
International Development Association (IDA)	100.00
Total	**100.00**

Expected Disbursements (in US$, millions)

Fiscal Year	2017	2018	2019	2020	2021	2022
Annual	0.22	8.13	16.18	26.60	28.42	20.45
Cumulative	0.22	8.35	24.53	51.13	79.55	100.00

INSTITUTIONAL DATA

Practice Area (Lead)

Agriculture

Contributing Practice Areas

Environment & Natural Resources
Finance & Markets
Trade & Competitiveness

Climate Change and Disaster Screening

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

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

Yes

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

Yes

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	
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	✔	
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
Schedule 2, Section I A.4 of the Financing Agreement: No later than three (3) months after the Effective Date, the Recipient, through the NPCU, shall recruit, under terms of reference satisfactory to the Association, and thereafter maintain throughout the implementation of the Project: (i) an additional accountant; and (ii) external auditors referred to in Section II B of Schedule 2 to this Agreement, all in accordance with the provisions of Section III.C. of Schedule 2 to this Agreement.

Sections and Description
Schedule 2, Section I A.5 of the Financing Agreement: No later than three (3) months after the Effective Date, the Recipient, through the NPCU, shall upgrade the accounting software, in a manner satisfactory to the Association.

Sections and Description
Schedule 2, Section I A.7 of the Financing Agreement: For purposes of carrying out Part 1 of the Project, the Recipient shall appoint no later than three (3) months after the Effective Date, and thereafter maintain, at all times throughout Project implementation, an independent facilitator, with experience and qualifications acceptable to the Association, which shall be responsible for, inter alia, carrying out the technical and financial evaluation of applications, including reviewing business plans, from producer groups and/or MSMEs to receive Matching Grants for carrying out Subprojects, as further detailed in the PIM.

Sections and Description
Schedule 2, Section I A. 8 of the Financing Agreement: For purposes of carrying out Part 1 of the Project, the Recipient shall appoint no later than six (6) months after the Effective Date, and thereafter maintain, at all times throughout Project implementation, a committee, under terms of reference and composition acceptable to the Association, which shall be responsible for the decision to approve the allocation of a Matching Grant to a producer group and/or MSMEs, as further detailed in the PIM.

Sections and Description
Schedule 2, Section I F.1 of the Financing Agreement: In order to ensure the proper implementation of Part 4 of the Project ("CERC Part"), the Recipient shall: (a) no later than six (6) months after Project effectiveness, prepare and furnish to the Association for its review and approval, an operations manual which shall set forth detailed implementation arrangements for the CERC Part, including: (i) designation of terms of reference for, and

resources to be allocated to the entity to be responsible for coordinating and implementing the CERC Part ("Coordinating Authority"); (ii) specific activities which may be included in the CERC Part, Eligible Expenditures required therefor ("Emergency Expenditures"), and any procedures for such inclusion; (iii) financial management arrangements for the CERC Part; (iv) procurement methods and procedures for the CERC Part; (v) documentation requirements for withdrawals of Emergency Expenditures; (vi) environmental and social safeguard management frameworks for the CERC Part, consistent with the Association's policies on the matter; and (viii) any other arrangements necessary to ensure proper coordination and implementation of the CERC Part.

Conditions

Type	Description
Effectiveness	Article IV, Paragraph 4.01 (a) of the Financing Agreement: The Recipient shall have established, in a form and manner acceptable to the Association, the Steering Committee.

Type	Description
Effectiveness	Article IV, Paragraph 4.01 (b) of the Financing Agreement: The MAEP shall have adopted, in a form and manner acceptable to the Association, the Project Implementation Manual.

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Amadou Oumar Ba	Team Leader(ADM Responsible)	Sr Agriculture Specialist	GFA07
Jean Edouard Albert Saint-Geours	Team Leader		GTCCS
Clement Tukeba Lessa Kimpuni	Procurement Specialist(ADM Responsible)		GGO07
Bella Diallo	Financial Management Specialist		GGO25
Alexandre K. Dossou	Team Member	Sr Transport Specialist	GTI08
Aurelie Marie Simone Monique Rossignol	Team Member	REDD+ Specialist	GEN07

Christine Heumesser	Team Member		GFAGE
Claude Lina Lobo	Safeguards Specialist	Environmental Specialist	GENDR
Diego Arias Carballo	Team Member	Lead Agricultural Economist	GFA07
Grace Muhimpundu	Safeguards Specialist	Jr Safeguards Professional Officer	GSU01
Issa Thiam	Team Member	Finance Officer	WFALA
Joanne Catherine Gaskell	Team Member	Agricultural Economist	GFA07
Josyane E. Carmen Costa	Team Member	Program Assistant	AFMCG
Julian Lee	Team Member	Environmental Specialist	GEN07
Karine N. MOUKETO-MIKOLO	Team Member	Program Assistant	GHN07
Lucienne M. M'Baipor	Safeguards Specialist	Sr Social Safeguards Specialist	GSU01
Marie Lolo Sow	Team Member	Program Assistant	GFA07
Rachel Sberro	Team Member		GFM3A
Sara Kimweri Mbago	Team Member	Sr Agricultural Economist	GFA07
Sofia De Abreu Ferreira	Counsel	Sr Counsel	LEGEN

Extended Team

Name	Title	Organization	Location
Franz Schorosch	Agricultural Specialist	FAO	Washington,United States
Michel Dissonama	Agriculture Economist	FAO	KInshasa,Congo, Democratic Republic of

THE REPUBLIC OF CONGO

CONGO COMMERCIAL AGRICULTURE PROJECT

TABLE OF CONTENTS

I. STRATEGIC CONTEXT

A. COUNTRY CONTEXT

1. **The Republic of Congo (ROC) is sparsely inhabited and highly urbanized.** With a population of 4.4 million people, the ROC ranks among the least-densely populated countries in the world (12.8 per km^2). The country has an urbanization rate of about 70 percent, with more than half of the population living in Brazzaville and Pointe-Noire, its two largest cities. Oil's share of total gross domestic product (GDP) increased from 56 percent in 2000–2004 to 66 percent in 2010–2014 and—despite the recent oil price decline—still accounts for more than half of GDP and more than 80 percent of total exports. Agricultural exports (palm oil, sugar, and cocoa) are stagnant and the country suffers from a rapidly deteriorating trade balance for food. The ROC's cereal import dependency ratio was 94 percent in 2010[1].

2. **The ROC is highly endowed in natural resources, but with poor social indicators.** The country is largely covered by the Congo Forest Basin (64 percent), with 31 percent of its total surface area comprising cultivable land. The country is also endowed with significant hydrocarbon reserves with an estimated 1.6 billion barrels of oil reserves and with a proven 90 billion m^3 of natural gas, the fourth-largest oil reserves and the fifth-largest natural gas reserves in Sub-Saharan Africa. In addition, the country is significantly endowed in mining ore such as iron, potash, and magnesium. However, the ROC's key social indicators, notably health and education outcomes, as well as service delivery in these sectors, are much lower than countries with similar resource endowments, evidence of the country's inability to harness its potential into dividends for its citizens.

3. **The economy is vulnerable and inequality is high.** Despite steady GDP growth of 5 percent over the past 10 years, the ROC continues to suffer from high rates of poverty and inequality due to jobless growth. Sixty-three percent of the population is engaged in either agriculture or informal services, and youth are severely affected by unemployment. The unemployment rate for those aged 15–29 is 32.7 percent[2]. Women and disabled persons also exhibit lower levels of education and have fewer employment opportunities. The ROC's gender inequality country index is 137 out of 157 countries. The country has a Gini coefficient of 0.45 with a poverty incidence of 74.8 percent in rural areas versus 32.3 percent in urban areas. The malnutrition rate remains high (32 percent), with a total of 1.4 million people estimated as malnourished[3] and 31 percent of children stunted. Food and nutrition insecurity is driven by (a)

---

[1] Food and Agriculture Organization (FAO) food security indicators.
[2] Poverty Report Republic of Congo 2016.
[3] Undernourishment means that a person is not able to acquire enough food to meet the daily minimum dietary energy requirements, over a period of one year. FAO defines hunger as being synonymous with chronic undernourishment. Food Hunger Map 2015.

inadequate access to quality food, (b) poor hygiene practices and lack of awareness of food and nutrition requirements, and (c) a lack of enforcement of food safety standards to prevent the sale of unsafe food.

4. **The business climate needs improvements and access to financial services is limited.** The ROC was listed 177 out of 190 countries in the World Bank Doing Business Report 2017, which noted that it takes an average of 50 days to register a business, well beyond the regional average of 27.3 days. Access to finance is cited as the second highest constraint by businesses[4]. Bank credit to agriculture accounts for 6 percent of short-term credit and 17 percent of medium-term credit and focused primarily on the forestry industry[5]. Microfinance institutions (MFIs) are mostly focused on urban markets, and agriculture accounts for only 2 percent of the portfolio of *Mutuelles Congolaises d'Epargne et de Crédit* (Congolese Savings and Credit Scheme, MUCODEC) (the largest MFI). The low penetration of financial services in rural areas, the financial institutions' limited knowledge of the agriculture sector, and collateral requirements limit access to credit for producer groups and micro, small, and medium enterprises (MSMEs) in agribusiness[6].

5. **The private sector in the ROC is largely fragmented.** There is little or no structured public-private dialogue (PPD) taking place to improve the enabling environment for business. The contribution of the private sector to growth is limited, as reflected by the level of private investments (excluding oil), which represents only 5 percent of GDP (against 14 percent on average in Sub-Saharan Africa and 25 percent of GDP in Asia).

6. **As part of its Reducing Emissions from Deforestation and Forest Degradation (REDD+) agenda, the ROC is developing an Emissions Reductions Program in the Sangha and Likouala Departments.** The Government program seeks to access a variety of REDD+ funding sources like the Forest Carbon Partnership Facility, the Forest Investment Program, and the Central Africa Forest Initiative. The ROC's forests are at risk of deforestation due to mineral extraction, road development, illegal logging, agricultural expansion, and charcoal collection. In addition, trends[7] indicate that exposure to periods of intense rainfall has been increasing. The ROC, in its recently submitted Intended Nationally Determined Contribution, has highlighted agriculture among its priority areas. The promotion of agro-forestry practices, water and soil management techniques and conservation farming are the various climate adaptation strategies that would be used to build climate resilience amongst producer groups.

[4] Enterprises Survey Report surveyed in 2009.
[5] The ROC ranks 118 out of 190 countries in access to credit according to the World Bank Doing Business Report 2017. In rural areas, 58 percent of rural adults save, but only 8 percent do so in a financial institution.
[6] There are four categories of private enterprises in the ROC: (a) micro enterprises with a maximum of 5 employees, (b) small enterprises with 5 to 19 employees, (c) medium enterprises with 20 to 99 employees, and (d) large enterprises that employ more than 100 staff.
[7] Country Adaptation and Risk Profiles (Republic of Congo). http://sdwebx.worldbank.org/climateportal/countryprofile/home.cfm?page=country_profile&CCode=COG.

B. SECTORAL AND INSTITUTIONAL CONTEXT

7. **Agriculture, including forestry, employs about 40 percent of the labor force and contributes 5 percent of GDP.** Approximately 498,000 people are actively engaged in agricultural production, of which 70 percent are female. With an average rainfall of 1,200 mm per year and only 2 percent of the 10 million hectares (ha) of arable land exploited, the agricultural sector holds potential for growth. The ROC has three types of agricultural production systems:

(a) Subsistence agriculture, mainly composed of small-scale producers farming 1–2 ha per household and accounts for 90 percent of agricultural output. Subsistence producers cultivate primarily staple crops such as plantain, cassava, groundnuts, maize, potatoes, beans, banana, and yam. Yields of staple crops are lower on average than in other Sub-Saharan countries mainly due to the poor quality of planting materials, the low use of fertilizer, and the limited access to improved technologies and mechanization.

(b) Urban and peri-urban agriculture is mainly composed of producers with small-scale gardens and semi modern commercial farms producing for urban consumption.

(c) Agro-industrial production systems, mainly monocultures geared toward export markets or niche urban markets. Apart from that of sugarcane, the production of traditional export and cash crops (for example, coffee, cocoa, palm oil, and rice) collapsed over the last couple of decades. A few large private agribusiness investors have recently started to invest again in these crops (including large-scale maize cultivation and the revival of palm oil and cocoa plantations).

8. **The cumulative effects of the different production systems have left an undeniable impact on the environment.** Studies revealed that the agriculture sector contributes 79 percent of greenhouse gas (GHG) emissions[8]. Subsistence farming has promoted deforestation through slash-and-burn shifting cultivation techniques. As a result, particularly in the Province of Plateau, producers are experiencing: (a) earlier planting times and longer crop cycles; (b) soil degradation, which makes some crops no longer suitable; and (c) greater occurrences of flooding.

9. **Although 70 percent of the country's agricultural workforce are women, Congolese women face barriers compared to men in accessing credit, agriculture inputs, land ownership, and labor.** Additionally, they are customarily encouraged to focus on subsistence farming, family, and child-rearing activities (fertility rate is high at 3.8 percent). Women are underrepresented in politics and higher levels of government, though the Family Code protects them against racial, ethnic, and sexual discrimination. Women earn less than men and are more likely to be self-employed as they do not have equal

[8] Climate Change Knowledge Portal's Country Adaptation and Risk Profiles (Republic of Congo).

opportunities for accessing secondary education and paid employment. Labor market analyses show that gender employment gaps result from unequal access to education and skills training. Lack of education gives women limited power in business and social dealings with men, who typically are better educated.

10. **Agricultural skills, competencies, and jobs are scarce**. Access to formal paid wage job is very limited for the youth who are more likely to be unemployed. If they manage to find a job, those aged 15–29 are more likely to be employed by a household (15 percent) or by an MSME (12 percent) [9]. The Republic of Congo is currently importing skilled labor to meet the competency gap that exists in the local labor market. The skills gap includes the following areas: (i) animal husbandry specialists; (ii) agronomists; (iii) plant pest and disease technicians; (iv) agro veterinary specialists; (v) food processing technicians; (vi) food scientists; (vii) agricultural scientists; and (viii) agriculture advisory and extension experts. There is only one institute for higher education in agriculture, *Ecole Nationale Supérieure d'Agronomie et de Foresterie* (ENSAF), with seven agriculture vocational skills training centers. They are under resourced and do not offer all of the relevant skills and entrepreneurship training. Because of a lack of funds, ENSAF struggles to operationalize the internship arrangements negotiated with private sector firms. ENSAF's capacity to train master's and doctoral students is also limited because of poor training facilities, no funds for research grants and a disconnect with the agricultural research and development agenda.

11. **Demand for food is high and growing in domestic and regional markets.** The ROC is highly dependent on food imports, with a negative trade balance. Food imports increased from US$197 million to US$240 million between 2007 and 2013, while reaching a high of US$353 million in 2011. Volumes of imported food in 2013 included 104,567 tons of wheat, 50,581 tons of palm oil, 45,878 tons of chicken meat, 41,541 tons of rice, and 38,455 tons of wheat flour[10]. The domestic cassava market is valued at US$174 million with 90 percent of the population consuming cassava and cassava-based products, offering a market for processed cassava products. There is high consumption of chicken at the household level and consumption of other livestock products is expected to grow significantly, for example, 80 million eggs and 15,000 tons of pork annually by 2020[11]. Demand for milk (and milk-based products) is high and growing. Fish consumption is at 24.4 kg per head per year, one of the highest in Africa. Other regional markets present sizable opportunities as well, for instance, the Kinshasa market (over 12 million inhabitants) in the Democratic Republic of Congo or other neighboring countries such as Angola, Gabon, and Cameroon.

12. **Food safety concerns are huge and compounded by the absence of a food policy and regulatory framework.** There is no current analysis on the national cost of food-borne diseases (for example, loss of human lives, cost of treatment, and loss of income especially for poor households). Imported food safety issues include: (a) food spoilage; (b) absence of harmonized food and product standards with the country's

[9] Republic of Congo Poverty Assessment 2016.
[10] FAOSTAT.
[11] *Plan de développement du secteur Agricole département Brazzaville*, *Rapport Société Française d'Etudes et de Conseils*.

main trading partners; (c) poor product quality (for example, expired food, deceitful labelling, and high levels of preservatives in food); (d) limited coordinated national surveillance and inspection capacity; and (e) no laboratories for food testing. There are risks associated with limited awareness among consumers and low levels of hygiene practices and standards (for example, unregistered food street vendors and unsanitary urban markets). Additional food safety risks from domestic agriculture include (a) the use of animal waste and sewage on crops as agriculture fertilizer, (b) poor harvesting and postharvest handling (raises risks of mycotoxins and aflatoxins), and (c) unhygienic agricultural transport systems (e.g. inadequate vehicles used to transport agricultural products, lack of or inappropriate use of refrigerated trucks, etc.).

13. **Agriculture value chains are characterized by underdevelopment and fragmentation.** Agricultural production is performed in a rudimentary, inefficient, low input-output model, making unit costs of production much higher than imported commodities. Most inputs are imported, at a high cost with no quality assurance. The transport sector is informally steered by cartels that fix the transport prices, making it expensive for producers to transport commodities and processors to source primary material. There are only a few domestic agro-processing companies and food distribution and retail is done mostly through formal open markets, informal markets, and small corner stores. There are only seven registered retail outlets (supermarkets) in urban areas selling mostly imported food.

14. **Commercial agricultural production is constrained by a multiplicity of factors.** The competitiveness of domestic value chains[12] is hampered by sector-specific legislative and governance constraints (seed policies, land access, food safety policies and guidelines, taxes, and legal registration procedures for cooperatives). Other factors include: (a) weak producer organizations; (b) insufficient agricultural extension and veterinary services and obsolete research and development (R&D) capacity; (c) high costs of agricultural inputs (seeds, fertilizers, land, animal feed, credit); (d) an ageing and under skilled workforce[13]; and (e) poor road and communication networks and costly logistics and energy services.

15. **A substantial number of smallholders have the potential to engage successfully in commercially demanding value chains[14].** These producers located in farms outside cities and towns (urban and peri-

---

[12] Domestic value chains such as poultry, piggery, and fish for livestock; cassava and groundnuts for staple crops; and cocoa and palm oil for cash crops.

[13] Young people are currently not seeking business opportunities in agriculture and remain mostly in cities, which leads to a non-renewal of the workforce and to an ageing workforce in the sector.

[14] Collion, M. H. 2012. “Rural Productive Partnerships: An Inclusive Agribusiness Model for Overcoming Small-holder Market Barriers.” World Bank. This finding is echoed by studies in Africa and Asia which indicate that 50–70 percent of farmers are unable to move out of subsistence (S. Ferris et al. 2014. “Linking Smallholder Farmers to Markets and the Implications for Extension and Advisory Services” Modernizing Extension and Advisory Services Discussion Paper 4).

urban) as well as within specific value chains (for example, cocoa, palm oil)[15]. These producers work in groups but are marginalized from higher-value markets due to high unit costs of production, poor infrastructure, and limited access to credit and technical assistance. Three main profiles have been identified in the ROC of MSMEs that are currently operating in the agribusiness sector and could establish business relationships with producer groups for commercial agriculture: (a) suppliers of critical inputs (for example, day-old chicks, veterinary medicine, and technical assistance provided by Transcontinental Business Néerlandais [TBN] in Pointe-Noire); (b) off-takers for agricultural products (for example, tropical fruits to produce concentrate bought by Bayo in Brazzaville); and (c) firms that are both input suppliers and off-takers (for example, supplying cassava cuttings, then purchasing of cassava for saka-saka processing by Agridec in Dolisie).

C. HIGHER LEVEL OBJECTIVES TO WHICH THE PROJECT CONTRIBUTES

16. **The proposed project will contribute strongly to the Government's agenda of economic diversification through the development of commercial agriculture, job creation, improved food and nutrition security, import substitution, increased exports, and poverty reduction.** The ROC's National Development Plan (NDP) 2012-2016 includes two pillars dedicated to diversification based on exploiting the country's natural endowments and on developing sectors with an identified comparative advantage such as in agriculture, forestry, transport and light manufacturing. The project will help improve the competitiveness of domestically produced food by (a) reducing transaction costs and improving connectivity between peri-urban/rural areas and growing urban markets, (b) promoting an improved business environment and PPD, and (c) strengthening the capacities of institutions supporting commercial agriculture development. Such increased competitiveness combined with a direct support to producer groups and MSMEs will help commercial agriculture activities expand, which will in turn help generate employment, notably for women and youth, and contribute toward food and nutrition security, import substitution, and exports of selected cash crops.

17. **The project is closely aligned with national and regional priorities for agriculture development.** By supporting the development of commercial agriculture, the project aligns with the national agricultural strategy of the ROC and Comprehensive Africa Agriculture Development Program (CAADP). The Government of the ROC signed the CAADP Country Compact Agreement in 2013. It is also fully aligned with the country's National Development Strategy and the 2015 *Plan National d'Investissement Agricole et de Sécurité Alimentaire et Nutritionnelle* (National Investment Plan for Agriculture, Food Security and Nutrition). In addition, the proposed project is in line with the outcomes of the Regional Nutrition and

[15] The Ministry of Agriculture holds a Registry of Farmer Cooperatives that totals 1,055 cooperatives nation-wide, out of which 25 percent (approximately 250) are estimated to be active according to a survey conducted by the ministry in 2015. According to records from PDARP (P095251) and the ongoing PADE (P118561), more than 500 additional active producer groups are not registered with the ministry since they registered at the department level or they decided to register as an association with the Ministry of Interior instead. There are therefore approximately 800 active producer groups (associations/cooperatives) in the ROC, totaling approximately 16,000 smallholders.

Food security program (PRSA-AC) of the *Communauté Economique des Etats de l'Afrique Centrale* (Economic Community of Central African States, CEEAC); Regional Agriculture Investment, Food Security, and Nutrition Program; and its Common Agricultural Policy, which seeks to reduce poverty and food insecurity by promoting a competitive agriculture open to regional and global trade for deepening economic integration.

18. **The proposed project also offers a clear opportunity to address and reduce the ROC's overall vulnerability to climate change and to build resilience**, which is well-aligned with the World Bank's Africa Climate Business Plan, particularly its first cluster ('strengthening resilience'). This cluster stresses on initiatives that build and protect the resilience of the continent's assets by investing in natural capital (landscapes, forests, agricultural land, and inland water bodies) and physical capital. The proposed project will contribute to the objectives of *Commission des Forêts de l'Afrique Centrale* (Central African Forest Commission) and the wider REDD+ agenda by supporting agroforestry.

19. **The proposed project is aligned with the ROC Country Partnership Strategy (CPS) (IDA/R2012-0283/Report No: 71713-CG) and the twin goals of the World Bank of eradication of extreme poverty and promotion of shared prosperity.** The FY13–16 ROC CPS aims to support the country's development into an "increasingly stable, competitive and diversified economy with enhanced opportunities for productive employment, diversifying the economy for import substitution and improved food security and nutrition." Within the CPS, the proposed project supports the first strategic objective of increasing competitiveness to achieve inclusive growth and reduce poverty, and corresponds directly with one of the World Bank Africa Region's priorities of supporting agribusiness development. A Performance and Learning Review (PLR) of the CPS and the Systematic Country Diagnostic (SCD) are both underway and should be finalized by the end of FY 17. The draft SCD has earmarked the agriculture and food sector as one of the sectors with potential for food import substitution, diversifying the economy and creating jobs for youth. A combination of policy reforms, capacity building and investments in agriculture public goods will be required to revitalize the sector for growth.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

20. The Project Development Objective (PDO) is to improve productivity of farmers and market access for producer groups and micro, small, and medium agribusiness enterprises, in selected zones of the territory of the Recipient, and provide immediate and effective response in the event of an Eligible Crisis or Emergency.

B. Project Beneficiaries

21. The project's direct beneficiaries include: (a) farmers and producer groups in the targeted areas; (b) MSMEs; (c) women, youth, and vulnerable groups (that is, indigenous communities, internally displaced people [IDP] and others at risk of violent mobilization); and (d) agricultural service providers, including the public agriculture education, research and extension services, international and local nongovernmental organizations (NGOs), and private service providers involved in value chains supported by the project.

C. PDO-Level Results Indicators

22. The following PDO-level results indicators have been identified:

(a) Direct project beneficiaries, of which female beneficiaries (Percentage) (Core)

(b) Average seasonal yield per standard area of specific crops among targeted farmers

(c) Percentage increase in volume of raw and processed products sold by producer groups and MSMEs in national or export markets

III. PROJECT DESCRIPTION

23. **Through support for the emergence and revival of a competitive commercial agriculture sector, the project will address the following key issues:**

(a) Access to market with

(i) Consistent supply of high volumes of quality produce meeting market requirements for commercial and industrial production; and

(ii) High-quality value-added agricultural products.

(b) An enabling business environment with

(i) Favorable legislation;

(ii) A partnership framework for PPD between agricultural stakeholders; and

(iii) An enabling institutional framework for private investors in the agricultural sector.

(c) An ecosystem of services that provide actors with

(i) Appropriate inputs (feed for livestock, seeds, organic fertilizers) through rebuilding the system of genetic material production, and finance, processing technology, micro-irrigation equipment, and so on through the matching grant scheme;

(ii) A qualified workforce;

(iii) Marketing infrastructure (logistics, agricultural feeder roads, storage); and

(iv) Access to water and electricity, where required to accommodate agro processing needs.

