

AFRICAN DEVELOPMENT BANK GROUP



DEMOCRATIC REPUBLIC OF CONGO

PROJECT TO SUPPORT THE DEVELOPMENT OF AGRICULTURAL VALUE CHAINS IN SIX PROVINCES IN DRC (PADCA-6P)

APPRAISAL REPORT

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CURRENCY EQUIVALENTS

(December 2018)

UA 1	=	CFAF 784
UA 1	=	USD 1.41
UA 1	=	EUR 1.19
EUR 1	=	CFAF 655.96

FISCAL YEAR

1 January – 31 December

WEIGHTS AND MEASURES

1 metric tonne	=	2,204 pounds
1 kilogramme (kg)	=	2.20 pounds
1 metre (m)	=	3.28 feet
1 millimetre (mm)	=	0.03937 inch
1 kilometre (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

ACRONYMS AND ABBREVIATIONS

ADF	: African Development Fund
AfDB	: African Development Bank
AfricaRice	: Africa Rice Center
CC	: Consultative Committee
CEMAV	: Plant Care and Maintenance Centre
CGPMP	: Public Procurement Management Unit
CNP	: National Steering Committee
COCD	: Democratic Republic of Congo Country Office
CPF	: Country Programming Framework
CSP	: Country Strategy Paper
DRC	: Democratic Republic of Congo
DVDA	: Directorate of Agricultural Feeder Roads
ERR	: Economic Rate of Return
ESIA	: Environmental and Social Impact Assessment
ESMP	: Environmental and Social Management Plan
FC	: Congolese Franc
FNEC	: Central African Republic National Stockbreeders Federation
FO	: Farmers' Organization
GDP	: Gross Domestic Product
GEF	: Global Environment Facility
GIBADER	: Inter-Donor Group for Agriculture and Rural Development
IFAD	: International Fund for Agricultural Development
IITA	: International Institute of Tropical Agriculture
INERA	: National Institute of Economics and Agricultural Research
MA	: Ministry of Agriculture
MFI	: Microfinance Institution
NPV	: Net Present Value
PADCA-6P	: Project to Support the Development of Agricultural Value Chains in Six Provinces in the Democratic Republic of Congo
PMU	: Project Management Unit
PNEFP	: National Employment and Vocational Training Policy
PNR	: National Rice Programme
PP	: Procurement Plan
SENAFIC	: National Fertilizer and Related Inputs Service
SENASEM	: National Seed Service
SNV	: National Extension Service
TAAT	: Technologies for African Agricultural Transformation
TFP	: Technical and Financial Partner
TSF	: Transition Support Facility
UAM	: Unit of Account Million
USD	: United States Dollar

PROJECT INFORMATION SHEET

Client Information

BORROWER	: Democratic Republic of Congo
EXECUTING AGENCY	: Ministry of Agriculture

Financing Plan

Sources of Financing	Amount	Instrument
ADF	UA 20 million	Loan
Government and Beneficiaries	UA 1.434.37 million	Counterpart in-kind contribution
TOTAL COST	UA 21.434.37 million	

ADF Key Financing Information

Loan/Grant Currency	Unit of Account
Interest Type*	2% per annum between the eleventh and twentieth years of the lending period and 4% thereafter
Interest Rate Margin*	Not Applicable
Commitment Fee*	0.5% on the undisbursed loan amount commencing 120 days after the signing of the Loan Agreement
Service Charge	0.75% per annum on the disbursed loan amount not reimbursed
Tenor	30 years
Grace Period	10 years
FRR (baseline scenario)	19%
ERR (baseline scenario)	26%

Timeframe – Main Milestones (expected)

Concept Note Approval	July 2018
Project Approval	April 2019
Signature of the Grant Protocol of Agreement	July 2019
First Disbursement	September 2019
Completion/Last Disbursement	December 2024
Closing Date	December 2025

PROJECT EXECUTIVE SUMMARY

Background: the African Development Bank-funded Project to Support the Development of Agricultural Value Chains in Six Provinces in the Democratic Republic of Congo (PADCA-6P) aims to sustainably improve food and nutrition security and increase the incomes of the target population. PADCA-6P will be implemented over a five-year period (2019-2024) for a total cost of UA 22.153 million in the provinces of Kwilu, Kasai, Haut Iomami, Iomami, Maniema, and Tshopo. It will target some 1,768,825 rural households, 60% of which are women, with 8, 394,125 direct beneficiaries, and build knowledge for the rural world at large.

In the Democratic Republic of Congo (DRC), the agricultural sector employs more than 70% of the labour force in rural areas. Arable farmland, which is estimated at about 80 million hectares, is largely underutilized. Ten per cent is developed, that is about 3.5 million hectares used for farming and some 4.5 million hectares for livestock breeding. Only 13,500 hectares, representing 3.2% of available areas, are irrigated. DRC's agricultural sector can create more than 60% of jobs in the country, if managed sustainably. The diagnosis of the agricultural sector and the operations being implemented therein have helped to focus the project's activities on four growth crop sub-sectors, namely cassava, beans, maize and rice.

The DRC's food deficit is estimated at between 20% and 30% of total food needs (according to region). In addition, the incidence of poverty at the national level, which stands at 63.4%, is very high, and 43% of under-five children suffer from chronic malnutrition, that is about 1 in 2 children. Furthermore, 38% of the country's population lives on a poor and limited diet and only 9.3% of children aged 6-23 months have a minimum acceptable diet. According to a study on the Cost of Hunger in Africa carried out in DRC in 2017, economic losses owing to malnutrition in the country are estimated at 3% to 8% of the gross domestic product, that is an annual loss of USD 1.174 billion. Against this backdrop, the improvement of agricultural production is an urgent priority for the Congolese Government.

Bank's Value Added: the proposed project seeks to actively involve agricultural sectors in efforts to achieve economic growth so as to create jobs and generate substantial incomes in rural areas. It is perfectly in line with the Strategy for Agricultural Transformation in Africa (2016-2025); the Bank's Ten-year Strategy (2013-2022), particularly two of its High-5s, namely Feed Africa, and Improve the quality of life for the people of Africa; the strategy covering the 2014-2019 period titled "Addressing Fragility and Building Resilience in Africa"; the Jobs for Youth in Africa Strategy which targets the agricultural sector and the entrepreneurial training of rural youths; the Multi-Sectoral Nutrition Action Plan concerning the pillar that seeks to increase the production and consumption of safe and nutritious food; and the Bank's Technologies for African Agricultural Transformation (TAAT) programme whose objective is to deploy agricultural technologies to increase the productivity and quality of agricultural production in targeted sectors. The project is technically justified and feasible and will generate positive impacts in terms of rebuilding the productive base, reviving economic activities and contributing to DRC's efforts to achieve economic and social development.

Knowledge Building: PADCA-6P will help to: (a) develop crop sub-sectors through the introduction and ownership of new technologies aimed at increasing the productivity of the crops identified; (b) provide institutional support, improve governance and build the capacity of existing entities in order to enhance their professionalization, particularly through the use of the value chain approach, and to improve coordination and dialogue between value chain actors through the platforms established. All these activities will serve as the Bank's pilot schemes in DR Congo and generate invaluable knowledge for future developments in the country's agricultural sub-sectors.

RESULTS-BASED LOGICAL FRAMEWORK

Country and Project Name: DRC –Project to Support the Development of Agricultural Value Chains in Six Provinces in the Democratic Republic of Congo (PADCA-6P) Project Goal: Contribute to sustainably improving food and nutrition security and increasing the incomes of the target population						
	RESULTS CHAIN	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS / MITIGATION MEASURES
		Indicators (including ISCs)	Baseline Situation	Target Beyond 2024		
IMPACT	The food and nutrition security of the population is improved	1. Food insecurity rate	1. Undefined	<20%	Annual and statistical reports of the Ministry of Agriculture Demographic and health Survey (DHS) – Middle-income countries (MICs)	
		2. Severe malnutrition prevalence rate	2. 10%	<5%		
		3. Chronic malnutrition rate	3. 43%	<20%		
OUTCOMES	Outcome 1: Agricultural productivity and production is increased.	Level of increase in food crop production and productivity. - Cassava - Rice - Maize - Beans/Cowpeas	8 t/ha 0.720 t/ha 0.8 t/ha 0.8 t/ha	15 t/ha 4 t/ha 3 t/ha 1.5 t/ha	Annual and statistical reports of the Ministry of Agriculture To be defined by baseline situation (agricultural statistical surveys)	Climate hazards and pest outbreaks Mitigation measures: Integration of the adaptation dimension into activities
	Outcome 2: New technologies are adopted by beneficiaries.	2.1 Number of households that have adopted new technologies	0	>75%		Integrated approach to agriculture and use of disease-resistant varieties
	Outcome 3: Jobs and economic opportunities are created for youths and women.	3.1 Number of jobs and economic opportunities created for youths/women.	0	60,000/80,000		Reluctance of the population to adopt new technologies and good farming practices
	Outcome 4: The quantity of fertilizers used is increased.	4.1 Additional quantity of fertilizer used.	0	13 kg/ha		Mitigation measures: Design of an appropriate communication plan for all stakeholders and agricultural extension and training activities Establishment of platforms

