

AFRICAN DEVELOPMENT BANK GROUP



SUDAN

AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT (AVCDP)

RDGE/AHAI/PGCL DEPARTMENTS

May 2018

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Currency Equivalents

(March 2018)

1 UA	=	1.45 USD
1 UA	=	26.03 SDG
1 USD	=	18.00 SDG
1 UA	=	1.18 EUR

Fiscal Year

January 1 – December 31

Weights and Measures

1 metric tonne (t)	=	2,204 pounds (lbs)
1 metre (m)	=	3.28 feet (ft)
1 kilometre (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres
1 Feddan	=	0.42 hectares

ACRONYMS AND ABBREVIATIONS)

ADF	African Development Fund	IFAD	International Fund for Agric. Develop.
AVCDP	Agricultural Value Chain Develop. Project	IMF	International Monetary Fund
CAADP	Comprehensive Africa Agriculture Development Programme	IsDB	Islamic Development Bank
CB	Country Brief	JICA	Japan International Cooperation Agency
CMA	Crop Market Administration	MoAF	Ministry of Agriculture and Forests
COMESA	Common Market for Eastern & Southern Africa	NAC	National Audit Chamber
CTC	Central Trading Company	PBA	Performance Based Allocation
COSD	AfDB Country Office in Sudan	PFI	Participating Financial Institutions
DAL	Sudan's largest conglomerate	PFM	Public Finance Management
DfID	UK Department for International Develop.	PIU	Project Implementation Unit
DPs	Development Partners	PRSP	Poverty Reduction Strategy Paper
DRSLP	Drought Resilience and Sustainable Livelihoods Program	RGF	Risk Guarantee Fund
EA	Executing Agency	RSGAMP	Sudan Gum Arabic Production and Marketing Project
EIA	Environmental Impact Assessments	SDP	Seeds Development Project
ESMP	Environmental and Social Management Plan	SNAIP	Sudan National Agric. Investment Plan
ERP	Economic Reform Program	TSF	Transition Support Facility
EU	European Union	TWGs	Thematic Working Groups
FAO	Food and Agricultural Organization	UNDP	United Nations Development Program
FNC	Forests National Corporation	USAID	United States Agency for International
GAPAs	Gum Arabic Producers Associations	UA	Unit of Account
GPN	General Procurement Notice	WSRMP	Western Sudan Res. Management Project

Grant Information

Client's information

GRANT RECIPIENT: REPUBLIC OF SUDAN

EXECUTING AGENCY: MINISTRY OF AGRICULTURE AND FORESTS

Financing plan

Source	Amount (Million UA)	%	Instrument
TSF (Pillar 1)	24.95	76.2	Grant
ADF (PBA)	4.00	12.2	Grant
FAPA	0.69	2.1	Grant
Government	3.10	9.5	NA
TOTAL COST	32.74	100	

Important Financial Information

Grant Currency	UA
Commitment Charge/Fee	NA
Service Charge	NA
Tenor	NA
Grace Period	NA
FIRR, NPV (base case)	28%, NPV (15%): US\$ 20.3 million
EIRR, NPV (base case)	26%, NPV (15%): US\$ 19.4 million

Timeframe - Main Milestones (expected)

Concept Note Approval	February, 2018
Project Approval	May, 2018
Effectiveness	July, 2018
Completion	June, 2023
Closing Date	December, 2023

PROJECT SUMMARY

1. Project Overview: The overall goal of the Agricultural Value Chain Development Project (AVCDP) is to contribute to the attainment of Sudan's National Agriculture Investment Plan (SNAIP) goals in achieving a comprehensive national socio-economic development driven by a dynamic agricultural sector. The specific objective of the project is to improve household incomes, food security, and climate resilience through infrastructure development, market access and trade facilitation as well as enhancing production and productivity. The project will be implemented in three states, namely, North Kordofan, West Kordofan, and Khartoum and will focus on four commodity value chains: Groundnuts, Sesame, Potato, and Gum Arabic. The project cost is estimated at UA 32.74 million, of which AfDB is financing UA 29.64 million or 90.5% and the Government of Sudan will contribute UA 3.10 million or 9.5%. The project is expected to start in July/August 2018 with a duration of five years.

2. The proposed project will directly benefit farmers in at least 236,457 households (50% females) in 13 localities in the Kordofan Region of the country. Additionally potato farmers of over 50,000 hectares of land currently under potato cultivation in Khartoum State and surroundings will directly benefit from the project. The target beneficiaries also include the 200 Gum Arabic Producers Associations (GAPAs) in West and North Kordofan States with emphasis on women and youth. The indirect beneficiaries of the project include over two million residents in the target localities in the country. With the expected increased production and productivity associated with the project and the value chain approach, more areas and population outside the target states will benefit from the project. Additionally, processors, marketers, agro-dealers in and around the target states will benefit from this project

3. Needs Assessment: The AVCDP was identified as part of SNAIP and is addressing three out its seven Investment Program Areas (IPAs), namely: Increasing Agricultural Production and Productivity through Development and Modernization of Agricultural Systems and Improved Agricultural Inputs; Development of Agricultural Value Chains and Markets Access; and Development of Agricultural Support Services and Establishment of Information Network. In achieving the objectives of SNAIP, the Government commissioned a comprehensive study on the establishment of a modern Commodity Exchange in the country and requested the Bank to assist the development of key market-access infrastructures, which are the focus of this project. Therefore, the project is a direct response to GoS' desire to revive the agriculture sector as the key driver for economic growth by promoting the value-chain development approach.

4. Bank's Added Value: The Bank's intervention through AVCDP is merited by the project's consistency with the principles of key Bank Group policies and strategies. These include the Bank's Ten Year Strategy (2013-22) particularly in its operational focus areas (private sector development) and areas of special emphasis (agriculture and food security); the Bank's High 5s, the Bank's Feed Africa Strategy (2016-2025) and its flagship programs such as TAAT and ENABLE Youth; the Bank's Gender Strategy (2014-18) for the promotion of gender equality; and the Bank's Strategy for "Addressing Fragility and Building Resilience in Africa (2014-2019).

5. Knowledge Management: Given its innovative nature of supporting the establishment of a modern electronic commodity exchange and piloting the Farm Consolidation concept, the Sudan AVCDP will generate considerable knowledge that will add value to the overall design and management of agricultural value-chain development operations across the continent. The Bank will share this knowledge with other development partners and stakeholders engaged in similar operations

RESULTS-BASED LOGICAL FRAMEWORK(RBLF)

Country and Project Name: Sudan: Agricultural Value Chain Development Project (AVCDP)

Purpose of the Project: Improve household incomes, food security, and climate resilience through infrastructure development, market access and trade facilitation.

RESULTS CHAIN		PERFORMANCE INDICATORS ¹			MEANS OF VERIFICATION	RISKS /MITIGATION MEASURES
		Indicator (Including CSI)	Baseline	Target		
IMPACT	Improved livelihoods and food security.	1. Economic growth (GDP, %) driven by agriculture 2. Poverty level in project area (%)	<u>2017</u> 1. (3.5) 2. (58)	<u>By 2031</u> 1. (7.0) 2. decreased at least by 50	Household survey. Annual reports Bureau of Statistics.	
	1. Increased access to modern agricultural inputs 2. Reduced high cost of imported potato seed 3. Increased market access, value addition and commercialization	1.1 Average crop yield (kg/feddan) in project area 2.1 Avg. price (SDG/kg) of certified potato seeds 2.2 Foreign currency resources (USD/year) saved 3.1 % of target farmers with access to real-time market information 3.2 Increased earning (SDG) per feddan	<u>2017</u> 1.1 groundnut: 210; sesame: 57.5 1.2 (30) 2.2 - 2.1 (0) 2.2 -	<u>By 2022</u> 1.1 groundnut: 450; sesame: 200 1.2 (12 to 16) 2.2 4.34 million 2.1 at least 80 2.2 increased by 100%	Project reports M&E reports	Risk 1: Macroeconomic instability negatively affecting productivity and project impact Mitigation 1: (i) Improved diversification of GDP resulting from the project intervention economic diversification through revival of agriculture sector remains government priority; (ii) Sustained implementation of sound macroeconomic policies
COMPONENT 1: ENHANCING PRODUCTION AND PRODUCTIVITY						
OUTPUTS	Output 1.1. Improved access to clean and certified potato seeds.	1.1.1 Seed multiplication centre equipped with certification lab and cold storage facilities of 10,000 tons capacity established 1.1.2 Volume (tons) of certified potato seed produced locally and available to farmers.	<u>2016</u> 1.1.1. - 1.2(5,000)	<u>By 2022</u> 1.1.1 by 2019 1.2 (15,000)	Project Progress Reports Midterm reports	Risk 2: Farmers may not fully understand farm consolidation concept and could resist it Mitigation 2: (i) Sensitization, awareness raising and training of farmers on the farm consolidation concept (ii) Support is provided in mobilizing and grouping farmers into cooperatives
	Output 1.2. Enhanced access to modern farm inputs through farm consolidation.	1.2.1 Area (feddans) of farms in the project area under fully mechanized agriculture as a pilot 1.2.2 # cooperatives established (30% women only) under the farm consolidation scheme 1.2.3 Risk Guarantee Fund (RGF) with its manual, policies and procedures established	1.2.1. - (0) 1.2.2 1.2.3 -	1.2.1 20,000 1.2.2 (7) 1.2.3 by June 2019		
COMPONENT 2. INFRASTRUCTURE DEVELOPMENT FOR MARKET ACCESS AND TRADE FACILITATION						

¹ Prices in SDG are based on the March 2018 exchange rate. On project completion, comparisons will be done at the prevailing exchange rate.