24. **Additional development challenges will be tackled by the project.** The project will also help address nutrition and food insecurity by promoting producer groups' access to nutrition and climate-sensitive technology[16], agriculture extension services that increase the adaptive capacity of climate

Box 1. Targeting Principles

Two basic principles will guide project design: (a) an open menu approach with respect to the selection of value chains, subsectors, and business opportunities and (b) a geographical concentration and targeting of project interventions where commercial opportunities and the need for support have been identified and expressed by market actors (producers, processors, and others). The rationale for an open menu is to avoid excluding any potentially viable value chain and business opportunity. The project's geographical focus will start where commercial agriculture has the strongest potential: the three main cities of Brazzaville, Pointe Noire, and Dolisie and in the north of the country. In its first component, the project will directly support private sector initiative in agriculture by facilitating market access for producer groups and agribusiness MSMEs. Support to producer groups will follow a productive alliance (PA) approach through which these producer groups target new markets and seek to establish commercial relationships with buyers and off-takers. Support to MSMEs will focus on helping agribusiness firms connect with specific off-takers and markets (both domestic and export), through sound business plan development; supply chain development for sourcing quality raw materials; and access to the know-how to improve processing techniques, relevant market information and/or equipment, and so on.

The second component will support public investments in agricultural service roads and other improved public infrastructure (for example, access to electricity and water supply for agro-processing) selected based on the location (clustering) of the demand for subprojects from producer groups and agribusiness MSMEs in Component 1. Producer groups and agribusiness MSMEs will need to identify (along with their expression of interest [EOI]) if their value chain development activities are constrained by the lack of viable infrastructure. Activities in Component 2 will also contribute to improving the business climate for commercial agriculture. Lastly, the project will support the strengthening of institutional capacities for commercial agriculture development in its third component.

[16] Such provision of climate-sensitive technology and extension services will also help increase the adaptive capacity of climate vulnerable farmers.

vulnerable farmers, and by supporting MSMEs to produce fortified and enriched foods in the market. Skills development and job creation for youth challenges (self-employment, semi-permanent, temporary jobs, and so on) will be addressed through support to internship arrangements between institutes of higher learning and the private sector. The gender gap with respect to access to services, inputs and finance, and ownership of economic resources will be reduced by promoting female producers' access to matching grants. Female-owned MSMEs would also be promoted through access to a tailored technical assistance package for women MSMEs (business leadership, entrepreneurship training, mentorship, and networking support). Targeting principles and the approaches by component are described in box 1.

A. PROJECT COMPONENTS

Component 1: Direct support to producer groups and agribusiness MSMEs (IDA: US$25 million; SDR18.0 million)

25. Component 1 seeks to increase productivity sustainably and market access along value chains, and improve food and nutrition security. Support provided under this component will be through a matching grant program financing technical assistance and productive investments to support production, marketing, and processing activities. This component has two subcomponents.

Subcomponent 1.1: Sustainable intensification and commercialization of crop and animal production (IDA: US$20 million; SDR14.5 million)

26. **Objective and instruments used.** This subcomponent will support producer groups in PA arrangements with buyers and markets for increased production and improved marketing of their products. It will support the sustainable intensification of production and commercialization of products through technical assistance and financing of business plans using a matching grant scheme administered through a PA approach.

27. **PA approach[17].** PAs will aim to develop the managerial and technical capacity of producer groups and help them implement business plans that include support for productive investment (access to inputs, production facilities, nutrition, and climate-sensitive technology[18]) and technical assistance (agriculture advisory, extension services, and business development skills and practices). The project will also seek to strengthen existing business arrangements between producer groups and buyers and/or support new ones[19].

[17] See annex 1 for more details on the PA approach.
[18] This can include climate-smart technologies and practices such as soil and water conservation measures, reduced tillage techniques, climate-sensitive seeds and improved agronomic practices with the potential to enhance existing carbon pools.
[19] See paragraphs 13 to 15 of the Sectoral and Institutional Context for more details on the profiles of producer groups and potential buyers and off-takers that could engage in PAs.

28. **Business plans.** Eligible producer groups will be supported to translate their vision and strategy into a business plan that clearly identifies specific markets, marketing plans and technical and financial needs. Business plans are expected to finance a series of investments (depending on market requirements, the supply chain and associated constraints), such as (a) improved access to quality inputs (for example, seeds, cuttings, chicks, fertilizer, feed, water through small pumped and piped irrigation systems, and so on); (b) infrastructure and/or equipment for processing; and (c) infrastructure and/or equipment to improve the storage and transport to reach target markets. Investments will systematically be accompanied with technical assistance to install and maintain the investment and to improve the producer group's marketing skills and management of its business and finances. The matching grants, however, will be awarded based on a competitive process. Applicants will have to meet a set of eligibility criteria to present their business plan, which will then be assessed based on additional relevant prioritization criteria[20]. In forest areas, application of REDD+ principles will for instance be a precondition for relevant value chains. Producer groups that do not meet basic eligibility criteria will be able to access a capacity-building program to strengthen their organizational, technical, and managerial capacities to meet basic eligibility criteria. An agribusiness capacity diagnostic (such as the International Finance Corporation's Agribusiness Leadership Program) will be carried out to assess the capacity of the producer groups that successfully complete the selection process to identify their areas of improvement and the potential relevant service providers. Lastly, female producers will receive tailored technical assistance that will include business leadership networking support to enable them to access markets and manage business operations.

Figure 1. PA Cycle

1. Marketing strategy and promotion	2. Call for proposals	3. Evaluation of EOI	4. Formulation of business plans	5. Evaluation of proposals	6. Implementation of business plans
Promotion plans and activities targeting potential members of productive alliances. This process continues during the call for proposals phase.	Public calls for potential productive alliance partners (that is producer groups, input suppliers, buyers, and so on) to present business plans. The calls will be accompanied by a communications campaign, as well as field information and training workshops.	Evaluation of EOI from producer groups with the following criteria: (a) compliance with basic eligibility criteria and safeguards; (b) location based on pre-identified areas; and (c) commitment by producer groups to co-financing.	Producer groups, whose profiles are approved, receive technical assistance for the formulation of their business plan. Groups that do not meet basic criteria receive capacity building support. EOI and business plans identify public infrastructure gaps to help prioritize infrastructure support under Component 2.	Evaluation of the commercial, technical and financial soundness of business plans conducted by an independent entity. Safeguards evaluation and inclusion of mitigating measures, if required, are carried out by the project unit.	Implementation of subprojects by producer groups, with systematic technical assistance to improve organizational, managerial, business and risk-management skills. Other agents (for example input suppliers, buyers, technical assistance providers) implement agreed measures separately.

[20] See annex 1 for more details on the matching grant selection process.

Subcomponent 1.2: Development of agro-industrial activities (IDA: US$5 million; SDR3.6 million)

29. **Objective and instruments used.** This subcomponent will support the competitiveness of MSMEs involved in agribusiness, from input supply to the production, processing, and distribution of agricultural products, as well as the delivery of agri-based services. These actors face efficiency challenges linked to the cost of processing, packaging, and marketing their products. Efficiency gains in operations will result in higher-quality agricultural products (nutritional and safety standards compliant); jobs (full time, part time, and seasonal); and a secure market that rewards farmers with quality produce with higher prices. Female-owned MSMEs will access a technical assistance plus package (business leadership, entrepreneurship training, with additional mentorship and networking support) to support them to bridge specific gender-related challenges. This subcomponent will aim to allow MSMEs to have better access to the training, equipment, and skills they need to develop their business.

30. **Business plans.** Agribusiness MSMEs will be able to apply for grants on a competitive basis through the same matching-grant scheme as the one described for Subcomponent 1.1. They will have to submit a business plan that identifies market demand for the firm’s products and services and shows returns on investment and financial sustainability of the firm’s operations while clearly demonstrating that the investment contributes to addressing at least one of the following challenges: product upgrade, process improvement, new product development, volume increase, or reduction of the environmental footprint. The matching grants will cover technical assistance and equipment. Technical assistance will systematically accompany equipment requests to ensure the proper use and maintenance of the investment. Eligibility and prioritization criteria will be applied to maximize the transparency of the selection process and the sustainability of the investments made and assistance received[21].

Component 2: Improving public infrastructure and the business climate for commercial agriculture (IDA: US$45 million; SRD33 million)

31. This component aims to foster the development of commercial agriculture by lifting constraints in terms of infrastructure and business climate. This component consists of two subcomponents.

Subcomponent 2.1: Public infrastructure for the development of commercial agriculture (IDA: US$37 million; SDR27 million)

32. **Objective and instruments used.** This subcomponent will contribute to the development of basic infrastructure essential for the promotion of commercial agriculture and the emergence of an agro-industry. It will include public investments in the rehabilitation and maintenance of the feeder road

[21] See annex 1 for more details on the matching grant selection process.

network and improved access to other public infrastructure (for example, access to electricity and water supply for agro-processing, and other public infrastructure) in a targeted manner.

33. **Prioritization criteria.** High logistics costs and limited access to markets are major obstacles faced by the private sector. To address these important issues, the project will make a provision to ensure public investments in infrastructure are (a) identified by the Government as infrastructure of a public nature and (b) located in targeted geographic zones where producer groups and MSMEs promoting commercial agriculture development express interest in receiving PA and/or MSME support (see Component 1).

34. **Sustainability of investments.** Technical assistance will also be provided through this subcomponent to selected departmental councils to implement the new road maintenance strategy developed with the assistance of the Agricultural Development and Rural Roads Rehabilitation Project (PDARP) to make such maintenance more sustainable.

Subcomponent 2.2: Governance and regulatory framework for commercial agriculture (IDA: US$8 million; SDR5.8 million)

35. **Objective and instruments used.** This subcomponent aims to improve the legal and regulatory framework for commercial agriculture. It will do so by (a) establishing and financing platforms for PPD on commercial agriculture at the departmental and national levels to identify needed reforms; (b) providing technical assistance to draft the identified legislation and regulations; (c) policy advocacy with parliamentarians (for example, policy notes, sensitization, training); and (d) conducting sensitization, dissemination, and training activities toward relevant stakeholders (that is, ministries and public institutions, producer groups, agribusiness MSMEs and other private sector actors, and so on) on drafted legislations and regulations pertaining to commercial agriculture.

36. **PPD on commercial agriculture**. The project will build on the mechanism for PPD established with the support of the Economic Diversification Support Project (PADE) to start a PPD specifically on commercial agriculture by providing technical assistance and budget support to set up and operate PPD platforms [22] on commercial agriculture at the departmental and national levels. The platforms are expected to identify and contribute to building consensus around changes to legislation and practices that constrain commercial agriculture[23].

[22] When business practices and legislation identified by these sector-specific PPD platforms are economy-wide in nature (for example, easing business entry and business exit, facilitating trade across borders, and so on), the project will share these inputs with the PADE, which is better placed to address them. When identified reforms are specific to commercial agriculture, and if a strong consensus can be built with stakeholders from the public and private sectors around them, the project will provide support for their drafting through this subcomponent.

[23] Public-private dialogue, especially at a sectoral level, will also present an opportunity for the private sector to come together and articulate and express its needs to the public sector. It will require, as a first step, the establishment of a dialogue between private sector entities as part of the PPD platforms. In addition, finding solutions to the issues brought forward by the private

37. **Identified reforms.** Some of the needed improvements to constrain legislation specific to commercial agriculture have already been identified with stakeholders and their drafting will be supported by the project. The legislation pertains to (a) compliance with *the Organisation pour l'Harmonisation du Droit des affaires en Afrique* (Organization for the Harmonization of Business Law in Africa, OHADA) Uniform Act on Cooperatives; (b) National Seed Policy in compliance with the norms of the CEMAC; (c) Rural Code to clarify and secure land access; and (d) food safety policy and regulatory framework, standards, and the certification of products[24].

Component 3: Strengthening institutional capacity to support the development of commercial agriculture (IDA: US$30 million; SDR22 million)

38. The objective of this component is to strengthen the capacity of public and non-public service providers involved in the implementation of project activities and/or supporting the development of commercial agriculture in the ROC. This component will notably ensure and oversee the successful management and implementation of the project. This component has two subcomponents.

Subcomponent 3.1: Capacity-building of institutions providing support to commercial agriculture (IDA: US$20 million; SDR14.5 million)

39. **Objective and instruments used.** The subcomponent will provide equipment, training, and operating cost support to government and nongovernment actors that are necessary for commercial agriculture to succeed, including a number of technical departments of the *Ministère de l'Agriculture, Elevage et Pêche* (Ministry of Agriculture, Livestock, and Fisheries, MAEP).

40. **Targeted institutions.** These capacity-building efforts will target institutions involved in key areas related to (a) agricultural statistics services; (b) the access to improved genetic materials; (c) the implementation of the reform of the national public system for agricultural extension and advisory services; (d) the agriculture education and vocational skills training systems; and (e) the policy framework for food safety, quality standards, and product certification supported in Subcomponent 2.2[25].

---

sector will require coordination between public sector entities, which the PPD platform will facilitate by convening stakeholders from relevant ministries

[24] See annex 1 for more details on the reforms that have been identified.

[25] A list of the institutions identified for capacity-building support includes (a) the Studies and Planning Department of MAEP; (b) the Ministry of Scientific Research and Technical Innovation through the *Institut National de Recherche Agronomique* (IRA) and the *Centre National de Semences Améliorées* (CNSA), among others; (c) the Cooperative Action Department of MAEP and Agricongo among others; (d) the Ministry of Higher Education through the ENSAF, among others; and (e) institutions identified through the food safety reform supported in Subcomponent 2.2. See annex 1 for more details on the institutional capacity-building work of Subcomponent 3.1.

Subcomponent 3.2: Project management, coordination, and monitoring at national and departmental levels (IDA: US$10 million; SDR7.3 million)

41. This subcomponent will support project management, coordination, communication, monitoring and evaluation (M&E), and adequate monitoring of the environmental and social safeguard policies, at the national level as well as at the departmental levels. Under this subcomponent, a strong fiduciary management system will be introduced and an effective M&E framework will be designed. The system will monitor impact indicators but will also ensure real-time data collection that will facilitate the adoption of corrective measures in a timely manner and even attempt to integrate the data into the national agricultural statistics database.

42. Through this subcomponent, the project will finance a baseline study, midterm review (MTR) study, final impact assessment, the recruitment of staff, consultancy services, and equipment, and it will support relevant seminars and training, as well as diverse operating costs to supervise the project activities.

Component 4: Contingency emergency response (IDA: US$0.0 million; SDR0.0 million)

43. This component will provide support for immediate response to an eligible crisis or emergency, as needed. 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 borrower, associated with a natural or man-made crisis or disaster. This component will allow the Government to request a reallocation of project funds to partially cover emergency response and recovery costs. This component will be triggered if (a) the Government has determined that an eligible crisis or emergency has occurred and has furnished to the World Bank a request to include said activities in the Contingency Emergency Response Component (CERC) for emergency response; (b) the Government has prepared and disclosed all safeguards instruments required for said activities; and (c) the borrower has adopted the CERC Operations Manual (OM) in form, substance, and manner acceptable to the World Bank. A specific OM for this component will be prepared, detailing financial management (FM), procurement, safeguards, and any other necessary implementation arrangements. While Components 1, 2, and 3 focus on pre-crisis disaster risk mitigation and climate resilience enhancement measures, Component 4 will help strengthen the Government’s capacity to respond effectively to an eligible crisis or emergency.

B. PROJECT COST AND FINANCING

44. The Commercial Agriculture Project will be financed through an Investment Project Financing amounting to US$100 million (IDA credit), including physical and price contingencies. The project period is five years (2017–2022). The IDA contribution will be made available upon effectiveness and disbursed based on a withdrawal application. Table 1 summarizes the project costs and financing.

TABLE 1. PROJECT FINANCING

Project Components	Project Cost (US$, million)	IDA Financing (US$, million)	Trust Funds (US$, million)	Counterpart Funding (US$, million)
Component 1: Direct support to producer groups and agribusiness MSMEs	25	25	—	—
Subcomponent 1.1: Sustainable intensification and commercialization of crop and animal production	20	20	—	—
Subcomponent 1.2: Development of agro-industrial activities	5	5	—	—
Component 2: Improving public infrastructure and the business climate for commercial agriculture	45	45	—	—
Subcomponent 2.1: Public infrastructure for the development of commercial agriculture	37	37	—	—
Subcomponent 2.2: Governance and regulatory framework for commercial agriculture	8	8	—	—
Component 3: Strengthening institutional capacities to support the development of commercial agriculture	30	30	—	—
Subcomponent 3.1: Capacity-building of institutions providing support to commercial agriculture	20	20	—	—
Subcomponent 3.2: Project management, coordination, and monitoring at national and departmental levels	10	10	—	—
Component 4: Contingency emergency response	0	0	—	—
Total Costs				
Total Project Costs	100	100	—	—
Front End Fees	—	—	—	—
Total Financing Required	100	100	—	—

C. LESSONS LEARNED AND REFLECTED IN THE PROJECT DESIGN

45. Overall, the project will draw on lessons from the implementation of different World Bank-financed projects in the Democratic Republic of Congo and ROC, specifically the Democratic Republic of Congo-Agriculture Rehabilitation and Recovery Support Project (P092724) with its successful results in rebuilding the seed value chain and rehabilitating rural roads in a very remote area of the country.

46. For Component 1, the project design is based on lessons learned from experience gained in implementing the PDARP and the PADE, two projects co-financed by the World Bank in the ROC. These lessons relate mainly to the establishment and implementation of a matching grant scheme that fully leverages the accumulated experience of both projects and maximizes the synergies between each project's activities to support producer groups and agribusiness MSMEs. Producer groups and MSMEs interested in receiving project support through Component 1's matching grant scheme will, for instance, be filtered on the basis of basic criteria and will receive technical assistance throughout implementation according to the lessons learned from the two projects. Project design also incorporates lessons from the World Bank review of matching grant projects published in 2016, 'How to Make Grants Better Match for Private Sector Development'.

47. For the PA approach in Subcomponent 1.1, the project also builds on several past projects, notably in Latin America and Asia, including successful experiences in Brazil, Bolivia, Colombia, China, and Papua New Guinea, among others.

48. For Component 2, the experience of the PDARP has demonstrated that investment in rural agricultural roads has, in some instances, motivated some commercial farm operators to resume their investments in abandoned areas. The rehabilitation of rural roads and their maintenance will be supported based on best practices developed from earlier experiences gained under the Additional Financing of the PDARP. In addition, the lessons learned from the implementation of the PDARP road rehabilitation intervention strategy will also be evaluated, analyzed, and adopted. Lastly, technical assistance will be provided to departmental councils to implement the new road maintenance strategy developed with the assistance of the PDARP to ensure sustained road maintenance.

49. For Subcomponent 2.2 and Component 3, the project will work in close synergy with the PADE to identify the points of convergence and complementarity between the two projects. The project will build upon the progress made by the PADE in improving the enabling environment for agribusiness and transparency in the implementation of procedures governing cross-border trade. The project will also use the mechanism for PPD established with the support of the PADE to start a PPD specifically on commercial agriculture to identify and promote sector reforms that may contribute to the development of commercial agriculture (Subcomponent 2.2).

IV. IMPLEMENTATION

A. INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS

50. The institutional arrangements proposed for this project, under the supervision of the MAEP, include the following supervisory and implementation bodies: (a) a Steering Committee; (b) a National Coordination Unit (NPCU) of the project (including a Matching Grant scheme); (c) Departmental Project Coordination Units (DPCUs); (d) technical service providers (public, private, NGOs); and (e) financial institutions, which will transfer and disburse the funds to selected project beneficiaries (producer groups, agribusiness MSMEs under Component 1) (see figure 2).

51. Public service providers will participate in the project through the structures of the MAEP. The ongoing reform of the MAEP and the introduction of specialized agencies is an opportunity for rethinking and repositioning the role of public technical services, including agriculture advisory and extension services.

Steering Committee

52. A high-level Steering Committee will be officially established before effectiveness. It will be chaired by the relevant minister who will be designated by the Government and composed of representatives of key project stakeholders (relevant ministries, private sector, and civil society including producer groups) in the project. The Steering Committee will be responsible for the strategic direction, operational oversight, communication, and overall good governance of the project.

National Project Coordination Unit

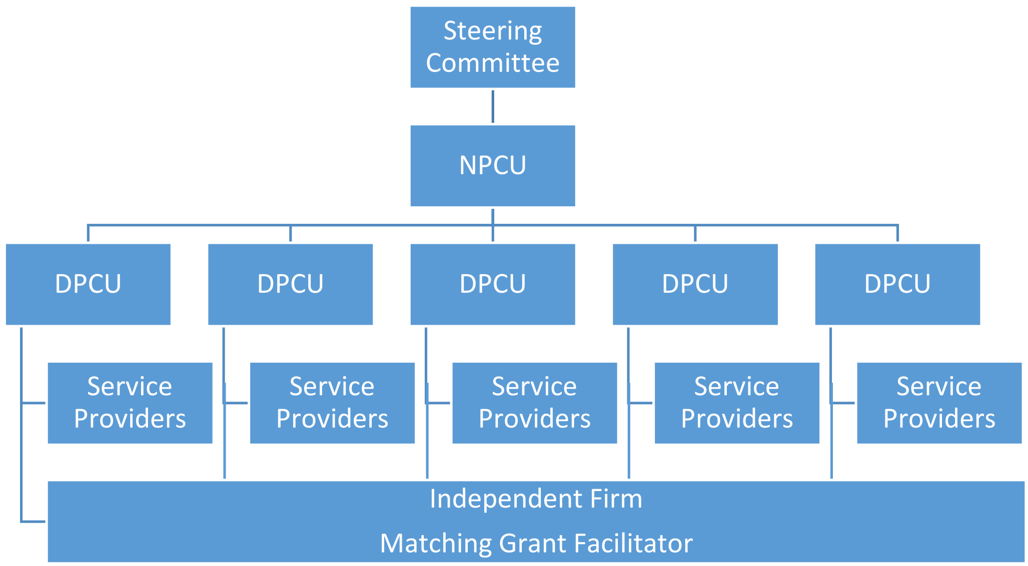
53. It is proposed that the current PDARP NPCU, with a proven track record in administrative and fiduciary management, be retained and strengthened to coordinate and manage the Commercial Agriculture Project. The NPCU will be responsible for project implementation, management, coordination, M&E, and supervision, as well as social and environmental safeguards monitoring. The NPCU will rely on specific expertise, including the hiring of an independent firm contracted for the management of the selection process of the matching grant program of Component 1.

Departmental Project Coordination Units

54. Five DPCUs will be established at the departmental level to support specific zones targeted by the project. These units will be responsible for the establishment and maintenance of databases of all eligible service providers at departmental levels. They will ensure project activity M&E as well as receive and process complaints related to the implementation of the project in collaboration with the authorities, civil

society and the NPCU. They will be composed of a unit manager, an accountant, an M&E specialist, a team assistant, and a driver.

Figure 2. Proposed Institutional Implementation Arrangements for the Commercial Agriculture Project



Financial Services through Financial Institutions

55. The project will build on the experience of the PDARP with the MUCODEC (Savings and Credit Groups) and other MFIs through which the funds of the matching grant program of Component 1 will be disbursed to beneficiaries (producer groups and MSMEs).

Project Implementation Modalities

56. **Component 1.** The implementation of the activities under this component will be managed under the general supervision of the NPCU and DPCUs. The communication, monitoring, and supervision of the disbursed grants will be performed by the NPCU and the DPCUs. The processing and evaluation of matching grant applications submitted under the matching grant program will be carried out by an independent organization. The final decision to approve the allocation of a matching grant to a beneficiary will be made by a committee composed of representatives from relevant ministries, the private and financial sectors, and civil society.

57. **Component 2.** This component will also be managed under the general supervision of the NPCU. Activity implementation will be informed, on the one hand, by the deployment of activities under Component 1 related to productive investments as the location of all public investment (roads, energy, and so on) will largely depend on the specific geographical zones where productive investments are being made. Local authorities will also guide the identification of public investments. The project will work

directly with relevant government agencies in implementing activities related to improving the enabling environment for agribusiness.