OUTPUTS	Component 1: Plant Sub-sector Development Output 1.1: Women and youths are integrated into agricultural value chains to develop sub-sectors	1.1.1 Number of women 1.1.2 Number of youths	0 0	500 000 300 000	Reports of INERA and project reports Annual and statistical reports of the Ministry of Agriculture	Worsening of the country's political and security crisis and its spread to the project impact area causing the population to flee Mitigation measures: in the provinces - Coordination of security information with the United Nations system - Facilitating social cohesion
	Component 2: Institutional Support, Improvement of Governance and Capacity Building Output 2.1: Farmers' groups are structured Output 2.2: Agricultural research and extension system and entities are strengthened. Output 2.3: Agri-seed multiplier groups and seed producer networks are supported. Output 2.4: National seed policy is developed. Output 2.5: The National Seed Board (CONASEM) and Provincial Seed Boards (COPROSEM) are established and strengthened. Output 2.6: National platforms (cereal and tuber processing units) are established	2.1.1 Number of groups structured 2.2.1 Number of agricultural research and extension entities strengthened 2.3.1 Number of seed producer and multiplier groups 2.4.1 Number of seed laws adopted 2.5.1 Number of boards established (a) National (b) Provincial 2.6.1 Number of platforms that facilitate technological innovations established	0 0 0 0 0 0	90 6 8 1 1 6	Reports of the Ministry of Agriculture and project reports Reports of INERA and the Ministry of Agriculture	Insufficient synergy of action between project partners Mitigation measures: Commitment of stakeholders/actors Synergy and complementarity between projects Poor road infrastructure for product disposal Mitigation measures: synergy with existing AfDB projects Mesures atténuations : synergie avec les projets existants de la BAD

KEY ACTIVITIES	RESOURCES (UA THOUSAND)	
<p>Component 1: Plant Sub-sector Development</p> <ul style="list-style-type: none"> Production of Improved Seeds and Seed Conservation Technologies Improvement of Crop Management Techniques Deployment of Technologies for the Production, Processing, Packaging and Storage of Products Supply of Farm Inputs and Tools <p>Component 2: Institutional Support, Improvement of Governance and Capacity Building</p> <ul style="list-style-type: none"> Strengthening the Improved Seed Multiplication and Field Distribution System Establishment of a Platform for Private Seed Enterprises Development of Harvest Products and Nutrition and Market Preference Technology Building the Capacity of Community Relays and Health Workers in Nutrition Baseline Survey on the Nutritional Status of Under-five Children Sensitization on Nutrition, Hygiene and Health/Nutritional Surveillance Socio-economic Survey on the Baseline Situation for the Four Crops Considered <p>Component 3: Project Coordination, Management and Monitoring and Evaluation</p> <ul style="list-style-type: none"> Project and ESMP Implementation Monitoring Project Administrative, Accounting and Financial Management Procurement of Project Goods, Works and Services 	<p>Component 1: UA 10,283.91</p> <p>Component 2: UA 6,269.53</p> <p>Component 3: UA 4,880.92</p>	<p>Sources of financing:</p> <p>ADF (loan): UA 20 million</p> <p>GVT/BEN: UA 1,434.37 million</p>

PROJECT IMPLEMENTATION SCHEDULE

		2019				2020				2021				2022				2023			
		T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
1.	Board Approval																				
2.	Signing of Loan Agreement																				
3.	Loan Effectiveness and First Disbursement																				
4.	Publication of the General Procurement Notice																				
5.	Recruitment of Key Staff																				
6.	Project Launching																				
7.	Signing of Agreements and Protocols with Partner Institutions																				
8.	Signing of Contracts																				
9.	Implementation of the Protocols of Research Institutions																				
10.	Implementation of Capacity-building Activities																				
11.	Mid-term Review																				
12.	Auditing																				
13.	Completion Report																				
14.	Completion of Activities																				
15.	Closure in December 2024																				

REPORT AND RECOMMENDATION OF BANK GROUP MANAGEMENT TO THE BOARD OF DIRECTORS ON A PROPOSAL TO GRANT A UA 20 MILLION TSF LOAN TO THE DEMOCRATIC REPUBLIC OF CONGO TO FINANCE THE PROJECT TO SUPPORT THE DEVELOPMENT OF AGRICULTURAL VALUE CHAINS IN SIX PROVINCES IN THE DEMOCRATIC REPUBLIC OF CONGO (PADCA-6P)

Management hereby submits the following report and recommendation concerning a proposal to grant a UA 20 million ADF loan to the Democratic Republic of Congo to finance the Project to Support the Development of Agricultural Value Chains in Six Provinces in the Democratic Republic of Congo (PADCA-6P).

I. STRATEGIC THRUST AND RATIONALE

1.1 Country Context

1.1.1 The period of political transition in the Democratic Republic of Congo which began at end-2016 ended with the holding of presidential, legislative and provincial elections on 30 December 2018. The country experienced its first peaceful transfer of power on 24 January 2019 between an outgoing and an incoming President of the Republic. On the economic front, The Democratic Republic of Congo recorded a growth rate of 8.3% on average over the period 2013-2015. However, this growth momentum was interrupted in 2016 (2.4%) due to a sharp fall in the prices of the country's main export products (copper and cobalt) and political instability. Growth rose to 3.7% in 2017 and 4.1% in 2018, driven by an increase in mining production and a rise in the prices of mining products especially in 2017. However, the country's recent economic performance has had a limited impact on the population's well-being due to low inclusiveness of growth which is driven mainly by the mining sector. Despite its enormous potential, DRC is one of the world's poorest countries. More than 82% of the population lives below the poverty line (USD 1.25 a day). Developments in the present political context marked by the holding of the December 2018 (presidential and legislative) elections will help to lay the foundations for the country's socio-economic development. Poverty, discrimination and violence against women are major causes of malnutrition. The poor (invariable and undiversified) diet that mothers and their children live on has irreparable consequences on the development of children and, hence, leads to economic losses due to a decrease in productivity.

1.1.2 DRC has considerable agricultural potential and offers tremendous opportunities for investment, especially a potential market of more than 100 million inhabitants, given its population and that of neighbouring countries. Arable farmland which is estimated at about 80 million hectares is highly underdeveloped (10% is developed). Food crop production, excluding groundnuts, plantains and cereals, is estimated at about 17 million tonnes on 3,700,000 hectares of land. Food shortage is estimated at 20% to 30% of total food needs (according to the regions).

1.1.3 Agricultural and rural sector development is hampered by numerous constraints including (i) advanced environmental degradation and inadequate basic infrastructure; (ii) weak institutional and management capacity; (iii) low access to inputs, production equipment and supervisory services, and lack of access to markets; and (iv) weak capacity of farmers' organizations and difficulties in accessing financial services and governance. According to the National Agriculture Investment Plan (NAIP), the major challenges to be met by the country to significantly alleviate rural poverty by 2020 are: (i) securing and modernizing the farming system to sustainably improve sub-sector production; and (ii) overcoming malnutrition and food insecurity.

1.2 Project Linkages with Country Strategy and Objectives

1.2.1 The project is consistent with the five main priorities of the National Agricultural Investment Programme (PNIA) which are to: (i) improve agricultural governance, promote gender mainstreaming and build human and institutional capacity; (ii) sustainably promote agricultural sub-sectors, particularly food sub-sectors, and develop agri-business in order to increase the incomes of farmers and other sector operators; (iii) improve the management of the population's food and nutrition security and build strategic reserves; and (iv) develop and disseminate research products to users and improve the level of professional competence of various actors.

1.2.2 The project is also consistent with the priorities of the Bank's 2013-2017 Strategy for DRC (updated at end-2018 and whose update for the second time to 2020 is under study) which seeks to help the country to emerge from fragility by creating conditions conducive to strong and inclusive growth driven by renewed vitality in the productive sectors of the economy. It is particularly consistent with the second pillar of the Country Strategy Paper (CSP) which aims to build the Government's capacity to increase public revenue and establish a framework of incentives for private investment, especially in the second thrust which seeks to create conditions conducive to inclusive and diversified growth driven by private investment. Lastly, the project is in line with the CSP's spatial approach which consists in focusing the Bank's operations in the country's greater centre region.

1.2.3 PADCA-6P is aligned with the Bank's Ten-year Strategy (2013-2022) and will contribute to achieving two of its five (5) strategic priorities, namely Feed Africa and Improve the quality of life for the people of Africa. The project is also perfectly in keeping with the thrusts of Feed Africa: Strategy for Agricultural Transformation in Africa 2016-2025, Multi-Sectoral Nutrition Action Plan, and Jobs for Youth in Africa Strategy. The project is technically justified and feasible and will generate positive impacts in terms of rebuilding the productive base, reviving economic activities and contributing to DRC's efforts to achieve economic and social development.

1.3 Rationale for Bank Involvement

1.3.1 DRC and its partners are committed to strengthening the population's resilience through a collaborative approach linking food security, social cohesion and access to financial resources in order to achieve stability. In this regard, agriculture has been re-positioned at the centre of political and strategic concerns to ensure the country's sustainable recovery. Thus, the objective of Congolese authorities is to achieve a sustained annual growth rate of more than 6% in the agricultural sector by 2020, which is essential to reduce poverty, ensure food and nutrition security for the Congolese people, generate sustainable jobs and incomes, especially for the youth. In addition, given the heavy concentration of the Congolese economy on the mining sector, the development of the agricultural sector contributes to diversifying the productive fabric, thus reducing the vulnerability of the economy to external shocks resulting from fluctuations in the prices of mining products. DRC imports about USD 1.5 billion worth of food products per year. The project, which will help to increase agricultural production (especially food production), is a response to food insecurity.

1.4 Donor Coordination

1.4.1 The activities of DRC's development partners are coordinated through the Aid and Investment Management Platform (PGAI) hosted in the Ministry of Planning. This platform records the investments made by the various partners, but technical activities are discussed and planned in

thematic groups chaired by the Ministry exercising supervisory authority over the theme. For example, the Agriculture and Rural Development Thematic Group is chaired by the Ministry of Agriculture. In September 2013, the Ministry of Agriculture, in collaboration with this thematic group and in consultation with all stakeholders, designed the National Agricultural Investment Programme (PNIA) for the period 2014-2020.

II. PROJECT DESCRIPTION

2.1. Project Objectives and Components

2.1.1 **The project's sector objective** is to contribute to sustainably improving food and nutrition security.