	Output 2.1. Key rural market access roads upgraded to all weather standard Output 2.2 Rural and regional markets with postharvest handling facilities and services developed Output 2.3 Modern Commodity Exchange facility established	2.1.1 Length (km) of rural access roads upgraded 2.2.1 No. of rural markets constructed/upgraded and equipped 2.2.2 No. of regional market centers constructed/upgraded and equipped 2.2.3 Warehouse receipting system established 2.3.1 Electronic commodity market in El-Obied constructed and equipped. 2.3.2 Market information systems to support market operations established	2.1.1 (0) 2.2.1 (0) 2.2.2 (0) 2.2.3 - 2.2.4 - 2.2.6 -	2.1.1 (266) 2.2.1 (10) 2.2.2 (3) 2.2.3 by 2020 2.2.5 by 2020 2.2.3 by 2019	Project Progress Reports Midterm reports M&E Reports	Risk 3: Climate change impacts could hinder project benefits Mitigation 3: Project infrastructures upgraded to climate resilient standard
COMPONENT 3. STRENGTHENING GUM ARABIC VALUE CHAIN						
	Output 3.1 The Gum Arabic value chain is strengthened through capacity building, and improved access to finance of Gum Arabic Producers Associations (GAPAs)	3.1 No. of GAPAs trained in value addition and commercialization of gums (at least 30 % women only owned) 3.2 % increase of target Gum Arabic farmers with improved access to credit 3.3 No. of farmers supported with improved gum harvesting tools	3.1 - - -	3.1 (200) 3.2 (40) 3.3 (200)	Annual Reports Midterm reports M&E Reports Technical reports (procurement, Audits, etc.)	
	COMPONENT 4. PROJECT COORDINATION AND MANAGEMENT					
	Output 4. Work plan, activities monitored and regularly evaluated as due	4.1 Gender action plan developed 4.2 M&E system established 4.3 ESMP operational 4.4 Project implemented and delivered on time & within budget	4.1 (0) - - -	4.1 (1) 4.2 by 2019 4.3 by year 1 4.4 completion by Dec. 2023	Annual Reports Midterm reports M&E Reports Technical reports (procurement, Audits, etc.)	Risk 4 : Weak implementation capacity that affects progress of the project Mitigation 4: (i) Competitive selection of PIU team with adequate experience; (ii) Continuous training of PIU personnel by the Bank (project management clinics)
KEY ACTIVITIES	COMPONENTS					Inputs
	Component 1: Enhancing Production and Productivity: 1.1 Potato seeds development; 1.2 Farm consolidation for improved production and productivity					Project Cost in million UA: UA 32.74 million Sources : TSF Grant: 24.95 million; ADF (PBA) Grant : UA 4.00 million
	Component 2: Infrastructure Development for Market Access and Trade Facilitation: 2.1 Construction/rehabilitation of rural market access roads; 2.2 Upgrading and equipping main and rural markets with warehousing receiving system and services					FAPA Grant : UA 0.69 million GoS: UA 3.10 million
	Component 3: Strengthening Gum Arabic Value Chain.					
	Component 4: Project Management and Coordination.					

PROJECT TIME FRAME/IMPLEMENTATION SCHEDULE²

Year	2018			2019				2020				2021				2022				2023	
Quarter	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
INITIAL ACTIVITIES																					
Grant negotiations and approval																					
Signature of Grants Agreements																					
Publication of the GPN																					
Finalization of PIU recruitment (advance contracting)																					
Fulfilment of first disbursement condition																					
Project launching																					
ENHANCING PRODUCTION AND PRODUCTIVITY																					
Establishment of seed multiplication centre equipped with certification lab and cold storage facilities																					
Sensitization, awareness raising and training of farmers on the farm consolidation concept																					
Mobilizing and grouping farmers in the target area into cooperatives for better access to modern agricultural inputs and financing																					
Establishment of the Risk Guarantee Fund (RGF) with its manual, policies and procedures																					
INFRASTRUCTURE DEVELOPMENT FOR MARKET ACCESS AND TRADE FACILITATION																					
Upgrading/rehabilitation of rural market access roads																					
Construction/upgrading rural and regional markets																					
Establishment of warehouse receipting system																					
Construction and equipping of an Electronic commodity market in El-Obied, North Kordofan																					
Establishment of market information systems to support market operations																					
STRENGTHENING GUM ARABIC VALUE CHAIN																					
Training of target GAPAs in value addition and commercialization of Gums																					
Supporting target GAPAs with improved gum harvesting tools																					
Supporting target GAPAs with improved access to credit																					
PROJECT MANGEMENT AND COORDINATION																					
Development of an M&E system																					
Quarterly Progress Reports																					
Annual workplans and budgets																					
Annual financial audits																					
Mid-term review																					
Completion Report																					

² This is a general project implementation schedule. Detailed annual work schedule will be developed before the beginning of each Project Year.

REPORT AND RECOMMENDATION OF THE MANAGEMENT TO THE BOARDS OF DIRECTORS ON PROPOSED GRANTS FOR THE AGRICULTURAL VALUE CHAIN DEVELOPMENT PROJECT

Management submits the following Report and Recommendation on a proposed Transition Support Facility (TSF-Pillar 1) grant of UA 24.95 million and an ADF (PBA) grant of UA 4.00 million to finance the Agricultural Value Chain Development Project in Sudan.

I – STRATEGIC THRUST & RATIONALE

1.1. Project Linkages with Country Strategy and Objectives

1.1.1 The AVCDP is well in line with Government of Sudan (GoS)'s long term development goals which are expressed in its Twenty Five Year National Strategy (2007-2031). Among the objectives and goals of the strategy related to agriculture sector, include developing natural resources and optimizing their use, realizing balanced agricultural and rural growth, food security, increased job opportunities, and revival of agriculture sector through infrastructure development and financing. The Project is also in line with the country's second Five-Year Strategic Plan (2012-16), which aims to diversify the economy away from oil to agriculture and other sectors.

1.1.2 The project is also consistent with the Economic Reform Program (ERP) 2015-2019. The ERP is the country's most recent national planning framework and seeks to achieve robust, sustainable and inclusive economic growth supportive of employment creation through expansion of the production base of the economy, the optimum utilization of resources and its direction towards priorities and strengthening the role of the private sector. Its pillars include: (i) Macroeconomic Stability, (ii) Public Finance Management, (iii) Value Chain Development in the Productive Sectors, and (iv) Human Capital Development. The proposed AVCDP directly contributes to Pillar III of the ERP. The project is also aligned with Sudan's National Agriculture Investment Plan (SNAIP, 2016-2020), which maps the investments needed to achieve the Sudan Comprehensive Africa Agriculture Development Program (CAADP) target of six percent annual growth in Agriculture GDP.

1.2. Rationale for Bank's Involvement

1.2.1 Sudan has long been regarded as having the potential to be one of the major surplus food producers in the world. About 63 percent of its land area of 1.886 million km² is classified as agricultural land. Before 1960s, the agriculture sector provided the bulk of the export products of the country and accounted for the bulk of the foreign exchange earnings. However, the sector's contribution to the GDP had been in decline until the secession of South Sudan in 2011. In the 2000s, the agricultural sector was essentially catering only to the domestic market. Following the secession of South Sudan and loss of oil revenue, the government has undertaken a number of important initiatives to diversify the economy away from oil and revive the agriculture sector. In 2013, Sudan became the 12th member state in the Common Market for Eastern and Southern Africa (COMESA) region to sign the CAADP Compact. In doing so, the government had adopted agriculture as the key driver for economic growth within the framework of the CAADP, and subsequently developed the Sudan National Agricultural Investment Plan. The plan is a five-year investment blueprint that maps investments and activities needed to achieve 6% annual growth for the agricultural sector by 2020. The plan is to also help Sudan achieve the 10% percent of total expenditure on agriculture in compliance with the Maputo Declaration.

1.2.2 The Agricultural Value Chain Development Project was identified as part of SNAIP and is addressing three out its seven Investment Program Areas, namely: Increasing Agricultural Production and Productivity through Development and Modernization of Agricultural Systems and Improved Agricultural Inputs; Development of Agricultural Value Chains and Markets Access; and Development of Agricultural Support Services and Establishment of Information Network. Given the importance of AVCDP in achieving the objectives of SNAIP, the Government and Bank agreed to formulate the operation as a program and designate the current intervention as the first Project, which will focus on

edible oil seeds (Groundnuts, and Sesame), Potato and Gum Arabic value chains. The proposed project is also included in the pipeline program of the Bank's current Country Brief (2017-2019) for Sudan and directly contributes to its second Pillar: Agricultural Value Chains for Inclusive Growth.

1.2.3 The Bank's intervention through ACDVP is also merited by the project's consistency with the principles of key regional and national initiatives as well as Bank Group policies and strategies. These include the CAADP Compact; Bank's Ten Year Strategy (2013-22) particularly in its operational focus areas (private sector development) and areas of special emphasis (agriculture and food security); the Bank's High 5s, the Bank's Feed Africa Strategy (2016-2025) and its flagship programs such as TAAT and ENABLE Youth; Jobs for Youth in Africa (2016-2025); the Bank's Gender Strategy (2014-18) for the promotion of gender equality; Bank's Strategy for "Addressing Fragility and Building Resilience in Africa (2014-2019); and with the Bank's Private Sector-led-Economic Diversification and Development in Sudan flagship publication, which identified Agriculture as one of the sectors for economic diversification.

1.3. Donor Coordination

1.3.1 Generally, donor assistance to Sudan is coordinated by three ministries, namely, (i) Ministry of International Cooperation - Grants from bilateral and multilateral partners, (ii) Ministry of Finance and Economic Planning - multilateral financial institutions (AfDB, World Bank and IMF and others), and (iii) Ministry of Humanitarian Aid Commission that deals with the humanitarian assistance. The USAID and EU are the largest donors in Sudan, which are mainly funding on-going and post-conflict humanitarian interventions in the form of food aid and disaster assistance in Darfur, Blue Nile and South Kordofan. Concerning development aid, the AfDB's growing technical assistance and targeted operations have enabled it to emerge as a preferred partner and first port of call for Sudan. Other leading development partners in Sudan are the EU, WB, IFAD, DFID and IsDB, which are also playing active roles in the country's development. The bilateral support from China and Gulf countries (Qatar and Saudi Arabia) and Arab Funds also constitute a significant support, which is mainly in the form of grants and FDIIs. Arab states have also pledged USD 10 billion towards food security in the region with a focus on Sudan, while Qatar has a USD 188 million development program in Darfur.

1.3.2 Besides its role to finance important development interventions, the Bank also hosts key policy dialogue meetings such as the PRSP Working Group (WG), which is co-chaired by State Minister of Finance and AfDB through the guidance and support of COSD. The Bank continues to provide leadership in the PRSP process, which has rallied donors' support for poverty, and poverty related issues. The PRSP WG eventually culminated in the establishment of the Development Partners Group (DPG). One of its main objectives is to contribute to strengthening coherence among Development Partners (DPs) in Sudan by consulting and sharing information on program and project interventions.