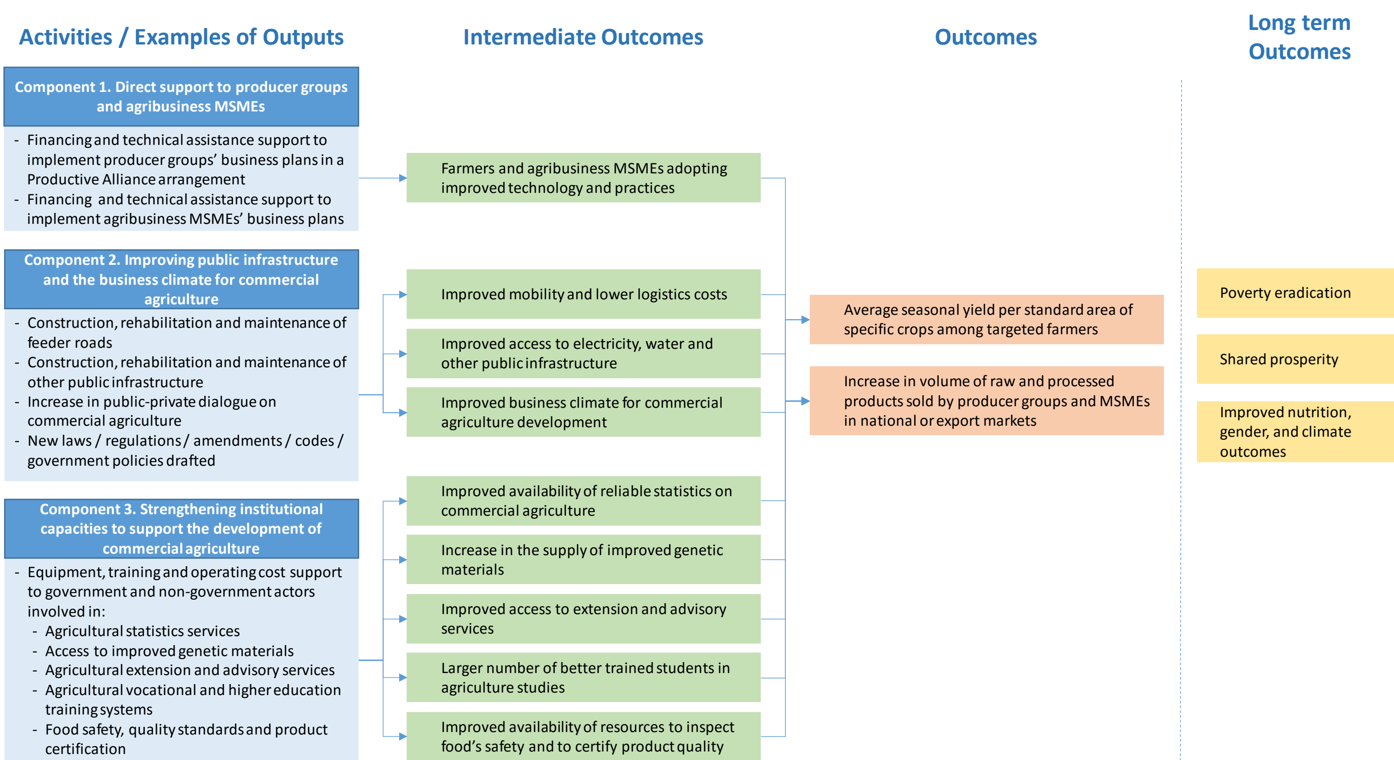
58. **Component 3.** All capacity-building activities under this component will be implemented directly by the NPCU in response to the needs and priorities identified and expressed by the directorates, units, and services engaged in service delivery. The management, coordination, communication, and M&E of the project as well as social and environmental safeguards monitoring are also the responsibility of the NPCU, which will ensure that all project components are coherent, ensure cohesion among actors, and oversee the proper use of project resources.

B. RESULTS MONITORING AND EVALUATION

59. The MAEP will assume overall responsibility for the M&E of the PDO-level and intermediate results indicators for the project. It will use the NPCU to support the data collection and analysis process. The MAEP has recently launched an agricultural census exercise that is expected to provide valuable inputs for the baseline status of the agricultural sector. A large part of the data on the agricultural sector is being collected by development partners, the FAO, the World Food Programme (WFP), the *Agence Française de Développement* (French Development Agency, AFD), and the African Development Bank (AfDB), in a series of fragmented studies with little participation and ownership of the MAEP. No concentrated efforts and investments have been made by the ministry to rebuild data management capacity for the sector. The project will work with the Government and other development partners to develop a consolidated M&E geo-referencing system, building on earlier initiatives, the ongoing agricultural census, and private sector M&E systems. The project will ensure that key core indicators for gender and citizen engagement and environmental sustainability are in compliance with World Bank requirements.

60. Project outcomes and impacts will be evaluated through the PDO and intermediate indicators described in the Results Framework, which will be presented in the Project Implementation Manual (PIM). Program outputs will be monitored by the NPCU in partnership with specific service providers. The project will finance all the M&E process and arrangements. Reports will follow the annual planning calendar and supervision missions will be used to confirm project progress. Figure 3 illustrates the theory of change for this project based on components' outputs.

Figure 3. Theory of Change



C. SUSTAINABILITY

61. The proposed project is fully owned by the Government of the ROC. In addition, the project design engages directly with the private sector through the PA approach, and business relationships supported under the project have an inbuilt market-based sustainability logic.

62. Sustainability and exit strategies have been integrated into the project design logic. Under Component 1, linkages will be fostered and facilitated between producer groups and private sector agricultural input providers, resulting in sustainable market relationships. Similarly, PAs forged between agribusiness off-takers and producer groups will help establish sustainable business relationships. All the productive investments made in equipment are supported by business plans, accompanied by technical assistance to ensure proper management and maintenance. PPD platforms specific to commercial agriculture will be established as a means of fostering collaboration among public and private sector actors and as a means of co-shaping favorable legislation and regulations. Some of these dialogue platforms are expected to last beyond the project's life.

63. The capacity development activities under Component 3 will ensure continuity of actions beyond the project's life span.

D. ROLE OF PARTNERS

64. Project implementation will rely on different key partners active in the ROC to support and scale up its intervention, among other things, the following:

(a) Technical assistance service providers will be hired by the project to assist (i) eligible producer groups and MSMEs prepare the business plan they wish to submit as part of their matching grant application under Component 1, (ii) the project implement a capacity-building program for producer groups that are unable to meet basic eligibility criteria, and (iii) producer groups and MSMEs implement their business plans. An example of such service providers for agricultural extension and advisory could be Agricongo, which is an NGO supported by the MAEP with a core mandate to develop horticulture production around peri-urban areas and to support the marketing of produce. This NGO has demonstrated an excellent record of accomplishment in the past and has been involved in the implementation of the PDARP.

(b) Private MSMEs already active in developing partnerships with smallholders and delivering key services. These will be strengthened in their functions and in establishing PAs through the matching grant program under Component 1 of the project.

(c) Financial institutions such as MFIs and commercial banks will help disburse the funds of the matching grant program to the selected beneficiaries under Component 1. In addition, a representative from the financial sector will participate in the selection committee for matching grant applications.

(d) An independent firm will be hired to support the matching grant program under Component 1. It will be in charge of processing and evaluating matching grant applications to make sure that applicants and their business plans meet eligibility and prioritization criteria before the final decision to approve the allocation of a matching grant to a beneficiary is made by the selection committee.

(e) The FAO and other key development institutions with whom the project will collaborate to support institutional development/transformation of the Ministry of Agriculture and address relevant transversal dimensions of the project such as nutrition, gender, and climate change.

65. The Government, through the MAEP, will be responsible for the day-to-day implementation of the project in accordance with the Credit Agreement.

V. KEY RISKS

A. OVERALL RISK RATING AND EXPLANATION OF KEY RISKS

66. **The program will be implemented in a context of substantial risks.** The southern hemisphere of the ROC has experienced sociopolitical troubles in a cyclical manner for many years. There is a high likelihood that political insecurity, elite capture, intercommunal conflicts, and governance factors could severely affect the achievement of the PDO.

67. **Brazzaville and Pointe Noire are large urban centers with high levels of poverty and disparity of incomes.** The corridor connecting the two cities (Pool Department) remains ravaged in conflict and violence. The project will include this zone within its intervention area and participatory stakeholder engagement should mitigate the risk of inequitable division of the project's benefits by promoting inclusive participation of target beneficiaries within different communities. Programming will need to be developed with the involvement of stakeholders to mitigate the risk of political interference or corruption. For substantive investments in infrastructure and agro-processing facilities, third-party independent evaluation and project beneficiary oversight will be used to mitigate against elite capture and political influence.

68. Critical risk factors that will require close attention during project implementation include: (a) low administrative and implementation capacity of governmental and nongovernmental institutions and actors; (b) risk of corruption and possible elite capture of funds and benefits at different levels; (c) the potential exacerbation of conflicts due to project activities, which generate benefits for some but not necessarily for all; and (d) the ongoing instability, displacement of communities, and insecurity in the Pool region, a project intervention zone which could jeopardize the achievement of the PDO.

Risks Ratings

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

69. For all these risk factors, adequate mitigation measures have been identified and incorporated into the project design and will be detailed in the implementation manuals to limit negative impacts. With regard to containing political and governance risk (Substantial), the project will maintain constant contact with the appropriate political and security actors (United Nations [UN] agencies, NGOs, and international donors), particularly to monitor the evolution of the situation in the Pool region. In addition, the proposed project will also use a bottom-up, participatory approach, notably under Component 1, to ensure that producer groups and MSMEs are engaged in an equitable fashion and to prevent problems related to elite capture.

70. With respect to macroeconomic risk (Substantial), the project preparation team worked closely with different partners (including governmental, private sector, and civil society) and already pre-identified suitable partners to ensure effective community dialogue and planning. To mitigate risks related to the technical design of the project or program (Substantial), a national multisector commission has been established and has conducted the project's preparation with the World Bank team. This has contributed to a better comprehension of the project's design. Risks related to institutional capacity for implementation and sustainability (High), as well as fiduciary risks (Substantial), have been mitigated by using the established Project Coordination Unit (PCU) of the PDARP, which has proven expertise and records of accomplishment in implementing the successful agriculture project during the past eight years. Regarding environmental and social risks, although Moderate, the required screening has been undertaken, and a budget allocated to ensure adequate monitoring of this risk category.

VI. APPRAISAL SUMMARY

A. ECONOMIC AND FINANCIAL ANALYSIS

71. The proposed investment will provide direct socioeconomic benefits to more than 700 agricultural producer groups representing approximately 7,000 households and to a number of MSMEs that provide inputs or processing technologies. In addition, the project will benefit approximately 500,000 beneficiaries living near improved roads, accessing improved quality of agriculture services and numerous food consumers who will have increased access to high-quality food. The project's development benefits correspond to the three project components: (a) direct support to producer groups and agribusiness MSMEs, (b) improving public infrastructure and the business climate for commercial agriculture, and (c) strengthening institutional capacity to support the development of commercial agriculture.

72. Yield and production investments under Component 1 have estimated financial returns of 27 percent and estimated economic returns of 26 percent. Due to market distortions, domestic crop prices are markedly different from international prices – sometimes higher (maize) and sometimes lower (cocoa) – with the net effect that economic and financial returns for the project are similar. The net present value of business plans supported by the project is estimated at almost US$8,000 per ha. Certain specialty

products, such as paprika pepper, require relatively small investments in processing technologies (for example, drying) to become economically lucrative. Investments in fish, vegetables, and cash crops (cocoa) have higher economic returns than investments in staples.

73. Economic rates of returns for Component 2 are about 9 percent, not counting any nonagricultural benefits from improved transport such as improved access to health services. Transport costs represent as much as 40 percent of market prices for basic commodities such as cereals, and based on existing studies (that is, United Nations Organization for Project Services [UNOPS] 2015), it is estimated that infrastructure and marketing improvements under Component 2 will reduce these transport costs for regional producers by 30 percent. Road rehabilitation and maintenance will directly benefit 500,000 rural beneficiaries engaged in agriculture. Investments from Components 1 and 2 will benefit commercialized value chains such as eggs, cereals, vegetables, and cocoa and may even encourage producers who do not currently engage in any sales (about 20 percent of agricultural households) to become commercial producers. The overall economic rate of return for Components 1 and 2, using baseline assumptions, is 21 percent.

74. The benefits of the third component are difficult to assess quantitatively. This component will generate important externalities related to information access and the overall efficacy of public agricultural investments. Government capacity-building efforts will increase access to research, extension, and services for the benefit of producers and ultimately, food consumers.

75. Public sector financing is justified given the importance of agricultural production to the country’s economic diversification objectives, overall growth and employment, balance of payments, and poverty reduction. Investments will be made in a redistributive way, targeting social issues by ensuring a fair balance of investments between communities and groups, especially women, youth, and vulnerable groups in a way that promotes stability and employment. A share of the additional agricultural revenues will be used to ameliorate the food security status of beneficiary households, and the other share will generate monetary revenues for households to meet their minimal recurrent cash needs and investment requirements.

76. The World Bank’s value added is high given the extensive knowledge and expertise generated under previous agriculture and trade and competitiveness activities such as the PDARP and PADE. The investment builds on previous implementation experience, ongoing Government dialogue, and global best practices.

B. TECHNICAL

77. **Matching grant program management.** PAs and MSME support will be approved through competitive processes. Scoring of PA business plans will include minimum requirements in terms of their commercial, technical, and financial/economic viability, as well as assessments of additional prioritization criteria in case the demand for matching grants exceeds the supply of funds (for example, number of

beneficiaries, contribution to improved nutrition outcomes, contribution to improved environment outcomes, and so on). Subprojects under PAs will aim to ensure that producer groups reach the market specifications agreed with potential markets and/or buyers and will include tailored organizational and business support. Groups incorporating women, youth, and indigenous people (IP) will receive, if required, additional support to be able to compete on equal terms. An independent firm will carry out the technical and financial evaluation of business plans. Producer groups will receive technical assistance support throughout the subproject cycle.

78. **Nutrition and food insecurity.** The project will address this in three ways: (a) increasing the volume and quality of nutritious food by making nutrition and climate-sensitive technology available to producer groups practicing sustainable intensification of vegetable and animal production systems; (b) improving the awareness of the importance of micronutrients in a healthy diet through nutrition-centered extension messages delivered by agricultural advisory and extension services (healthy food choices and promoting household food processing technologies); and (c) through business plans submitted by MSMEs for financing under the matching grants that promote fortification and nutrition-enriched food (cassava flour and so on).

C. FINANCIAL MANAGEMENT

79. An FM assessment of the implementing unit for the PDARP was undertaken to determine whether: (a) this unit has adequate FM arrangements to ensure that project funds will be used for the intended purposes, in an efficient and economical way; (b) project financial reports will be prepared in an accurate, reliable, and timely manner; and (c) the project's assets will be safeguarded. The FM assessment was done in accordance with the Financial Management Practices Manual issued by the Financial Management Sector Board on November 3, 2005 (revised March 2010). The assessment reviewed the FM system (budgeting, staffing, financial accounting, financial reporting, funds flow and disbursements, and internal and external audit arrangements) at the PDARP.

80. The PDARP PCU has satisfactorily managed the implementation of that project since 2008. The FM staff includes a financial and administrative expert who is responsible for financial and administrative matters, an accountant who handles overall accounting and reporting, and an administrative assistant. They have been trained in the use of World Bank procedures as well as the accounting software over the last years of project implementation. The project maintains proper books of accounts, which include a cash book, ledgers, journal vouchers, and a contract register.

D. PROCUREMENT

81. Project procurement will be undertaken by the procurement unit within the PDARP. The PDARP has a proven track record in administrative and fiduciary management of a World Bank-funded project which closed on April 30, 2017. Given the country context and associated risk and the fact that the

procurement capacity of the PDARP needs to be continually strengthened, the procurement risk is rated Substantial. Procurement arrangements are included under annex 2.

E. SOCIAL (INCLUDING SAFEGUARDS)

82. **Social benefits: poverty and equity.** The proposed project, by improving the delivery of agricultural services to producer groups (R&D, improved seed and planting material, organic and mineral fertilizers, and so on) and rural mobility for goods and people, is designed to contribute to shared growth and poverty alleviation, including: (a) improved access for women to agricultural inputs, extension services, and entrepreneurship training, which will increase their ownership and control of assets; (b) an increased productivity in supported agricultural value chains that will contribute to enhanced food and nutrition security; (c) improvement in the enabling environment of public and private investments in the agriculture sector leading to the transfer of skills and the creation of jobs (self-employment, seasonal jobs, temporary jobs, semi-permanent jobs, and so on); and (d) reduction of GHG emissions through the promotion of climate-smart agriculture.

83. As stated above, the project's direct beneficiaries are: (a) farmers and producer groups in the targeted areas; (b) MSMEs; (c) women, youth, and vulnerable groups (that is, indigenous communities, IDP, and others at risk of violent mobilization); and (d) agricultural service providers, including the public agriculture research and extension services, international and local NGOs, and private service providers involved in value chains supported by the project.

84. **Gender.** Gender-inclusive consultations were carried out during project preparation. Beneficiaries of all ages, both men and women, are expected to benefit from the project's investments. The project seeks to empower women through two main approaches, in line with the World Bank Gender Strategy (2016): (a) removing the constraints to more and better jobs and (b) removing barriers to women's ownership and control of assets. Access to more and better jobs will be achieved through training and internships targeted at young women. Women's ownership and control of assets will be promoted through access to matching grants for: (a) technical assistance; (b) access to improved genetic material, including agricultural extension (seeds, planting material, and breeds); and (c) agricultural machinery and equipment. The gender-informed approach will be consolidated during project implementation through gender-specific investments in the value chains. A gender-informed M&E system will be implemented and will collect and present gender-disaggregated data on project beneficiaries.

85. **Job creation.** It is expected that commercial arrangements facilitated under the PAs, the support to agribusiness MSMEs, and the financing of public infrastructure for the development of commercial agriculture will contribute to the creation of jobs and the transfer of skills through the

(a) Intensification of agricultural production and increases in agricultural productivity, which will strengthen self-employment and potentially reduce underemployment on farms;

(b) Expansion in processing capacity and packaging of agricultural products, which will have a big impact on the availability of permanent, part-time, and seasonal jobs at the level of MSMEs and farms;

(c) Financing of public investments including the construction and maintenance of rural agricultural roads and improved access to electricity and water for agro-processing and so on;

(d) Improved access to agricultural inputs and extension services that will lead to semi-permanent jobs with slightly higher skills levels; and

(e) Support to internship arrangements with the private sector that will facilitate access to jobs for youth.

86. **Citizen engagement.** The identification and design of project components, including the selection of the project implementation zone, was based on consultations with various stakeholders. Stakeholders consulted during preparation included Government institutions at different levels (national and departmental), representatives of producer groups, MSMEs active in the agriculture sector, medium and large private actors including strategic investors in the agriculture sector and financial institutions, women's groups, civil society, local and international NGOs, research and training institutes, bilateral donors, and UN organizations. The establishment of dialogue platforms with multi-stakeholder groups will be part of the project's strategy for inclusion and participation in the reform agenda to boost commercial agriculture in the country. At the same time, these consultations with civil society and a beneficiary assessment will be part of the proposed project's M&E strategy. The preparation and implementation of safeguards instruments have been and will be part of the consultation process. Citizen engagement and beneficiary feedback will be monitored through agreed and detailed indicators.

87. **Social safeguards.** Overall, the proposed project is expected to have positive social impacts, although some activities will generate adverse social impacts. Specifically, Subcomponent 2.1 (public infrastructure for the development of commercial agriculture—roads, energy, water and others—to support value chains) may induce land acquisition and involuntary loss of assets. Both of these impacts trigger OP 4.12 (Involuntary Resettlement). Because the proposed project will be implemented in areas inhabited by indigenous people, OP 4.10 (Indigenous Peoples) is triggered. Given these considerations, and also given that the precise project locations have yet to be specified and only the larger project implementation area is known, two social safeguards instruments have been prepared: (a) a Resettlement Policy Framework (RPF) and (b) an Indigenous Peoples Planning Framework (IPPF). The RPF indicates that individuals that may be affected by involuntary resettlement are not known at this stage as number, nature, and exact location of subprojects are not defined yet. The IPPF estimates that 43,378 indigenous persons live in the project area. These instruments (RPF and IPPF) were prepared; consulted upon in-country on December 22, 2016; and publicly disclosed in-country on March 28, 2017 and at the InfoShop on March 29, 2017. In addition, Resettlement Action Plans (RAPs) will be prepared, as needed, before

project activities that induce involuntary resettlement. An additional adverse impact to be addressed is the potential transmission of HIV/AIDS, induced by the influx of extension workers, road contractors, and other professionals involved in implementing the project in rural and peri-urban areas. The preparation and implementation of HIV/AIDS prevention plans will be part of the contractual obligations of various contracts issued under the proposed project.

F. ENVIRONMENT (INCLUDING SAFEGUARDS)

88. The proposed project is associated with major environmental benefits as it aims to promote climate-smart agriculture and measures to conserve forestry landscapes—of both adaptation and mitigation relevance—such as agro-forestry plantations. By inducing improved soil and water conservation, increased tree/shrub/grass cover, and reduced deforestation and soil degradation, the project should have a significant, positive environmental impact.

89. The planned project will finance physical infrastructure investments and triggers five out of six environmental safeguard policies: OP/BP 4.01 (Environmental Assessment), OP/BP 4.04 (Natural Habitats), OP/BP 4.36 (Forests), OP/BP 4.09 (Pest Management), and OP/BP 4.11 (Physical Cultural Resources). Structures that will be funded under the proposed project include rural roads, irrigation facilities, warehouses, and cold storage facilities, among others.

90. Given these considerations, the project is rated Environment Category B. The environmental policies triggered by this project include (a) OP/BP 4.01 (Environmental Assessment), (b) OP/BP 4.04 (Natural Habitats), (c) OP/BP 4.09 (Pest Management), (d) OP/BP 4.11 (Physical Cultural Resources), (e) OP/BP 4.36 (Forests), and (f) OP/BP 7.50 (Projects on International Waterways). To handle potential adverse impacts, an Environmental and Social Management Framework (ESMF) and an Integrated Pest Management Plan (IPMP) were prepared in accordance with OP/BP 4.01 and OP/BP 4.09. The ESMF includes specific chapters addressing issues related to, for example, natural habitats and forests. Physical cultural resources are addressed in the Physical Cultural Resources Management Framework (PCRMF). To fully comply with OP/BP 7.50, a Riparian Notification Letter to riparian countries was prepared and sent on September 18, 2016, through *Commission Internationale du Bassin Congo-Oubangui-Sangha* (International Commission for Congo-Oubangui-Sangha Basin, CICOS), the international commission for the management of the Congo-Oubangui-Sangha Basin. A no-objection cannot be issued, as CICOS regulations require a completed Environmental and Social Impact Assessment (ESIA) to issue the notification and not an ESMF. As the detailed project activities are demand driven and still to be identified, it is not possible to prepare an ESIA at this time. In view of the fact that the project will finance micro/minor irrigation rehabilitation only and there will be no change in the amount of water consumed, an exception memo for the Riparian Notification was processed and approved by the Vice President's office on May 15, 2017. The ESMF, IPMP, and PCRMF were consulted upon on December 22, 2016, and disclosed in-country on March 23, 2017, and at the InfoShop on March 29, 2017.

G. OTHER SAFEGUARD POLICIES (IF APPLICABLE)

	Safeguard Policies Triggered by the Project	Yes	No
	Environmental Assessment OP/BP 4.01	X	
	Natural Habitats OP/BP 4.04	X	
	Forests OP/BP 4.36	X	
	Pest Management OP 4.09	X	
	Physical Cultural Resources OP/BP 4.11	X	
	Indigenous Peoples OP/BP 4.10	X	
	Involuntary Resettlement OP/BP 4.12	X	
	Safety of Dams OP/BP 4.37		X
	Projects on International Waterways OP/BP 7.50	X	
	Projects in Disputed Areas OP/BP 7.60		X

H. WORLD BANK GRIEVANCE REDRESS

91. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB'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 WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit *http://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.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY : Congo, Republic of
Commercial Agriculture Project

Project Development Objectives

The Project Development Objective (PDO) is to improve productivity of farmers and market access for producer groups and micro, small and medium agribusiness enterprises, in selected zones of the territory of the Recipient, and provide immediate and effective response in the event of an Eligible Crisis or Emergency.