2.1.2 **The project's specific objective** is to improve agricultural production by: (i) increasing the productivity of the growth sub-sectors, namely cassava, maize, bean/cowpeas, and rice; (ii) building the capacity of stakeholders to ensure the sustainability of investments in value chains; and (iii) promoting youth and women's entrepreneurship.

2.1.3 Project Design

The project design is based on the value chain approach and takes into account the TAAT initiative which aims to contribute significantly to: (i) increasing agricultural productivity and production by identifying and disseminating appropriate farming technologies; (ii) conducting training and extension campaigns for the adoption of good farming practices through the effective provision of technologies to farmers; and (iii) promoting a plant sub-sector development policy.

2.1.4 The project will comprise the following three components: (1) Plant Sub-sector Development; (2) Institutional Support, Improvement of Governance and Capacity Building; and (3) Project Coordination, Management and Monitoring and Evaluation. Table 2.1 below presents project activities by component.

Table 2.1: Project Components

No.	Component Name	Estimated Cost	Component Description
1.	Plant Sub-sector Development	UA 11 346.60 million	<ul style="list-style-type: none"> Promoting and developing food crops using the value chains approach for cassava, maize, rice, and cowpeas/beans. Besides developing agricultural value chains, the component will also: (i) support the production, supply and distribution of improved seeds, certified plant materials and inputs; (ii) promote agricultural mechanization/animal draught power; (iii) promote storage and processing systems; and (iv) improve market access. <p>Sub-component 1.1: Plant Sub-sectors</p> <p>Cassava</p> <ul style="list-style-type: none"> Establishing the baseline situation and registering beneficiaries in cassava production basins. Strengthening the seed multiplication and distribution system using the Semi-Autotrophic Hydroponic (SAH) rapid multiplication technology which makes it possible to rapidly obtain large quantities of healthy cuttings. Popularizing appropriate techniques to increase cassava yields by at least 30% to 50% and cassava processing technologies.

			<p>Maize (AATF): the activities will be organized into various modules:</p> <ul style="list-style-type: none"> • Module 1: Establishment of Maize Platforms and Contracts for the Operationalization of Development Poles. • Module 2: Deployment of Maize Production Technologies in Agro-ecological Zones in DRC by: (i) producing 120 tonnes of pre-basic and basic seeds; (ii) training more than 3 200 maize seed multipliers; and (iii) producing and distributing at least 7 000 tonnes of commercial maize seeds by the fifth year. • Module 3: Establishment of two Farm Input Procurement Centres in Ngandajika and Mweka, Grouping the Input Orders of Farmers' Organizations and Building the Capacity of Farmers. • Module 4: Building Capacity to Enhance the Ownership and Use of Product Processing, Packaging and Storage Improvement Technologies. • Module 5: Improvement of Market Access and Value Added through the Development of Local Markets and Organization of Marketing Channels. • Module 6: Involvement of Youths and Women through Training in Post-harvest, Drying, Packaging, Labelling and Threshing Techniques, ICT, etc. <p>Beans/Cowpeas (CIAT): supporting the introduction and improvement of technologies to support the promotion of biofortified bean cultivation by:</p> <ul style="list-style-type: none"> • disseminating iron- and zinc-rich dwarf varieties which are adapted to DRC; • ensuring the use of 'soil docs' by the platform of producers; • promoting the use of hulling machines for the packaging of beans; • using Purdue improved crop storage (PICS) bags; • promoting the production of high iron bean meal products for child and household consumption as nutrient-rich foods – building capacity and transferring technology. <p>Rice (AfricaRice)</p> <ul style="list-style-type: none"> • Introducing new climate-resilient high yielding seed varieties for irrigated lowland and rain-fed plateau ecologies and supporting the production of pre-basic and basic seeds by building the capacity of the researchers of INERA, PNRI and SENASEM; • Supporting the establishment of a seed distribution system by organizing producers through innovative contractual arrangements; • Introducing good farming practices to farmers through trials for local adaptation on the following themes: Soil Fertility Management, Seed Quality, Crop Density, Weed Management, Disease Management, Agroforestry, and Short-term Improved Fallows. <p>Soil fertility: within the agricultural value chains development framework, the Bank included the International Fertilizer Development Agency (IFDC) among Compact Leaders. IFDC will work closely with SENAFIC to:</p> <ul style="list-style-type: none"> • promote the use of mineral and organic fertilizers with improved seed varieties and ensure local adaptation where soils require the addition of lime or dolomite to increase productivity; • produce soil deficiency and acidity/alkalinity maps for project areas;
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			<ul style="list-style-type: none"> work together with private sector actors to determine the feasibility of fertilizer blending plants in order to work out specific soil and crop formulas. <p>Sub-component 1.2: Agricultural Value Chain Support Infrastructure: PADCA-6P will utilize the existing infrastructure in the project impact area by first identifying all existing infrastructure and/or creating and developing synergies with ongoing TFP-funded projects.</p>
II.	Institutional Support, Improvement of Governance and Capacity Building	UA 6 227.95 million	<p>This component aims to build the capacity of existing entities to professionalize them particularly through the value chains approach. It will improve coordination and dialogue between value chain actors (public and private).</p> <p>Sub-component 2.1: Capacity Building This sub-component will focus on activities to: (i) build the technical and organizational capacity of farmers' organizations, civil society and the private sector involved in the relevant agricultural products value chains; (ii) build the capacity of coordination, monitoring-evaluation and control entities; (iii) provide vocational training in agricultural sector trades and nutritional food technology (fortification and biofortification).</p> <p>Sub-component 2.2: Institutional Support and Improvement of Governance</p> <ul style="list-style-type: none"> Improving governance by contributing to implementing an inclusive national seed policy (including the participation of the private sector and other associations) and supporting the establishment of the National Seed Board (CONASEM) and Provincial Seed Boards (COPROSEM). <p>Sub-component 2.3: Support for the Operationalization of Sub-sectors</p> <p>Cassava sub-sector</p> <ul style="list-style-type: none"> Establishing technological innovation platforms; Promoting good farming practices to improve cassava production; Developing ICT and establishing counselling platforms. <p>Maize sub-sector</p> <ul style="list-style-type: none"> Deploying technologies in production areas and marketing and promoting good farming practices and introducing new technologies to increase productivity. <p>Bean/Cowpea sub-sector</p> <ul style="list-style-type: none"> Establishing biofortified beans (Fe) platforms and contracts for the operationalization of development poles; Developing harvest products, nutrition-related technology and market preference. <p>Rice sub-sector</p> <ul style="list-style-type: none"> Producing and disseminating new climate change-resilient basic seed varieties; Deploying technologies in rice growing areas; Involving youths and women in various rice sub-sector chains. <p>Support for the Operationalization of Multipurpose Platforms (MPPs)</p> <ul style="list-style-type: none"> Establishing six MPPs in the project impact area within a surface area of 100 to 200 square metres; <u>Agricultural counselling</u>: (i) providing counselling services through the agricultural extension officers of the Ministry of

			<p>Agriculture; and (ii) ensuring the dissemination of information to local farmers;</p> <ul style="list-style-type: none"> • <u>Sale of farm inputs</u>: (i) ensuring the supply of farm inputs to local farmers; • <u>Processing/development of cassava, maize and rice</u>: setting up units for the processing and development of these products. <p><i>Support to the Agricultural Market Information System (AMIS)</i></p> <ul style="list-style-type: none"> • Establishing an agricultural market information system (AMIS) to study and identify markets for targeted crops; • Monitoring activities and evaluating the results of AMIS (monitoring-guidance and monitoring-control). <p><i>Nutritional support</i></p> <ul style="list-style-type: none"> • Promoting food diversification and good feeding practices among children through (i) sensitization campaigns; (ii) grassroots nutrition education (Early Childhood and Infant Feeding Support Group – ANJE);(iii) the training of community nutrition relays (RECO) and health workers in the districts concerned, and prevention of malnutrition through the provision of small health-care facilities to the health districts concerned for nutritional surveillance. Since households with at least one malnourished child generally figure among the poorest households, they will be the primary beneficiaries of nutritional activities.
III.	Project Coordination, Management and Monitoring and Evaluation	UA 3 955.18 million	<ul style="list-style-type: none"> • The PMU in charge of project implementation will ensure effective management, integrate key experts, and carry out project financial and technical audit. • Carrying out environmental compliance monitoring in accordance with the ESMP. • Developing gender information kits to monitor and guide the implementation of activities. • Preparation of the annual program and budget of the project Préparation du programme et budget annuels du projet

2.2 Technical Solutions Adopted and Alternatives Explored

2.2.1 The replacement of the cowpea varieties being disseminated with new iron- and zinc-rich varieties (high iron bean – HIB) which meet market requirements (major market classes) will significantly increase production and profitability for all actors involved in the value chain. The importance and adoption of high iron beans have been well documented in Rwanda and published in international science journals (Hass et al. 2016; Oparinde et al. 2015, 2016).

2.2.2 The continued promotion of new varieties by extension officers and all project partners will help to accelerate the adoption and use of new technologies. To fast-track the adoption of input technologies, it is necessary to use the **integrated soil fertility management (ISFM)** approach.

Table 2.2: Selected technical solutions and alternatives studied Solutions techniques retenues et solutions de rechange étudiées

Name	Brief Description	Reasons for Rejection
Adoption of techniques for the use of fertilizers	The integrated soil fertility management (ISFM) approach should be used to better rationalize the use of fertilizers.	Former soil fertility management paradigms which focused on fertilizer or “low input” approaches, and rarely on both, ignored the vital scientific fact that fertilizers are more effective and efficient on well-conserved soils which contain organic matter.
Use of bean varieties being disseminated (traditional)	The replacement of the bean varieties being disseminated with new iron- and zinc-rich varieties (high iron bean – HIB) which meet market requirements (major market classes) will help to significantly increase production and profitability for all the actors involved in the value chain.	The replacement of the bean varieties being disseminated with new iron- and zinc-rich varieties (high iron bean – HIB) which meet market requirements will help to significantly increase production and profitability for all the actors involved in the value chain.
Semi-Autotrophic Hydroponics (SAH) system	Strengthening the seed multiplication and distribution system using the SAH system.	The SAH technology, which is a rapid seed multiplication technology, makes it possible to rapidly obtain large quantities of healthy cuttings.