Table: 1.1 Donor Support to Agriculture

Sector	Size (%)					
	GDP	Exports		Labour Force		
Agriculture	31.7	14.9		35.2		
Players - Public Annual Expenditure (average) : 2017 Budget						
Government UA m %	630	Donors	AfDB	9.4	FAO	0.25
	88		WB	0.3	Qatar Govt	5.6
			Arab Funds	21.9	UNDP	12.85
			IsDB	18.6	IFAD	9.0
			EU	0.3	Other bilateral	9.3
Level of Donor Coordination						
Existence of Thematic Working Groups (this sector/sub-sector)					[N]	
Existence of SWaps or Integrated Sector Approaches					[N]	
AfDB's Involvement in Donors Coordination					[M]	

Key: L: Leader. M: member but not leader. None: no involvement. Y: Yes. N: No

1.3.3 Development partners' interventions are coordinated based on their comparative advantages. While the Arab Funds and IsDB focus on large infrastructure investments (especially dams), IFAD focuses on small scale agricultural operations with focus on traditional rain-fed agriculture and rural development, whereas AfDB focuses on value chain development and productivity increase. During the preparation and appraisal missions, consultations were made with all relevant DPs including FAO, IFAD, JICA, IsDB, WB, USAID, UNDP and EU to explore potential for co-financing and to ensure that the Agriculture Value Chain Development in Sudan is implemented in a harmonized and aligned manner with other DPs.

II – PROJECT DESCRIPTION

2.1. Project Objectives and Components

2.1.1 The overall goal of the AVCDP project is to contribute to the attainment of SNAIP goals in achieving a comprehensive national socio-economic development driven by a dynamic agricultural sector. The specific objective of the AVCDP is to improve household incomes, food security, and climate resilience through infrastructure development, market access and trade facilitation as well as enhancing production and productivity.

2.1.2 The design of the project components and main activities are mainly informed by the outcome of a needs assessment study on the establishment of a modern Commodity Exchange or Borsa (as known in Sudan) in North Kodofan. The study was conducted to assess the current agricultural marketing ecosystem in the state and identify key challenges and gaps for establishing a modern commodity exchange. Infrastructure development for rural access roads, postharvest handling and storage, and processing facilities are some of the key gaps identified by the study. These infrastructures are the focus of this project. The project components are described in Table 2.1 below, with details provided in Annex C1 (Technical Annexes).

Table 2.1: Description of Project Components

No	Component Name	Cost (UA million) and % allocation	Component Description
1	Enhancing Production and Productivity	7.8 (23.8)	<p><u>Sub-component 1: Potato seeds development</u> – This sub-component will focus on the establishment a potato seed-multiplication center in Khartoum State, the main area of potato production in Sudan. The center is expected to produce locally the 10,000 tons of certified potato seed currently imported to Sudan. This will be done through the implementation of the following activities:</p> <ul style="list-style-type: none"> • Land development for potato seed production • Establishment of small irrigation system for plots • Establishment of cold storage facilities. • Procurement of farm machinery and lab equipment • Certification labs and seed packaging facilities • Administration facilities and equipment • Procurement of foundation seeds • Feeder Road (7km) <p><u>Sub - Component 2: Farm consolidation for improved production and productivity</u> – This sub-component deals with piloting the process of joining small plots of land together through a participatory approach to form larger areas that are more viable production units with better access to mechanization, improved agricultural inputs, and financing.</p>

No	Component Name	Cost (UA million) and % allocation	Component Description
			<p>20,000 feddans (8,400 ha) in seven locations ranging from 2000 (840 ha) to 4000 feddans (1,680 ha) in North and West Kordofan States are already identified for this pilot activity. As Sudan is a country with a long tradition in the use of agricultural cooperatives, the project will build upon past and on-going similar initiatives and lessons learnt. This sub-component will have following key areas of focus:</p> <ul style="list-style-type: none"> • Sensitization, awareness raising and training of farmers on the farm consolidation concept. • Mobilizing and grouping farmers in the target area into cooperatives for better access to modern agricultural inputs and financing. • Establishment of a Risk Guarantee Fund (RGF), its guidelines, organizational structure, and implementation. • Farm Consolidation financing agreement to be signed among participating Financial Institutions (FI), private sector (agricultural inputs service providers), and farmer cooperatives.
2	Infrastructure Development for Market Access and Trade Facilitation	21.2 (64.8)	<p>This component addresses the development of key market-access infrastructures for the proposed Commodity Exchange. These include the need to establish a modern Borsa building in El Obeid, North Kodofan with a network of access roads and warehousing receipt facilities across North and West Kordofan States. Activities under this component will be implemented under two main categories: (i) Civil Works for upgrading/construction of main Borsa building, rural markets, feeder roads and one bridge (ii) Consultancy services for design review, pre-construction services, construction supervision, and technical audits to ensure works carried out meet the requirements of the design specifications. The Component has two sub-components:</p> <p><u>Sub-component 1: construction/rehabilitation of rural market access roads and bridge:</u> This sub-component addresses upgrading priority rural access roads to all weather gravel standards for a total of 266 km and construction of one bridge.</p> <p><u>Sub-component 2: upgrading and equipping main and rural markets with warehousing receiving system and services:</u> Under this sub-component, the construction/rehabilitation of the following key infrastructure will be undertaken:</p> <ul style="list-style-type: none"> • El Obeid Main Borsa Building and warehousing facilities; • 12 regional/rural warehousing facilities in 12 localities in North and West Kordofan States. Details of these facilities and their capacities are described in Annex C1 of the Technical Annexes. These warehouses will be used for storing not only the sesame and groundnuts, but also Gum Arabic, Hibiscus, and Sorghum.

No	Component Name	Cost (UA million) and % allocation	Component Description
3	Strengthening Gum Arabic Value Chain	0.7 (2.1)	This component of the project will be mainly financed with USD 1.00 million grant from FAPA. The direct beneficiaries of the activities under this component are the Gum Arabic Producers Associations (GAPAs) in West and North Kordofan States with emphasis on women and youth. The component will focus on building the capacities of GAPAs through training in value addition and commercialization of gums, provision of improved gum harvesting tools, and support with improved access to credit.
4	Project coordination and management	3.0 (9.2)	<ul style="list-style-type: none"> Recruitment of PIU staff and launching Development of a M&E system Conduct project monitoring and reporting; annual and mid-term reviews, coordination and supervision of project activities; Project procurement, disbursement, financial management, and audit.
Total		32.7	

2.2. Technical Solutions Retained and Other Alternatives Explored

2.2.1 The technical solutions retained are based on criteria that will ensure project success and sustainability. Three technical alternatives were considered and rejected for their weaknesses in generating the expected impact on a sustainable basis (Table 2.2).

Table 2.2: Alternatives Considered and Reasons for Rejection

No	Alternative Name	Brief Description	Reasons for Rejection
1.	Project to directly finance farmer cooperatives under the Farm Consolidation scheme	Beneficiaries are supported with grants to defray the cost of accessing full mechanization and improved agricultural inputs for better production and productivity.	The option has often not worked effectively as it creates a culture of dependency and entitlement, which does not foster sustainable agricultural growth. Therefore, project resources are used only as a guarantee fund to leverage financing from agricultural lending banks
2.	Bituminous surface treatment for feeder roads	Flexible road with bituminous surfacing using chip seals.	The surface treatment was not selected because of less traffic and high cost which make the investment not economically viable
3.	To ensure equitable distribution, consider project to cover more disadvantaged states in the country	In this scenario, project sites would be identified in more regions of the country where target crops have production advantage	The coordination and supervision of the intervention would be cumbersome, and the spread of resources to too many intervention sites would result in less impactful project outcomes.

2.3. Project Type

2.3.1 The Agriculture Value Chains Development Project (AVCDP) is an investment project financed by ADF XIV (TSF/PBA) Grants and project activities are in line with TSF Guidelines³

2.4 Project Cost and Financing Arrangements

2.4.1 Total project costs to be incurred during the five-year implementation period, including price and physical contingencies, but excluding duties and taxes, are estimated at UA 32.74 million (US\$ 47.5 million). The project will be financed by the Government of the Republic of Sudan, African Development Fund (ADF) and FAPA. The ADF and FAPA will provide UA 28.95 million (US\$ 42 million) and UA 0.69 million (US\$ 1.0 million) respectively on grant terms. The Government will finance selected project activities, including design of infrastructure; and parts of training, consultancies, and recurrent costs to the tune of UA 3.1 million (USD 4.5) million. In conformity with the principle that no taxes or duties would be financed out of the proceeds of the ADF and FAPA financing, any future changes in the rates and/or structures of taxes and duties would apply to the project. A summary of project cost estimates by components, expenditure categories, and schedule are presented in Tables 2.3, 2.4 and 2.5 below, while details are provided in the Technical Annexes B2 Volume II of the appraisal report.

Table 2.3: Summary Project Cost by Components

Sn.	Components	In USD (millions)			In UA (millions)		
		FC	LC	Total	FC	LC	Total
1	Enhancing Production and Productivity	6,626	3,396	10,021	4,569	2,342	6,911
2	Infrastructure Development for Markets and Enhanced Access	17,131	9,307	26,438	11,815	6,418	18,233
3	Strengthening Gum-arabic Value Chain	799	198	998	551	137	688
4	Project Coordination and Management	730	3,000	3,731	503	2,069	2,573
	<i>Total Baseline Cost</i>	<i>25,286</i>	<i>15,901</i>	<i>41,188</i>	<i>17,439</i>	<i>10,966</i>	<i>28,405</i>
	Physical Contingencies	1,295	669	1,963	893	461	1,354
	Price Contingencies	1,691	2,658	4,349	1,166	1,833	2,999
	Total Project Cost	28,272	19,228	47,500	19,498	13,261	32,759

Table 2.4a: Project Cost by Expenditure Categories (UA '000')

No	Categories	In USD ('000)			In UA ('000)		
		LC	FC	Total	LC	FC	Total
1	Civil Works	10,109	16,033	26,141	6,972	11,057	18,029
2	Goods	243	4,571	4,814	168	3,153	3,320
3	Services	250	999	1,249	172	689	861
4	Miscellaneous	1,907	2,551	4,458	1,315	1,759	3,074
5	Recurrent Costs	3,393	1,132	4,526	2,340	781	3,121
	<i>Total Base Cost</i>	<i>15,901</i>	<i>25,286</i>	<i>41,188</i>	<i>10,966</i>	<i>17,439</i>	<i>28,405</i>
	Physical Contingencies	669	1,295	1,963	461	893	1,354
	Price Contingencies	2,658	1,691	4,349	1,833	1,166	2,999
	Total Project Cost	19,228	28,272	47,500	13,261	19,498	32,759

³ADB/BD/WP/2014/46/Rev.3/Approval - ADF/BD/WP/2014/30/Rev.3/Approval entitled "Operational Guidelines for the Implementation of the Strategy for Addressing Fragility and Building Resilience in Africa and for the Transition Support Facility.

