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Report No: PAD4097

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

IN THE AMOUNT OF SDR 44.2 MILLION (US\$62.5 MILLION EQUIVALENT)  
INCLUDING SDR 8.82 MILLION (US\$12.5 MILLION EQUIVALENT)  
FROM THE CRISIS RESPONSE WINDOW EARLY RESPONSE FINANCING (CRW-ERF)

TO THE

REPUBLIC OF SOUTH SUDAN

FOR A

RESILIENT AGRICULTURAL LIVELIHOODS PROJECT

May 10, 2021

Agriculture and Food Global Practice  
Eastern and Southern Africa Region

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective March 31, 2021)

Currency Unit =

SDR 0.71 = US\$1

US\$1.42 = SDR 1

## FISCAL YEAR

January 1 - December 31

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## ABBREVIATIONS AND ACRONYMS

AAP	Accountability to Affected Populations
ACLED	Armed Conflict Location and Event Data Project
AfDB	African Development Bank
AEOs	Agricultural Extension Officers
ASA	Advisory Services and Analytics
BCR	Benefit Cost Ratio
BDC	Boma Development Committees
CAADP	Comprehensive Africa Agriculture Development Program
CAD	County Agriculture Development
CAMP	Comprehensive Agriculture Master Plan
CAR	Central African Republic
CBPP	Contagious Bovine Pleuro-Pneumonia
CEN	Country Engagement Note
CERC	Contingent Emergency Response Component
CERIP	Contingent Emergency Response Implementation Plan
CES	Central Equatoria State
CIAT	International Centre for Tropical Agriculture
CIMMYT	International Maize and Wheat Improvement Centre
CIMS	Contract Information Management System
CIWG	CAMP and IDMP Working Group
CoA	Chart of Accounts
CO <sub>2</sub>	Carbon Dioxide
COHSP	Construction-Occupational Health and Safety Plan
COVID-19	Coronavirus Disease 2019
CPA	Comprehensive Peace Agreement
CQS	Consultant Qualification Selection
CRW	Crises Response Window
CSA	Climate Smart Agriculture
CSSD	Corporate Support Services Department
DFID	Department for International Development
DRC	Democratic Republic of Congo
E&S	Environmental and Social
ECRP	Enhancing Community Resilience and Local Governance Project
EES	Eastern Equatoria State
EFCRP	Emergency Food Crises Response Project
EFNSP	Emergency Food and Nutrition Security Project
ELRP	Emergency Locust Response Project
ERF	Emergency Response Financing
ESF	Environment and Social Framework
ERR	Economic Rate of Return
ESIA	Environment and Social Impact Assessment
ESS	Environmental and Social Standard
EU	European Union
EX-ACT	Ex-Ante Carbon-Balance Tool

F&C	Fraud and Corruption
FA	Financing Agreement
FAO	Food and Agriculture Organization of the United Nations
FAORSER	FAO Country Representative
FBOs	Farmer Based Organizations
FBS	Fee Based Selection
FC	Farmer Organization Centre
FCV	Fragility, Conflict and Violence
FFS	Farmer Field School
FLSE	Farmer-Led Seed Enterprise
FM	Financial Management
FMD	Foot-and-Mouth Disease
FMFA	Financial Management Framework Agreement
FO	Farmer Organization
FPMIS	Field Program Management Information System
FSCPP	Food Security Crisis Preparedness Plan
GAP	Good Agricultural Practice
GBV	Gender-Based Violence
GBVIMS	Gender-Based Violence Information Management System
GDP	Gross Domestic Product
GEMS	Geo-Enabled Monitoring System
GHG	Greenhouse Gas
GIIP	Good International Industrial Practices
GIS	Geographic Information System
GPS	Global Positioning System
GRM	Grievance Redress Mechanism
GRMS	Global Resource Management System
GRN	Goods Received Note
GRS	Grievance Redress Service
GRSS	Government of the Republic of South Sudan
Ha	Hectare
HAC	High Activity Clay
HDI	Human Development Index
IA	Implementing Agency
IASC	Inter-Agency Standing Committee
IDA	International Development Association
IDMP	Irrigation Development Master Plan
IDP	Internally Displaced Person
IFAD	International Fund for Agricultural Development
IFR	Interim Unaudited Financial Report
IGAD	Inter-Governmental Authority on Development
IITA	International Institute of Tropical Agriculture
IP	Implementation Partner
IPC	Integrated Food Security Phase Classification
IPF	Investment Project Financing
IRR	Internal Rate of Return

IT	Internet Technology
Kg	Kilogram
KII	Key Information Interview
KPI	Key Performance Indicator
LMP	Labor Management Plan
LoA	Letter of Agreement
LCS	Least Cost Selection
LTA	Long Term Agreement
M&E	Monitoring and Evaluation
MAFS	Ministry of Agriculture and Food Security
MCR	Maximum Capital at Risk
MDB	Multilateral Development Bank
MEAL	Monitoring, Evaluation, Accountability and Learning
MIn	Million
MoFP	Ministry of Finance and Planning
mm	Millimeter
MTR	Mid-Term Review
NAC	National Audit Chamber
NAPA	National Adaptation Program of Actions
NBEG	Northern Bahr El Ghazal State
NCB	National Competitive Bidding
NDC	Nationally Determined Contribution
NOL	No Objection Letter
NPV	Net Present Value
O&M	Operation and Maintenance
OCC	Opportunity Cost of Capital
OED	Office for Evaluation
OIG	Office of the Inspector General
OPCS	Operations Policy and Country Services
OPEC	Organization of the Petroleum Exporting Countries
OSHA	Occupational Safety and Health Administration
PAD	Project Appraisal Document
PCU	Project Coordination Unit
PDC	Payam Development Committee
PDO	Project Development Objective
PDM	Post-Distribution Monitoring
PEHSP	Provision of Essential Health Services Project
PfRR	Partnership for Recovery and Resilience
PFM	Public Financial Management
PHA	Post-Harvest Assessment
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PMIU	Procurement Management Information System
PMU	Project Management Unit
PPA	Post-Planting Assessments
PP	Procurement Plan