2.3. Project Type

This is an investment project. It falls within the framework of the assistance provided to regional member countries by the Bank through the Feed Africa initiative and the value chain approach, and is in keeping with the Feed Africa strategy.

2.4 Project Cost and Financing Arrangements

2.4.1 The indicative project cost is estimated at about UA 21.434 million (USD 30.008 million), excluding tax and duty of which 64% in foreign exchange and 36% in local currency. The project will be financed as follows: UA 20 million ADF loan, and the remaining UA 1.434 million the counterpart contribution of the Government (less than 10% of the total project cost – see supporting documents in Annex C.4) and beneficiaries. Project activities will be implemented over a five-year period. The summary project cost, financing breakdown and expenditure schedule are presented in Tables 2.4 to 2.6.

2.4.2 The Bank loan will be used to finance all works exclusive of taxes, except community infrastructure for which municipal councils will be required to pay a 10% contribution (FEICOM will assist beneficiary local authorities in mobilizing this counterpart contribution). Goods and services will be fully financed in accordance with the appended financing plan. Civil servants’ salary and part of office rental (1/3) costs will be borne by the Government.

Table 2.3: Estimated Project Cost by Component

COMPONENTS	(USD Thousand)			(UA Thousand)			% F.E.	% Base Cost
	L.C.	F.E.	Total	L.C.	F.E.	Total		
PLANT SUB-SECTOR DEVELOPMENT	2,210.13	11,586.64	13,796.77	1,590.02	8,335.71	9,925.73	84	48
Plant /Agricultural Sub-sectors	2,040.13	10,546.64	12,586.77	1,467.72	7,587.51	9,055.23	84	43
Agricultural Value Chain Support Activities	170.00	1,040.00	1,210.00	122.30	748.20	870.50	86	4
INSTITUTIONAL SUPPORT, IMPROVEMENT OF GOVERNANCE AND CAPACITY BUILDING	1,901.16	6,605.06	8,506.22	1,367.74	4,751.84	6,119.58	78	29
Capacity Building	631.46	2,461.26	3,092.72	454.29	1,770.69	2,224.98	80	11
Institutional Support and Improvement of Governance	449.70	1,823.80	2,273.50	323.53	1,312.09	1,635.61	80	8
Support for the Operationalization of Sub-sectors	820.00	2,320.00	3,140.00	589.93	1,669.06	2,258.99	74	11
PROJECT COORDINATION, MANAGEMENT AND MONITORING AND EVALUATION	6,353.95	317.75	6,671.70	4,571.19	228.60	4,799.78	5	23
Base Cost	10,465.24	18,509.45	28,974.69	7,528.95	13,316.15	20,845.10	64	100
Physical Contingencies	49.34	444.02	493.35	35.49	319.44	354.93	90	2
Price Escalation	198.98	341.08	540.06	88.10	146.23	234.33	62	1
TOTAL PROJECT COST	10,713.56	19,294.55	30,008.11	7,652.54	13,781.82	21,434.36	64	103

Table 2.4: Project Cost by Expenditure Category

EXPENDITURE CATEGORIES	(USD Thousand)			(UA Thousand)			% F.E.	% Base Cost
	L.C.	F.E.	Total	L.C.	F.E.	Total		
Investment								
Works	309.40	2,784.60	3,094.00	222.59	2,003.31	2,225.90	90.00	11.00
Goods	3,117.78	11,871.14	14,988.92	2,243.01	8,540.39	10,783.40	79.00	52.00
Services	390.86	3,517.71	3,908.57	281.19	2,530.73	2,811.92	90.00	13.00
Operating Costs	6,647.20	336.00	6,983.20	4,782.16	241.73	5,023.88	5.00	24.00
Base Cost	10,465.24	18,509.45	28,974.69	7,528.95	13,316.15	20,845.10	64.00	100.00
Physical Contingencies	49.34	444.02	493.35	35.49	319.44	354.93	90.00	2.00
Price Escalation	198.98	341.08	540.06	88.10	146.23	234.33	62.00	1.00
TOTAL PROJECT COST	10,713.56	19,294.55	30,008.11	7,652.54	13,781.82	21,434.36	64.00	103.00

Table 2.5: Expenditure Schedule by Component (amounts in UA thousand)

Components	2019	2020	2021	2022	2023	TOTAL
PLANT SUB-SECTOR DEVELOPMENT	2,032.58	2,911.38	2,920.35	1,784.66	634.94	10,283.91
INSTITUTIONAL SUPPORT, IMPROVEMENT OF GOVERNANCE AND CAPACITY BUILDING	1,526.99	2,051.12	1,197.88	900.42	593.11	6,269.53
PROJECT COORDINATION, MANAGEMENT AND MONITORING AND EVALUATION	1,104.83	930.31	940.71	948.57	956.50	4,880.92
TOTAL	4,664.40	5,892.81	5,058.95	3,633.66	2,184.55	21,434.36

Table 2.6: Sources of Financing

Sources of Financing	(UA Thousand)			(USD Thousand)			% Total
	L.C	F.E.	Total	L.C	F.E.	Total	
ADF	6,218.17	13,781.83	20,000.00	8,705.44	19,294.56	28,000.00	93.30
Government	1,434.37	-	1,434.37	2,008.12	-	2,008.12	6.70
TOTAL	7,652.54	13,781.83	21,434.37	10,713.56	19,294.56	30,008.12	100.00

2.4.3. The Government's contribution (6.7%) not reaching 10% of the overall project budget as required by the Bank, a note on the waiver for the national counterpart, developed by the Country Economist of the Bank, has been introduced (Annex C4). This note is based on a set of criteria including (i) the country's commitment to implement its development programme, (ii) the priority given by the country to the sector targeted by the Bank's assistance, (iii) the country's fiscal situation and debt level.

2.5. Project Target Area and Beneficiaries

2.5.1. The project impact area is defined by crop and by province as follows: (1) **Kwilu**: cassava and maize (Idiofa, Bulungu and Bagata Territories); (2) **Lomami**: maize (Ngandajika Territory and Muene-Ditu Centre); (3) **Kasai**: maize (Mweka Territory); (4) **Haut Lomami**: beans (Kanyama Territory); (5) **Maniema**: rice (Kibombo, Kassongo, Kabambare sites); and (6) **Tshopo**: rice (Opala, Isangi, Imela, and Banalia Territories). These areas were proposed based on the following criteria: (i) accessibility; (ii) existence of infrastructure (warehouses and packaging lines); (iii) mastery of the relevant crop by experienced farmers with a high level of organization; (iv) easy access to inputs and a high level of production; and (v) existence of plant materials for reproduction and propagation. The targeted provinces have a substantial and diverse agricultural potential which, if harnessed, will help to partly reduce the country's food shortage.

2.5.2 This is one of the priority development areas defined in the Government's Five-Year Programme 2012-2016. This choice is also based on a spatial approach as recommended in the 2013-2017 CSP, which has been extended to 2020 and focuses particularly on the central and neighbouring provinces, and on criteria for the use of the integrated approach to sector-based operations, and the consolidation and enhancement of the achievements of Bank-funded and supported operations. The provinces of Maniema and Tshopo (rice-growing provinces) have been added to those of the Centre Zone to take into account the Government's desire to implement many operations in the country's rice production sub-sector and to complement the operations of other technical and financial partners (IFAD).

2.5.3. Project Beneficiaries

Some 1,768,825 rural households, including 60% of women, will benefit directly from the project. Given that the average size of a household is about six (6) people, 10,612,950 people will therefore benefit directly from the project. The benefits will take several forms, including capacity building in the use of modern farming techniques, innovations and good farming practices. Other benefits include increased productivity and production, better crop management, improved food and nutrition security and increased household incomes, as well as improved general well-being of households. Besides the rural households that will benefit directly from the project, about 3,353,650 households would benefit indirectly from the project through the dissemination of farming technologies, innovations and good practices among the direct project beneficiaries.

2.6 Participatory Approach for Project Identification, Design and Implementation

2.6.1. The project design is based on the value chain approach adopted for the TAAT programme and takes into account several factors including, in particular, proven high-performance technologies, agricultural sub-sector support infrastructure, ability of producers and available manpower, conditions for market access, market demand and consumer preference.

2.6.2 A broad-based participatory approach was used during the preparation of PADCA-6P. During the preparation mission, discussions and exchanges were held with all stakeholders involved in project implementation. Meetings were held with the representatives of the Ministry of Finance and the Ministry of Agriculture, particularly the Project and Programme Monitoring Unit of the Ministry of Finance. Discussions were held with key agricultural sector stakeholders such as the National Institute of Economics and Agricultural Research (INERA), the National Seed Service (SENASA), the National Extension Service (SNV), Provincial Inspectorates of Agriculture, and other seed sub-sector

and private sector stakeholders represented by the Fédération des Entreprises du Congo (Federation of Congolese Businesses) and the General Directorate of the Bukanga Lonzo Agro-industrial Park. Consultations and due diligence meetings were held with the key TFPs operating in the agricultural and nutrition sector in DRC, notably the Inter-Donor Group for Agriculture and Rural Development (GIBADER), the United Nations Children's Fund (UNICEF), the World Food Programme (WFP), the European Union (EU), the Belgian Development Agency (ENABEL – formerly Belgian Technical Cooperation) and the Food and Agriculture Organization of the United Nations (FAO), to familiarize them with ongoing operations and envisage improved aid and operation coordination.