Table 2.4b: Project Categories of expenditure by source of financing

Expenditure Category	UA ('000)						
	TSF	ADF	FAPA	GoS	Total	Foreign	Local
Civil Works	15,191	3200	-	1,714	20,106	12,503	7,603
Goods	3,672	800	-	76	4,548	3,536	1,012
Services	377	-	-	96	473	206	267
Miscellaneous, incl. RSF	3,074	-	690	182	3,946	3,248	698
Recurrent	2,636	-	-	1,035	3,671	781	2,890
Total	24,950	4,000.00	690	3,103	32,742.83	19,483	13,260

Table 2.5: Summary Project Cost Schedule by Components (UA '000')

Components	Year1	Year 2	Year 3	Year 4	Year 5	Total
Component 1: Production and Productivity Enhancement:	2,695	3,274	590	210	142	6,911
Component 2: Infrastructure Development	1,472	9,093	7,017	349	302	18,233
Component 3: Strengthening Gum-arabic Value Chain	210	113	133	133	99	688
Component 4: Project management and capacity building	681	482	485	461	463	2,573
<i>Total Base Cost</i>	<i>5,059</i>	<i>12,962</i>	<i>8,225</i>	<i>1,154</i>	<i>1,005</i>	<i>28,405</i>
Physical Contingency	200	714	438	2	-	1,354
Price Contingency	193.00	1,172.26	1,103.50	247.69	283.04	2,999
Total Project Cost	5,452	14,848	9,767	1,404	1,288	32,759

2.4.2 Project Financing Arrangement: ADF grant will finance the production and productivity enhancement component, agricultural infrastructure development component, production and productivity component and of market development and trade facilitation, and part of project management activities. The Government will mainly finance capacity building activities, design of works and allowances for the support staff. The Government of Republic of Sudan will also finance some recurrent costs of the Project Implementation Unit (PIU) in terms of staff salaries, office spaces and operating costs. The breakdown of financing for the project is presented in the Table 2.6.

Table 2.6: Financing plan of the project (UA '000)

Source	USD '000			UA '000			Percentage
	FC	LC	Total	FC	LC	Total	
ADF Grant	25,983	16,017	42,000	17,919	11,046	28,966	88.4%
FAPA Grant	789	211	1,000	544	146	690	2.1%
Government of Sudan	1,500	3,000	4,500	1,034	2,069	3,103	9.5%
Total Project Cost	28,271.9	19,228.1	47,500	18,463	12,841	32,759	100%

2.4.3 Counterpart Funds: The Government of the Republic of Sudan counterpart contribution to the project will be 9.5% of the total project cost (equivalent to UA 3.145 million); in addition to VAT contribution on all works, goods and services.

Risk Guarantee Fund (RGF): The project will dedicate up to **\$ 2.0 million** to act as a risk guarantee fund, which will provide backstopping support to financial institutions that will provide financing to the project's Farm Consolidation scheme. The RGF is expected to be hosted and managed within the ENABLE Youth Sudan Project's Risk Sharing Facility currently being established. Under this RGF framework, the Participating Financial Institutions (PFIs) are expected to finance full mechanization (from land preparation to harvesting) services to 20,000 feddans allocated under this pilot activity

through a financing agreement to be signed with private sector (agricultural inputs service providers) and farmer cooperatives. The total cost for providing full mechanization services for 20,000 feddans is estimated at USD 4 million (\$200/feddan) as confirmed by the major agricultural inputs service providers in Sudan. Therefore, a USD 2 million for the RGF is considered adequate for giving backstopping support to financial institutions who will finance the Farm Consolidation scheme.

2.4.4 Discussions were held with major agricultural inputs service providers and agricultural lending Banks and they all indicated their enthusiasm and willingness to participate in the project. As a next step, Terms of Reference will be developed for a consultant to structure RGF, its guidelines, organizational structure, and implementation including the development of a manual, policies and procedures to facilitate the Flow and Processing of Claims (Receipt, Recording, Screening, Evaluation and Determination) with a view of determining eligibility and settlement.

2.5. Project Target Area and Population

2.5.1 The project will be implemented in three states, namely, North Kordofan, West Kordofan, and Khartoum and it will focus on four commodity value chains: Groundnuts, Sesame, Potato, and Gum Arabic. In North and West Kordofan States, the target beneficiaries are the small farmers of groundnuts, sesame, and Gum Arabic value chains for which AVCDP will develop critical infrastructures for market development and trade facilitation, while also enhancing production and productivity. For potato value chain, the project will address one of the major constraints - the high cost of imported potato seed. Currently, farmers in Khartoum State spend about a third of the total production cost on acquiring certified seed. Moreover, the imported seed typically arrives late in the planting season due to congestion at Port Sudan resulting in late planting that causes substantial losses in yield. The project will establish a potato seed-multiplication center in the northern Khartoum State, which is the main area of potato production in Sudan. The center is expected to produce locally 10,000 tons of certified potato seed currently imported to Sudan at cost of about USD 4.3 million.

2.5.2 The project will directly benefit farmers in 158, 756 households (50% females) in seven localities in North Kordofan (Sheikan, El Rahad, Um Rawaba, Brieka, Um Dumm, Um Sumeima, Um Kiredim), 77,701 households six localities in West Kordofan (Gibaish, Al udaya, Alikry, Lagawa, Khammas, and Nyama). Additionally potato farmers of over 50,000 hectares of land currently under potato cultivation in Sudan will directly benefit from the project. The target beneficiaries also include the 200 GAPAs in West and North Kordofan States with emphasis on women and youth. The indirect beneficiaries of the project include over two million residents in the 13 target localities in North and West Kordofan States. With the expected increased production and productivity associated with the project and the value chain approach, more areas and population outside the target states will benefit from the project. Additionally, processors, marketers, agro-dealers in and around the target states will benefit from this project.

2.5.3 The selection of states was made based on their (i) potential and high comparative advantage in the production of these value chains; (ii) the existence of well-established markets that serve the majority of states in Sudan, neighboring countries as well as international markets; and (iii) the importance of these crops for the livelihoods and resilience of the smallholder farmers, rural women and youth in the area.

2.6. Participatory Process for Project Identification, Design and Implementation

2.6.1 The request for this project came from the Government of Sudan and project components and activities were identified as part of a broad consultation undertaken during the identification, preparation, and appraisal missions. Extensive consultations were conducted with senior government officials of the Ministry of Finance & Economic Planning, the Ministry of Agriculture and Forests, Ministry of Industry, State Ministries of Agriculture for Khartoum, North Kordofan and West Kordofan States, Forests National Corporation, and financial institutions engaged in agricultural lending. The

Bank missions also consulted with technical staff of line ministries and other stakeholders including international development partners (USAID, World Bank, IFAD, UNDP, FAO, JICA, IsDB, and UNOPS), the private sector (CTC Group, DAL group, Mahgoub Sons Group, agricultural lending banks), business associations and NGOs. The participatory process will continue throughout project implementation to ensure ownership and sustainability.

2.6.2 These various consultative processes offered an opportunity to discuss with stakeholders of the targeted value chains about their constraints, prospects and expectations of the project. The outcomes of these consultations can be summarized as follows: (i) the need to advance smallholder farmers' access to improved agricultural inputs for better crop production and productivity; (ii) increased crop production and productivity should be complemented with enhanced post-harvest storage, processing and market access; and (iii) the need to strengthen value addition and market linkages of small farmers.

2.7. Bank Group Experience and Lessons Reflected in Project Design

2.7.1 The Bank has currently 10 operations in Sudan valued at UA 171 million. The sectoral composition includes Social 39%, Agriculture 30%, Water and sanitation 18% and Multisector, 13%. Three operations (totalling UA 51.0 million) are in the areas of Agriculture (DRSLP II, DRSLP III, and ENABLE Youth) with no pending issues in satisfying conditions precedent to first disbursements. According to the last CPPR conducted in June 2017, the Bank's overall portfolio performance is assessed as satisfactory with an overall rating of 3. There are currently no Problematic Projects (PP), no Potentially Problematic Projects (PPP) and no effectiveness delays in the entire portfolio. However, some projects such as PFM and DRSLP projects have been affected by PD 02/2015 and currently flagged as slow disbursing operations mainly due to difficulties in getting funds transferred as a result of US sanctions imposed on the country since 1997. The sanctions were recently lifted and projects have started to receive funds in March 2018, which is considered very promising to enhance the portfolio performance in the coming three months.

2.7.2 The Formulation of this project drew lessons learnt from these ongoing agriculture projects and other similar Bank operations on the continent such as Agricultural Value Chain Development projects in Uganda, Angola, Gambia, and Cameron. The design of the project also draws lessons from ongoing similar interventions in the country by other development partners (IFAD, WB) in the project area including Western Sudan Resources Management Project (WSRMP), Revitalizing the Sudan Gum Arabic Production and Marketing Project (RSGAMP), and Seeds Development Project (SDP). The lessons learned from these interventions are described in Annex B1 (Technical Annexes). The main lessons applied to the project are described in Table 2.7

Table 2.7: Lessons learned and reflected in project design

No	Lessons Learnt	Actions incorporated in the Project design
1.	Weak M&E system at project level which often results in poor assessment of implementation progress	A robust results-oriented M&E system with adequate financial allocation has been included in the project design. The M&E system will be developed in PY1.
2.	Inadequate consultation with stakeholders in some project designs and preparations compromised sustainability and ownership	Components and activities under this project were designed and prepared with full participation of all stakeholders including government, target beneficiaries, private sector, agricultural lending banks, and development partners.
3.	Challenges in transferring project funds to Sudan due to US sanctions has resulted in implementation and disbursement delays of some projects	The sanctions were recently lifted but intermediate Banks are still reluctant to transfer money to Sudan. Therefore project AWPB and PP will take into account and anticipate these potential delays
4.	Interventions intended for increased crop production and productivity should	The project is designed to address not only increased crop production and productivity, but also providing key

No	Lessons Learnt	Actions incorporated in the Project design
	be complemented with enhanced post-harvest storage, processing and market access.	infrastructures for market access, and postharvest handling facilities and services.
5.	The project management staff should have inadequate skills and training essential for effective conduct of their responsibilities.	Recruitment of PIU personnel on performance based contracts. Continuous training of PIU staff by the Bank project management clinics will also ensure strengthened capacity.

2.8. Project Performance Indicators

2.8.1 The project's key performance indicators to be measured throughout its life span are presented in the Results Based Logical Framework. The M&E expert of the PIU will carry out internal project monitoring and evaluation in collaboration with the other PIU staff to monitor performance of the project. The main indicators defined for monitoring the project outcomes and outputs include (i) average crop yield (kg/feddan) in project area; (ii) volume (tons) of certified potato seed produced locally and available to farmers; (iii) proportion of target farmers with access to real-time market information; and (v) average earning from a feddan. Regular implementation progress will be measured through Quarterly Progress Reports, bi-annual Bank supervision missions, and annual technical and financial audits. These reports will systematically render an account of the achievement level of indicators, which will be regularly presented to decision and policy makers to guide project mid-term review and to facilitate project management after completion.