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Direct project beneficiaries		Number	0.00	500000.00	Yearly	Calculation of number of individuals receiving project benefits	NPCU
Female beneficiaries		Percentage	0.00	50.00	Yearly	Calculation of number of individuals receiving project benefits	NPCU

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description: Direct beneficiaries are people or groups who directly derive benefits from an intervention (i.e., individuals directly benefitting from at least one project activity/input). Please note that this indicator requires supplemental information. Supplemental Value: Female beneficiaries (percentage). Based on the assessment and definition of direct project beneficiaries, specify what proportion of the direct project beneficiaries are female. This indicator is calculated as a percentage.							
Name: Percentage increase in volume of raw and processed products sold by producer groups and MSMEs in national or export markets		Percentage	0.00	20.00	Yearly	Calculation of percentage increase of raw and processed goods sold	NPCU
Description:							
Name: Average seasonal yield per standard area of specific crops among targeted farmers		Metric ton	0.00	0.00			
Maize		Metric ton	0.50	1.50	Per season	Survey	NPCU/National Agricultural Statistics
Cassava		Metric ton	7.00	15.00	Per season	Survey	NPCU/National Agricultural Statistics

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Aquaculture		Metric ton	0.00	4.00	Per season	Survey	NPCU/National Agricultural Statistics
Livestock (Egg production per chicken)		Number	0.00	250.00	Per season	Survey	NPCU/National Agricultural Statistics
Description:							

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Farmers adopting improved agricultural technology	✓	Number	0.00	7000.00	Yearly	Survey	NPCU
Farmers adopting improved agricultural technology - Female	✓	Number	0.00	3500.00	Yearly	Survey	NPCU

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							
Name: Value of matching grants given to producer groups and MSMES (disaggregated by sex)		Amount(USD)	0.00	20000000.00	Yearly	Calculation of value of grants in US$	NPCU
Description:							
Name: Number of business plans that are supported by the project (for producer groups, disaggregated by sex)		Number	0.00	700.00	Yearly	Survey	NPCU
Number of business plans that are supported by the project (for MSMEs)		Number	0.00	50.00	Yearly	Survey	NPCU
Description:							
Name: Roads rehabilitated, Rural		Kilometers	0.00	1000.00	Yearly	Review of technical inspection report 3 months after completion	NPCU

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description: Kilometers of all rural roads reopened to motorized traffic, rehabilitated, or upgraded under the project. Rural roads are roads functionally classified in various countries below Trunk or Primary, Secondary or Link roads, or sometimes Tertiary roads. Such roads are often described as rural access, feeder, market, agricultural, irrigation, forestry or community roads. Typically, rural roads connect small urban centers/towns/settlements of less than 2,000 to 5,000 inhabitants to each other or to higher classes of road, market towns and urban centers.							
Name: Number of policy reforms (e.g. laws and regulations) drafted by the project		Number	0.00	3.00	Yearly	Annual reports, Mid-term evaluation	NPCU
Description:							
Name: Number of multi-stakeholder platforms for public-private dialogue on commercial agriculture		Number	0.00	4.00	Yearly	Quarterly Reports	NPCU
Description:							
Name: Quantity of improved seeds certified annually		Metric ton	0.00	100.00	Yearly	Quarterly reports	NPCU

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description:							
Name: Number of laboratories for agriculture research and development and/or for food safety control rehabilitated and brought up to international standards (test, control, analysis of soils, genetic mater		Number	0.00	3.00	Yearly	Annual reports, Mid-term evaluation	Implementing partner/NPCU
Description:							
Name: Percentage of producers and MSMEs satisfied with supporting services provided along agricultural value chains in the areas of intervention of the project (services)		Percentage	0.00	60.00	Yearly	Survey	NPCU/Implementing Partner
Description:							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Number of students who received support from the project for practical internships or master's degrees (disaggregated by sex)		Number	0.00	500.00	Yearly	Mid-term evaluation	ENSAF/NPCU
Description:							
Name: Availability of agricultural scientific data and statistics from a centralized source		Number	0.00	1.00	Yearly	Annual progress reports	NPCU
Description:							

Target Values

Project Development Objective Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Direct project beneficiaries	0.00	25000.00	100000.00	250000.00	450000.00	500000.00	500000.00
Female beneficiaries	0.00	50.00	50.00	50.00	50.00	50.00	50.00
Percentage increase in volume of raw and processed products sold by producer groups and MSMEs in national or export markets	0.00	2.00	5.00	12.00	18.00	20.00	20.00
Average seasonal yield per standard area of specific crops among targeted farmers	0.00						0.00
Maize	0.50	0.50	0.80	1.00	1.20	1.50	1.50
Cassava	7.00	7.00	10.00	12.00	15.00	15.00	15.00
Aquaculture	0.00	0.00	3.00	3.00	4.00	4.00	4.00
Livestock (Egg production per chicken)	0.00	0.00	100.00	150.00	200.00	250.00	250.00

Intermediate Results Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Farmers adopting improved agricultural technology	0.00	100.00	2000.00	4000.00	6500.00	7000.00	7000.00
Farmers adopting improved agricultural technology - Female	0.00	50.00	1000.00	2000.00	3000.00	3500.00	3500.00
Value of matching grants given to producer groups and MSMES (disaggregated by sex)	0.00	0.50	4.00	10.00	15.00	20.00	20000000.00
Number of business plans that are supported by the project (for producer groups, disaggregated by sex)	0.00	25.00	150.00	350.00	500.00	700.00	700.00
Number of business plans that are supported by the project (for MSMEs)	0.00	5.00	10.00	20.00	35.00	50.00	50.00
Roads rehabilitated, Rural	0.00	0.00	550.00	750.00	900.00	1000.00	1000.00
Number of policy reforms (e.g. laws and regulations) drafted by the project	0.00	0.00	1.00	2.00	3.00	3.00	3.00
Number of multi-stakeholder platforms for public-private dialogue on commercial agriculture	0.00	1.00	2.00	4.00	4.00	4.00	4.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Quantity of improved seeds certified annually	0.00	0.00	10.00	50.00	80.00	100.00	100.00
Number of laboratories for agriculture research and development and/or for food safety control rehabilitated and brought up to international standards (test, control, analysis of soils, genetic mater	0.00	0.00	0.00	1.00	2.00	3.00	3.00
Percentage of producers and MSMEs satisfied with supporting services provided along agricultural value chains in the areas of intervention of the project (services)	0.00	5.00	25.00	45.00	60.00	60.00	60.00
Number of students who received support from the project for practical internships or master's degrees (disaggregated by sex)	0.00	50.00	150.00	300.00	450.00	500.00	500.00
Availability of agricultural scientific data and statistics from a centralized source	0.00	0.00	0.00	1.00	1.00	1.00	1.00

Results Framework and Monitoring

PDO: To improve productivity of farmers and market access for producer groups and micro, small and medium agribusiness enterprises, in selected zones of the territory of the Recipient, and provide immediate and effective response in the event of an Eligible Crisis or Emergency.

PDO Level Results Indicators*	Core	Unit of Measure	Baseline	Target Values**					Frequency	Data Source/Methodology	Responsibility for Data Collection	Description (indicator definition and so on)
				YR 1	YR 2	YR3	YR 4	YR5				
Indicator 1: Direct project beneficiaries	☒	Number	0	25,000	100,000	250,000	450,000	500,000	Yearly	Calculation of number of individuals receiving project benefits	NPCU	Individuals directly benefitting from at least one project activity/input; Cumulative targets
Of which female	☒	Percent	0	50	50	50	50	50				
Indicator 2: Percentage increase in volume of raw and processed products sold by producer groups and MSMEs in national or	☐	Percentage	0	2	5	12	18	20	Yearly	Calculation of percentage increase of raw and processed goods sold	NPCU	Increases in commodities and products sold on the market

export markets[26]												
Indicator 3: Average seasonal yield per standard area of specific crops among targeted farmers[27]	☒											Productivity increases in priority value chains
Maize		t/ha	0.5	0.5	0.84	1.0	1.2	1.5	Per season	Survey	NPCU/National Agricultural Statistics	
Cassava		t/ha	7	7	10	12	15	15				
Livestock (Egg production per chicken)		Per production unit per production cycle	0	0	100	150	200	250				

[26] This indicator tracks increases in the volume of products sold rather increases in sales revenue because of the high volatility of agricultural commodity prices in the ROC over which the project has no control. This price volatility will be monitored by the project through its work on supporting agricultural statistics in Subcomponent 3.1.

[27] The project will follow an open menu approach in terms of the value chains and business opportunities it supports. Seasonal yields will be tracked for four specific crops under this indicator because of: (i) market demand; (ii) importance in respect to food security; (iii) potential for value added; and (iv) national comparative advantage. Seasonal yields will also be tracked by the project for all the other types of crops it will support, whichever they may be.

Aquaculture		t/ha	0	0	3	3	4	4				
Intermediate Results (Component 1) - Direct support to producer groups and agribusiness MSMEs												
1.1: Farmers adopting improved agricultural technology	☒	Number	0	100	2,000	4,000	6,500	7,000	Yearly	Survey	NPCU	Individuals adopting at least one technology; Cumulative targets
Farmers adopting improved agricultural technology of which female		Number	0	50	1,000	2,000	3,000	3,500	Yearly	Survey	NPCU	Individuals adopting at least one technology; Cumulative targets
1.2: Value of matching grants given to producer groups and MSMEs (disaggregated by sex)	☐	US$	0	500,000	4,000,000	10,000,000	15,000,000	20,000,000	Yearly	Calculation of value of grants in US$	NPCU	Cumulative (US$)
1.3: Number of business plans that are supported by the project (for producer groups,	☐	Number	0	25	150	350	500	700	Yearly	Survey	NPCU	Business plans under PAs financed

disaggregated by sex)												
1.4: Number of business plans that are supported by the project (for MSMEs)	☐	Number	0	5	10	20	35	50	Yearly	Survey	NPCU	Business plans for MSMEs financed
Intermediate Results (Component 2) - Improving public infrastructure and the business climate for commercial agriculture												
2.1: Roads rehabilitated, Rural	☒	Km	0	0	550	750	900	1,000	Yearly	Review of technical inspection report 3 months after completion	NPCU	Cumulative; Information provided by service providers (Better access to market due to rehabilitated roads)
2.2: Number of policy reforms (for example, laws and regulations) drafted by the project	☐	Number	0	0	1	2	3	3	Yearly	Annual reports, Mid-term evaluation	NPCU	Cumulative; Supporting multi-stakeholder participation in the drafting of 3 new laws and regulations
2.3: Number of multi-stakeholder	☐	Number	0	1	2	4	4	4	Yearly	Quarterly Reports	NPCU	Cumulative; 4 multi-actor PPD

platforms for public-private dialogue on commercial agriculture												platforms established
Intermediate Results (Component 3) - Strengthening institutional capacity to support the development of commercial agriculture												
3.1: Quantity of improved seeds certified annually (tons)	☒	Tons	0	0	10	50	80	100	Yearly	Quarterly Reports	NPCU	Cumulative; 100 tons of certified seed produced
3.2: Number of laboratories for agriculture R&D and/or for food safety control rehabilitated and brought up to international standards (test, control, analysis of soils, genetic material)	☐	Number	0	0	0	1	2	3	Yearly	Annual reports, Mid-term evaluation	Implementing partner/NPCU	Cumulative

3.3: Percentage of producers and MSMEs satisfied with supporting services provided along agricultural value chains in the areas of intervention of the project (services)	☒	Percentage	0	5	25	45	60	60	Yearly	Survey	NPCU/Implementing Partner	Cumulative; Percentage of clients of agricultural extension and advisory services satisfied with quality
3.4: Number of students who received support from the project for practical internships or master's degrees (disaggregated by sex)[28]	☐	Number	0	50	150	300	450	500	Yearly	Mid-term evaluation	ENSAF/NPCU	Cumulative; Number of students participating in internships and pursuing master's degrees

[28] In the first years of the project's implementation, the results from this indicator will likely come from the support for internships, for which ENSAF has already built partnerships with the private sector. The support to master's degrees will likely yield results at a later stage in the project's life.

3.5: Availability of agricultural scientific data and statistics from a centralized source (database & website)	☐	Number	0	0	1	1	1	1	Yearly	Annual progress reports	NPCU	Knowledge platform operational (website developed, launched, and regularly updated)

ANNEX 1: DETAILED PROJECT DESCRIPTION

COUNTRY: Republic of Congo
Congo Commercial Agriculture Project

Country Context

1. **The ROC is sparsely inhabited and highly urbanized.** With a population of 4.4 million people, the ROC ranks among the least-densely populated countries in the world (12.8 per km^2). The country has an urbanization rate of about 70 percent, with more than half of the population living in Brazzaville and Pointe-Noire, its two largest cities. Oil's share of total GDP increased from 56 percent in 2000–2004 to 66 percent in 2010–2014 and—despite the recent oil price decline—still accounts for more than half of GDP and more than 80 percent of total exports. Despite steady GDP growth of 5 percent over the past 10 years, the ROC continues to face high poverty rates and inequality due to jobless growth.

2. **The ROC is highly endowed in natural resources, but with poor social indicators.** The country is largely covered by the Congo Forest Basin (64 percent), with 31 percent of its total surface area comprising cultivable land. The country is also endowed with significant hydrocarbon reserves with an estimated 1.6 billion barrels of oil reserves and with a proven 90 billion m^3 of natural gas, respectively, the fourth-largest oil reserves and the fifth-largest natural gas reserves in Sub-Saharan Africa. In addition, the country is significantly endowed in mining ore such as iron, potash, and magnesium. However, the ROC's key social indicators, notably health and education outcomes, as well as service delivery in these sectors, are much lower than countries with similar resource endowments, evidence of the country's inability to harness its potential into dividends for its citizens.

3. **The economy is vulnerable and inequality is high.** Sixty-three percent of the population is engaged in either agriculture or informal services, and youth severely affected by unemployment. The unemployment rate for those aged 15–29 is 32.7 percent[29]. Gender and disability have an indirect impact on poverty as women and disabled persons exhibit lower levels of education and have fewer employment opportunities. The ROC's gender inequality country index is 137 out of 157 countries. The country has a Gini coefficient of 0.45 with a poverty incidence of 74.8 percent in rural areas versus 32.3 percent in urban areas. The malnutrition rate remains high (32 percent), with a total of 1.4 million people estimated as malnourished and 31 percent of children stunted. Food and nutrition insecurity is driven by (a) inadequate

[29] Poverty Report, Republic of Congo 2016

access to quality food, (b) poor hygiene practices and lack of awareness of food and nutrition requirements, and (c) unsafe food.

4. **The business climate needs improvements and access to financial services is limited.** The ROC was listed 177 out of 190 in the World Bank Doing Business Report 2017, which noted, for instance, that it takes an average of 50 days to register a business, well beyond the regional average of 27.3 days. Access to finance is cited as the second highest constraint by businesses[30]. Bank credit to agriculture accounts for 6 percent of short-term credit and 17 percent of medium-term credit, and is focused primarily on the forestry industry. MFIs are mostly focused on urban markets, and agriculture accounts for only 2 percent of the MUCODEC's portfolio (the largest MFI). Low penetration of financial services in rural areas, knowledge of the agriculture sector, and collateral requirements limit the access to credit by producer groups and MSMEs in agribusiness.

5. **The private sector in the ROC is largely fragmented.** There is little or no structured PPD taking place to improve the enabling environment for business. The contribution of the private sector to growth has been limited, as reflected by the level of private investments (excluding oil), which represents only 5 percent of GDP (against 14 percent on average in Sub-Saharan Africa and 25 percent of GDP in Asia).

6. **As part of its Reducing Emissions from Deforestation and Forest Degradation (REDD+) agenda, the ROC is developing an Emissions Reductions Program in the Sangha and Likouala Departments.** The Government program seeks to access a variety of REDD+ funding sources like the Forest Carbon Partnership Facility, the Forest Investment Program, and the Central Africa Forest Initiative. The ROC's forests are at risk of deforestation due to mineral extraction, road development, illegal logging, agricultural expansion, and charcoal collection. In addition, trends indicate that exposure to periods of intense rainfall has been increasing. The ROC, in its recently submitted Intended Nationally Determined Contribution, has highlighted agriculture among its priority areas. The promotion of agro-forestry practices, water and soil management techniques and conservation farming are the various climate adaptation strategies that would be used to build climate resilience amongst producer groups.

Sectoral and Institutional Context

7. **Agricultural exports (that is, palm oil, sugar, and cocoa) are stagnant and the country suffers from a rapidly deteriorating trade balance for food**. The ROC's cereal import dependency ratio is 94 percent in 2010[31]. With an average rainfall of 1,200 mm per year and only 2 percent of the 10 million ha of arable land exploited, the agricultural sector holds potential for growth. The ROC has three types of

[30] Enterprises Survey Report surveyed in 2009.
[31] Food and Agriculture Organization (FAO) food security indicators.

agricultural production systems: (a) subsistence agriculture, (b) small-scale farmers, and (c) agro-industrial farming organized in plantations. Commercial agriculture remains under developed.

8. **Food safety concerns are huge and compounded by the absence of a food policy and regulatory framework.** No analysis has been done to understand the national cost of food-borne diseases (for example, loss of human lives, cost of treatment, and loss of income especially for poor households). Food safety issues from imports include: (a) food spoilage; (b) absence of harmonized food and product standards with the country's main trading partners; (c) poor product quality (for example, expired food, deceitful labelling, and high levels of preservatives in food); (d) limited coordinated national surveillance and inspection capacity; and (e) no laboratories for food testing. There are risks associated with limited awareness among consumers and the low levels of hygiene standards (for example, unregistered food street vendors and unsanitary urban markets). Additional food safety risks from domestic agriculture include (a) the use of animal waste and sewage on crops as agriculture fertilizer, (b) poor harvesting and post-harvest handling (raises risks of mycotoxins and aflatoxins), and (c) unhygienic agricultural transport systems (e.g. inadequate vehicles used to transport agricultural products, lack of or inappropriate use of refrigerated trucks, etc.).

9. **Agricultural skills, competencies, and jobs are scarce.** Access to formal paid wage job is very limited for the youth who are more likely to be unemployed. If they manage to find a job, those aged 15–29 are more likely to be employed by a household (15 percent) or by an MSME (12 percent)[32]. The Republic of Congo is currently importing skilled labor to meet the competency gap that exists in the local labor market. The skills gap includes the following areas: (i) animal husbandry specialists; (ii) agronomists; (iii) plant pest and disease technicians; (iv) agro veterinary specialists; (v) food processing technicians; (vi) food scientists; (vii) agricultural scientists; and (viii) agriculture advisory and extension experts. There is only one institute for higher education in agriculture, *Ecole Nationale Supérieure d'Agronomie et de Foresterie* (ENSAF), with seven agriculture vocational skills training centers. They are under resourced and as a result do not offer relevant courses, practical skills and entrepreneurship training. Because of a lack of funds, ENSAF struggles to operationalize the internship arrangements negotiated with private sector firms. The internships opportunities exist, but the private sector incurs costs in hosting students. ENSAF's capacity to train master's and doctoral students in the relevant disciplines is limited because of poor training facilities, no funds for research grants and a disconnect with the national agricultural research and development agenda.

10. **Every segment across the agriculture value chain is characterized by underdevelopment and fragmentation** (see figure 1.1). Agricultural production is performed in a rudimentary, inefficient, low input-output model, making unit costs of production much higher than imported commodities. Most inputs are imported, at a high cost with no quality assurance. The transport sector is informally steered

[32] Republic of Congo, Poverty Assessment 2016.

by cartels that fix transport prices, making it difficult for producers to transport commodities and for processors to source primary material. There are only a few domestic agro-processing companies and the distribution and retail of food is done mostly through formal open markets, informal markets, and small corner stores. There are only seven registered retail outlets (supermarkets) in urban areas selling mostly imported food.

Figure 1.1. Agricultural Value Chains' Stages in the ROC

R&D	Inputs	Production	Processing	Distribution and retail
Public institutions provide R&D but some efforts need to be deployed differently (for example seeds) and extension services are insufficient Underdeveloped role of the private sector	Most of the inputs used are imported (seeds, fertilizers, mechanization) at a high cost and are sometimes low quality	Majority of small holders Low yields and challenges in terms of cost competitiveness Some vast plantations are emerging	First artisanal processing close to the farm Very limited industrial processing	Majority of informal markets and small corner stores Limited number of supermarkets Little exports

11. **Commercial agricultural production is constrained by a multiplicity of factors.** The competitiveness of domestic value chains is hampered by sector-specific legislative and governance constraints (seed policies, land access, food safety policies and guidelines, taxes, and legal registration procedures for cooperatives). Other factors include: (a) weak producer organizations; (b) insufficient agricultural extension and veterinary services and obsolete R&D capacity; (c) high costs of agricultural inputs (seeds, fertilizers, land, animal feed, credit); (d) an ageing and under skilled workforce[33]; and (e) poor road and communication networks and costly logistics and energy services.

12. **A substantial number of smallholders have the potential to engage successfully in commercially demanding value chains.** These producers are found among farms located outside cities and towns (urban and peri-urban) as well as within specific value chains (for example, cocoa, palm oil)[34]. These producers

[33] Young people are currently not seeking business opportunities in agriculture and remain mostly in cities, which leads to a non-renewal of the workforce and to an ageing workforce in the sector.

[34] The Ministry of Agriculture holds a Registry of Farmer Cooperatives that totals 1,055 cooperatives nation-wide, out of which 25 percent (approximately 250) are estimated to be active according to a survey conducted by the ministry in 2015. According to records from PDARP and the ongoing PADE (P118561), more than 500 additional active producer groups are not registered with the ministry since they registered at the department level or they decided to register as an association with the Ministry of

work in groups but are marginalized from higher-value markets due to high unit costs of production, poor infrastructure, and limited access to credit and technical assistance. The support provided through this project to these producers will focus on collective action to reduce costs and facilitate access to markets. Three main profiles have been identified in the ROC of MSMEs that are currently operating in the agribusiness sector and could establish business relationships with producer groups for commercial agriculture: (a) suppliers of critical inputs (for example, day-old chicks, veterinary medicine, and technical assistance provided by TBN in Pointe-Noire); (b) off-takers for agricultural products (for example, tropical fruits to produce concentrate bought by Bayo in Brazzaville); and (c) firms that are both input suppliers and off-takers (for example, supplying cassava cuttings then purchasing cassava for saka-saka processing by Agridec in Dolisie).

13. **Additional development challenges will be tackled by the project.** The project will also contribute to addressing four critical and important challenges faced by the ROC: (a) food and nutrition security; (b) climate change mitigation and contribution to GHG emissions; (c) skills development and job creation particularly for youth; and (d) gender gap with respect to access to services, inputs, and finance, and ownership and control of economic assets by women.

14. **Food and nutrition security are major concerns.** The malnutrition rate remains high (32 percent), with a total of 1.4 million people estimated to be malnourished and 31 percent of children stunted. Food and nutrition insecurity is driven by interrelated factors: (a) low farm productivity and low food production leading to unavailability of food; (b) high food prices on the local market; (c) low purchase power of urban and rural households; (d) inadequate access to quality food; (e) customary dietary habits rich in carbohydrates and low in fruit and vegetable consumption; (f) poor hygiene practices and lack of awareness of food and nutrition requirements; and (g) unsafe food. The project will focus on addressing only four of these challenges, namely low farm productivity, inadequate access to quality food, lack of awareness of food and nutrition requirements, and unsafe food. Three key entry points will be used: (a) at production level, working with research and extension agencies to facilitate farmer access to nutrition and climate sensitive technology and thus enhancing the adaptive capacity of climate vulnerable farmers; (b) providing nutrition-centric agriculture extension services; and (c) supporting MSMEs to produce fortified and enriched foods in the local market (for example, nutrition enriched cassava and maize flour).

15. **Agriculture is vulnerable to climate and contributes to GHG emissions.** The ROC is home to 21.7 million ha of the Congo Basin forest. With a low historical rate of deforestation—0.052 percent annually between 2002 and 2013—and forests covering 64 percent of the land area, it is a typical example of a High Forest Cover and Low Deforestation country. The agriculture sector is specifically vulnerable to climate change. Ninety percent of the agriculture in the ROC is subsistence slash-and-burn agriculture practiced by communities in forest zones, which are also engaged in extracting artisanal timber, collecting

---

Interior instead. There are therefore approximately 800 active producer groups (associations/cooperatives) in the ROC, totaling approximately 16,000 smallholders.

non-timber forest products, and hunting both legally and illegally. These practices have negative impacts on the forest stock. Maintaining low deforestation and forest degradation rates represents an important contribution to achieving the commitments made at the COP21 in terms of global emissions targets. The project intends to address the identified vulnerabilities holistically along the three components: (i) under Component 1, by providing producer groups the opportunity to acquire and adopt climate sensitive technology[35], while ensuring that business plans submitted for matching grant support are REDD+ compliant, especially in forest zones; (ii) under Component 2, by ensuring the compliance with environmental sustainability norms and standards of infrastructure development activities; and (iii) under Component 3, by supporting climate change mitigation in improving public agriculture education, research and extension services.

16. **There is a gender gap with respect to access to services and ownership and control of economic assets by women.** Labor market analyses show that gender employment gaps result from unequal access to education and skills. Cultural norms determine and define women's societal role, which is to focus on subsistence farming, family, and child-rearing activities (the average woman bears five children, and the fertility rate is high at 3.8 percent) while men are encouraged to gain skills and become economically active. Seventy percent of the country's agricultural workforce are women. It is estimated that women farmers are half as productive as men are, largely because (a) Congolese women face additional barriers compared to men in accessing land, credit, and inputs and (b) an unequal share of their time is devoted to child rearing and household tasks. The economic contribution of women at the household level is not recognized, and, as a result, their ownership and control of productive assets, particularly of land, and their participation in decision-making are limited. The project will address gender gap challenges by tackling the skills gap among women and their access to services and inputs. On the one hand, the project will support (a) access to internship opportunities for young women and (b) access to master's and PhD grants for young women to bridge the education and skills gap. On the other hand, through the matching grants under Subcomponents 1.1 and 1.2, the project will facilitate access of female producers to matching grants accompanied with targeted technical assistance, as well as support female-owned MSMEs to access dedicated technical assistance packages that will provide leadership and entrepreneurship training, mentoring for business management, and networking support for market access.

17. **Agriculture education, skills development and job creation for youth is scarce.** The agriculture sector in the ROC is facing an acute skills shortage that affects negatively the competitiveness of the sector. This shortage stems from a number of interrelated factors: (a) poor quality, ill-resourced skills training centers that provide courses of little market relevance to the sector; (b) the absence of a Uniform Vocational Qualifications Framework for agriculture developed in collaboration with the private sector;

[35] Introducing nutrition and climate-sensitive technologies such as reduced tillage techniques, improved, climate-sensitive seeds and improved agronomic practices and training to enhance farmer's adaptive capacity of climate vulnerable farmers

(c) difficulties for students to access quality internship arrangements with the private sector; and (d) the absence of information about the business opportunities presented by the agricultural sector particularly for the youth. The project will promote and address workforce skills development for private sector access to appropriately skilled staff and youth employability. The project will focus on addressing only the most immediate constraints, thereby yielding results quickly. The project will support the operationalization of internship agreements with private sector firms already negotiated by ENSAF. PhD and master's research grants would be provided to support in country agriculture research on topics that are pertinent to the sector. In country capacity is limited, but will be reinforced by visiting professors from the Cheikh Anta Diop University and the *École Nationale Supérieure d'Agriculture* – Thiès in Senegal[36]. Investments include: (i) laboratory; (ii) ICT library; (iii) practical training facilities; and (iv) upgrading teaching resources and facilities to improve the relevance and quality of agriculture education that is responsive to sector needs for competiveness and transformation. Support to PA arrangements will lead to sustainable job creation. Temporary jobs will be created through productive investments in rural infrastructure.