2.6.3 This participatory, inclusive and holistic approach which is based on lessons learned from similar projects aims to contribute significantly to: (i) increasing agricultural productivity and production by identifying and disseminating appropriate technologies; (ii) providing training and organizing agricultural extension campaigns on the adoption of good farming practices through the effective provision of technologies to farmers; (iii) promoting a plant sub-sector development policy; and (iv) offering vulnerable groups, particularly women and youths, the opportunity to participate fully in the main stages of agricultural sub-sector development. Discussions with the authorities and officials of the Ministry of Agriculture, other technical and financial partners (GIBADER and FAO), as well as farmers' groups and associations, and NGOs led to a better definition of the priority actions to be implemented in this regard.

2.6.4 Field visits and discussions held with actors on agricultural value chains helped to identify major weaknesses in (i) the production chain (input supply, support/counselling and poor organization, inappropriate farming practices, and lack of equipment); (ii) processing (poor organization, lack of equipment and inadequate marketing); and (iii) marketing.

2.7. Bank Group Experience and Lessons Reflected in Project Design

2.7.1 As at 31 December 2018, the Bank Group's active portfolio in DRC comprised a total of 31 public sector operations for a cumulative amount of UA 1 020.67 million. This includes 25 national operations for a cumulative amount of UA 895.77 million, of which 21 investment projects (UA 891.15 million), 3 studies (UA 3.90 million) and 1 emergency humanitarian operation (UA 0.72 million). These operations are financed mainly by the ADF for a total of UA 873.21 million (of which UA 163.49 million under the Transition Support Facility (TSF), that is 18.25%), the Rural Water Supply and Sanitation Initiative (RWSSI): UA 4.87 million, the African Water Facility (AWF): UA 1.53 million, and the Forest Investment Programme (FIP): UA 15.43 million. The portfolio also includes 6 regional projects for a total amount of UA 124.90 million, financed by the ADF, of which UA 65.90 million under the TSF. At the national level, the breakdown of the portfolio by sector, which is perfectly consistent with the orientations of the CSP and the Bank's five operational priorities and Ten-year Strategy, is as follows: infrastructure sector: (79% transport: 41%, energy: 26%, water and sanitation: 12%); agricultural sector: 12%; governance sector: 7%, and social sector: 2%. Concerning the agricultural sector, 6 national operations are being implemented for cumulative net commitments of UA 107.65 million (see Annex 3).

2.7.2 On the whole, from the CSP analysis, portfolio performance as at 31 December 2018 was considered satisfactory with a score of 3 on a scale of 4. Performance has remained stable compared with the CSP mid-term review carried out in 2015 and the one carried out during the extension of the CSP in 2017 to 2020. However, the Portfolio Flashlight Report noted that portfolio performance is moderately satisfactory. According to the December 2018 Flashlight Report, only 66% of the portfolio achieved a performance considered satisfactory (that is 47% of the portfolio with a

performance considered satisfactory and 19% with a performance considered moderately satisfactory), while 33% of the portfolio has an unsatisfactory performance.

2.7.3 Despite the improvements noted, the implementation of operations continues to face recurrent problems which affect performance. These constraints include: (i) delays in fulfilling the conditionalities of agreements, particularly the ratification of loan agreements and the fulfilment of first disbursement conditions; (ii) the insufficient involvement of line ministries in project monitoring; (iii) the poor financial management of some projects, including the conduct of audits; and (iv) long delays in the processing of some files by the Bank.

2.7.4 In light of these findings and in a bid to ensure rapid and consistent project implementation, the project design aims to: (i) ease conditions precedent to first disbursement under the project; (ii) better involve the line ministry (Ministry of Agriculture) in project monitoring through the Secretary-General and the support ministry (Ministry of Rural Development); (iii) promote closer and greater collaboration between sector (AHAI) and regional (RDGC) directorates and strengthen the country office to ensure the swift processing of files submitted to the Bank for approval.

2.8 Key Performance Indicators

2.8.1 The main performance indicators contained in the project logical framework are: (i) food insecurity rate; (ii) severe malnutrition prevalence rate; (iii) level of increase in food crop productivity (cassava, rice, maize, beans/cowpeas); (iv) number of women and youths integrated into agricultural value chains; number of job and economic opportunities created for youths and women; (v) number of households that have adopted new technologies; (vi) increase in crop productivity through proper fertilization; (vii) number of groups structured; (viii) number of seed producer and multiplier groups supported; (ix) number of seed laws adopted; and (x) number of platforms facilitating technological innovations established. Concerning the food and nutrition security of people in DRC, the food insecurity rate will be reduced to less than 20%, the severe malnutrition rate from 10% to a level below 5%, and the chronic malnutrition rate from 43% to below 20%. The productivity and production of beans will be increased to 0.86 t/ha, cassava from 8 t/ha to 10 t/ha, rice from 0.720 kg/ha to 4-7 t/ha and maize from 0.8 t/ha to 1.5 t/ha.

2.8.2 The number of households adopting new technologies is estimated at more than 75%. The number of women and youths involved in agricultural value chains is expected to be 80 000 (women) and 60 000 (youths). In the second year, the project will establish the baseline situation and register beneficiaries in the production basins of each crop. All these indicators relate to the African Development Bank's Feed Africa programme.

III. PROJECT FEASIBILITY

3.1. Economic and Financial Performance

3.1.1. Project financial analysis was conducted using three models of activity based on market prices. The main assumptions underlying the analyses include: (i) 80 000 farmers are actively engaged in agriculture under the project at full capacity; (ii) the project will lead to a 25% increase in incomes; (iii) farmers will adopt improved varieties of maize, bean and rice seeds; (iii) a 20-year period was used to measure the incremental benefits of the project; (iv) the opportunity cost of the capital used to update future benefits was estimated at 12%.

3.1.2 For economic analysis: (v) the value of wage labour was adjusted using a conversion factor of 0.75; and (vi) the rehabilitation of the seed system will ensure national supply of quality seeds. These analyses were carried out based on financial and economic costs generated using Costab 32. The financial and economic analysis is summarized in Annex VII and developed in Annex B6 of Volume II of the Appraisal Report.

3.1.3 The project is expected to generate the following benefits: (i) increased food production; (ii) increased private sector investments; (iii) improved seed production and storage; (iv) increased average household income; (v) job creation for 140 000 farmers and entrepreneurs; and (vi) improved nutrition through use of bio-fortified foods.

Table 3.1: Key Economic and Financial Figures

IRR (baseline scenario): 19% NPV equivalent to: FC 18 753 235 485.13	
ERR (baseline scenario): 26% NPV equivalent to: FC 22 530 519 219.40	

NB: Detailed calculations are presented in Annex B7

3.1.4 **Financial Analysis:** based on the above assumptions, the financial analysis generated a net present value of FC 18 753 235 485.13 and a 19% internal rate of return, as shown in the technical annexes (B6). Based on the above analysis, the project is deemed financially viable. The 19% IRR is above the opportunity cost of capital (12%).

3.1.5 **Economic Analysis:** the economic analysis was carried out using the same approach as for the financial analysis, based on the reference prices of tradeable goods and the total project cost. In addition, other indirect benefits were also expected such as reduced post-harvest losses, the establishment of an agricultural equipment service centre, a reliable soil information system for fertilizer mixtures, an efficient system for the distribution of inputs through the farmer database system and reduced cost of transporting goods and services. However, it was difficult to assess these additional benefits in monetary terms owing to the limited scope of this report. Under such conditions, the economic analysis showed an NPV of FC 22 530 519 219.40 and a 26% IRR, as shown in the technical annexes.

3.2 Environmental and Social Impact

Environment

3.2.1 The proposed activities do not entail any physical or economic resettlement. The project falls under the TAAT initiative which focuses much more on technology transfer. Besides introducing and disseminating new technologies in production areas, the project will only rehabilitate infrastructure deemed necessary. Production is mostly rain-fed and rice is irrigated in some areas under well controlled conditions.

3.2.2 PADCA-6P has been classified under Environmental Category 2 pursuant to the Bank's environmental and social assessment procedures (ESAPs), considering the nature of its activities. An environmental and social impact assessment (ESIA), together with an environmental and social management plan (ESMP), was prepared between January 2019 and March 2019, PADCA-6P outcomes are not expected to generate major environmental and social impacts. They will mostly address the following real social problems: (i) improvement of the food and nutrition security of the

people; (ii) provision of support for the production, supply and distribution of improved seeds, taking into account climate, certified plant material and input risks/variations; (iii) promotion of farm mechanization; (iv) promotion of processing systems; and (v) building the technical and organizational capacity of farmers' organizations, civil society and the private sector involved in the value chains of the agricultural products concerned. These outcomes will radically improve the living conditions of the beneficiary populations (employment of youths and women) in the six project provinces and at the national level.

3.2.3 There will be no irreversible or large-scale negative impact. Most of the impacts will be temporary and limited in time. The negative environmental and social impacts of PADCA-6P activities will be: (i) risks of pollution of the ground water and water rivers as well as soil degradation linked to the use of pesticides and fertilizers (even the project will promote the use of the use of mineral and organic fertilizers with local adaptation according to soil deficiencies locally adapted mineral and organic fertilizers, depending on soil deficiencies); (ii) fertilization and cropping (crop association and rotation) and herbicide (biodegradable materials will be recommended to reduce negative impacts) system.

3.2.4 Socially, there could be the recrudescence of water-borne diseases; insecurity and social constraints due to the influx of migrant populations into the project area; risks of accidents and nuisances resulting from the rehabilitation and construction of various infrastructure such as platforms (the project will set up 6 multipurpose platforms (MPPs) in the project area). Each MPP will cover a surface area of between 100 and 200 square metres, including access to drinking water and sanitation in storage areas (100-square metre storage room). To prevent these risks, measures have been proposed in the ESMP and the overall cost of implementing the environmental and social safeguard measures will stand at USD 505,000. The Project Management Unit will be responsible for implementing the ESMP.