III – PROJECT FEASIBILITY

3.1. Economic and Financial Performance

3.1.1 The main economic benefits of the project are an increase in production and productivity of groundnuts, sesame, gum arabic and irish potatoes, enhanced access to markets and ultimately an increase in beneficiary incomes and strengthening of food security and climate resilience. Other project benefits include jobs generated by business developed, improved balance trade of agricultural products as the country will export more groundnuts and sesame and its products. At farm level, the project will directly reach out to at least 236,457 farm households⁴ cultivating groundnut, sesame farmers, and gum arabic as well as 50,000 irish potato farmers. Groundnuts, sesame and Gum Arabic will be exported, while the entire additional potatoes produced by the project will be consumed locally.

3.1.2 Main assumptions: The main assumption underpinning the economic and financial analysis is an anticipated increase in area under production of groundnuts, sesame, gum arabic and irish potatoes by 20,000 feddans. As a result of increased farm mechanisation, improved seeds and fertilizer use, and capacity building, the project is expected to increase productivity of groundnuts and sesame from the current 210 and 57.7 kg/feddan to 450 and 200 kg/feddan respectively. With domestic generation of potato seeds, a total amount of USD 4.3 million per annum will be saved from importation. Post-harvest losses for groundnuts and sesame will be reduced from 20% to 10%. On-farm consumption of groundnuts and sesame accounts for 25% the net total production. The remaining 75% is sold directly to middlemen or processed by farmers and then sold to traders or consumers. Ninety eight (98%) of gum Arabic produced at household level is sold to middlemen.

3.1.3 The production costs including processing costs are derived from the results of the similar projects implemented in the country and computed field data from Sudan. Prevailing 2018 market prices are used for input and output valuation. Infrastructure operating and maintenance costs are estimated at 7% of investment costs. Groundnuts, sesame, gum arabic and irish potatoes are treated in the analysis, as a

⁴ On average, each household has a total of 5 to 6 members.

traded and import substitute goods. All project costs and prices are estimated on the basis of constant market prices for a life span of 25 years. The average market prices of processed crops and their by-products (seed cakes) are used to value groundnuts and sesame. On-farm consumption is valued at farm-gate prices.

3.1.4 For the **economic analysis**, (i) groundnuts, sesame, potatoes and gum arabic are adjusted to reflect their economic values. (ii) All agricultural inputs, such as fertilizers, agro-chemicals and farm tools, are imported without any import duty or withholding tax. Furthermore, no government interventions in terms of input subsidies or import restrictions are recorded. Therefore, the market prices are used as the shadow prices for tradable goods used in domestic rice and maize production.

The FIRR is 28% with a NPV of US\$ 20.3 million at a capital opportunity cost of 15%. The EIRR is 26% for a NPV of USD 19.4 2 million at a capital opportunity cost of 15%. The summary result is tabulated below:

FIRR, NPV (base case)	28%, NPV (15%): US\$ 20.3 million
EIRR, NPV (base case)	26%, NPV (15%): US\$ 19.4 million

3.1.5 The economic rate of return (EIRR) and the internal rate of return (FIRR) are sensitive to changes in prices and costs. A 10% increase in the prices of agricultural products generates an EIRR of 16% and a FIRR of 18%. Similarly, a 10% increase in production costs decreases the EIRR and the FIRR to 15% and 14% respectively. More details of financial and economic analysis is presented in Annex B7 of the technical annexes

3.2. Environmental, Social and Climate Change Impacts

3.2.1 Environmental Issues: The proposed project is expected to result in a number of minimum localized environmental impacts including: (i) biodiversity loss through vegetation clearing and destruction of natural habitats during construction works; (ii) soil compaction and some destabilization of the geological balance during excavations; (iii) increased use of agricultural chemicals leading to pollution as a result of increased agricultural activities; (iv) increased environmental damage through excavations and creation of burrow pits to get construction materials; and, (v) dust pollution during construction works and transportation of construction materials. Mitigation measures to address these impacts have been proposed in the Environmental and Social Management Plan (ESMP). The preparation and implementation of site-specific environmental impact assessments (EIAs) will be carried out by the individual contractors under the supervision of the Executing Agency, in consultation with resident engineers and environmental authorities in Sudan. The Bank as the financing entity will ensure compliance with its environmental and climate change safeguards. Because of the limited and localized environmental impacts, the project has been classified as Category 2 in the Bank's environmental and social safeguard systems.

3.2.2 Gender Issues: Access to information, marketing and finance is a challenge faced by both male and female farmers in North and West Kordofan. However, consultations indicated that female farmers are significantly more affected due to domestic duties and reduced access to collateral. The majority of female farmers involved in groundnut and sesame value chains are functioning in informality and with low productivity. There have been successful initiatives by the Government and Development Partners to organize women groups to access finance, with some promising results. In sesame and groundnut Producer Associations, women represent approximately 30% of participants, with some Producer associations consisting of only women. The project will endeavour to support women in, and women-only, cooperatives to formalize and professionalize through targeted training. In terms of markets, women are found mainly trading horticultural products and constitute 50-60% of traders in markets targeted in this project. Consultations with them indicated their need for infrastructure that protects them

from the sun, improved transport to reduce their costs, and better representation in management of market structures.

3.2.3 The Comprehensive National Policy for Women (2002-2027), which the Ministry of Agriculture was involved in developing, recognizes women as an important human resource in the achievement of comprehensive country development and seeks to enable them economically to achieve gender equality. The Government of Sudan has also developed “The Policy Document of the National Rural Women & Empowerment Project”. This project will align itself to the policy frameworks to put in measures that aid equitable access and equity in the distribution of resources to women farmers.

3.2.4 It is expected that this project will reap significant results for women in the target region. There are three targeted interventions to manage the gender gap between men and women: (a) the project PIU will be trained on Results Based Management and Gender in order to ensure that project objectives are defined from the start in a gender-disaggregated manner; (b) a Gender Action Plan will be developed by the PIU to create an institutional framework and mechanisms to achieve the advancement of women farmers/traders; and (c) a Targeted training for women-led cooperatives, and women in cooperatives, on leadership, business management, and negotiation. Whilst the Ministry of Agriculture is highly aware of issues faced by men and women in agriculture wholly, the PIU will be capacitated with a Gender Officer who is also involved in community mobilization to ensure targeting, monitoring and reporting in a systematic way.

3.2.5 Social and economic importance: The project will have several social and economic benefits among them: (i) improved agricultural production due to improved and structured market outlets and enhanced market access; (ii) reduced post-harvest losses because of improved storage and warehousing facilities; (iii) enhanced employment opportunities in the Borsa, warehousing and storage facilities; (iv) improved incomes at households and community levels; (v) improved living standards; (vi) improved national income through exports; (vii) improved industrialisation through processing and value addition; and, (viii) minimised out-migration hence reducing rural-urban migration. Improvement in the market infrastructure development and improvement of the rural market access roads in the two states of North Kordofan and West Kordofan is a great opportunity for the youth to enhance their participation in trade, agricultural production and increased incomes through improvements in transportation.

3.2.6 Involuntary Resettlement: There will be no involuntary resettlement of the population from the project sites. The agricultural farms are already existing farming areas. The project will only support reorganization of the farming system through farmer grouping and farm amalgamation to make the farm units more viable and larger production units. The targeted areas for market construction comprise existing market centers and government lands that have over the years been set aside for market expansion and development.

3.2.7 Climate change and green growth: In terms of climate change and green growth, the project will contribute to climate change resilience through constructing and rehabilitating rural access roads to all weather standards and through increased marketing of the agricultural produce by improving the marketing segment of the value chain. The project will also enhance climate change resilience through improved storage and warehousing facilities which will minimize post-harvest losses and farmers’ desperation to sell their crops at throw-away prices due to lack of storage facilities, especially at harvest time. By improving infrastructure through improvement of market and rural access roads, the project will also reduce transportation costs hence improving the farmers’ incomes and consequently reducing poverty and as such enhancing resilience of the poor farmers as well as their adaptation to climate change. The project supports the Government of Sudan in achieving its obligations in the Nationally Determined Contributions. Using the Climate Safeguard Systems, the project was screened and classified as Category 2.

IV – IMPLEMENTATION

4.1. Implementation Arrangements

4.1.1 The Ministry of Agriculture and Forests (MoAF) is the implementing agency of the project. The Project will have a Steering Committee (SC) chaired by the Undersecretary of the MoAF with Director Generals of ministries of agriculture of North and West Kordofan as deputy co-chairs. The SC will also include members from ministries of Finance & Economic Planning, Industry, Trade, Physical Planning and Public Utilities in North and West Kordofan States, Producer Associations, and Agriculture Financing Banks.

4.1.2 The MoAF will establish a Project Implementation Unit (PIU) with key staff including project coordinator, civil engineer, value chain specialist, procurement officer, M&E officer, gender/social development expert, Financial Management specialist and an assistant accountant. For closer implementation, monitoring and follow up of project activities, the PIU will be located in Kordofan Region (El-Obeid, North Kordofan), where the Project Coordinator and all project technical officers will be based. To build capacity of the staff of the executing agency, the assistant accountant can be seconded from the Chamber of Accounts, if such expertise is not available in the MoAF. In addition, a Gum Arabic focal person will be seconded from the Forests National Corporation (FNC) to be part of the PIU to coordinate activities under Gum Arabic component of the project. Furthermore, two state focal officers will be seconded; one from Ministry of Agriculture and Forestry to coordinate the activities under the seed multiplication center and one from West Kordofan State Ministry of Agriculture to coordinate activities in the state. The Executing Agency, through Ministry of Finance & Economic Planning will nominate a focal point before negotiations to facilitate the processing and project start-up until the process of competitive recruitment of the PIU is finalized.

4.1.3 **Procurement Arrangements:** Procurement of goods (including non-consulting services), works and the acquisition of consulting services, financed by the Bank for the project, will be carried out in accordance with the “Procurement Policy for Bank Group Funded Operations”, dated October 2015, as amended from time to time, and following the provisions stated in the Financing Agreement. Specifically, Procurement would be carried out following Bank Procurement Policy and Methodology (BPM) using the relevant Bank Standard or Model Solicitation Documents SDs and in exceptional circumstances the Borrower’s Procurement System (BPS), for any category of procurement.