18. The proposed Commercial Agriculture Project has four components.

Component 1: Direct support to producer groups and agribusiness MSMEs (IDA: US$25 million, SDR18.0 million)

19. Component 1 seeks to increase productivity sustainably and market access along value chains, and improve food and nutrition security[37]. Support provided under this component will be through a matching grant program financing technical assistance and productive investments to support production, marketing, and processing activities. This component has two subcomponents.

Subcomponent 1.1: Sustainable intensification and commercialization of crop and animal production (IDA: US$20 million; SDR14.5 million)

20. **Objective and instruments used.** This subcomponent will support producer groups seeking to reach buyers and markets for increased production and improved marketing of their products. It will support the sustainable intensification of production and commercialization of products through technical assistance and financing of business plans owing to a matching grant program administered through a PA approach.

21. **PA approach.** A Productive Alliance is defined as an economic agreement (formal or informal) between a producer group (cooperative, association, or other) and a buyer (or buyers), in which all contribute and benefit, thus ensuring the continuity of the agreement in the medium and long term. Each alliance will consist of a producer group and a market agent (or buyer). The nature of the alliance between

[36] Both institutions are part of the education and research in agriculture platform between West Africa and the United States on collaborative research, extension, and education.
[37] It also seeks to enhance the adaptive capacity of climate vulnerable farmers.

the group and the buyer or market will need to be identified in the producer group's business plan and will need to be deemed viable as a necessary condition for financing by the project. The alliance may be based on a formal agreement of partnership or based on historical relationship between the producer group and the market agent. The profile of viable PAs will be developed and described in the Project Implementation Manual (PIM). The producer groups interested in receiving project support will first be filtered on the basis of a basic criteria according to the lessons learned from ongoing projects (PADE, PDARP) and based on the minimum requirements of financial institutions lending to the agriculture sector.

22. This approach is intended to correct imperfections in the market that hinder the social and economic progress of small producers, including: (a) the limited capacity of producer groups to receive better prices for inputs and more stable market relationships due to the lack of scale; (b) their limited knowledge of market requirements; (c) their poor production practices, technologies, and management practices limiting their competitiveness and resilience to economic and climate shocks; and (d) their low access to financial resources for productive investments to increase their efficiency and meet market requirements. It has been implemented following a variety of methods and can adapt to circumstances and country-specific needs, target beneficiaries, and the realities of the market. Successful experiences include, among others, those of Brazil, Bolivia, Colombia, China, and Papua New Guinea.

23. **PAs will aim, on the one hand, to develop the managerial and technical capacity of producer groups and implement business plans that include support for productive investment (access to inputs, production facilities); nutrition and climate-sensitive technology; technical assistance (extension services and technology transfer); and business development skills and practices (coaching).** On the other hand, the project will seek to strengthen existing business arrangements between producer groups and buyers and/or support new ones. Producer groups will be supported with developing their vision and strategy into a business plan that clearly identifies specific markets and the means to access them, and accessing financial and technical resources to implement said business plan. Business plans are expected to finance a series of investments (depending on market requirements, the supply chain, and associated constraints), such as (a) improved access to quality inputs for improved productivity (for example, seeds, cuttings, chicks, fertilizer, feed, water through small pumped and piped irrigation systems, etc.); (b) soil and water conservation measures which can enhance resilience to climate change and variability and have the potential to improve existing carbon pools; (c) infrastructure and/or equipment for processing; and (d) infrastructure and/or equipment to improve the storage and transport to reach target markets. Investments will systematically be accompanied by technical assistance to install and maintain the investment and to improve the group's marketing skills and management of its business and finances.

24. **The project support will help organized producers formulate and implement business plans.** Financing would be provided solely to the producer group, and would be aimed at identifying product specifications for the market (quality, quantity, and delivery). Purchasers and/or existing technical assistance providers (like input suppliers) may provide technical assistance or financing to the group and commit to additional investments in logistics or transformation infrastructure. Successful PAs are

expected to increase net benefits to all parties but will be measured solely through increases in the volume of products sold by the producer group[38].

25. The component would finance different combinations of consultant and non-consultant services, training, goods, and works under subprojects to support the following activities:

(a) Provision of technical assistance support for (i) identifying and implementing PAs and (ii) carrying out pre-investment studies for PAs, including supply chain studies, the formulation of business plans, and associated PA subprojects.

(b) Provision of matching grants to the producer groups for carrying out PA subprojects consisting of, among others, one or more of the following: (i) minor on-farm infrastructure; (ii) soil and water conservation measures; (iii) provision and utilization of inputs, equipment, and tools; (iv) technical assistance services; and (v) off-farm infrastructure for storage, processing, and packaging.

26. Component outputs are (a) PAs identified, (b) business plans formulated and evaluated, and (c) producer groups which reached the specifications described in the business plan.

27. **Business plans.** A PA business plan includes (a) a marketing strategy specifying the goods to be produced in terms of quality, quantity, and delivery, as well as a price reference assessment (scenarios); (b) the roles and contributions of the stakeholders within the PAs (buyers, markets, input suppliers, technical assistance providers, and so on), including those of the project and potentially other Government institutions; (c) the PA subproject (investments and costing), comprising the activities required to reach the product specification, as well as the managerial strengthening of the producer group; and (d) the technical, financial, and safeguard analyses required to establish feasibility. Producer groups will manage subproject funds under community procurement and business practices. They will pay for at least 10 percent of subproject costs for agricultural production investments and 20 percent of subproject costs for value addition investments.

28. **Producer group eligibility criteria.** At least 80 percent of participating members of each producer group must be smallholders and must manage their own production units. Producers with larger properties may participate but would not be eligible for individual, on-farm investments. At the level of the producer group, the following criteria apply: (a) have a bank account in the name of the producer group at a financial institution registered with the *Commission Bancaire de l'Afrique Centrale* [39]; (b) have a two-year track-record operating as a producer group (even if informally); (c) have accounting records (even if only the most recent year is available); and (d) possess common assets. For those producer groups

[38] See paragraphs 8 to 10 of the Sectoral and Institutional Context for more details on the profiles of producer groups and potential buyers and off-takers that could engage in PAs.
[39] Central African Banking Commission

that do not meet these basic criteria, a capacity-building program will be provided to strengthen organizational, technical, and managerial capacities to allow them to meet the basic eligibility criteria.

29. **Business plan prioritization criteria.** Once producer groups have met basic eligibility criteria, they will be able to present their business plan. Alliances will be chosen through a competitive process based on the business plan they submit. Each PA business plan will be scored and will need to receive passing grades for each of the following three criteria to ensure the soundness and sustainability of the proposed investment: (a) commercial viability of the business case; (b) technical feasibility of proposed investments (scale, required technical capacity, and so on); and (c) financial and economic feasibility of the opportunity. In forest areas and for relevant value chains, a minimum score will also be needed regarding the compliance of the business plan with REDD+ principles. In case the demand for matching grants exceeds the supply of funds, additional criteria could be used to further prioritize the business plans that receive support, such as (a) number of beneficiaries; (b) contribution to improved nutrition outcomes; and (c) contribution to improved environment outcomes, such as climate change mitigation or adaptation [40]. Additional points and/or additional support will be awarded to producer groups incorporating women in leadership positions, youth, and IPs to compete on equal terms. Producer groups will receive technical assistance support throughout the subproject cycle. To ensure complete transparency of the matching grant allocation process, several tools will be established, such as public disclosure of all applicants, disclosure of reasons for rejection to applicants, and public disclosure of beneficiaries (including the type of support, the amount of the investment, and the percentage matched).

30. **PA cycle.** The following steps will be followed for the implementation of component activities:

(a) **Marketing strategy and promotion.** The project (through service providers) will carry out producer group and buyer promotion plans and activities, targeting potential members of PAs. This process will continue even during the call for proposals phase.

(b) **Call for proposals.** The project will carry out public calls for potential PA partners (producer groups, input suppliers, buyers, and so on) to present business plans. The calls will be accompanied by a process of mobilization—a communications campaign aimed at producers, input suppliers, technical assistance providers, and buyers, as well as field information and training workshops, which consider the different needs and capacities of different target groups.

(c) **EOI evaluation.** The project will evaluate EOIs from producer groups with the following criteria: (i) compliance with basic eligibility criteria and safeguards, (ii) location based on pre-

[40] Climate change mitigation could be obtained, for instance, by adopting soil and water conservation practices that enhance existing carbon pools, by increasing water use or energy efficiency or by reducing non carbon dioxide GHG emissions from reduced fertilizer use. Climate change adaptation measures could help address vulnerability.

identified areas, and (iii) commitment by producer groups to co-financing at least 10 percent of agricultural production subproject costs and 20 percent of value addition subproject costs. The project will collect baseline data for the evaluation at this stage.

(d) **Formulation of business plans.** Producer groups, whose profiles are approved, will receive technical assistance support for the formulation of their business plan.

(e) **Evaluation of proposals.** The commercial, technical, and financial evaluation of business plans will be conducted by an independent entity hired by the project unit under terms of reference (ToR) approved by the World Bank. Safeguards evaluation and inclusion of mitigating measures, if required, will be carried out by the project unit.

(f) **Implementation.** Subprojects will be implemented by producer groups under community procurement and commercial practice rules. Other agents (like input suppliers, buyers, technical assistance providers) will implement agreed measures separately. The project unit will provide implementation support and close monitoring during the investment phase and for one year of operations.

(g) **Evaluation.** Each PA will be evaluated to measure if it achieved its own objectives, as well as its contribution to expected project results. A final evaluation will be conducted on a sample of alliances.

Figure 1.2. PA Cycle

1. Marketing strategy and promotion	2. Call for proposals	3. Evaluation of EOI	4. Formulation of business plans	5. Evaluation of proposals	6. Implementation of business plans
Promotion plans and activities targeting potential members of productive alliances. This process continues during the call for proposals phase.	Public calls for potential productive alliance partners (that is producer groups, input suppliers, buyers, and so on) to present business plans. The calls will be accompanied by a communications campaign, as well as field information and training workshops.	Evaluation of EOI from producer groups with the following criteria: (a) compliance with basic eligibility criteria and safeguards; (b) location based on pre-identified areas; and (c) commitment by producer groups to co-financing.	Producer groups, whose profiles are approved, receive technical assistance for the formulation of their business plan. Groups that do not meet basic criteria receive capacity building support. EOI and business plans identify public infrastructure gaps to help prioritize infrastructure support under Component 2.	Evaluation of the commercial, technical and financial soundness of business plans conducted by an independent entity. Safeguards evaluation and inclusion of mitigating measures, if required, are carried out by the project unit.	Implementation of subprojects by producer groups, with systematic technical assistance to improve organizational, managerial, business and risk-management skills. Other agents (for example input suppliers, buyers, technical assistance providers) implement agreed measures separately.

31. **Technical assistance support.** With respect to technical assistance support, the project will strengthen the provision of capacity-building services to producer groups at local levels for them to (a) comply with the basic criteria to present business plans (to be defined in the OM) and (b) improve organizational, managerial, business, and risk-management skills. The initial assessment of the producer groups' capacity will be done by implementing a diagnostic of agribusiness capacity (such as the International Finance Corporation's Agribusiness Leadership Program), identifying the areas of improvement and the potential relevant service providers. The project will therefore provide support for (a) identifying and implementing business plans of PAs and (b) carrying out pre-investment supply chain studies for PAs, including the formulation of business plans associated with PA subprojects. Once the initial technical support has been provided and the basic criteria met, the producer group will be able to present a business plan based on a PA for financing by the project. A dedicated technical assistance package will be provided to train female producers on business leadership and provide coaching on networking for marketing.

32. This subcomponent will also emphasize the link between the support to PAs and efforts to develop agri-finance and quality agriculture advisory and extension services. In the management of the support to PAs, the following elements will ensure linkages with private financial institutions: (a) the selection criteria for beneficiaries of investments are aligned with financial institutions' requirements, (b) financial institutions are part of the joint committee for business plan appraisals, and (c) matching grant beneficiaries are encouraged and required to save part of the revenues from their investment throughout the project. Component 3 of the project will also strive to improve the access to quality agricultural advisory and extension services (technical assistance) at local levels.

Subcomponent 1.2: Development of agro-industrial activities (IDA: US$5 million; SDR3.6 million)

33. **Objective and instruments used**. This subcomponent will support MSMEs involved in agribusiness, from input supply, to the production, processing, and distribution of agricultural products, as well as the delivery of agri-based services, to enhance their competitiveness.

34. These actors have a crucial role to play in the development of commercial agriculture and in strengthening the value addition process of agricultural products. Through the provision of agribusiness services (for example, the provision of inputs), these MSMEs work directly with other value chain actors downstream and upstream in the chain, including small producers and producer groups, and are able to help them improve their productivity and efficiency. Promoting value addition such as agro-processing in turns results in the introduction of higher-value agricultural products and jobs, as agro-processing activities are often labor intensive, while offering producers secure market outlets for their products and rewarding greater quality products with higher prices.

35. However, as described in the Sectoral Context section, these agribusiness-oriented MSMEs are facing a series of obstacles. This subcomponent will aim to allow them to have better access to the training, equipment, and technology they need to develop their activities. To do this, these key players in commercial agriculture can apply for grants on a competitive basis through the same matching grant scheme as the one described for Subcomponent 1.1.

36. **Business plan.** Agribusiness MSMEs will have to submit a business plan that clearly identifies market demand for the firm's products and services and shows returns on investment and financial sustainability of the firm's operations.

37. **MSME eligibility criteria.** The matching grants will be attributed based on a competitive process and will cover technical assistance (with an expected level of matching by the MSME of 20 percent) and equipment (with an expected level of matching of 50 percent). Support for equipment will be systematically accompanied with technical assistance to ensure the proper use and maintenance of the investment. Only formal MSMEs will be eligible. They will need to show a minimum of two years in operation to be allowed to apply to maximize the sustainability of investments and minimize the risk of supporting firms created with the sole purpose of receiving a grant.

38. **Business plan prioritization criteria.** Once MSMEs have met basic eligibility criteria, they will be able to present their business plan. MSME beneficiaries will be chosen through a competitive process based on the business plan they submit. Each MSME business plan will be scored and will need to receive passing grades for the following four criteria to ensure the soundness and sustainability of the investment: (a) commercial viability of the business case; (b) technical feasibility of proposed investments (scale, required technical capacity, and so on); (c) financial and economic feasibility of the opportunity; and (d) contribution to addressing at least one of the following challenges: product upgrade, process improvement, new product development, volume increase, or a reduction of the environmental footprint.

In case the demand for matching grants exceeds the supply of funds, additional criteria could be used to further prioritize the business plans that receive support, such as (a) job creation potential; (b) links or positive externalities for producer groups and other stakeholders along the value chain; (c) contribution to improved nutrition outcomes; and (d) contribution to improved environment outcomes, such as climate change mitigation or adaptation, increase in water use, or energy efficiency. Additional points and/or additional support will be awarded to MSMEs promoting women in leadership positions, youth, and IPs to compete on equal terms. In addition, female-owned and managed enterprises will have access to a dedicated technical assistance package that includes entrepreneurship leadership, coaching on networking, and mentoring for business management. Mechanisms promoting transparency like the ones mentioned in Subcomponent 1.1 will apply, such as the public disclosure of all applicants and all beneficiaries (including the type of support, the amount of the investment, and the percentage matched).

39. It should be noted that the project will keep on working closely with the PADE, co-financed by the World Bank on the establishment and implementation of a matching grant scheme that fully considers the accumulated experience of the PADE Matching Grants Fund and maximizes the synergies between the two projects in their activities to support producer groups and agribusiness MSMEs.

Component 2: Improving public infrastructure and the business climate for commercial agriculture (IDA: US$45 million; SDR33 million)

40. This component aims to foster the development of commercial agriculture by lifting constraints in terms of infrastructure and business climate. This component consists of two subcomponents.

Subcomponent 2.1: Public infrastructure for the development of commercial agriculture (IDA: US$37 million; SDR27 million)

41. **Objective and instruments used.** This subcomponent will contribute to the development of basic infrastructure essential for the promotion of commercial agriculture and the emergence of an agro-industry. It will include public investments in the rehabilitation and maintenance of rural feeder road and in improved access to other public infrastructure in a targeted manner.

42. **Prioritization criteria.** High logistics costs and limited access to markets are major obstacles faced by the private sector. To address these important issues, the project will make a provision to ensure public investments are (a) identified by the Government as infrastructure of a public nature and (b) located in targeted geographic zones where producer groups and MSMEs promoting commercial agriculture development will express interest in receiving PA and/or MSME support (see Component 1).

43. **Rehabilitation and maintenance of rural roads.** The rehabilitation and maintenance of rural roads will be supported based on best practices developed from earlier experiences gained under the Additional Financing of the PDARP. In addition, the lessons learned from the implementation of the PDARP road rehabilitation intervention strategy will also be evaluated, analyzed, and adopted. Experience from

neighboring DRC shows that improving rural road networks facilitates the entry of other transport providers (e.g. medium and small scale traders), which drives down the cost of transport services in the short to medium term by reducing the influence of informal transport cartels. Organizing farmers into producer groups also offers opportunities for farmers to reduce unit costs by bulking and transporting commodities jointly.

44. **Improved access to other public infrastructure.** Access to electricity, connection to water systems for agro-processing, and other public infrastructure investments will similarly be prioritized in zones targeted by the project and where commercial agriculture and agro-industrial investments are supported by the PA and/or MSME support model (see Component 1) in a bid to make their final products more competitive compared to imported products in the domestic market and potentially to reach export markets. These investments will be financed from the project's budget, in compliance with public procurement procedures that call for transparency in the recruitment of service providers who will bid on a competitive basis for the contract(s) to design, construct, supervise, and monitor the construction and other works.

45. **Sustainability of investments.** Technical assistance will also be provided through this subcomponent to selected departmental councils to implement the new road maintenance strategy developed with the assistance of the PDARP to make such maintenance more sustainable.

Subcomponent 2.2: Governance and regulatory framework for commercial agriculture (IDA: US$8 million; SDR5.8 million)

46. **Objective and instruments used.** This subcomponent endeavors to help improve the legal and regulatory framework for commercial agriculture. It will do so by (a) helping set up and operate platforms for PPD on commercial agriculture at the departmental and national levels to identify needed reforms; (b) providing technical assistance to draft the legal and regulatory reforms thus identified; (c) policy advocacy with parliamentarians (for example, policy notes, sensitization, training); and (d) conducting sensitization, dissemination, and training activities toward relevant stakeholders (that is, ministries and public institutions, producer groups, agribusiness MSMEs and other private sector actors, and so on) on drafted legislations and regulations pertaining to commercial agriculture.

47. **PPD on commercial agriculture.** The work done by the project on the improvement of the governance and regulatory framework for commercial agriculture will be carried out in close collaboration and synergy with the PADE, co-financed by the World Bank. The project will notably build on the economy-wide mechanism for PPD put in place with the support of the PADE to start a PPD specifically on commercial agriculture by providing technical assistance and budget support to set up and operate PPD platforms on commercial agriculture at the national and departmental levels. These will help identify and promote sector reforms that may contribute to the development of commercial agriculture. When priority reforms identified by these PPD platforms are economy-wide in nature (for example, easing business entry and business exit, facilitating trade across borders, high cost of transport due to informal transport cartels,

etc.), the project will share these inputs with the PADE, which is better placed to address them. When identified reforms are specific to commercial agriculture, and if a strong consensus can be built with stakeholders from the public and private sectors around them, the project will provide support for their drafting and for raising awareness about their usefulness as described in the paragraph above (that is, technical assistance for drafting reforms, policy advocacy support, and sensitization and training). In addition, public-private dialogue, especially at a sectoral level, will also present an opportunity for the private sector to come together and articulate and express its needs to the public sector. It will require, as a first step, the establishment of a dialogue between private sector entities as part of the PPD platforms. In addition, finding solutions to the issues brought forward by the private sector will require coordination between public sector entities, which the PPD platform will facilitate by convening stakeholders from relevant ministries.

48. **Identified reforms.** Some of the needed legislation improvements specific to commercial agriculture have already been identified with stakeholders and their drafting will be supported by the project. The legislation pertains to (a) the compliance with the OHADA Uniform Act on Cooperatives; (b) a National Seed Policy in compliance with the norms of the CEMAC; (c) a Rural Code to clarify and secure land access; and (d) a food safety policy and regulatory framework, standards, and the certification of products.

49. **Compliance with the OHADA Uniform Act on Cooperatives.** The Congolese Government is a founding member of OHADA. OHADA includes nine validated Uniform Acts: (a) general commercial law, (b) commercial companies and Economic Interest Groups, (c) secured transactions law, (d) debt resolution law, (e) insolvency law, (f) arbitration law, (g) harmonization of corporate accounting, (h) contracts for the carriage of goods, and (i) the law on cooperatives companies. The ROC has started adopting some of the Uniform Acts, for example, the one on general commercial law. It has however not made much progress in applying the law on cooperatives companies. The project will support the preparation of this Uniform Act, which would give a legal and governance framework for farmer cooperatives and Economic Interest Groups.

50. **Compliance of seed policies with norms of CEMAC.** The seed certification and control system is currently nonexistent in the ROC. Local seed companies are unable to certify their production (lack of field trials and tests, sample collection, analysis of the quality of seeds, and so on) and the country imports seeds without being able to certify their quality before entering the market. The few improved seeds that are produced by the IRA and the CNSA, upon demand by different donor-funded projects, are usually distributed for free to producers. In these conditions, it is impossible to create a market for certified seeds and to stimulate the development of a sustainable private seed industry. Therefore, the seed certification and production system is a structural issue for the ROC, which should be resolved within the framework of this project. This is why the project will support the reform of seed policies to build a sustainable seed sector, in accordance with the recommendations of the meeting of the Ministers of Agriculture of the CEMAC. It will do so in close collaboration with the FAO, which is supporting the Government on seed

issues. The reform of seed policies supported in the subcomponent will be accompanied with financial resources to support its implementation, including human resources, seed technology, equipment, testing and certification laboratories, awareness, and information dissemination to key stakeholders (see activities under Subcomponent 3.1).

51. **Introduction of a Rural Code.** The agricultural sector has multiple laws and regulations governing access to and exploitation of land. The agricultural sector is currently governed by two laws: (a) law No. 10-2004 March 26, 2004, which provides the general principles applicable to federal lands and land regimes, and (b) law No. 25-2008 September 22, 2008, that establishes the agricultural land classification system. The project will provide support to the Government's plan to introduce a more comprehensive Rural Code. This would help clarify and secure land access in a way that is aligned with the Government's new strategy for land use and regional planning.

52. **Improved regulatory framework for food safety, quality standards, and the certification of products.** The responsibility of ensuring the safety of food and food products' quality and certification is shared among a few institutions with little coordination among them and insufficient resources for all. As a result, the food safety regulatory framework appears insufficient to protect the health of consumers. The lack of quality and product certification standards also limits the emergence of a quality-oriented domestic food industry, which will ultimately limit access to high export markets for agricultural products in the future. The project will work in close collaboration with the European Union and their regional project to support food safety and food safety laboratories.

Component 3: Strengthening institutional capacity to support the development of commercial agriculture (IDA: US$30 million; SDR22 million)

53. The objective of this component is to strengthen the capacity of public and non-public service providers (Government and nongovernment) involved in the implementation of project activities and/or supporting the development of commercial agriculture in the ROC. At the same time, it will ensure and oversee successful project implementation while making a provision to enable an immediate response in case of declared crisis or emergency. This component has three subcomponents.

Subcomponent 3.1: Capacity-building of institutions providing support to commercial agriculture (IDA: US$20 million; SDR14.5 million)

54. **Objective and instruments used.** The subcomponent will provide equipment, training, and operating cost support to Government and nongovernment actors that are necessary for commercial agriculture to succeed. These capacity-building efforts will target key areas related to (a) agricultural statistics services; (b) the access to improved genetic materials; (c) the implementation of the reform of the national public system for agricultural extension and advisory services; (d) the agricultural vocational and higher education training systems; and (e) the implementation of the reform of the framework for food safety, quality standards, and product certification supported in Subcomponent 2.2.

55. **Agricultural statistics services.** The MAEP is unable to capture and monitor data related to (a) policy implementation, (b) service delivery, (c) public expenditure in agriculture, and (d) agriculture sector performance (crop and livestock production and so on). Most of the agricultural data is outdated and not readily accessible. The ongoing General Agricultural Census (*Recensement Général de l'Agriculture*) will provide a new set of data, which will have to be curated and updated continuously. As a result, there is need for the Studies and Planning Department of the MAEP to strengthen its capacity to sustainably collect, analyze, and report on the sector's performance. Making credible agricultural data (for example, soil tests, crop planting itineraries, animal performance, market information, and so on) more widely and transparently available will notably help facilitate agriculture-based investments and support the Government's broader effort to promote foreign and domestic investments in the country.

56. **Agricultural seed production and certification system.** The IRA and the CNSA, whose activities should be limited to this function, in addition to the management and storage of phytogenetic material, will carry out the production of germ plasms and base seeds. A seed bank will be established for this purpose. To do this, the project will fund the rehabilitation of two IRA substations for the R&D of nutrition and climate-sensitive seeds for both staple crops and perennial crops (cocoa and coffee). The Inoni technical assistance center under the PDARP will be replicated. Research services will be made available (soil tests, animal health, and so on). The private sector will be a key partner in seed multiplication to facilitate the dissemination of high-performance nutrition and climate-sensitive seed varieties and animal genetic materials. R&D for seed and germ plasm of crops likely to be grown in forest areas will have to consider REDD+ sustainability criteria. The establishment of seed certification capacity, which currently does not exist, will complement this.