Adaptation to Climate Change

3.2.5 The agricultural sector is very vulnerable to climate change in DRC because of the extreme variability of climate parameters, especially rainfall. Seasonal droughts cause serious disruption of agricultural calendars, while agriculture is rain-fed, which significantly affects production and, hence, the food security of communities, especially in rural areas. They also cause poverty because farming is the main means of livelihood in these areas. In addition, the climate risks identified under PADCA-6P are compounded by a rain-dependent production system, subsistence agriculture, environment-unfriendly farming practices, absence of rigorous compliance with crop management techniques and lack of a climate risk information and management system. The specific impacts in the project impact area include: (i) drop in the yields of the main crops (cassava, maize, rice, beans and cowpea), including those targeted by PADCA-6P; (ii) physical and chemical soil degradation leading to reduced agricultural productivity and pasture plant resources for animals; and (iii) worsening of land conflicts.

Gender Situation

3.2.6 Gender equality is a right enshrined in the country's constitution. The country has also ratified international protocols on the promotion of gender equality. However, despite the progress made regarding the legal framework, gender equality is still a major challenge in the country. Gender equality-related issues may be mainstreamed in the various value chain development activities. Although women play a key role in agriculture, they face many challenges and constraints,

particularly limited access to the various means of production, unequal access to agricultural inputs (seeds, fertilizers, etc.) and lack of access to credit.

3.2.7 For women to also benefit from the project, specific activities will be designed for them to enhance their economic and social empowerment. The project will seek to: (i) ensure socio-economic empowerment; (ii) increase the participation of men and women in the promotion of agribusiness in the project areas; (iii) create conditions for equal access to project resources by men, women and youths; and (iv) increase the participation of women in the decision-making process throughout the agricultural value chain. The project will encourage a gender transformation approach through: (a) capacity building in all aspects of the agricultural value chain, including the establishment of cooperatives/business associations headed by women, and the development of their leadership and entrepreneurship technical skills; and (b) the construction of gender-sensitive infrastructure. The project will also support gender-specific monitoring and evaluation information activities that will be indicated in the reports prepared.

IV. PROJECT IMPLEMENTATION

4.1 Implementation Arrangements – Monitoring and Evaluation Mechanism

4.1.1 PADCA-6P will be placed under the oversight of the Ministry in charge of agriculture through the Secretariat General for Agriculture (SGA) which, in that capacity, will facilitate interactions with the other sector ministries and technical and financial partners. It will also coordinate monitoring and evaluation activities. Consultation at the national level will be carried out by a National Steering Committee (CNP) which, for reasons of harmonization and consistency, will be the same one set up under PEJAB (see Volume II- Technical Annex B5). At the decentralized level, consultation will be carried out by Provincial Consultation Committees (CCs). These bodies will validate and supervise the implementation of provincial investment planning in order to ensure alignment and coherence with provincial and national strategies and other sector operations.

4.1.2 Regarding the Project Management Unit (PMU), it was agreed that the PEJAB Coordinator will be the PDACA-6P Coordinator, assisted by a project officer. The PMU will be responsible for project implementation, assisted by a project officer recruited for that purpose. It will ensure effective management and recruit the experts required (1 procurement expert, 1 financial management expert, 1 accountant, 1 environmental expert, 1 rural infrastructure expert placed on secondment from the Ministry of Rural Development and 1 value chain monitoring and evaluation officer). The project will supply additional equipment (logistics, ICT and management tools). The project will provide resources to reinforce the project management and coordination entity.

4.1.3 The project monitoring and evaluation mechanism will be designed taking into account the target indicators adopted for the project components as well as their expected impact, outcome and output indicators. Socio-economic surveys will be conducted according to a frequency to be determined to inform the performance and impact indicators. At project start-up, a baseline situation will be clearly established, with gender-disaggregated data to provide information on the level of the initial key indicators that will be monitored. Monitoring and evaluation activities will be carried out in collaboration with the National Agricultural Statistics Service.

4.1.4 Quarterly and annual progress reports will also be prepared and submitted to the Bank, in accordance with the agreements signed. The Bank will field at least two monitoring and supervision missions annually. The DRC Country Office will maintain permanent dialogue with the Government

and monitor the project. At the end of the project, the Government will prepare a Completion Report on the basis of which the Bank will draft its Project Completion Report (PCR).

4.2 Procurement Arrangements

4.2.1 Procurements of goods (including non-consultancy services), works and consultancy services financed by the Bank under the project will be done in accordance with the “Procurement Policy and Methodology for Bank Group-funded Operations” approved in October 2015, as well as the provisions set forth in the Financing Agreement. Specifically, procurements will be done in accordance with: (i) the Borrower’s national procurement procedures (NPPs) governed by Law No. 10/10 of 10 April 2010 on Public Procurement, as well as its implementing decrees; (ii) Bank procurement methods and procedures (BPMPs) using relevant standard bidding documents (SBDs) for contracts that are (a) above the thresholds shown in Annex B7, Para. B.7.3.2 or (b) for procurements for which the Borrower’s national procurement procedures (NPPs) is considered inappropriate; and (iii) third party procurement systems (e.g. co-financing).

4.2.2 Procurement Risk and Capacity Assessment (PRCA): the country, sector and project procurement risks as well as the procurement capacity of the executing agency (EA) were assessed and the findings used to guide the selection of the procurement system (Borrower, Bank or third party) to be used for specific activities or group of similar activities under the project. Appropriate risk mitigation measures have been included in the action plan presented in Para. B.7.9. of Annex B7.

4.2.3 PADCA’s PMU will be responsible for procurement of goods, works and services. The PMU will be backed by the Public Procurement and Management Unit (CGPMP) of the Secretariat General of MINAGRI, in pursuance of the provisions of Section 13 (1) of the Public Procurement Code, as supplemented by Article 2 of Decree No. 10/32 2012 on the establishment, organization and functioning of the Project and Public Procurement Management Unit.

4.2.4 The unit’s procurement capacity is deemed insufficient. The Implementation Unit of PADCA-6P should therefore recruit a project procurement expert whose commencement of work should be approved beforehand by the Bank.

4.2.5 A procurement plan (PP) was designed during project preparation. The PP will be updated by the PMU at project start-up and posted on the Bank’s website. The PP will cover an initial period of 18 months and updated each year as appropriate, but always after 18 months during the project implementation period. The procurement plan, detailed procurement methods and the goods and service procurement table are presented in the technical annexes of the report (Annex B7).

4.3 Financial Management Arrangements

Project financial management will be entrusted to a project team to be recruited. The team will benefit from the close collaboration of the Coordination Unit of PEJAB through: (i) the supervision of financial and accounting tasks; (ii) the updating of management tools (existing software and manual); (iii) the reinforcement of the internal control mechanism; (iv) the preparation of interim financial reports and annual financial statements; and (v) the monitoring of audit activities and transmission of audit reports to the Bank. The PADCA-6P procedures manual will be based on that of PAJEB, but revised to take into account the specificities of PADCA-6P. The project financial management conditions will be confirmed and presented in detail in Volume II- Technical Annexes of the Project Appraisal Report.

4.4 Disbursement Arrangements

4.4.1 Loan resources will be disbursed in accordance with the Bank's Disbursement Manual once the Loan Agreement enters into effect, and the conditions precedent to first disbursement are fulfilled. It is envisaged that the first disbursement will be effected within the three months following signature of the Loan Agreement. The following disbursement methods will be used for disbursement of loan resources by the Bank: (i) the direct payment method and (ii) the revolving fund or special account method, and (iii) the reimbursement method. The direct payment method will be used for payment of works, goods and services contracts. The special account method will be used to finance operating expenses. The Bank will transmit the "Disbursement Letter" specifying the special provisions for the withdrawal of project funds and management of special accounts.

4.4.2 The Bank reserves the right to take protective measures in compliance with the general conditions to, among other things, suspend the disbursements of funds where its fiduciary requirements are not met.

4.4.3 The Government will contribute to project financing through accounting valuation of the recurrent operating expenditure (salaries, rents, etc.) of the SGA financed by the State budget. There will be no other disbursements in terms of financial flows in respect of the national counterpart contribution.

4.4.4 Disbursements will be made according to the list of goods and services and in accordance with Bank rules and procedures as laid down in the disbursement manual. Disbursement conditions are presented in detail in the technical annexes.

4.5 Audit Arrangements

External Audit: on the date of project appraisal, the SGA had not submitted the 2017 audit report for the Study on the Development of Agro-industrial Parks due on 30 June 2018, that is a delay of close to 8 (eight) months. The 2017 PPF audit reports for PEJAB and LEAFII were deemed acceptable by the Bank. Many audit reports are expected on 30 June 2019, and the processes for the recruitment of audit firms are ongoing. Annual project audits financed with loan resources will be conducted by an independent external audit firm to be recruited on a competitive basis and in accordance with the standard terms of reference (ToR) in force at the Bank. The external auditor could be recruited in collaboration with the Court of Auditors. Audit-related expenses will be borne by the project. Audits will be conducted in accordance with International Standards on Auditing (ISA) and International Standards of Supreme Audit Institutions (ISSAI). Financial statements audited by the independent audit firm will be transmitted (see table for frequency) to the Bank within the six months following the closure of the financial year under consideration.