4.1.4 The various items under different expenditure categories and related procurement arrangements for each contract to be financed by the Grant together with the respective procurement methods or consultant selection methods, estimated costs, prior-review requirements, and time frame as agreed between the Recipient and the Bank are detailed in the Procurement Plan under Annex B5 of the Technical Annexes. To ensure timely project launching and start-up, Advance Contracting will be used for the recruitment of key PIU staff before project approval.

4.1.5 **Procurement Risks and Capacity Development:** The assessment of procurement risks at the Country, Sector and Project level and procurement capacity of the Executing Agency (EA), were undertaken for the project and the output have informed the decisions on the procurement regimes to be used for specific transactions or groups of similar transactions under the project. The appropriate risk mitigation measures have been proposed to reduce any fiduciary risk in project implementation (Section 5.2.4 of the Technical Annexes).

Financial Management (FM): The Bank carried out a FM assessment to determine the adequacy, strength and weakness of the financial management systems. The FM assessment concluded that the overall risk is “Substantial”. Mitigation measures in the risk analysis table include (i) Recruiting a Financial Management Specialist (ii) Acquisition of suitable accounting software for the project (iii)

training on Bank Financial Management requirements and International Accounting Standards (iv) Development of the Project Administration and Financial manual. They will enhance the Project ability to (1) use the funds for the intended purposes in an efficient and economical way, (2) prepare accurate, reliable and timely periodic financial reports, and (3) safeguard the entities' assets.

4.1.6 The Executing Agency of the project is the Ministry of Agriculture and Forestry (MoAF). The overall accountability of the project will be the Project Steering Committee chaired by the Undersecretary of MoAF through the Project Implementation Unit (PIU) under the Project Coordinator. MoAF has experience in managing Bank financed projects, and the ongoing project Enable Youth Sudan is complying with the Bank requirements including maintenance of special account. The financial transactions of the project will be initiated, processed, recorded and reported in accordance with the country's Financial and Accounting Act (2007), and the Financial and Accounting Regulations (2011) which incorporates Generally Accepted International Accounting Standards. The project Financial Management Specialist (FMS), recruited competitively with qualification and experience acceptable to the Bank, will undertake the day-to-day financial management function. MoAF will assign an Assistant Project accountant to strengthen internal control and capacity building for the Ministry.

4.1.7 The Project will prepare quarterly reports and submit them to the Bank within 45 days after the end of each quarter. The Internal controls of the Ministry including the internal audit of the project will apply to this project. This will include the inclusion of the project in the internal audit program and conducting audit at least twice per annum based on risk basis.

4.1.8 Audit: An independent auditor will audit the project annual financial statements in line with the General Conditions of the Grant Agreement. The National Audit Chamber (NAC) or Private Audit Firm appointed with the involvement the NAC in accordance to the terms of reference for Bank financed Projects should audit the Project. The submission of audited project financial statements, along with the management letter, to the Bank is within six (6) months after the end of each fiscal year. The cost of the auditing the project is part of the eligible expenditure of the Project to cater for audit fees of the private audit firm. If the audit is conducted by NAC, no audit fees is payable, but on exceptional circumstances, re-emburseable expenses like per diem for staff and transportation can be paid if NAC is facing financial constraints.

4.1.9 Disbursement Arrangement: The direct payment and special account/revolving fund methods used by the Bank to disburse funds will apply to the Project to pay eligible Project activities. The other two methods also described in the Disbursement Handbook maybe used when necessary with prior approval from the Bank. The funds from the Transition Support Facility (TSF) are disbursable and payable in only US dollars and Euros. The project contracts and disbursement applications should be denominated and made payable in EUR or USD. In the transition period (post lifting of sanctions) where there are difficulties still encountered in remitting USD to or involving Sudan, MoAF should take steps to persuade contractors to sign contracts and take payments in only Euros. The ADF Fund will apply the direct payment method to disburse ADF resources.

4.1.10 The Bank will issue a Disbursement Letter stipulating key disbursement procedures and requirements. With regard to the special Account (revolving fund method), the Recipient will be required to open two (2) special accounts. The first will be an account denominated in foreign currency (preferably in EUR) and the second a local (operating) account at bank (s) acceptable to TSF. Funds paid directly into the foreign currency special account by the Bank are draw able by the Project, as and when required, into the operating account to cover local costs expenses including local contractors. The Project implementation Unit will centrally manage the Project funds

4.2. Monitoring

4.2.1 The project will put in place an adequate computerized Monitoring and Evaluation (M&E) system based on a results-based framework with an emphasis on outcomes and impacts, as well as the regular monitoring of inputs and outputs covering the four main project components. Effort will be made to ensure gender-disaggregated data at every level and where applicable. The project will make use of national data sets (e.g. Central Bureau of Statistics, Household surveys, Annual reports, Bureau of Statistics, Project reports, etc.) whenever possible. In order to stimulate stakeholder participation in M&E, the project will employ participatory approaches such as beneficiary assessments and use of focus groups. The Bank office in Sudan will closely monitor day-to-day implementation of the project. The Bank will field supervision missions twice a year. The PIU will submit quarterly progress reports according to the format and procedures of the Bank. The Mid-Term Review will be undertaken in PY3. Project Completion Report will be prepared during PY5. Below is a summary of provisional project implementation schedule.

Activity	Responsible Entity	Timeframe
Appraisal	ADF	Feb/March 2018
Negotiations	Government/ADF	April 2018
Project Approval	ADF	May 2018
Signature of Grant Agreement	Government/ADF	June 2018
Fulfilment of 1 st Disbursement Conditions	ADF	July/August 2018
Project Launching	ADF/ Government/ PIU	August 2018
Mid-term Review	ADF/Government/PIU	June 2021
Completion Report	ADF/ Government/ PIU	August 2023 or when 85% disbursement rate achieved
Auditing	Government/ PIU	Annually

4.3. Governance

4.3.1 Recent international assessments show that Sudan has improved its accountability and transparency ratings and indicators of Governance including corruption control, rule of law, regulatory quality and Government effectiveness. However, the Bank is in the process of undertaking a comprehensive PFM assessment, which will provide more clarity on the Government efficient use of public resource. The design of the project has catered for a comprehensive governance structure to manage the implementation, monitoring and fiduciary aspects of the project. To ensure conformity with the Bank's procurement procedures, an initial procurement plan is prepared and this will be updated regularly during project implementation.

4.3.2 The main governance issues for the project are related to contracting and bidding processes mainly due to lack of adequate familiarization with the Bank's procurement rules and procedures. To mitigate the problem, the project will: (i) ensure the use of standard bidding documents and procedures of the Bank; (ii) provide financial management manual to guide project staff; (iii) promote regular submission of progress reports; and (iv) recruit qualified and experienced National Project gram Coordinator, Procurement Specialist and Financial Management Specialist for the PIU. The Bank will also ensure that PIU is trained on Bank requirements and guidelines during the project start-up. To ensure regular and quality reporting on implementation progress, the project provides for the appointment of a monitoring and evaluation officer in the PIU. Supervision missions and audits, with close follow up by COSD, will monitor adherence to the Bank standards and procedures to ensure value for money is achieved.

4.4. Sustainability

4.4.1 The Government of Sudan attaches great significance to the proposed AVCDP as it is the foundation of the first modern Commodity Exchange in the country soon to be established in North Kordofan State and later be rolled out to other states. The operation is a multi-purpose one expected to provide an enabling environment for private sector development and agricultural value chains, improving food security and contributing to the diversification of the agricultural economy as well as employment generation. The Government has already commissioned a comprehensive study on the establishment of a modern commodity exchange in North Kordofan State and requested the Bank to assist the development of key market-access infrastructures for the proposed commodity exchange. The project's sustainability is ensured by the very strong will and determination at both state and national levels for this project. A high-level committee headed by the North Kordofan State Governor is in place for the realization of the Borsa project.

4.4.2 In Sudan, the rural feeder roads are under the responsibility of the State ministries of physical planning and public utilities. Funds for maintenance planning and management is set aside in the national/state budget annually and private sector contractors for the execution of maintenance works. The main Borsa building and the 13 market warehousing receipt facilities in North and West Kordofan will be managed by the existing state Crop Market Administrations (CMA). The facilities are expected to sustain themselves with revenues generated from various fees (storage, grading, marketing, market data subscription, membership, etc.) charged on the users. Availability of commodity prices for the smallholder farmers in real time will enable them to produce for the market at a profitable price, which will in turn help them build a sustainable business relationship with traders, processors and exporters. In addition, the public-private partnerships established through the project provides the basis for continuous cooperation among the relevant players, connecting non-financial and financial services, and leveraging the private sector in the delivery of business services.

4.4.3 Another key factor of the sustainability of AVCDP is the establishment of the Risk Guarantee Fund for the Farm Consolidation Scheme to incentivize the lenders' participation in the scheme. The State Authorities in North Kordofan underscored its commitment to contribute to the current Fund and to periodically top-up to ensure sustainable access to finance for the farmers even after the operation closes. The Project will also provide adequate resources to train all the technical staff from the participating ministries, at all levels, who will support the farmers' cooperatives as well as the private sector involved in the project

4.5 Risk Management

4.5.1 A Potential risk to the successful execution of the project could stem from a macroeconomic instability negatively affecting productivity and project benefits especially the impacts of economic sanctions and high inflation rates. Improved diversification of GDP resulting from the project intervention and the Government's strong commitment on economic diversification through revival of agriculture sector remaining government priority will mitigate this risk. Other potential risks include Climate Change impacts that could hinder project benefits. This risk will be mitigated by ensuring that project infrastructures are constructed/upgraded to all weather standard. Weak capacity of the PIU team might undermine effective conduct of their responsibilities of the project. To ensure smooth project implementation, the project has broadly defined the skills and qualifications of key members of the PIU team, who will be recruited on a competitive basis, following the Bank's rules and procedures. The project has similarly identified focal points in each of the beneficiary states for facilitating technical coordination. Continuous training of PIU personnel by the Bank project management clinics will also ensure strengthened capacity.

4.6 Knowledge Building

4.6.1 Given its innovative nature of supporting the establishment of a modern electronic commodity exchange and piloting the Farm Consolidation concept, the Sudan AVCDP will generate considerable

knowledge that will add value to the overall design and management of agricultural value-chain development operations across the continent. Progress reports, audit reports, mid-term review reports, and completion reports as well as other information routinely collected, as part of monitoring and evaluation framework will be used to document the lessons learnt. PIU will collect, collate, and analyse project outputs, outcomes and impact data, including standardized M&E reports. The Bank will share this knowledge with other development partners and stakeholders engaged in similar operations.

V – LEGAL INSTRUMENTS AND AUTHORITY

5.1. Legal instrument

5.1.1 The financing instruments proposed are a TSF (pillar 1) grant of UA 24.95 million and an ADF (PBA) grant of UA 4.00 million.