57. **Agricultural extension and advisory services.** The MAEP has embarked on reforms of the national agricultural extension and advisory system for the development of commercial agriculture. The project will facilitate access to (a) nutrition and climate-sensitive technology that increases notably the adaptive capacity of climate vulnerable farmers; (b) soil and water management techniques; (c) disease and pest management practices; and (d) nutrition and gender messaging, notably through direct support to institutions like the Cooperative Action Department of the MAEP and Agricongo, the primary provider of agricultural extension services on behalf of the Government. In addition, Agricongo's facilities will be upgraded and an agricultural extension innovation center will be established. The recipients and nature of the support provided are susceptible to change depending on the results of ongoing reforms aiming at introducing specialized agencies with the responsibility of providing improved extension services.

58. **Agricultural vocational and higher education training.** The project will support workforce skills development by contributing to the Ministry of Higher Education's efforts to provide youth with access to relevant high-quality, certified agricultural skills training courses and internships. This will be done by financing the ENSAF investment plan to improve relevance, quality, and effectiveness of training and facilitating them to forge and operationalize smart partnerships with private sector companies engaged in commercial agriculture to host internships for third-year students to support their employability. This

will be complemented with graduate student research grants. This will provide private agribusiness access to a pool of trained and skilled workforce. PhD and master's grants' recipients would be studying in-country on research topics that are of immediate relevance for the sector. In addition, two vocational centers will be financed to make necessary investments to innovate and modernize their practical teaching offers in terms of relevance, quality, and effectiveness. This will enable the institutes to revise their curricula to include entrepreneurship, agribusiness, and FM. This will support youth to create their own employment or secure jobs. This support to agricultural vocational and higher education training will help alleviate some of the difficulties currently met by the producer groups and agribusiness MSMEs targeted in Component 1 in receiving the practical agricultural technical support they need to develop their business.

59. **Food safety, quality standards, and product certification.** To support the implementation of the reform of the framework for food safety, quality standards, and product certification initiated in Subcomponent 2.2, the project will finance the capacity of the country to test and control food quality by financing the establishment of a food safety laboratory and the equipment and training for food safety technicians. A budget on a declining basis would be made available to enable the functioning of laboratory services. The project will work in close collaboration with the European Union and their regional project on food safety to avoid any duplication of efforts.

Subcomponent 3.2: Project management, coordination, and monitoring at national and departmental levels (IDA: US$10 million; SDR7.3 million)

60. This subcomponent is exclusively concerned with activities related to project management, coordination, communication, M&E, and adequate monitoring of the environmental and social safeguard policies, at the national level as well as at the departmental levels, including the project intervention zones. Under this subcomponent, an airtight fiduciary management system will be introduced, and an effective M&E framework will be designed, which will not only monitor impact indicators but will also ensure real-time data collection that will facilitate the adoption of corrective measures in a timely manner and even attempt to integrate the data into the national agricultural statistics database.

61. Through this subcomponent, the project will finance a baseline study, MTR study, final impact assessment, the recruitment of staff, consultancy services, and equipment, and it will support relevant seminars and training.

Component 4: Contingency emergency response (IDA: US$0.0 million; SDR0.0 million)

62. Designed as a mechanism to implement the Government's rapid response to an emergency, this component would enable the project to finance emergency recovery activities and reconstruction sub-projects under an agreed CERC OM. This component 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 borrower, associated with a natural or man-made crisis or disaster. However, if no adverse natural event occurs during the lifetime of the project, the component will not be activated.

63. **Conditions to trigger the CERC.** This emergency 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 said activities in the CERC for emergency response; (b) the Government has prepared and disclosed all safeguards instruments required for said activities; and (c) the borrower has adopted the CERC OM in form, substance, and manner acceptable to the World Bank. A specific OM for this component will be prepared, detailing FM, procurement, safeguards, and any other necessary implementation arrangements.

64. **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 borrower'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 from IDA in the event of an emergency.

65. **CERC OM.** The OM would describe (a) the actions to be taken by the Government when a crisis or emergency occurs and (b) the M&E and reporting arrangements on the emergency response. In addition, the OM draws together in one place information about (a) the country 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 goods, if applicable; and (f) criteria to determine that a crisis or emergency has occurred. Approval of the CERC OM by the World Bank and adoption by the borrower is required for the CERC to be effective.

ANNEX 2: IMPLEMENTATION ARRANGEMENTS

COUNTRY: Republic of Congo
Congo Commercial Agriculture Project

Project Institutional and Implementation Arrangements

A. Institutional and Implementation Arrangements

1. The institutional setting proposed for this project, under the supervision of the MAEP, includes the following supervisory and implementation bodies: (a) a Steering Committee; (b) an NPCU of the project (including a matching grant scheme); (c) DPCUs; (d) technical service providers (public, private, and NGOs); and (e) financial institutions through which the funds of the matching grant program of Component 1 will be disbursed to beneficiaries (producer groups and agribusiness MSMEs).

2. Public service providers will participate in the project through the structures of the MAEP, especially with regard to the national agricultural extension system or agricultural statistics, or with other ministries such as, for example, that of Scientific Research and Technology Innovation for agricultural research. The ongoing reform of the MAEP and the introduction of specialized agencies is an opportunity for rethinking and repositioning the role of public technical services. The provision of private services on the other hand will be facilitated through the support provided to agribusiness MSMEs in Subcomponent 1.2.

Steering Committee

3. A high-level Steering Committee will be officially established before effectiveness. It will be chaired by the relevant minister who will be designated by the Government and composed of representatives of key project stakeholders (relevant ministries, private sector, and civil society including producer organizations) in the project. The Steering Committee will be responsible for the strategic direction, operational oversight, communication, and overall good governance of the project.

National Project Co-ordination Unit

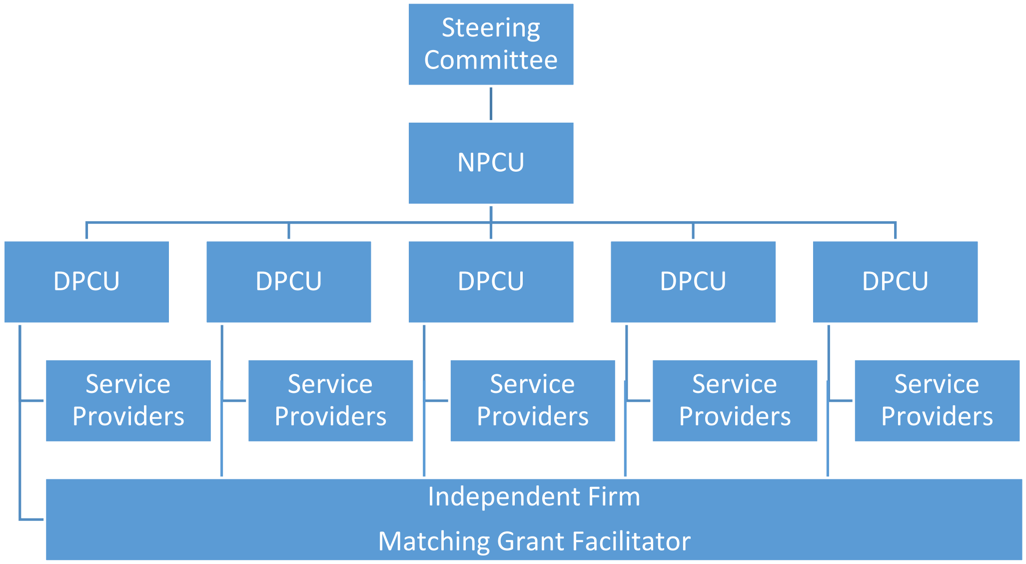
4. It is proposed that the current PDARP NPCU, with a proven track record in administrative and fiduciary management, be retained and strengthened to coordinate and manage the commercial agriculture project. The NPCU will be responsible for (a) preparing, coordinating, and monitoring the implementation of annual work plans (AWPs) and budgets consolidated and approved by the Steering Committee; (b) the overall supervision of the implementation of project activities; (c) the M&E of the performance of the project; (d) monitoring of social and environmental safeguards; (e) the management of the financial and human resources of the project; and (f) the procurement and contracting of service

providers. Moreover, the NPCU will rely on specific expertise including the hiring of an independent firm contracted to process and evaluate all matching grant applications submitted under the matching grant program of Component 1.

Departmental Project Coordination Units

5. Five DPCUs will be established at the departmental level to support specific zones targeted by the project in a phased manner in line with the project's programmatic approach. These units will be responsible for the establishment and maintenance of databases of all eligible service providers at departmental levels. They will ensure project activity M&E as well as receiving and processing complaints related to the implementation of the project in collaboration with the authorities, civil society and the NPCU. They will be composed of a unit manager, an accountant, an M&E specialist, a team assistant, and a driver.

Figure 2.1. Proposed Institutional Implementation Arrangements for the Commercial Agricultural Project



Financial Services through Financial Institutions

6. The project will build on the experience of the PDARP with the MUCODEC (Savings and Credit Groups) and other MFIs through which the funds of the matching grant program of Component 1 will be disbursed to beneficiaries (producer groups and MSMEs).

Project Implementation Modalities

7. **Component 1.** The implementation of the activities under this component will be managed under the general supervision of the NPCU and DPCUs. Sensitization efforts about the matching grant program and the processing and analysis of matching grant applications from producer groups as part of PAs and from MSMEs will be performed by dedicated expertise (including an independent firm with relevant experience and a proven track record for the processing and evaluation of all matching grant applications). The final decision to approve the allocation of a matching grant to a beneficiary will be made by a committee composed of representatives from relevant ministries, the private and financial sectors, and civil society. The administration, management, and follow-up of the disbursement of the grants will be performed by the NPCU and the DPCUs.

8. **Component 2.** This component will also be managed under the general supervision of the NPCU. Activity implementation will be informed by the deployment of activities under Component 1 related to investments in productive activities, as the location of all public investment (roads, energy, water, and others) will largely depend on the specific geographical zones where productive investments are being made. Local authorities will also guide the identification of public investments. The project will work directly with all relevant government agencies in implementing activities related to the reforms to the business environment.

9. **Component 3.** All activities under this component will be implemented directly by the NPCU in response to the capacity-building needs and priorities identified and expressed by the directorates, units, and services engaged in rendering public services. The management, coordination, communication, and M&E of the project, as well as social and environmental safeguards monitoring are also the responsibility of the NPCU, which will ensure that all project components are well articulated ensure cohesion among actors, and oversee the proper use of project resources.

B. Results Monitoring and Evaluation

10. The MAEP will assume overall responsibility for the M&E of the PDO-level and intermediate results indicators for the project. They will use the NPCU to support the data collection and analysis process. The MAEP has recently embarked on an agricultural census exercise that is expected to provide valuable input towards the baseline situation of the agricultural sector. A large part of the data on the agricultural sector is being collected by development partners: the FAO, the WFP, the AFD, and the AfDB, in a series of fragmented studies with little participation and ownership of the MAEP. No concentrated efforts and investments have been made to rebuild data management capacity by the ministry for the sector. The project will work with the Government and other development partners to develop a consolidated M&E geo-referencing system, building on earlier initiatives, the ongoing agricultural census, and private sector M&E systems. The project will ensure that key core indicators for gender and citizen engagement and environmental sustainability are in compliance with World Bank requirements.

11. Project outcomes and impacts will be evaluated through the PDO and intermediate indicators described in the Results Framework, which will be developed in the PIM. Program outputs will be monitored by the NPCU in partnership with specific service providers. The project will finance all the M&E process and arrangements. Reports will follow the annual planning calendar and supervision missions will be used to confirm project progress.

Financial Management

12. An FM assessment of the implementing unit of the ongoing PDARP has been carried out. The objective of the assessment is to determine (a) whether this unit has adequate FM arrangements to ensure that project funds will be used for purposes intended efficiently and economically; (b) project financial reports will be prepared in an accurate, reliable and timely manner; and (c) the project's assets will be safeguarded. The FM assessment was carried out in accordance with the Financial Management Practices Manual issued by the Financial Management Sector Board on November 3, 2005, and revised in March 2010. In this regard, a review of the existing FM system (budgeting, staffing, financial accounting, financial reporting, funds flow and disbursements, and internal and external audit arrangements) at the PDARP's Coordination Unit level has been conducted.

13. This unit is currently implementing the Additional Financing of the PDARP (P095251 IDA-53620) and has managed satisfactorily the previous initial project IDA-H3020, both financed by the World Bank. The FM staff includes a Financial and Administrative Officer, who is responsible for financial and administrative matters, an accountant who is handling the overall accounting and reporting aspects, and an assistant accountant in the NPCU and in each of the DPCUs. They have been trained in the use of the World Bank's procedures as well as the accounting software over the last years of project implementation. The project maintains proper books of accounts, which include a cashbook, ledgers, journal vouchers, and a contract register. They prepare the necessary records and books of accounts, which adequately identify, in accordance with accepted international accounting standards and practices, the goods and services financed out of the proceeds of the Grant. It is expected that this FM system will be used for the implementation of this new project. The assessment concluded that the overall residual FM risk is Substantial.

14. Going forward and to better strengthen the FM system, the following actions will need to be implemented: (a) updating the existing Procedures Manual and upgrading the software (that is, Success) to consider the specificity of the new project; (b) recruiting one additional accountant to reinforce the team given the specificity of this new project; (c) recruiting an independent external auditor based on acceptable ToR; (d) agreeing on the format and content of unaudited interim financial reports (IFRs); and (e) organizing a workshop to launch the project for all beneficiaries right after effectiveness.

15. The overall project funding will consist of US$100 million from the World Bank. The funds will be managed through one bank account to be opened and maintained by the NPCU in a commercial bank acceptable to IDA.

16. The ROC has enjoyed considerable economic growth in recent years, though it still depends too narrowly on the oil sector. The country reached the heavily indebted poor countries (HIPC) completion point in 2009, but its institutions are still weak. Structural reforms have been launched in the areas of economic governance, public expenditure management, and transparency. Although there is cause for cautious optimism (significant improvements have been made in public financial management [PFM] and oil revenue management through the IDA project on transparency and governance support as well as other donor-financed projects), it will take a long time for these reforms to yield substantial improvement in the management of public funds. Given the fragility of the fiduciary environment, the Government has requested to use a ring-fenced approach to implement this project, similar to the other World Bank-financed projects in the country.

17. **Risk assessment and mitigation.** The following risk identification worksheet summarizes the significant risks with the corresponding mitigating measures.

TABLE 2.1. RISKS AND MITIGATIONS MEASURES

Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
Inherent risk				
Country level According to questions 13 and 16 of the Country Policy and Institutional Assessment, the ROC is a high-risk country from the fiduciary perspective. The Country Integrated Fiduciary Assessment, Public Expenditure Review, Public Expenditure and Financial Accountability (PEFA) reports as well as the ongoing Public Expenditure Management and Financial Accountability Review (PEMFAR) study outlined PFM weaknesses at all levels in terms of governance and public funds management.	H	None. Beyond the control of the project. The Government is committed to a reform program that includes the strengthening of the PFM. The Integrated Public Sector Reform Project (P160801) under preparation will help address some PFM concerns.	N	H

Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
Entity level The assessment of some ministries during PEFA and PEMFAR revealed internal control weaknesses and weak fiduciary environment. However, the Ministry of Agriculture has now good experience in implementing World Bank-financed projects.	S	The existing PCU (PDARP) will be used for this project; relying on a dedicated FM team at the PCU and use of IDA FM requirements is critical for the mitigation of fiduciary risk of this project; the adoption of an FM Procedures Manual by effectiveness will help mitigate internal control weaknesses.	N	M
Project level This is a project which will be implemented across different levels in Brazzaville and in other regions that will face coordination challenges. Ensuring that funds are used for purposes intended both at the central and the decentralized levels will be a challenge. It will involve material amount of contract, ensuring that procurement procedures will be followed will be a challenge.	M	The NPCU will strengthen ex ante and ex post control of activities implemented/managed by implementing entities. Training on fiduciary procedures will be conducted for all FM staff throughout the life of the project. Clear ToRs for each responsibility will be agreed between the parties involved to ensure clear understanding to include time frames for reporting.	N	M
Control Risk	**S**			**S**
Budgeting The AWPs and Budgets will be prepared by the NPCU and approved by the Steering Committee based on the policy guideline. Ensuring that the AWP will be prepared and validated by the	S	The project Financial Procedures Manual will define the arrangements for budgeting, budgetary control, and the requirements for budgeting revisions. Annual detailed disbursement forecasts and budgets are required. IFRs will provide information on budgetary control and analysis of variances between actual and	N	M

Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
Steering Committee could be a challenge.		budgeted values. The PDARP unit is familiar with the overall preparation of the AWP.		
Accounting This project will use the accounting software as for all other Word Bank-financed project in the ROC. The risks will relate to poor policies and procedures and delay in maintaining reliable and auditable accounting records.	S	The project will adopt the OHADA accounting system. Accounting procedures will be documented in the manual of procedures. The FM functions will continue to be carried out by a qualified consultant and the existing software will be customized to consider the need for this new project. Staff will continue to be trained on the use of the accounting software.	N	M
Internal control The internal control system may be weak due to inadequate FM capacity of the implementing agency. Insufficient safeguards and controls may result in misuse of funds and affect the implementation of the project.	S	Revision and adoption of an FM Procedures Manual and training on the use of the manual by the consultants recruited for this purpose. The existing internal audit consultant will help ensure that FM procedures will be followed.	N	M
Funds flow One Designated Account (DA) will be opened in a reliable commercial bank and all project activities will be financed through this account. Risk of misused funds and delays in disbursements of funds to the implementing agency and beneficiaries.	S	The following are the mitigating measures: the FM manager will approve payment requests before disbursement of funds and the ToRs of the external auditors will include physical verification of goods and services acquired.	N	S
Financial reporting The NPCU will provide a quarterly IFR (45 days after the	S	A computerized accounting system, namely SUCCESS, will be used.	N	M

Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
end of each quarter); annual financial report (within six months after the year-end) to the World Bank to monitor the utilization of funds for the project. The risk will be to have inaccurate and delay in submission of the IFR to the World Bank due to delays from implementing agencies or inadequate capacity of the FM team.		IFR and financial statements with similar formats agreed during negotiations.		
Auditing The national audit capacity is weak and not reliable. There may be delays in submission of audit reports or qualified opinion and delays in the implementation of audit report recommendations.	S	The project's institutional arrangements allow for the appointment of adequate external auditors (independent auditors) and the ToRs will include physical verification and specific report on finding of physical controls of goods and services acquired or delivered. Annual audit will be carried out during the project implementation period in accordance with the International Standards on Auditing (ISA).	N	S
Governance and accountability Possibility of circumventing the internal control system with colluding practices such as bribes, abuse of administrative positions, and misprocurement is a critical issue.	M	(a) The ToR of the external auditor will comprise a specific chapter on corruption auditing; (b) FM Procedures Manual should be approved three months after project effectiveness; (c) robust FM arrangements (qualified individual FM staff recruited under ToRs acceptable to IDA, quarterly IFR including budget execution and monitoring) are	N	S

Risk	Risk Rating	Risk Mitigating Measures Incorporated into Project Design	Conditions for Effectiveness (Y/N)	Residual Risk
		required; and (d) measures to improve transparency such as providing information on the project status to the public and to encourage participation of civil society and other stakeholders are built into the project design.		
OVERALL FM RISK	**S**			**S**

18. The overall residual FM risk rating is deemed Substantial.

19. **Implementing entity.** The existing PCU for the PDARP will have the overall responsibility of implementing this project. It will oversee the project's fiduciary aspects (FM and Procurement); the existing FM team will be reevaluated to ensure that they are suitable to handle the fiduciary aspects of the projects. The fiduciary team will be trained on the use of World Bank procedures as well as the project's software.

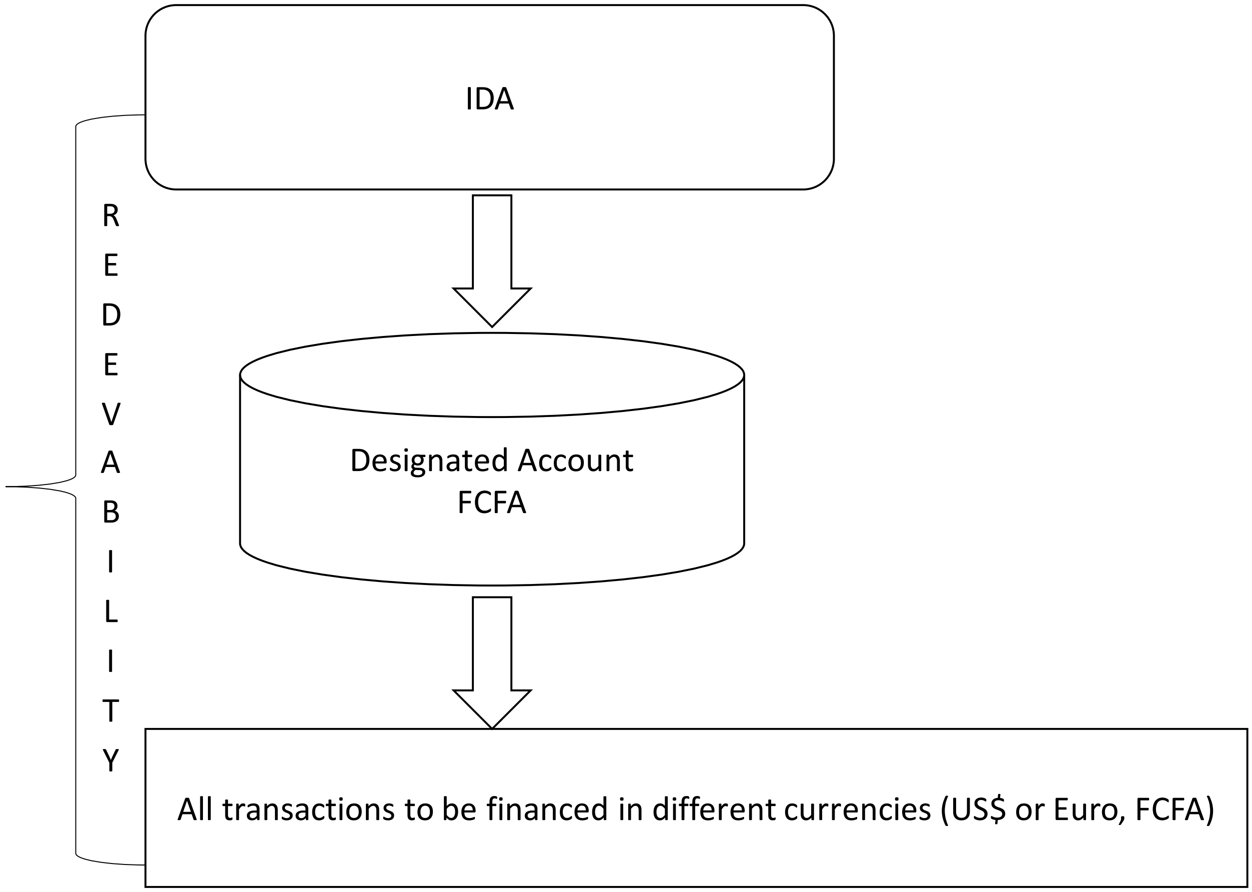
20. **Planning and budgeting.** The AWP and budget, along with the disbursement forecast, will be consolidated into a single document by the FM unit of the project, which will be submitted to the Project Steering Committee for approval, and thereafter to the World Bank for approval no later than December 31 of the year preceding the year the work plan should be implemented. The NPCU will monitor its execution with the accounting software in accordance with the budgeting procedures specified in the manual of procedures and report on variances along with the quarterly IFR. Only budgeted expenditures would be committed and incurred to ensure that the resources are used within the agreed upon allocations and for the intended purposes. The quarterly IFRs will be used to monitor the execution of the AWP.

21. **Information and accounting system.** The ROC is a member of OHADA and thus, adheres to its accounting standards (SYSCOHADA), in line with international accounting standards. Hence, SYSCOHADA accounting standards will apply to this project. An integrated financial and accounting system is in place and will be updated to accommodate this project. The project code and chart of accounts will be developed to meet the specific needs of the project and documented in the manual of procedures. The charter of account should be prepared according to the wording used in tables for sources and uses of funds for the accepted eligible expenditures as agreed during negotiations of the project. These diaries and records should be maintained with the support of FM software that should be operational no later than three months after project effectiveness. FM staff at the NPCU should also be trained in the use of the software by the same date.

22. **Internal control and financial, administrative, and accounting manual.** The internal control system of the project will be described in the FM Manual. Such a manual should be flexible enough to allow for improvement and changes as necessary during project implementation. This manual should be fully aligned with the accounting elements mentioned above as well as the modules of FM software. The NPCU already has an FM and Accounting Procedures Manual that was prepared for the PDARP. The Procedures Manual will be subject to revision so as to consider the specific aspects of the proposed project. Such a revision will be carried out by the project fiduciary team.