4.6 Project Monitoring and Evaluation

Table 3: Project Implementation Schedule

Period	Phases	Responsible Entity
April 2019	Board Approval	Bank
June 2019	Signature of Loan Agreement	Beneficiary/Bank
September 2019	First disbursement	Beneficiary/Bank
June 2020	Submission of first audit report	Borrower
December 2021	Mid-term review	Bank/Borrower
June 2023	Completion mission	Bank/Borrower
December 2023	Project completion	Bank/Borrower
December 2024	Project closure	Bank/Borrower

4.7 Governance

4.7.1 The Mo Ibrahim Foundation report on 54 African countries (2017 Edition) notes that DRC is among a group of countries that made the most remarkable progress in the 2017 Index of African Governance. The World Governance Index created by the World Bank also shows significant progress regarding transparency and accountability, political stability, government effectiveness, regulation, rule of law and control of corruption. The project will contribute to enhancing agricultural governance in the provinces of Kwilu, Kasai, Lomami, Haut-Lomami, Tshopo and Maniema in support of the promotion of the agricultural value chain.

4.7.2. The recent presidential election is expected to strengthen governance quality. PADCA-6P implementation will be placed under the oversight of the Ministry in charge of agriculture through the Secretariat General for Agriculture which, in that capacity, will facilitate interactions with the other sector ministries. It will also coordinate monitoring and evaluation activities. Consultation will be carried out by a National Steering Committee (CNP) at the national level and by Provincial Consultation Committees (CCs) at the decentralized level.

4.7.3 The improvements noted notwithstanding, the Bank portfolio review showed that the implementation of operations is still facing recurrent problems that affect performance. The constraints faced include: (i) bottlenecks in the fulfilment of loan agreement conditionalities, particularly the ratification of loan agreements and the fulfilment of conditions precedent to first disbursement; (ii) the low involvement of oversight ministries in project monitoring; and (iii) the poor financial management of some projects, especially the conduct of audits. To mitigate these risks and enhance good governance, the project will reinforce the PADCA management team which will comprise a procurement expert. In addition, the project will support local governance through greater regional consultation, secured land tenure systems and capacity building for infrastructure management cooperatives and bodies.

4.8 Sustainability

4.8.1 Project sustainability will be ensured by enhancing the capacity of institutional actors (beneficiaries, State services, service-providing NGOs, local elected representatives, etc.) to replicate the good initiatives the project would have developed throughout its existence. The potential effect and the sustainability of the expected impacts of the implementation of the activities of the various sub-sectors mainly depend on the project's holistic approach, its intervention and support principles upstream and downstream of the sub-sectors.

4.8.2 The sustainability of investments and expected benefits is contingent upon: (i) beneficiaries who are better trained and equipped for production and processing; (ii) the choice of locally tested and easily mastered varieties, techniques and technologies; (iii) support for the restructuring and supervision of beneficiaries in the management, maintenance and replacement of productive facilities; (iv) social cohesion, especially community work, which will contribute to ensuring sustainability; (v) institutions and other actors who are trained and empowered to better conduct participatory variety selection (PVS) tests and adoption of good farming practices; (vi) the development of partnerships and synergies with national institutions and organizations such as the National Extension Service, the National Seed Service and the National Institute of Agronomic Studies and Research, which will contribute to ensuring sustainability; and (vii) the involvement of the private sector in seed multiplication and the marketing of products, which will ensure continuity of production, processing and marketing.

4.8.3 The national and international laws in place in DRC require the conduct of a prior environmental and social impact assessment, especially Law No. 11/9 of 9 July 2011 on the fundamental principles for protection of environment, Section 2 of which states that: “Every development, infrastructure or industrial, commercial, agricultural, forestry, mining, telecommunications, etc. project likely to have an environmental impact shall be subject to a prior environmental and social impact assessment, together with its duly approved management plan”.

4.9 Risk Management

4.9.1 The project will adopt a participatory approach based on response to request. It will introduce technological and technical innovations already tested in research/development institutions and/or pilot farmers, through the activities of research centres. As a result, the technical risks related to these activities will be few. The other risks that could affect PADCA-6P are:

- (i) The difficulties in finding local service providers capable of providing the institutional and technical support that the project seeks to develop;
- (ii) The weak capacity of the population to implement a participatory, decentralized approach for expressing priority needs in a context characterized by the absence and/or weakness of grassroots community organizations.

Mitigation measures: the risk mitigation strategy adopted by PADCA-6P consists in: (i) promoting the structuring, organization and capacity building of the population/farmers’ organizations; and (ii) developing, in collaboration with financial partners and specialized NGOs in the provinces concerned, consultation and conflict prevention mechanisms among traditional rulers and decentralized local authorities. The new political climate ushered in by the presidential and legislative elections is expected to mitigate this risk.

4.9.2 The major potential risks that project implementation may face and their mitigation measures are presented in the table below:

No.	Potential Risks	Level	Mitigation Measures
1	Insufficient synergy of action between project partners	High	<ul style="list-style-type: none"> - Establishment of a project coordination unit and proper planning of activities, and fielding of joint missions - Reinforcement of collaboration and coordination between research and agricultural counselling institutions.
2	Insufficient support from the population	Moderate	<ul style="list-style-type: none"> - Establishment of an appropriate communication plan for all actors and agricultural counselling and training activities - Establishment of platforms
3	Worsening of the political and security crisis in the country and its spread to the project area	High	<ul style="list-style-type: none"> - Establishment of coordination branches in the provinces - Coordination of security information with the United Nations system - Facilitating social cohesion
4	Climate hazards and pest outbreaks	High	<ul style="list-style-type: none"> - Mainstreaming of the adaptation dimension in activities - Integrated farming approach and use of resistant and tolerant varieties
5	Inadequate road infrastructure	Moderate	<ul style="list-style-type: none"> - Synergy with existing AFDB projects

4.10. Knowledge Building

4.10.1 Cassava sub-sector activities contribute to knowledge building and sharing. They include: (i) the dissemination of production and processing technologies which will help to develop expertise in the sub-sector and promote mechanization; (ii) training in production and processing and exchange visits which are tools for interaction between researchers, advisory support workers and beneficiaries; (iii) awareness-raising and information dissemination through various communication channels (community radios, media programmes, website, etc.); and (iv) promotion of innovative actions for youth and women employability in the growth areas of the sub-sector.

4.10.2 The project will use the **Semi-Autotrophic Hydroponic (SAH)** rapid multiplication technology. The introduction of this technology helps to rapidly obtain large quantities of healthy cuttings.

4.10.3 Regarding fertilization, the project will introduce the ***integrated soil fertility management (ISFM)*** approach which combines organic and inorganic soil fertility inputs. To improve agronomic efficiency, the use of mineral and organic fertilizers with improved varieties will be promoted. They will also be adapted to the local context in case the soils need additional lime or dolomite for greater increase in productivity.

V. LEGAL FRAMEWORK

5.1. Legal Instrument

A loan agreement will be signed between the Fund and DRC (“the Borrower”).

5.2. Conditions for Fund Intervention

5.2.1. Conditions Precedent to Loan Effectiveness

Entry into force of the Loan shall be subject to fulfilment by the Borrower of the conditions set forth in Section 12.01 of Article XII of the General Conditions Applicable to Loan Agreements and to African Development Fund Guarantee Agreements (Sovereign Entities).

5.2.2. Conditions Precedent to First Disbursement of Loan Resources

The Fund’s obligation to effect the first disbursement of loan resources shall be subject to entry into force of the Loan Agreement, and to fulfilment, to the Fund’s satisfaction, in form and in substance, of the following conditions:

- (i) Provide the Fund with evidence of appointing the Coordinator of the Youth Entrepreneurship in Agriculture and Agri-business Project as Coordinator of the project.

5.2.3. Other Conditions

In addition, the Borrower shall:

- (i) Provide the Fund, within the six (6) months following the first disbursement of loan resources, with evidence of recruiting the Procurement Specialist and the Accountant whose qualifications and experience would have been deemed satisfactory by the Fund; and
- (ii) Provide the Fund, within one year following the first disbursement of loan resources, with evidence of signing partnership agreements under the project with (a) the National Institute of Economics and Agricultural Research (INERA), the National Seed Service (SENASEM), the National Extension Service (SNV), the Plant Care and Maintenance Centre (CEMAV), the National Rice Programme (PNR) and the National Fertilizer and Related Inputs Service (SENAFIC) and (b) the Fund’s partner research institutions in TAAT implementation.

5.2.4. Commitments

The Borrower undertakes to implement the Environmental and Social Management Plan (ESMP) and to submit, in a form deemed acceptable to the Fund, quarterly reports on the plan’s implementation status.

5.3. Compliance with Bank Policies

The project is consistent with all applicable Bank policies.

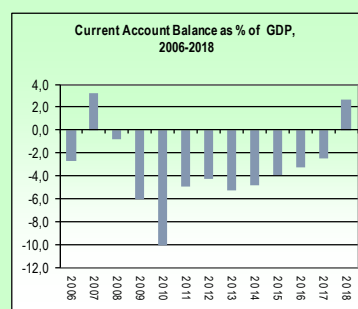
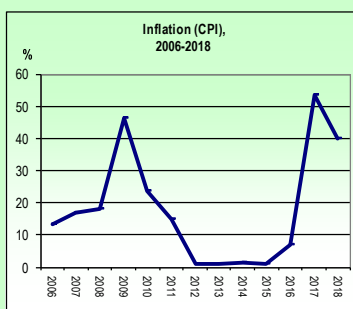
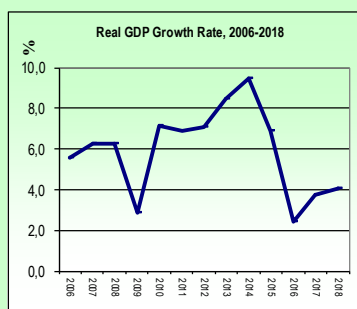
VI. RECOMMENDATION

Management recommends that the Board of Directors of the Fund approve the proposal to grant a Loan not exceeding Unit of Account twenty million (UA 20,000,000) to the Democratic Republic of Congo for the purpose and under the conditions set forth in this report.