5.2. Conditions associated with Bank’s intervention

5.2.1 Conditions precedent to Entry into Force: The grant agreements shall enter into force on the date of signature by the Recipient and the Bank.

5.2.2 Conditions precedent to First Disbursement: The obligation of the Bank to make the first disbursement of the Grant in each agreement shall be conditional upon the entry into force of the Agreements

5.2.3 Other Conditions

- (i) The opening of a foreign currency denominated Special Account and a local currency account by Recipient in a bank acceptable to the Bank.
- (ii) No later than three months from the date of signature of Grant Agreements, the Recipient shall submit project annual work plan and procurement plan covering the first 18 months approved by the Project Steering Committee

For the TSF Grant:

- (iii) No later than nine months from the date of signature of the grant, the Recipient shall establish a Risk Guarantee Fund (RGF) framework and the development and submission of operational manual. The RGF seed money will be disbursed upon the fulfilment of the following conditions:
 - a. The opening of a foreign currency denominated account by the Recipient in a bank acceptable to the Bank into which the RGF seed money will be deposited.
 - b. The submission of evidence by the Recipient in form and substance acceptable to the Bank, of the Farm Consolidation financing agreement signed among participating Financial Institutions (FI), private sector (agricultural inputs service providers), and farmer cooperatives.

5.3. Compliance with Bank Policies

5.3.1 This project complies with all applicable Bank policies.

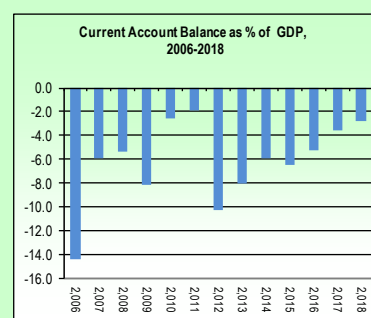
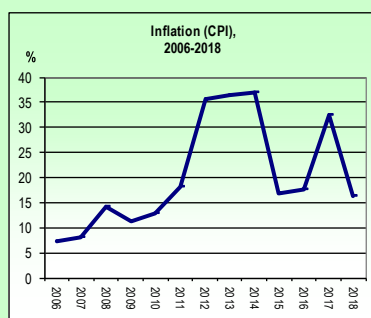
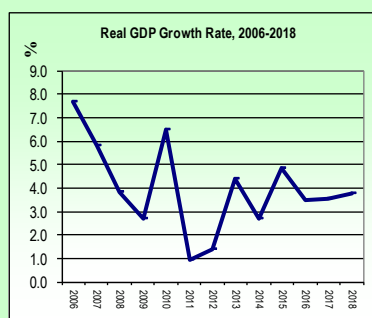
VI – RECOMMENDATION

6.1 Management recommends that the Boards of Directors approve the proposed TSF (Pillar 1) grant of UA 24.95 million and an ADF (PBA) grant of UA 4.00 million to the Republic of Sudan for the purposes of this project and subject to the conditions stipulated in this document.

Appendix 1: Sudan - Comparative Socio-economic Indicators

Sudan Selected Macroeconomic Indicators

Indicators	Unit	2000	2013	2014	2015	2016	2017 (e)	2018 (p)
National Accounts								
GNI at Current Prices	Million US \$	11,239	46,988	72,011	80,470	88,116	...	...
GNI per Capita	US\$	400	1,220	1,830	2,000	2,140	...	...
GDP at Current Prices	Million US \$	12,367	65,507	71,081	81,444	91,240	118,979	145,215
GDP at 2000 Constant prices	Million US \$	12,367	23,675	24,314	25,496	26,388	27,327	28,353
Real GDP Growth Rate	%	23.6	4.4	2.7	4.9	3.5	3.6	3.8
Real per Capita GDP Growth Rate	%	20.7	2.2	0.5	2.6	1.1	1.1	1.3
Gross Domestic Investment	% GDP	18.3	20.0	19.2	20.3	20.1	18.7	18.3
Public Investment	% GDP	2.3	4.6	1.2	2.8	3.7	4.0	4.1
Private Investment	% GDP	16.0	15.4	18.0	17.5	16.4	14.7	14.1
Gross National Savings	% GDP	9.9	11.0	9.9	9.1	11.5	12.1	12.3
Prices and Money								
Inflation (CPI)	%	6.9	36.5	36.9	16.9	17.6	32.4	16.3
Exchange Rate (Annual Average)	local currency/US\$	2.6	4.8	5.7	6.0	6.3	6.5	6.5
Monetary Growth (M2)	%	...	11.5	13.4	21.1	17.4	...	...
Money and Quasi Money as % of GDP	%	...	8.4	7.3	7.4	7.4	...	...
Government Finance								
Total Revenue and Grants	% GDP	10.3	10.8	10.4	9.4	8.3	8.4	8.5
Total Expenditure and Net Lending	% GDP	11.0	13.1	11.6	10.6	10.1	10.5	10.8
Overall Deficit (-) / Surplus (+)	% GDP	-0.7	-2.2	-1.2	-1.2	-1.8	-2.1	-2.3
External Sector								
Exports Volume Growth (Goods)	%	149.7	13.6	-6.2	0.9	-1.9	4.9	3.6
Imports Volume Growth (Goods)	%	12.4	2.6	-3.8	21.7	-9.2	-14.7	6.2
Terms of Trade Growth	%	6.1	-15.7	-0.2	-16.3	3.0	23.0	-3.1
Current Account Balance	Million US \$	-50	-5,301	-4,201	-5,247	-4,769	-4,200	-3,985
Current Account Balance	% GDP	-0.4	-8.1	-5.9	-6.4	-5.2	-3.5	-2.7
External Reserves	months of imports	1.0	0.2	0.2	0.2	0.2	...	...
Debt and Financial Flows								
Debt Service	% exports	2.9	2.7	2.0	7.6	3.0	3.7	4.4
External Debt	% GDP	155.0	68.7	65.8	61.1	57.4	46.5	40.5
Net Total Financial Flows	Million US \$	320	1,564	846	879	...	...	...
Net Official Development Assistance	Million US \$	225	1,507	875	900	...	...	...
Net Foreign Direct Investment	Million US \$	392	1,688	1,251	1,737	1,064	...	...



Source : AfDB Statistics Department; IMF: World Economic Outlook, October 2017 and International Financial Statistics, October 2017;
AfDB Statistics Department: Development Data Portal Database, January 2018. United Nations: OECD, Reporting System Division.

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

Last Update: January 2018

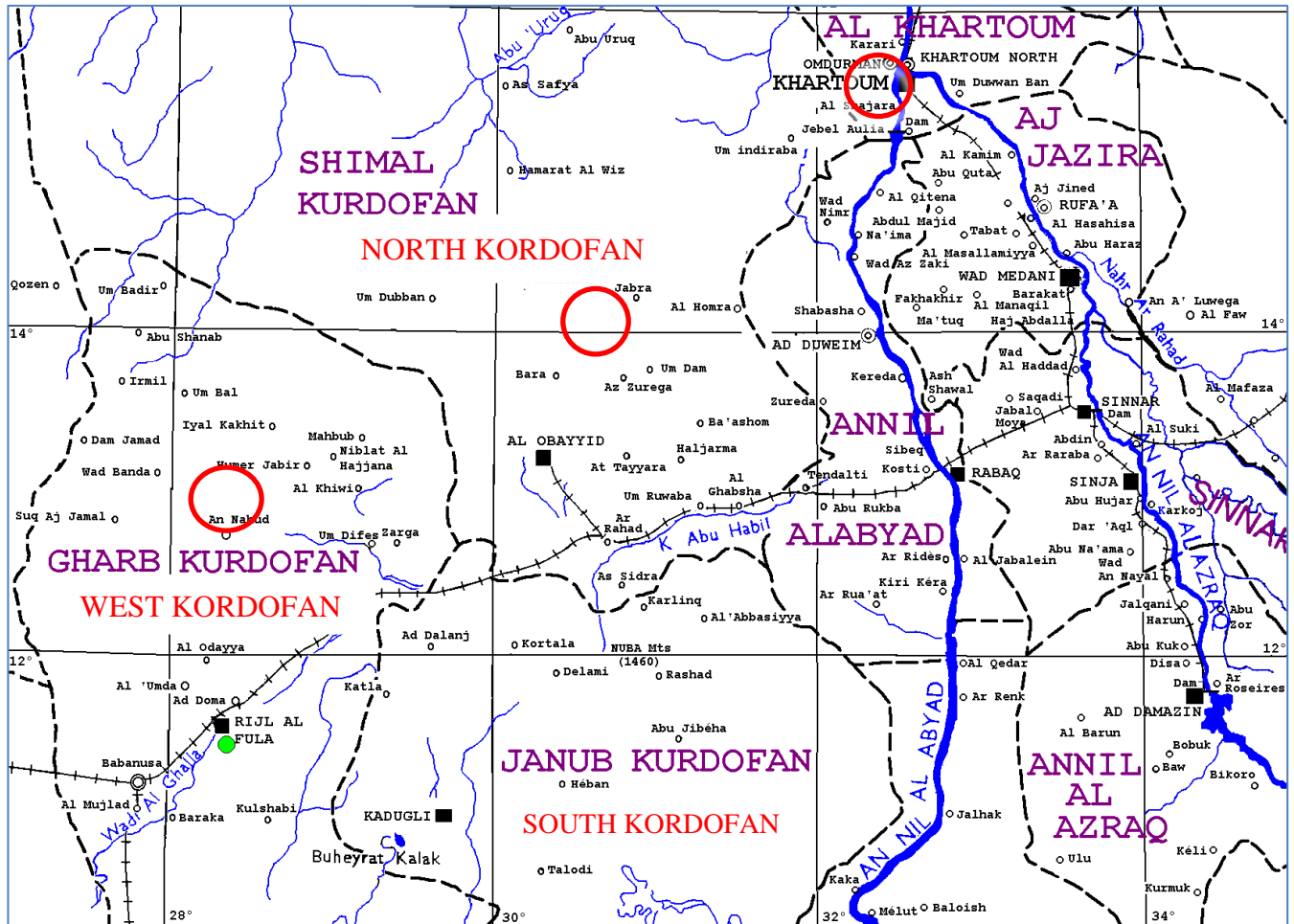
Appendix 2: AfDB's Active Portfolio in Sudan (31st March 2018)