23. **Flow of funds.** Project activities will be financed through a DA that will be opened in a commercial bank acceptable to the Association. The DA will be managed according to the disbursement procedures described in the PIM and Disbursement Letter (DL) for the project. The ceiling of the account will be decided by the disbursement services of the World Bank and should consider the disbursement capacity of the various structures implementing the project. The ceiling of the DA will be set at CFA Franc 300 million. Additional advances to the DA will be made on a monthly basis against withdrawal applications supported by Statements of Expenditures (SOEs) or records and other documents as specified in the DL. The flow of funds is summarized in figure 2.2.

Figure 2.2. Flow of Funds



Disbursements

24. Disbursements under the project will be carried out in accordance with the provisions of the IDA Disbursement Guidelines ('World Bank Disbursement Guidelines for Projects' dated February 1, 2017), the DL, and the Financial Agreement.

25. **Disbursement procedures and methods.** Given the Substantial risk environment, the report-based disbursement will not be applicable by default. Therefore, upon project effectiveness, transaction-based disbursements will be used. An initial advance up to the ceiling of the DA (CFA Franc 300 million) will be made into the DA and subsequent disbursements will be made on a monthly basis against submission of the SOE or records, as specified in the DL. Hereafter, the option to disburse against submission of quarterly unaudited IFR (also known as the report-based disbursements) could be considered subject to the quality and timeliness of the IFRs submitted to the World Bank and the overall FM performance as assessed in due course. The other methods of disbursing the funds (reimbursement,

direct payment, and special commitment) will also be available to the project. The minimum value of applications for these methods is 20 percent of the DA ceiling. The project will have the option to sign and submit withdrawal applications electronically using the eSignatures module accessible from the World Bank's Client Connection website.

26. **Financial reporting.** The NPCU will prepare on a quarterly basis the unaudited IFRs. These reports will be submitted to IDA on a quarterly basis within the 45 days following the end of each quarter. The reports will include (a) a table with sources and use of funds, (b) a table with use of funds per activity, (c) a table regarding the use of funds according to procurement methods and threshold, and (d) a table with M&E or physical advance of activities. Financial statements will be prepared for each financial exercise covering, in general, 12 months. Interim financial statements will also be prepared considering certified status of expenditures. The format of such reports was discussed and agreed upon during project negotiations.

27. **External audit.** The assessment of the '*Cour des Comptes et de Discipline Budgétaire* (Court of Audit and Budgetary Discipline)', the Supreme Audit Institution during the PEFA and subsequent PFM evaluation, revealed a need for improvement of its capacity and could not be used to audit the project accounts. Therefore, a qualified, experienced, and independent external auditor will be recruited on approved ToR three months after effectiveness. The external audit will be carried out according to ISA and will cover all aspects of project activities implemented and include verification of expenditures eligibility and physical verification of goods and services acquired. The report will also include specific controls such as compliance with procurement procedures and financial reporting requirements and consistency between financial statements and management reports and field visits (for example, physical verification). The audit period will be on an annual basis and the reports, including the project financial statements, submitted to IDA and the *Cour des Comptes* (Court of Audit) six months after the end of each fiscal year.

28. The project will comply with the World Bank disclosure policy of audit reports (for example, make them publicly available, promptly after receipt of all final financial audit reports [including qualified audit reports] and place the information provided on the official website within one month of the report being accepted as final by the team).

29. **Governance and accountability.** The risk of fraud and corruption within project activities is substantial given the country context and the inherent risks of activities. However, the proposed fiduciary arrangements will help mitigate such risks.

30. **FM Action Plan.** The FM Action Plan described in table 2.2 has been developed to mitigate the overall FM risks.

Table 2.2. FM Action Plan

Issue	Remedial Action Recommended	Responsible Entity	Completion Date	FM Conditions
Staffing	Recruitment of additional accountants	NPCU	Three months after effectiveness	No
Accounting software	Upgrade the existing software and train the fiduciary staff on the use of that software	NPCU	Three months after effectiveness	No
FM Procedures Manual	Update the existing project manual of procedures which will include FM and accounting aspects	NPCU	Three months after effectiveness	No
Reporting (IFRs)	Agree on the format and content of unaudited IFRs	NPCU	Agreed during negotiations	No
External auditing	Selection of an external auditor on ToRs (project accounts)	NPCU	Three months after effectiveness	No

31. **Conclusion and supervision plan**. Supervisions will be conducted over the project's lifetime. The project will be supervised on a risk-based approach. It will comprise, among other things, the review of audit reports and IFRs, and advice to task team on all FM issues. Based on the current risk assessment, which is (Moderate), the project will be supervised at least twice a year and may be adjusted when the need arises. The Implementation Status and Results Report will include an FM rating of the project. To the extent possible, mixed on-site supervision missions will be undertaken with procurement, M&E, and disbursement staff.

32. Based on the outcome of the FM risk assessment, an implementation support plan is proposed.

TABLE 2.3. IMPLEMENTATION SUPPORT PLAN

FM Activity	Frequency
Desk reviews	
IFR review	Quarterly
Audit report review of the program	Annually
Review of other relevant information such as interim internal control systems reports	Continuous, as they become available
On-site visits	
Review of overall operation of the FM system	Annually (implementation support mission)
Monitoring of actions taken on issues highlighted in audit reports, auditors' Management Letters, internal audit, and other reports	As needed
Transaction reviews (if needed)	As needed

Capacity-building support	
FM training sessions by the World Bank FM team	Before project start and thereafter as needed

33. The objectives of this implementation support plan are to ensure that the project maintains satisfactory FM systems throughout the project's life.

(a) **Effectiveness conditions.** There are no FM effectiveness conditions for this project.

(b) **Financial covenants.** Upgrading the computerized system and completion of the configuration of the multi-project accounting system three months after effectiveness.

(c) **Other FM standard covenants.** (i) IFRs will be prepared on a quarterly basis and submitted to the World Bank 45 days after each quarter and (ii) annual detailed work program and budget including disbursement forecasts will be prepared each year by the end of December.

Procurement

34. **Applicable guidelines.** Procurement for the proposed project will be carried out in accordance with the World Bank's 'Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011 and revised July 2014; 'Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011 and revised July 2014 (given that the project's concept review took place prior to June 30, 2016); and the provisions stipulated in the Financial Agreement. The various items under different expenditure categories are described in general below. For each contract to be financed by the Credit, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the borrower and the World Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The Procurement Plan will be available in the project's database and on the World Bank's external website. The implementing entities, as well as contractors, suppliers, and consultants, will observe the highest standard of ethics during procurement and execution of contracts financed under this project. 'Guidelines on Preventing and Combatting Fraud and Corruption in Projects financed by IBRD Loans and IDA Grants', dated October 15, 2006, and revised in January 2011 (the Anti-Corruption Guidelines) shall apply.

35. **Procurement documents.** Procurement will be carried out using the World Bank's Standard Bidding Documents (SBDs) or Standard Request for Proposals, respectively for all International Competitive Bidding (ICB) for supplies, works, and services other than consulting services. For National Competitive Bidding (NCB), while waiting for the World Bank to assess the implementation of the new procurement system, and based on experience gained from the Government's use of these documents outside the context of this project, the borrower will use the World Bank's SBD for ICB for supplies, works,

and services other than consulting services and the World Bank's Standard Request for Proposals for recruitment of consultants.

36. **National procurement system and ongoing reforms.** The main recommendations of the 2006 Country Procurement Issues Paper were to (a) prepare and approve of a public procurement code, (b) carry out a survey of the existing capacity on procurement, (c) make a needs assessment of the institutional and human capacity requirements for public procurement in the country, (d) prepare an action plan for the procurement reform, and (e) implement the new procurement code in accordance with the agreed action plan. All these recommendations have been undertaken. Indeed, the Government has finalized major actions to implement the new procurement code and the said code is already being applied by the Government since September 2009. The most important steps achieved to date include the following: (a) draft of the national procurement code finalized and approved by the national authorities; (b) staff of the *Direction Générale de Contrôle des Marchés Publics* (DGCMP) (prior reviewing institution) are already in place; (c) the board of the regulatory body (*Agence de Régulation de Marchés Publics*, ARMP) has been nominated by the Government, the private sector, and civil society, as recommended by the new provisions; (d) the SBDs are reviewed and approved by the procurement reform committee; and (e) an action plan for training the main actors has been properly implemented. The result of an independent audit for 2013 and 2014 are expected for verifying the extent to which the rules are respected by contract authorities. The World Bank is working with partners to assist the current system and help the ARMP and DGCMP establish an action plan, which will allow to move forward in using country institutions for bank operations.

37. **Conditions to use the national procurement code.** Once the new procurement code and its implementation have been reviewed and found satisfactory to IDA, the new code will be applicable for all contracts, which are not advertised internationally. If any exception to the procurement code is needed, so that it is acceptable to the World Bank, the said exception will be notified to the Government before the use of the code. At any time, modifications in the national procurement system can be brought by the Government; the exceptions should then be updated accordingly.

38. **Advertising procedure.** General Procurement Notice (GPN), Specific Procurement Notices, Requests for Expression of Interest , and results of the evaluation and contracts award should be published in accordance with advertising provisions in the following guidelines: 'Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011 and revised July 2014, and 'Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011 and revised July 2014.

Procurement Methods

39. **Procurement of goods, works, and non-consulting services.** Goods procured under this project will include computer equipment, office furniture, accounting software, small equipment, vehicles, and

other materials. Non-consulting services procured under this project will include workshops and training in the country and abroad. Depending on the size of the contracts, goods, works, and services other than consultancy services procured under this project will be done under ICB using World Bank procurement rules that include the related World Bank's SBDs or under NCB using national SBDs agreed with or satisfactory to the World Bank. Small-value goods, works, and services other than consultancy services may be procured under Shopping procedures. Direct contracting may be used where necessary if agreed in the Procurement Plan in accordance with the provisions of paragraphs 3.7 to 3.8 of the Procurement Guidelines. The following additional methods may be used where appropriate: (a) Limited International Bidding and (b) procurement from UN agencies.

Guidelines.

40. **Selection of consultants.** Consultancy services will include training providers, technical assistance, and firms' recruitment. The selection method will be Quality- and Cost-Based Selection (QCBS) whenever possible. Contracts for specialized assignments estimated to cost less than US$300,000 equivalent may be contracted through Selection based on Consultant's Qualification (CQS). The following additional methods may be used where appropriate: Quality-Based Selection (QBS), Selection under a Fixed Budget, and Least-Cost Selection.

41. Single-Source Selection (SSS) of firms may be employed with prior approval of the World Bank and (should) be in accordance with paragraphs 3.8 to 3.11 of the Consultant Guidelines.

42. **All services of Individual Consultants (IC)** will be procured under contracts in accordance with the provisions of paragraphs 5.1 to 5.6 of the guidelines. These provisions include the SSS of IC.

43. Short-lists of consultants for services estimated to cost less than the equivalent of US$100,000 per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. However, if foreign firms do express interest, they will not be excluded from consideration.

44. **Training, workshops, seminars, and conferences.** Training activities will comprise workshops and training in the country and abroad, based on individual needs as well as group requirements, on-the-job training, and hiring consultants for developing training materials and conducting training. All training and workshop activities will be carried out on the basis of approved annual programs that will identify the general framework of training activities for the year, including (a) the training envisaged; (b) the criteria for selection of personnel to be trained (and personnel if known); (c) the selection methods of institutions or individuals conducting such training; (d) the institutions conducting the training, if already selected; (e) the duration of the proposed training; and (f) the cost estimate of the training. Attendance at relevant project workshops and seminars will be treated as training and will need advance World Bank's no-objection.

45. **Operating costs.** The operating costs will include reasonable expenditures for office supplies, vehicle operation and maintenance, communication and insurance costs, banking charges, rental expenses, office equipment maintenance, utilities, document duplication/printing, consumables, travel cost and per diem for project staff and Steering Committee members for travel linked to the implementation of the project, and salaries of contractual staff for the project but excluding salaries of officials of the recipient's civil service.

46. **Implementation arrangements.** The PCU (PDARP) created within the MAEP will have the overall responsibility of implementing this project. It will oversee the project's fiduciary aspects (FM and Procurement). Regarding procurement, the PDARP team will have full responsibility. The *Cellule de Gestion des Marchés Publics* (Public Procurement Management Unit) of the MAEP will be associated with the project's procurement management for training purpose on the use of World Bank procedures.

47. **MTR.** An MTR is planned to take place 24 months after the effectiveness date to assess the capacity of all government entities involved in the project execution. The MTR report will integrate the results of the procurement activities performed during the period preceding the date of such report, and it will set out measures recommended concerning the use of the national procurement code for the remaining activities of the project, if the implementation of the national code has been determined to be satisfactory to the World Bank.

48. **Assessment of risks and mitigation measures.** The risk factors for procurement performance include the country context, which is likely to involve the following risks:

(a) A weak governance environment, weaknesses in accountability arrangements, and an overall lack of transparency in conducting procurement processes, which create significant risks of corruption, collusion, and fraud.

(b) The PDARP system should be reinforced in order to avoid informal interference in the procurement process by senior officials—and prevent waste, mismanagement, nepotism, corruption, collusion, and fraud.

(c) Government officials likely to be involved in project procurement through tender committees and the national control system ensuring that the rules are respected and able to handle complaints from bidders may not be familiar with procurement procedures.

(d) The control and regulatory systems are not fully operational and independent.

49. The overall project risk for procurement is Substantial before risk mitigation. Proposed corrective measures which have been agreed to mitigate the risk are summarized in table 2.4.

TABLE 2.4. ACTION PLAN CORRECTIVE MEASURES

Ref.	Tasks	Responsibility	Due date
1	Update the PIM of the PDARP to consider the specificities of this project.	Commercial Agriculture Project	By effectiveness
2	Organize a launch workshop involving all stakeholders.	Commercial Agriculture Project	3 months after effectiveness
3	Recruit a procurement specialist with a strong experience in World Bank procurement procedures who will temporally provide technical assistance to the PDARP's Procurement Unit.	Commercial Agriculture Project	As needed

50. The prevailing risk can be improved to Moderate if the above corrective measures are implemented.

51. **Implementation readiness.** The following actions were initiated/carried out during the preparation of this project:

(a) A detailed Procurement Plan for the first 18 months of the project has been prepared and was finalized during the negotiations.

(b) The GPN will be prepared and advertised locally and in the United Nations Development Business online and the World Bank's external website after Board approval.

(c) The selection of consultants for studies for all major components has been initiated and is expected to be completed by the project effectiveness.

(d) The most important procurement activities for the critical contracts of the first year are initiated and completed at the stage of contract award but without signed contracts.

52. **Fraud, coercion, and corruption.** All procuring entities, as well as bidders, suppliers, and contractors, shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraphs 1.16 and 1.17 of the Procurement Guidelines and paragraphs 1.23 and 1.24 of the Consultant Guidelines. The anti-corruption plan to be prepared for the project and discussed above will also focus on procurement-related matters. This anti-corruption plan will be part of the PIM.

53. **Frequency of procurement supervision.** In addition to the prior review supervision to be carried out from the World Bank office, the capacity assessment of the implementing agency has recommended (a) supervision missions every six months to visit the field and (b) at one annual post procurement review.

Missions in the first 18 months shall include a World Bank procurement specialist or a specialized consultant.

54. **Procurement methods and review thresholds.** Procurement methods and Bank review requirements are summarized in table 2.5.

TABLE 2.5. THRESHOLDS FOR PROCUREMENT METHODS AND WORLD BANK REVIEW REQUIREMENTS

Expenditure Category	Contract Value Threshold (US$)	Procurement Method	Contracts Subject to Prior Review
1. Works	≥10,000,000 ≥100,000 > 200,000 <200,000 n.a.	ICB NCB Shopping SSS	All None Post review All above US$100,000
2. Goods and services (other than consultant's services)	≥1,000,000 ≥100,000 > 1,000,000 <100,000 n.a.	ICB NCB Shopping SSS	All None Post review All above US$100,000
3. Consultant's services, firms, individuals	n.a <200,000 n.a ≥100,000	CQS SSS IC SSS	Above US$500,000 None All above US$100,000 All All above US$100,000

55. The approved Procurement Plan will determine procurement methods and the contracts to be submitted to World Bank review and no-objection (see table 2.6).

Table 2.6. Simplified Procurement Plan (for the first 18 months) List of Contract Packages to be Procured Following ICB and Direct Contracting Guidelines for Works, Goods, and Non-consulting Services

Ref. No.	Contract (Description)	Estimated Cost - US$, thousands	Procurement Method	Prequalification	Review by World Bank (Prior/Post)	Expected Bid-Opening Date	Comments
1	Vehicle, TT (four-wheel drive)	160	Shopping	No	Prior	March 2018	—
2	Motocycles	50	Shopping	No	Post	March 2018	—
3	NPCU FM and accounting software purchase and implementation	40	Direct Contract	No	Post	December 2017	—
4	Office furniture and IT equipment for NPCU	150	NCB	No	Post	February 2018	—
5	Office rehabilitation for NPCU	400	NCB	No	Post	March 2018	—

Ref. No.	Contract (Description)	Estimated Cost - US$, thousands	Procurement Method	Prequalification	Review by World Bank (Prior/Post)	Expected Bid-Opening Date	Comments
6	Office rehabilitation for DPCUs	600	NCB	No	Post	March 2018	—
7	Infrastructure for R&D/IRA	800	NCB	No	Prior	November 2018	—
8	Maintenance of rural roads	800	NCB	No	Post	May 2018	—
9	Rehabilitation/construction of rural roads	2,500	NCB	No	Prior	January 2019	—
10	Equipment for agricultural statistical services	300	NCB	No	Post	February 2018	—
11	Equipment for selected agricultural higher education and technical and vocational education and training institutes	500	NCB	No	Prior	June 2018	—

Table 2.7. List of Contract Packages to be Procured Following Guidelines for the Selection and Employment of Consultants

Ref. No.	Description of Assignment	Estimated Cost - US$, thousands	Selection Method	Review by Bank (Prior/Post)	Expected Proposals Submission Date	Comments
1	Technical assistance for producer groups	800	QBS	Prior	n.a.	First 3 contracts only
2	Technical assistance for MSMEs	500	QBS	Prior	n.a.	First 3 contracts only
3	Consultants for studies on rural roads maintenance	30	IC	Post	April 2018	—
4	Technical assistance for support to departmental counsels (rural roads maintenance strategy)	100	Direct contracting	Prior	October 2018	—
5	Consultants for studies on rural roads construction	300	QBS	Post	November 2018	—

Ref. No.	Description of Assignment	Estimated Cost - US$, thousands	Selection Method	Review by Bank (Prior/Post)	Expected Proposals Submission Date	Comments
6	Drafting of Cooperative Law (OHADA)	200	Direct contracting with UN agency	Prior	February 2018	—
7	Study on food safety	300	QBS	Post	April 2018	—
8	Seed Legislation Reform (CEMAC)	200	QBS	Post	October 2018	—
9	Drafting the rural code	200	QBS	Post	April 2018	—
10	Technical assistance on M&E and agricultural statistics	500	Direct Contract (with FAO)	Prior	n.a.	—
11	National specialist for nutrition	120	IC	Post	March 2018	—
12	National specialist for knowledge management	120	IC	Post	March 2018	—
13	Contract with service provider for rural roads rehabilitation	17,000	QBS	Prior	n.a.	—
14	External auditor	170	QCBS	Prior	October 2017	—
15	Project staff	To be determined	IC	Prior	October 2017	—

Environmental and Social (including safeguards)

56. **Environmental category and justification.** The proposed project has been classified under Environmental Assessment Category B and is expected to have a positive social impact by improving commodities and market access for smallholder farmers in the targeted zones. There are no significant, long-term, or irreversible adverse impacts expected from the implementation of activities to be financed under this project.

57. **Environmental assessment and technical studies carried out.** Safeguard instruments prepared by the recipients during the preparation phase included (a) ESMF, (b) Physical Cultural Resources Management Framework (PCRMF), (c) Integrated Pest Management Plan (IPMP), (d) Resettlement Framework, (e) Indigenous Peoples Planning Framework (IPPF), all consulted upon, developed, cleared and disclosed. In addition, an Exception Memo to the Riparian Notification was prepared and approved by AFRVP on May 15, 2017. The ESMF contains studies related to forests and natural habitats. Physical

cultural resources are addressed in the Physical Cultural Resources Management Framework (PCRMF). The ESMF also focuses on capacity development for the management of safeguard issues, which is still considered weak in the country.

58. The Environmental Management Framework includes a screening mechanism that will make the identification of specific safeguards issues possible and will guide the preparation of appropriate safeguards instruments for specific subprojects, including environmental assessments and environmental management plans.

59. The borrower has prepared an IPPF that describes the PA communities, their geographic locations, potential impacts, and a process for engaging the pygmies in the project, including through consultations, participation, and benefit sharing for local communities. Once the sites of subprojects to be financed by the project have been determined, an Indigenous Peoples Plan may be prepared as necessary, according to the requirements of OP 4.10 (Environmental Assessment).

60. **An RPF has been prepared to address potential social safeguards issues.** Certain proposed activities under Component 2 (Improving Public Infrastructure) may require acquisition of land, but due to low population density in rural areas of the ROC, the risk of physical resettlement is minimal, although there may be potential economic displacement or loss of assets. Where required, the RPF will guide the preparation of RAPs or Abbreviated RAPs. To that effect, a social impact assessment will be carried out and a RAP will be prepared before the commencement of the subprojects works, in accordance with the World Bank's safeguard policies (including OP 4.12), once the exact sections of the concerned subprojects to be covered by the RAP have been identified and agreed with the Government. The proposed project will build on the experience and results of the Agricultural Development and Rural Roads Rehabilitation Project (P095251). The project established an escrow account of US$500,000 for resettlement compensation. As the project did not require any land acquisition and therefore did not induce any resettlement (physical or economic displacement), funds in the escrow account remain unused. The account will be transferred to the new project to fund potential compensation cases for the new Commercial Agriculture Project.

61. **Consultations with various stakeholders and affected groups.** Public consultations with local communities based on the respect of the 'right of the people to information', took place in the area of potential influence of the project. The people who were consulted included local communities and IP; representatives of civil society; associations of producers operating in the agriculture, livestock, and fishing sectors in various departments; some departmental directorates of environment, agriculture, fisheries, and aquaculture; women's integration associations; and heads of agricultural sector. These consultations with exchange and discussion of the activities planned by the project, and the positive and negative impacts that may result, allowed the actors to freely give their opinions on the project, share their concerns and major fears, and formulate suggestions and recommendations as part of its implementation.

62. The consulted local communities are favorable to the project and are pleased to see that their incomes could increase with its implementation. In general, the actors in communities perceive the project as a good instrument to fight against poverty and support equality of opportunity between men and women, and they also see the benefit of infrastructure and equipment (roads, markets, storage, and so on) made in the villages. The general view of the institutional actors at the Central Government level is that this is a project with great innovative aspects for the development of agriculture, livestock, and fisheries. The project will contribute to the opening up of rural areas, improving yields in the production of supported crops, and the adoption of appropriate technologies, which will help generate additional income for people in local communities.

63. **Mechanisms to monitor the implementation of agreed mitigation plans.** The NPCU will directly supervise the project activities with support from technical institutions (such as public institutions of agricultural advice and research and facilitation through different partnerships and by NGOs). One key issue for the ROC will be to (a) ensure leadership at the Ministry of Agriculture; (b) mitigate elite capture by elite groups in society with vested interests; and (c) clarify the roles, responsibilities, and mandate of private and public actors in the project.

Monitoring and Evaluation

64. The project M&E system will build on census carried out by the FAO and the WFP to assess producers, prices, and crop and animal production for food security. A joint exercise to expand and establish a countrywide food price monitoring system will contribute toward the rebuilding of the MAEP data and statistical service capacity. The project has the objective to strengthen the statistics management and analysis capacity of the Ministry of Agriculture’s Department of Studies and Planning. The capacity of the unit to produce and disseminate official agricultural statistics that will monitor (a) sector performance, (b) geo-referenced data useful for investors, and (c) expenditure tracking which will feed into the CADDP Regional Strategic Analysis and Knowledge Support System M&E system will be funded under Component 3. The social and environmental assessment will also provide data, which will allow project monitoring.

65. In the ROC, access to statistics is limited. To cope with this challenge, the project will also explore the use of available information and communication technologies to improve data collection and its M&E framework. International experience shows that mobile devices and applications can be used to collect data from beneficiaries and satellite imagery can be used to monitor changes in land use. The team will build on international experience to select the most suitable information and communication technology tools for project M&E.

66. The NPCU will assume overall responsibility of the project M&E and prepare Implementation Progress Reports four times a year. A Management Information System (MIS) will be established at the NPCU and operated by its M&E specialist who will be supported by a team of five data analysts in decentralized departmental coordination units and who will lead the results measurement exercises with the guidance of the World Bank Team. A baseline survey will be undertaken, establishing a control group,

and the project's impacts will also be assessed through specific impact studies. These will be planned by the NPCU in partnership with key actors. Several core indicators will be monitored. The project's M&E system will include an explicit focus on disaggregating results by gender for key performance indicators wherever possible.

67. The M&E system will feature an MIS, spot-checks, evaluations, and beneficiary assessments to gather accurate data on the indicators. Specifically, the MIS will be used for tracking all information related to project activities, including (a) basic information on producer groups, (b) details on business plans and the PAs, (c) subproject information such as physical and financial progress, (d) FM data from which SOEs will be provided to the World Bank, and (e) project management information for progress reports to be submitted semiannually.