Annex 1: Democratic Republic of Congo: Key Macroeconomic Indicators

Congo, Dem. Republic Selected Macroeconomic Indicators

Indicators	Unit	2000	2013	2014	2015	2016	2017 (e)	2018 (p)
National Accounts								
GNI at Current Prices	Million US \$	6 246	28 296	32 197	35 543	36 672	...	...
GNI per Capita	US\$	130	390	430	460	460	...	...
GDP at Current Prices	Million US \$	4 335	32 680	35 909	37 918	40 321	43 300	41 556
GDP at 2000 Constant prices	Million US \$	4 335	8 705	9 529	10 189	10 433	10 823	11 261
Real GDP Growth Rate	%	-6,9	8,5	9,5	6,9	2,4	3,7	4,0
Real per Capita GDP Growth Rate	%	-9,3	5,1	6,1	3,6	-0,8	0,6	0,9
Gross Domestic Investment	% GDP	3,4	21,8	23,9	20,0	17,7	15,7	13,2
Public Investment	% GDP	0,5	6,2	6,4	3,8	4,0	3,4	3,6
Private Investment	% GDP	3,0	15,6	17,5	16,1	13,7	12,2	9,6
Gross National Savings	% GDP	-0,1	11,8	18,2	16,5	8,7	11,5	12,5
Prices and Money								
Inflation (CPI)	%	550,0	0,9	1,2	1,0	6,9	53,5	39,8
Exchange Rate (Annual Average)	local currency/US\$	69,0	919,6	925,2	926,0	1 010,3	1 294,2	1 428,1
Monetary Growth (M2)	%	...	20,2	17,2	11,1	21,5	41,7	...
Money and Quasi Money as % of GDP	%	14,3	14,6	15,5	16,3	17,0	17,6	...
Government Finance								
Total Revenue and Grants	% GDP	4,0	14,6	18,6	17,2	12,3	10,7	11,9
Total Expenditure and Net Lending	% GDP	8,5	11,6	17,4	17,5	13,2	10,6	12,5
Overall Deficit (-) / Surplus (+)	% GDP	-6,0	3,1	1,2	-0,3	-0,9	0,1	-0,6
External Sector								
Exports Volume Growth (Goods)	%	-6,1	40,7	-5,0	-5,3	0,1	-8,9	8,0
Imports Volume Growth (Goods)	%	32,5	21,4	30,1	-5,0	0,4	12,9	9,5
Terms of Trade Growth	%	-9,0	-4,9	9,1	0,7	0,5	36,2	9,0
Current Account Balance	Million US \$	-173	-1 711	-1 721	-1 485	-1 334	-1 085	1 086
Current Account Balance	% GDP	-4,0	-5,2	-4,8	-3,9	-3,3	-2,5	2,6
External Reserves	months of imports	...	1,8	1,4	1,2	0,6	0,6	1,5
Debt and Financial Flows								
Debt Service	% exports	83,6	1,6	1,7	2,5	3,5	3,0	3,7
External Debt	% GDP	66,1	19,5	18,9	20,8	22,4	21,4	21,0
Net Total Financial Flows	Million US \$	192	206	2 048	2 791	1 849	...	...
Net Official Development Assistance	Million US \$	177	2 584	2 400	2 599	2 107	...	...
Net Foreign Direct Investment	Million US \$	94	2 098	1 843	1 674	1 205	...	...



Source : AfDB Statistics Department; IMF: World Economic Outlook, April 2018 and International Financial Statistics, April 2018;
AfDB Statistics Department: Development Data Portal Database, April 2018. United Nations: OECD, Reporting System Division.

Notes: ... Data Not Available (e) Estimations (p) Projections

Last Update: May 2018

Annex 2: Bank Portfolio in the Democratic Republic of Congo

Table 1: Bank Operations in the Agricultural Sector

Project Name	Amount (UA)	Approval Date	Disbursement Rate (%)	Implementation Status
PPF-YOUTH ENTREPRENEURSHIP IN AGRICULTURE AND AGRI-BUSINESS PROJECT	800,000.00	1/18/2016	97.58	Ongoing
FEASIBILITY STUDY ON INDUSTRIAL PARKS	1,524,582.00	9/21/2016	8.01	Ongoing
REDD+ INTEGRATED PROJECT IN THE MBUJI-MAYI/KANANGA BASINS	15,023, 828.49	9/11/2013	18.63	Ongoing
PPF – THEBUKANGA LONZO AGRO-INDUSTRIAL PARK SUPPORT PROJECT	843, 202.00	7/19/2017	0.00	Ongoing
RURAL INFRASTRUCTURE DEVELOPMENT SUPPORT PROJECT	49,460,000.00	11/10/2011	80.01	Ongoing
YOUTH ENTREPRENEURSHIP IN AGRICULTURE AND AGRI-BUSINESS PROJECT	40,000,000.00	12/9/2016	0.00	Ongoing
Total	107,651,612.49			

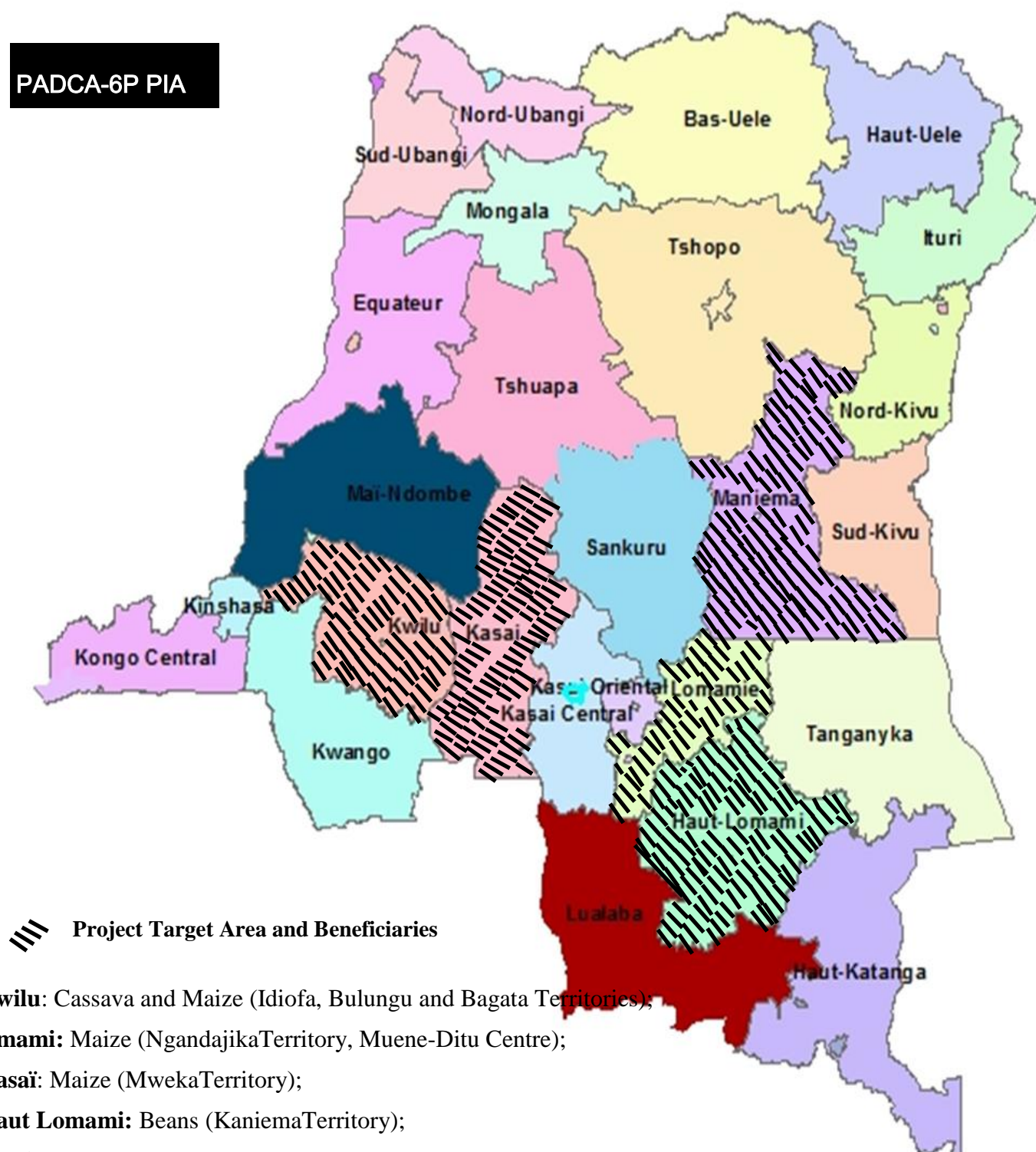
Annex 3: Major Related Projects Financed by the Bank and other Development Partners in the Country

Table 2: Partner Operations in the Rural Sector

<i>Partners</i>	<i>Project/Activities</i>	<i>Amount</i>
USAID	Cassava Brown Streak Disease	USD 4,700,000
	Food for Hunger Tuendelee Pamoja II	USD 9,600,000
World Bank	Integrated Agricultural Growth Programme in the Great Lakes Region (PICAGL) 2018-2021	USD 150,000,000
IFAD	Crops and Livestock Integration Project	USD 1,600,000
ENABEL	Regional Project on Cassava and Banana Cultivation Systems	USD 6, 000,000

Annex 4: Map of Project Area

PADCA-6P PIA



1. **Kwilu:** Cassava and Maize (Idiofa, Bulungu and Bagata Territories);
2. **lomami:** Maize (Ngandajika Territory, Muene-Ditu Centre);
3. **Kasai:** Maize (Mweka Territory);
4. **Haut Lomami:** Beans (Kaniema Territory);
5. **Maniema:** Rice (Kibombo, Kassongo and Kabambare sites);
6. **Tshopo:** Rice (Opala, Isangui, Iomela and Banalia Territories).