No	Project Name	Window	Approval Date	Disburse Deadline	Amount Approved (UA)	Amount Disbursed (UA)	Disbursed Rate (%)
1	Darfur Water Project for Peace & Conflict Resolution	African Water Facility (ADF-AWF)	24.5.2012	30.06.2018	3,000,000	3000,000.0	100%
2	Technical Assistance to Full Poverty Reduction Strategy Paper	Transition Support Facility	16.06.2013	30.06.2018	1,973,285	1,973,285	100%
3	Technical Capacity Building for Public Finance and Macroeconomic Management Project	Transition Support Facility Pillar 1 Resources	06.12.2013	05.12.2018	22,190,000	3,106.6	14%
4	African Legal Support Facility (ALSF)	ALSF	09.03.2014	30.12.2017	651,856.49	100,000.00	15.4%
5	Drought Resilience and Sustainable Livelihood Program Phase II	TSF/RO	14.11.2014	31.12.2020	20,000,000	1,940,000.00	9.7%
6	Building Capacity for Inclusive Service Delivery	50% of PBA	02.03.2015	30.06.2020	27,990,000	3,918,600	20%
7	Drought Resilience and Sustainable Livelihood Program Phase III	TSF/RO	14.11.2015	31.12.2020	10,000,000	520,000.00	5.2%
8	Capacity Building for Improved Quality of Education and Skills Development	TSF Pillar 1	14.05.2015	30.05.2020	15,000,000	570,000.00	25%
9	Water Sector Reform Project	TSF Pillar 1	10.07.2015	30.07.2020	15,000,000	675,000	4.5%
10	Capacity Building for Enhanced Women Participation in Peace Building and Economic Activities	TSF Pillar III	02.02.2016	30.02.2021	3,200,000.00	1,600,000.00	60%
11	Enable Youth Program	TSF Pillar 1	28-11-2016	28.11.2021	20,960,000	1,330,000.00	6.3%
12	Institutional Capacity Building for Improved Access to Water and Sanitation in Port Sudan	TSF Pillar 1	October 2017	31.12.2022	15,000,000	0	0
13	Improving Health Services and Systems Strengthening	TSF Pillar I	15-01-2018	15-01-2023	20,050,000	0	0
	Total				175,015,141	25,244,285	14%

Appendix 3: Similar Projects Financed by the Bank and Other Development Partners in 2018

No.	Project Name	Amount (USD)	Donor
1	Integrated Agriculture Marketing Development Project	26,000,000	IFAD
2	Butana Integrated Rural Development Program	38,000,000	IFAD
3	Seed Development Project	10,070,000	IFAD
4	Livestock Marketing and Resilience Program	40,000,000	IFAD
5	Supporting the Small Scale Traditional Rain-fed Producer in Sinnar State	13,540,000	IFAD
6	Enable Youth Program	30,000,000	AfDB
7	Drought Resilience and Sustainable Livelihood Program	45,000,000	AfDB
8	Feed Security and Capacity Building for Smallholders	6,600,000	EU
9	Reduction of Illegal Migration	2,500,000	EU
10	Support to Agriculture Research Corporation	3,900,000	World Bank
11	Quarantine and Meat Health Project	30,000,000	China
12	Support to National Research Centre for Pesticide Control	3,300,000	JICA
13	Capacity Building for Rice Production	3,000,000	JICA
14	Reducing Carbon Emissions	1,300,000	UNDP
15	Desert to Power Project	4,500,000	UNDP
	Total	257,710,000	

Appendix 4: Map of Project Area



Appendix 5: Project Fragility Analysis

1. **Fragility Context in Sudan**

Sudan's political, economic and social stability are intrinsically intertwined. Conflicts and instability are at the very core of state fragility in Sudan. The country has been struggling to address multiple conflicts, low development and violent crisis for decades. A fragility assessment was undertaken in November 2017, which included dialogue with the government, development partners, private sector, and civil society. The assessment identified a number of political, economic, social and environmental drivers of fragility in Sudan. A few of these identified drivers of fragility in Sudan are quite relevant for this project, and they include:

- (i) **Weak Economic Planning Framework:** There are structural weaknesses in the economic planning and management systems. The weak macro-economic framework has limited the country's ability for proper planning for long term economic goals. The weak financial management system undermines effective service delivery, project monitoring and accountability.
- (ii) **Neglect of the Agriculture Sector and Low Agriculture Production:** With most of the rural poor relying directly or indirectly on agriculture, the sector's growth is necessary for poverty reduction and shared prosperity. The sector is very fragile and characterized by subsistence production, competition and conflict for land and water and impacted by climate change, floods, droughts, desertification, unstable and low process, lack and inaccessibility of market, wastage, lack of access to credits and limited supply chain value addition opportunities.
- (iii) **High Youth and Women Unemployment:**
- (iv) There is youth bulge combined with a high youth unemployment that has become a major socio-economic problem in Sudan. More than 60% of the population in Sudan is below 24 years, with a low investment on education (2.2% of the GDP), and a high youth unemployment rate of 22 percent. The youth bulk presents potential fragility dynamics such as radicalism, crime and increasing discontent leading to many uprisings and social unrest.
- (v)
- (vi) **Private Sector Development:** In Sudan, as in many other African countries, diversification is both an economic and social imperative. The economic imperative takes cognizance of the urgent need for the country to identify alternative sources of growth to achieve macroeconomic stability, especially fiscal sustainability and maintaining the external balance.
- (vii) **Internally displaced people and refugees:** In 2016, considerable new displacement occurred and a large number of those who have fled their homes since 2004 remain displaced. The official government estimate is that an additional 0.2 million internally displaced people live in South Kordofan and Blue Nile. Armed movements in South Kordofan and Blue Nile estimate that an additional 545,000 people are displaced in areas under their control.
- (viii) **Environmental degradation:** The country has experienced environmental degradation during the last 20-30 years. The main causes of environmental degradation, as rated by the UN, are low rainfall (38%), over-cutting (32%), over-cultivation (15%) and over-grazing (13%). Three out of the four are directly linked to the country's internal development, which has recently involved massive displacements of population and movement.

2. **Fragility-responsive project design and approach**

At the project-level, the design and implementation of the AVCP project including the activities at different levels are targeting different drivers of fragility that have been identified as earlier mentioned. In applying fragility-lens in this project, the approach was to unpack the relevant drivers of fragility into downside or project-level risks and challenges. The next step was to match the proposed project-level interventions and activities to the identified risks. The underlying assumption in this approach is that by making project interventions address project-level risks, the project ultimately contributes to address the major drivers of fragility affecting the sector and country at large.

The table below presents the approach of applying fragility-lens in the project design with the view of making the project contribute to addressing the root cause of fragility in Sudan.

Drivers of Fragility	Downside risks stemming from the drivers of fragility	Proposed Project interventions
1. Weak Devolution System	<ul style="list-style-type: none"> • Lower coverage of states outside capital, Khartoum • Exclusion of rural communities • Inadequate agricultural infrastructure • Unequal access to women and vulnerable groups 	<ul style="list-style-type: none"> • Seven localities North Kordofan and six localities in West Kordofan states in addition to Khartoum state (potato center), including a number of rural communities, were selected with huge potential for agricultural development • Ensured farm consolidation for improved production and productivity • Development of key market-access infrastructures with a network of access roads and warehousing receipt facilities • Benefit the Gum Arabic Producers Associations (GAPAs) with emphasises on women an youth
2. Lack of Public Participation in Policy Making, Planning and Monitoring of Program Implementation	<ul style="list-style-type: none"> • Little opportunities for the public to engage in policy planning and budget processes • Lack of mechanisms to ensure public participation 	<ul style="list-style-type: none"> • Contribution of the project to the Sudan's National Agriculture Investment Plan (SNAIP) • Use of participatory approaches such as beneficiary assessments and use of focus groups in order to stimulate stakeholder participation in M&E
3. Sub national violent conflicts	<ul style="list-style-type: none"> • Physical and psychological threats, populations • Insecurity and violence limit safe access to basic social services • Movement limitations due to insecurity with a significant impact on economic activities, • Non-inclusive access to land 	<ul style="list-style-type: none"> • Appropriate responses to mitigate the socio-economic impacts of crises and to avoid frustrations, tensions and conflicts • Increase the resilience capacities of vulnerable local populations most affected • Give priority to mutual aid and solidarity through existing mechanisms such as community work or solidarity funds • Sensitization, awareness raising and training of farmers on the farm consolidation concept
4. Weak Economic Planning Framework	<ul style="list-style-type: none"> • Lack of sufficiently trained experts in value chains process 	<ul style="list-style-type: none"> • Capacities building of GAPAs through training in value addition and commercialization of gums, provision of improved gum harvesting tools, and support with improved access to credit

Drivers of Fragility	Downside risks stemming from the drivers of fragility	Proposed Project interventions
	<ul style="list-style-type: none"> • Poor management capacity • Ineffective economic ecosystem 	<ul style="list-style-type: none"> • Training on Bank Financial Management requirements and International Accounting Standards • Allocation of USD 2 million a credit risk guarantee fund to de-risk to leverage financing from agricultural lending banks
5. Neglect of the Agriculture Sector and Low Agriculture Production	<ul style="list-style-type: none"> • Inadequate investment in the agricultural sector • Lack of coherent policy/legal framework on agriculture at the national level 	<ul style="list-style-type: none"> • Increased investment of commercial financial institutions in agriculture as a means of diversifying to non-oil sector • Provide a coherent and conducive policy environment for agricultural development through investment in youth agripreneurs. Create links with ENABLE YOUTH program
6. High Youth and Women Unemployment	<ul style="list-style-type: none"> • Limited economic opportunities in the agricultural sector • Lack of training for youths • Mismatch of skills relevant for agri-business 	<ul style="list-style-type: none"> • Enhanced youth participation in trade, agricultural production and improved incomes through eased transportation • Strategic and tailored training to both male and female youths selected within the program • Develop and implement a training strategy – to include an effective training plan and a complete strategic delivery
7. Private Sector Development	<ul style="list-style-type: none"> • Difficulties to access to funding for private enterprises • Lack of support from Ministries for private sector development 	<ul style="list-style-type: none"> • Increased lenders' participation in the Farm Consolidation Scheme thanks to the establishment of the Risk Guarantee Fund in North Kordofan • Partnerships will be established with public and private stakeholders. Training of technical staff from the participating ministries, at all levels, who will support the farmers' cooperatives as well as the private sector involved in the project
8. Internally displaced people and refugees	<ul style="list-style-type: none"> • Consequences of existing conflicts at the level of refugees and Internally Displaced Persons (IDPs) • Return of Burundian refugees 	<ul style="list-style-type: none"> • Measures to reintegrate returning IDPs • Coordination with organizations involved in facilitating reintegration
9. Environmental degradation	<ul style="list-style-type: none"> • Need to adapt to climate change 	<ul style="list-style-type: none"> • Upgraded Project infrastructures to climate resilient standard