68. **Citizen engagement will be carried out through the PPD platforms under Component 2 of the project.** Project progress and results will be regularly shared with key stakeholders, including producer groups, commercial actors, and participating financial institutions, at the end of dialogue sessions. The relevance of project technical assistance services, the project's efficiency and effectiveness in the implementation of its activities, and beneficiary testimonies will all be used as means to assess results (changes in productivity, entrepreneurial capacity, market access, and the enabling environment for commercial agriculture).

69. Project design was informed by broad consultations with key project stakeholders (MSMEs, producer groups, financial institutions, Government, and vocational training institutes). To ensure continued citizen engagement in the project, a full-time communications specialist will be engaged in the NPCU and a comprehensive communications strategy will be developed and implemented by the client over the duration of the project to ensure proper coordination, dissemination, and stakeholder feedback.

Role of Partners

70. Project implementation will rely on different key partners active in the ROC to support and scale up its intervention, among other things:

(a) Technical assistance service providers will be hired by the project to assist (i) eligible producer groups and MSMEs in preparing the business plan they wish to submit as part of their matching grant application under Component 1, (ii) the project in implementing a capacity-building program for producer groups that are unable to meet basic eligibility criteria, and (iii) producer groups and MSMEs implement their business plans. An example of such service providers for agricultural extension and advisory could be Agricongo, which is an NGO supported by the MAEP with a core mandate to develop horticulture production around peri-urban areas and also to support the marketing of produce. This NGO has demonstrated an excellent track record in the past and has been involved in the implementation of the PDARP.

(b) Private MSMEs already active in developing partnerships with smallholders and delivering key services. These will be strengthened in their functions and also in putting in place PAs through the matching grant program under Component 1 of the project.

(c) Financial institutions such as MFIs and commercial banks will help disburse the funds of the matching grant program to the selected beneficiaries under Component 1. Also, a representative from the financial sector will participate in the Selection Committee for matching grant applications.

(d) An independent firm will be hired to support the matching grant program under Component 1. It will be in charge of processing and evaluating matching grant applications to make sure that applicants and their business plans meet eligibility and prioritization criteria before the final decision to approve the allocation of a matching grant to a beneficiary is made by the Selection Committee.

(e) The FAO and other key development institutions with whom the project will collaborate to support institutional development/transformation of the Ministry of Agriculture and address relevant transversal dimensions of the project such as nutrition, gender, and climate change.

(f) The Government, through the MAEP, will oversee the project implementation and ensure that funds are disbursed in accordance with the credit agreement.

ANNEX 3: IMPLEMENTATION SUPPORT PLAN

COUNTRY: Republic of Congo
Congo Commercial Agriculture Project

Strategy and Approach for Implementation Support

1. The strategy for supporting project implementation will focus on close monitoring of the project's technical design and implementation, as well as governance, fiduciary, and safeguard issues. It will consist of (a) implementation support missions carried out jointly with the FAO depending on technical needs and (b) technical assistance particularly in the areas of PA models, a new approach that is being introduced in the ROC. The approach will also incorporate successfully the risk mitigating measures to support the risk management proposed in the Systematic Operations Risk-rating Tool.

2. **Implementation support missions**. One of the biggest implementation challenges identified is the overall low capacity in the ROC to implement and supervise programs and projects conducted under the Ministry of Agriculture and other related institutions. Despite a strong project implementation unit (the PDARP NPCU) that has a proven track record in fiduciary and safeguards management, technical supervision of an innovative project like this one would be a challenge. To respond to this challenge, and to ensure that project resources are being used effectively to achieve the PDO, the supervision strategy will use a number of instruments to review progress and respond to implementation issues, including the following:

(a) **Implementation support missions.** The World Bank task team will conduct semiannual reviews and close implementation support missions to review implementation performance and progress toward the achievement of the PDO. Given the overall design and scope of the project, a multidisciplinary team comprising technical specialists with fiduciary, environmental, social, and operations specialists will be needed to support the Government of the ROC in implementing the project. Support from technical partners, such as the FAO, will be sought when needed. The first implementation support mission will take place as soon as possible after effectiveness to provide start-up support through direct and timely feedback on the quality of implementation plans and their likely soundness and acceptability.

(b) **MTR.** An MTR will be carried out midway in the implementation phase. It will include a comprehensive assessment of the progress in achieving outcome and output objectives as laid out in the Results Framework. The MTR will also serve as a platform for revisiting design issues that may require adjustments to ensure satisfactory achievement of the project's objective.

(c) **Use of technical implementing partners.** The project will make use of existing technical partners already active in specific areas of the project interventions to benefit from their experience and expertise for the benefit of producer groups and MSMEs. These would be, for example, NGOs or private sector MSMEs also supported by the project.

(d) **Implementation completion.** At the close of the project, the World Bank will carry out an implementation completion review to assess the success of the project and draw lessons from its implementation.

3. **Objective of implementation support mission.** The implementation support and oversight missions would have the combined aim of reviewing the quality of implementation, providing solutions to implementation problems, and assessing the likelihood of achieving the PDO. More specifically, they will (a) review implementation progress by component, including institutional development aspects; (b) provide solutions to implementation problems as they arise; (c) review with the NPCU the Action Plan and disbursement programs for the next six months; (d) review the project's fiduciary aspects, including disbursement and procurement; (e) verify compliance of project activities with the World Bank's environmental and social safeguard policies; (f) review case studies and survey results to measure results indicators to determine progress toward the PDO against the targets set within the Results Framework and the quality of implementation; and (g) review the quality of capacity-building activities, which are crucial for an effective implementation of the program. The missions would combine some field visits, field-based focus group discussions and interactive workshops with stakeholders for feedback, and regional workshops as well as national workshops to highlight implementation issues; gather emerging implementation lessons; and share mission recommendations, including agreements on actions moving forward. It will also include reviews of quarterly/annual reports and various studies.

4. **Technical assistance.** Implementation support will include technical support from the World Bank, the FAO, and possibly other bilateral/multilateral agencies for critical aspects of the project, to ensure proper FM/procurement, as well as to monitor social and environmental safeguards. The objective of the technical support would be to help the project teams internalize good practices and resolve implementation bottlenecks as they are identified during implementation support missions. Technical assistance will include training workshops for developing core resource teams within implementing units and project teams, helping to finalize manuals, and reviewing and advising on ToR for required studies and technical support missions.

Implementation Support Plan and Resource Requirements

5. **Technical support.** Some of the investments planned under the project are relatively complex from a technical standpoint, especially in terms of ensuring that the activities to be funded actually result in expected efficiency improvements. In addition to the World Bank's core supervision team, the FAO Investment Center as well as a number of consultants may be mobilized periodically to provide technical assistance to implementing agencies in the form of hands-on training and mentoring.

6. **Focus of support.** The first two years of implementation will see more technical support. Thereafter, the focus will change to more routine monitoring of progress, troubleshooting, and assessments based on the Results Framework. The support missions will be complemented by regular short visits by individual specialists to follow up on specific thematic issues as needed.

7. **Financial support.** The project FM specialist based in the Kinshasa country office will review the FM systems including their continued adequacy, evaluate the quality of the budgets and implementing agencies' adherence to these budgets, review the cycle of transaction recording through to final report generation, evaluate the internal audit function, review IFRs and/or annual financial statements, follow up on the advances to the DA, follow up on both internal and external audit reports, and periodically assess the project's compliance with the FM manual as well as the Financial Agreement. Table 3.1 summarizes the implementation support plan.

Table 3.1. FM Implementation Support Plan

FM Activity	Frequency
Desk reviews	—
IFR review	Quarterly
Audit report review of the program	Annually
Review of other relevant information such as interim internal control systems reports	Continuous, as they become available
On-site visits	—
Review of overall operation of the FM system (implementation support mission)	Twice per year
Monitoring of actions taken on issues highlighted in audit reports, auditors' management letters, internal audit, and other reports	As needed
Transaction reviews	As needed
Capacity-building support	—
FM training sessions	During implementation and as and when needed

8. **Procurement support.** On the procurement front, the World Bank will provide implementation support to the client through a combination of prior and ex post reviews, procurement training to project staff and relevant implementing agencies, and periodic assessment of the project's compliance with the procurement manual. Implementation support missions will be geared toward (a) reviewing procurement documents, (b) providing detailed guidance on the World Bank's Procurement Guidelines, and (c) monitoring procurement progress against the detailed Procurement Plan. Based on the recommendations of the fiduciary assessments of the implementing agencies, and in addition to the prior review supervision to be carried out from the World Bank office, the semiannual supervision missions will include field visits, of which at least one mission will involve ex post review of procurement activities.

9. **Safeguards.** The World Bank specialists in Social and Environmental Safeguards based in the Kinshasa country office will have responsibility for supervising safeguard activities. They will conduct supervision of the project's safeguard activities twice a year, participate in regular meetings to discuss findings, and draft action plans to improve implementation.

10. **Main focus of implementation support.** Table 3.2 summarizes the main focus of implementation support during the project's implementation period.

Table 3.2. Main Implementation Support Activities

Time	Focus	Skills Needed
First 12 months	• Project start-up • Support to implementation activities (sensitization, community consultations and planning, capacity building, strengthening implementation capacity including M&E) • Guidance on applying safeguard instruments • Complete baseline survey • Procurement, FM, M&E, and safeguards training of staff at all levels • Establishing coordination mechanisms with different implementing partners • Support to preparation of matching grant manual • Value chain analysis	• TTL • Private sector Specialist (Co-TTL) • Agri-finance specialist • Market access specialist • FM • Procurement • Environment and social • Matching grant management facilitation • Communication • M&E • Value chain specialist
12–48 months	• Monitor implementation performance including progress • Review AWPs and disbursement schedule • Support the development of cooperatives • Review quality of quarterly/annual reports, data and various produced studies • Assess quality of implementation process • Assess quality of M&E system (including quality of data collected) • Review audit reports and IFR • Review adequacy of the FM system and compliance with FM covenants • Assess quality of safeguards instruments and their application	• TTL + co-TTL • PA Specialist • Agri-finance specialist • Market access specialist • FM • Procurement • Environment and Social Safeguards • M&E • Value chain specialist • Communication

Note: TTL = Task team leader.

Table 3.3. Skill Mix required for the Proposed Project (per year)

Skills Needed	Staff Weeks	Number of Trips	Comments
TTL	15	—	Kinshasa based
Private sector specialist (Co-TTL)	12	2	Washington, DC based
Agri Finance specialist	6	2	Washington, DC based
Agriculture Economist	10	_	Kinshasa based
Value chain specialist	6	2	Consultant
Operations officer	10	—	Washington based
Procurement specialist	6	2	Kinshasa based
FM specialist	6	2	Kinshasa based
Environmental safeguard specialist	6	2	Kinshasa based
Social safeguard specialist	6	2	Kinshasa based
M&E specialist	6	2	Consultant
Communication specialist	4		Country office based
Gender specialist	2	1	Consultant

ANNEX 4: ECONOMIC AND FINANCIAL ANALYSIS

COUNTRY: Republic of Congo
Congo Commercial Agriculture Project

1. The proposed investment will provide direct socioeconomic benefits to more than 700 agricultural producer groups representing approximately 7,000 households and to a number of MSMEs that provide inputs or processing technologies. In addition, the project will benefit approximately 500,000 beneficiaries living near improved roads and numerous food consumers who will have increased access to high-quality food. The project's development benefits correspond to the three project components: (a) improving competitiveness and efficiency of value chains, (b) enabling the business of agriculture, and (c) institutional capacity building. Benefits will include increased agricultural output, higher returns for commercial producers, job creation, safe nutritious food, and higher Government tax revenues. Rates of return for the first component are calculated based on business plans of the type likely to be supported through project matching grants, estimated production, and expected producer prices. Returns for the second component are quantified based on changes in transport costs achieved from similar investments in a neighboring country.

2. Yield and production investments under Component 1 have estimated financial returns of 27 percent and estimated economic returns of 26 percent. Some business plans of the type likely to be supported by the project have a net present value of almost US$8,000 per ha. Taking the case of tomato production, spoilage in the field and during transport is approximately 35 percent and 10 percent, respectively, losses that can be dramatically reduced through relatively inexpensive investments in farming technologies, storage, and packaging. Certain specialty products, such as paprika pepper, require relatively small investments in processing technologies (for example, drying) to become economically lucrative. The economic analysis shows that investments in fish, vegetables, and cash crops (cocoa) have higher financial returns than investments in staples (table 4.1). However, the food security benefits of staple crops such as maize and cassava have large social externalities. In addition, many farmers prefer to ensure their self-sufficiency in staple food crops before investing in higher-value commodities. Therefore, the value chains are best considered as a package with a favorable return, overall. Economic rates of return are substantially lower, compared to the financial rate of return, for maize investments. The domestic price of maize is US$1732 per ton, whereas the international price is US$159 per ton. The massive distortions in grain markets mean that it would be more cost-effective, economically, to import maize than to invest in domestic production. The reverse is true for cocoa, where the financial rate of return is lower than the economic rate of return due to market distortions that lower the domestic, farm-gate price of cocoa. Overall, the economic rate of return is not substantially different from the financial rate of return. Additional economic benefits stem from job creation.

Table 4.1. Estimated Rates of Return from Investments under the Matching Grant Program under Baseline Assumptions

Value Chain	Estimated Component 1 Investment (US$, millions)	Financial Rate of Return (%)	Economic Rate of Return (%)
Eggs	2.5	14	9
Vegetables	9.25	31	31
Cereals (maize)	1.25	9	−18
Fish farming	7.0	32	32
Cocoa	5.0	21	26
Total	**25**	**27**	**26**

3. The economic and financial return estimates assume a project lifespan of 15 years, with a 2-year production delay. Investment, production, and price assumptions in the model are shown in table 4.2. For vegetables, peppers are chosen as an illustrative crop.

Table 4.2. Investment, Production, and Price Assumptions

	Investment (US$, millions)	Annual Production (tons)	Financial Price (US$/ton)	Economic Price (US$/ton)
Eggs	3.00	150	3,880	2,281
Vegetables (peppers)	9.25	3,000 (dried)	1,270	1,270
Cereals (maize)	1.25	100	1,732	159
Fish farming	7.00	1,200	2,500	2,500
Cocoa	5.00	540	2,340	2,890

4. Rates of return for Component 1 are sensitive to project delays and food price fluctuations. The ROC has seen food prices rise at 7.3 percent per year on average, over the past ten years, faster than the general rate of inflation. An increase in real food prices of 2 percent per year would boost the financial rate of return for Component 1 from 27 percent to 29 percent. In contrast, a two-year delay in implementation for Component 1 would drop the rate of return from 27 percent to 18 percent.

5. Economic returns for Component 2 are estimated at 14 percent, not counting any nonagricultural benefits from improved transport such as improved access to health services. Transport costs represent as much as 40 percent of market prices for basic commodities such as cereals, and based on existing studies (that is, UNOPS 2015), it is estimated that infrastructure and marketing improvements under Component 2 will reduce these transport costs for regional producers by 30 percent. In the case of road maintenance (as opposed to rehabilitation), the transport costs would be reduced by 15 percent. Road rehabilitation and maintenance will directly benefit 500,000 rural beneficiaries engaged in agriculture. Investments from Components 1 and 2 will promote commercialized value chains such as eggs, cereals, vegetables, and cocoa and may even encourage farmers who do not currently engage in any sales (about 20 percent of agricultural households) to become commercial farmers. Additional benefits accrue from reduced maintenance costs for vehicles and higher competition among traders due to lower entry costs.

6. The internal rate of return (IRR) was estimated for both road rehabilitation and maintenance activities. Key model assumptions were:

Table 4.3. Key Model Assumptions for IRR

	Road Rehabilitation	**Road Maintenance**
Distance (km)	1,000	500
Cost/km (US$)	16,450	6,000
Other costs (design, oversight in US$)	1,960,000	1,412,000
Beneficiaries served	256,667	128,333
Annual production value/Beneficiary (US$)	100	100
Reduced vehicle maintenance	0	0
Access to other services (health, education, and so on)	0	0

7. The baseline economic model assumes a 15-year lifespan for the improved roads. Rates of return for Component 2 are highly sensitive to this assumption. If the lifespan of the improved roads is 10 years, then the estimated rate of return is 9 percent; if the lifespan of the improved roads is only 5 years, then the estimated rate of return drops to −5 percent. The implication of this result is that road investments are only justified if maintenance protocols are established and operationalized to ensure the longevity of the investment. The road investments will require upkeep to be cost-effective.

8. The overall economic rate of return for Components 1 and 2, using baseline assumptions, is 21 percent.

9. The benefits of the third component are difficult to assess quantitatively. This component will generate important externalities related to information access and the overall efficacy of public agricultural investments. Government capacity-building efforts will increase access to research, extension, and services for the benefit of producers and, ultimately, food consumers. Public relations campaigns will include messaging related to gender equality and nutrition that promote human capital development.

10. Results of a GHG accounting model indicate that the project constitutes a net carbon source of 990,241 tCO_2e emission over a period of 20 years, which translates into 49,514 tCO_2e emission per year over a period of 20 years. At a social price of US$30/ton and a discount rate of 12 percent, the net present value of this carbon is −US$11 million. The carbon emissions are due to road investments and associated traffic increases; these emissions are somewhat offset by improving land use and crop management practices.

11. Public sector financing is justified given the importance of agricultural production to the country’s economic diversification objectives, overall growth and employment, balance of payments, and poverty reduction. Investments will be made in a redistributive way, targeting social issues by ensuring a fair balance of investments between communities and groups, especially the most vulnerable (women and

youth) in a way that promotes stability and employment. A share of the additional agricultural revenues will be used to ameliorate the food security status of beneficiary households, and the other share will generate monetary revenues for households to meet their minimal recurrent cash needs and investment requirements.

12. The World Bank's value added is high given the extensive knowledge and expertise generated under previous agriculture and trade and competitiveness activities such as the PDARP and PADE. The investment builds on previous implementation experience, ongoing Government dialogue, and global best practices.

ANNEX 5: ASSESSMENT OF THE NET CARBON BALANCE WITH EX-ACT

COUNTRY: Republic of Congo
Congo Commercial Agriculture Project

1. In its 2012 Environment Strategy, the World Bank has adopted a corporate mandate to conduct GHG emissions accounting for investment lending. The quantification of GHG emission is an important step in managing and ultimately reducing emission and is becoming a common practice for many international financial institutions. The World Bank has adopted the Ex-Ante Carbon-balance Tool (EX-ACT), developed by the FAO in 2010,[41] to assess a project's net carbon-balance, that is, the net balance of tCO_2e (tons of carbon dioxide equivalent) GHGs that were emitted or carbon sequestered as a result of project implementation compared to a 'without project' scenario. EX-ACT is used to assess agricultural, land-based interventions.

2. In terms of accounting for GHG contributions related to transport activities changes triggered by road infrastructure development (construction, rehabilitation, and maintenance), the World Bank uses the Roads Economic Decision (RED) Model and the Highway Development and Management Model-4 (HDM-4) Road User Cost Model. Both tools have been developed to improve the decision-making process for the development and maintenance of low-volume rural roads.

Data Inputs and Analysis with EX-ACT

3. **Basic assumptions.** The project areas are in tropical moist climate regions with low activity soil types. The project implementation period is 5 years with a capitalization period of 15 years. Dynamics of evolution are assumed to be linear. Default 'Tier 1' coefficients are used. It is assumed that the 'without project' scenario is the same as currently observed.

4. **Relevant activities.** The project will implement several activities, which can be captured in EX-ACT. Under Subcomponent 1.1, producer groups will have improved access to quality inputs (seeds and breeds); infrastructure; or equipment for processing, storage, or transportation. Subcomponent 2.1 targets the development and rehabilitation of public infrastructure for the development of commercial agriculture, including rehabilitation and maintenance of feeder road network and improved access to electricity and water. Subcomponent 3.1 supports the improvement of the seed sector and of the access to improved livestock and fish breeds or the provision of key inputs for the cocoa value chain.

5. **Inputs to EX-ACT** (**Table 5.1).** Private sector seed producers will be contracted to produce improved maize, banana seedlings, and cassava cuttings. It is expected that 60 percent of 7,000 targeted

[41] http://www.fao.org/tc/exact/ex-act-home/en/.

producers, will adopt the improved seed, which results in around 9,000 ha planted under a new technology. It is conservatively assumed that this area will fall under crop production. Improved seeds will be established on around 1,100 ha land—largely for cassava and also for maize seed. The project supports nurseries for cacao seedling production on 6 ha of land, which enable 2,700 ha of cacao plantations annually. The project also supports introduction of improved broiler breeds, which support production of 250 eggs/chickens per year.

TABLE 5.1. DATA INPUTS TO EX-ACT

Activities	Current Scenario	'Without Project' Scenario	'With Project' Scenario
Improved crop seed production	No seed production		100 ha maize 1,000 ha cassava
Improved perennial seedling production	No seed production		3 ha of banana seedlings 6 ha of cacao seeding production
Cacao production	No production, area remains agricultural land		2,700 ha under cacao production (Year 5 of project)
Improved crop management practices	Agricultural production under traditional practices		9,000 ha under improved agronomic practices 700 ha under improved water management
Chicken under improved management	No chickens introduced		1,250 broiler chickens with higher productivity introduced by project
Infrastructure	No irrigation system		700 ha sprinkler irrigation

6. **Results.** First results show that agricultural activities promoted by the project constitute a net carbon sink of −829,454 tCO_2e emission over a period of 20 years, which translates into −61 tCO_2e per hectare over 20 years and −41,473 tCO_2e emission per year. The net carbon sink is caused by improving land use and crop management practices. However, the result may be overestimated, as the analysis does not account for activities along the value chain, which may also be supported by the project. Detailed results are presented in table 5.2.

TABLE 5.2. RESULTS OF THE GHG ACCOUNTING ANALYSIS WITH EX-ACT, IN TCO2E EMISSION

Components of the Project	Gross Fluxes			Result per Year		
	Without	**With**	**Balance**	**Without**	**With**	**Balance**
Cacao production and seedling production	0	188,369	188,369	0	9,418	9,418
Perennial	0	471,701	471,701	0	23,585	23,585
Annual	0	169,505	169,505	0	8,475	8,475
Inputs and investments	0	24	24	0	1	1
Livestock		97	97	0	5	5

Total	0	829,454	829,454	0	41,473	41,473
Per hectare	0	−61	−61			
Per hectare per year	0	−3	−3	0	−3	−3

Data Inputs and Analysis with RED and HDM-4 Models

7. **Basic assumptions.** Given the absence of reference data on traffic volumes, road conditions, geometry, and alignment, among other infrastructure and operational elements within the ROC's context, data obtained from rural roads development through support to the agriculture sector-oriented projects in the Democratic Republic of Congo was used. Growth factors are assumed comparable given the characteristics of the rural environment and projected traffic flows, on both composition (vehicle typology) and volume/frequency (Average Annual Daily Traffic [AADT]) between the neighboring countries. Following the completion of any road improvement, it is assumed the traffic growth pattern will continue for three years, gradually reducing to a more traditional trend assumed to be 3 percent/year. Forecasts on changes of vehicle composition are not available; however, the forecasted AADT is assumed to account for typology shifts that naturally occur as demand for transport varies along the corridor. Although Subcomponent 2.1 refers to the financing of 1,000 kilometers of roads to be either constructed or, rehabilitated, and 500 kilometers to be maintained, in undetermined areas or corridors within the ROC, the GHG accounting analysis was generated to obtain yearly transport related emission estimates per kilometer of road intervened, allowing for future refinement in the accounting process once detailed information is available. As such, the accounting was carried out for a sample road of 100 km.

8. **Inputs.** Inputs are provided in table 5.3 and table 5.4.

Table 5.3. Inputs for Base Scenario AADT

Traffic (AADT)		
Vehicle Description	'Without Project'	'With Project'
Motorcycle	20	87
Delivery Vehicle	—	3
Truck Medium	—	2
Total	20	92

Table 5.4. Inputs for Base Scenario Road Characteristics

Scenario	Road Condition			Speed Flow Type				
	Road Roughness (IRI, m/km)	Carriageway Width (m)	Surface Code (1-Paved / 2-Unpaved)	Ultimate Capacity (pcse/hour/lane)	Free-Flow Capacity (pcse/hour/lane)	Nominal Capacity (pcse/hour/lane)	Jam Speed at Capacity (km/hour)	Number of Lanes (#)
Without	10.0	5.0	2	1200	0	840	20	1
With	6.0	7.0	2	1400	140	1260	25	2

9. **Results.** For a rehabilitation intervention of a road of 100 km, the total gross CO_2 emissions from transport-related activities are expected to rise from 46.54 tons in the 'without project' scenario to 249.9

tons in the 'with project' scenario, for the first year of operation (203.37 tCO_2 of net emissions). This is primarily due to expected increase in motorcycle traffic and to generated/induced traffic flows of cars/pickups and trucks. For the proposed roads rehabilitation of 1,500 km and over a period of 20 years, the total gross CO_2 emissions for the same activities are 1,838,466 tons, the total net emissions are 1,819,708 tons, and the annual net average emissions are 90,985 tCO_2 per year.

Overall Results

10. Overall, the estimation results show that agriculture interventions constitute a net carbon sink, while road interventions will constitute a sizable net carbon source. Summarizing the results of the EX-ACT model for agriculture interventions and the RED and HDM-4 Models for the establishment of rural roads, over a period of 20 years, the gross emissions for the 'with project' scenario are 1,009,012 tCO_2e and net emission 990,254 tCO_2e, with an annual net average net emission of 49,512 tCO_2e.

ANNEX 6: MAP OF THE REPUBLIC OF CONGO – No. IBRD 33390R1