PPP	Purchasing Power Parity
PPR	Peste des Petits Ruminants (small ruminant pest)
PPSD	Project Procurement Strategy for Development
PSC	Project Steering Committee
PTI	Project Targeting Index
PWG	Procurement Working Group
QBS	Quality Based Selection
QCBS	Quality and Cost Based Selection
QDS	Community-led Quality Declared Seed
RALP	Resilient Agricultural Livelihoods Project
RBF	Results Based Financing
RECA	Remaining Engaged in Conflict Allocation
RFP	Request for Proposal
RO	Release Orders
RTGoNU	Revitalized Transitional Government of National Unity
SDG	Sustainable Development Goal
SEA	Sexual Exploitation and Abuse
SEAHG	Sexual Exploitation, Abuse and Harassment
SEF	Stakeholder Engagement Framework
SEP	Stakeholder Engagement Plan
SER	Shadow Exchange Rate
SGBV	Sexual and Gender-Based Violence
SH	Sexual Harassment
SMoA	State Ministry of Agriculture
SMP	Security Management Plan
SNP	Safety Net Project
SOC	Social Opportunity Cost
SoE	Statement of Expenditure
SSP	South Sudanese Pound
SSSA	Seed System Security Assessment
SSP	South Sudanese Pound
SSS	Single Source Selection
SSSNP	South Sudan Social Safety Net Project
STASS	Seed Trade Association of South Sudan
SQCBs	Seed Quality Control Boards
STEP	Systematic Tracking of Exchanges in Procurement
TA	Technical Assistance
TC	Technical Committee
TCC	Technical Coordination Committee
ToC	Theory of Change
TPM	Third Party Monitoring
TPMA	Third Party Monitoring Agent
ToR	Terms of Reference
ToT	Training of Trainers
UAV	Unmanned Aerial Vehicle
UKAID	United Kingdom Aid Direct

UN	United Nations
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
VBAs	Village Based Agents
VSLAs	Village Savings and Loan Associations
WASH	Water, Sanitation and Hygiene
WB	World Bank
WBEG	Warrap and Western Bahr El Ghazal state
WES	Western Equatoria State
WFP	World Food Program



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## DATASHEET

**BASIC INFORMATION**

Country(ies)	Project Name	
South Sudan	South Sudan Resilient Agricultural Livelihoods Project	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P169120	Investment Project Financing	High

**Financing & Implementation Modalities**

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

Expected Approval Date	Expected Closing Date
01-Jun-2021	23-Aug-2026

Bank/IFC Collaboration

No

**Proposed Development Objective(s)**

The project development objective is to strengthen capacity of farmers and their organizations and improve agricultural production.

**Components**

Component Name	Cost (US\$, millions)
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Capacity Building in Good Agricultural Practices	21.00
Investment Support for Improved Agricultural Production	35.16
Project Management and Technical Assistance	6.34
Contingent Emergency Response	0.00

### Organizations

Borrower: Ministry of Finance and Planning  
Implementing Agency: Ministry of Agriculture and Food Security

### PROJECT FINANCING DATA (US\$, Millions)

#### SUMMARY

Total Project Cost	62.50
Total Financing	62.50
of which IBRD/IDA	62.50
Financing Gap	0.00

#### DETAILS

##### World Bank Group Financing

International Development Association (IDA)	62.50
IDA Grant	62.50

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

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
<b>South Sudan</b>	0.00	62.50	0.00	62.50
National PBA	0.00	50.00	0.00	50.00
Crisis Response Window (CRW)	0.00	12.50	0.00	12.50



Total	0.00	62.50	0.00	62.50
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## INSTITUTIONAL DATA

### Practice Area (Lead)

Agriculture and Food

### Contributing Practice Areas

Fragile, Conflict & Violence, Social Protection & Jobs

### Climate Change and Disaster Screening

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

## SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

### Risk Category

### Rating

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

## COMPLIANCE

### Policy

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

☐ Yes ☒ No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

#### Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

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

#### Legal Covenants

##### Sections and Description

Schedule 2 Section I.A.1 of the Financing Agreement: Within ninety (90) days from the Effective Date, the Recipient shall establish within MAFS, and thereafter maintain at all times during the implementation of the Project, a Project Coordination Unit (“PCU”) within MAFS, with the composition, functions, staffing and resources satisfactory to the Association, and responsible for day-to day oversight and management of the Project and for coordination of implementation of Project activities.

##### Sections and Description



Schedule 2 Section I.A.2 of the Financing Agreement: Within sixty (60) days from the Effective Date, the Recipient shall establish and thereafter maintain at all times during the implementation of the Project, a Project Steering Committee ("PSC"), with the composition, functions, staffing and resources satisfactory to the Association, and responsible for providing high-level oversight and guidance on implementation of the Project

#### Sections and Description

Schedule 2 Section I.B.3 of the Financing Agreement: Within one hundred eighty (180) days from the Effective Date, the Recipient shall hire a Third-Party Monitoring Agent, in accordance with terms of reference satisfactory to the Association, to monitor and review performance of the Project

#### Sections and Description

Schedule 2 Section I.B.4 of the Financing Agreement: The Recipient shall no later than ninety (90) days from the Effective Date establish and thereafter maintain at all times during the implementation of the Project, a grievance redress mechanism, under terms and structure satisfactory to the Association.

#### Sections and Description

Schedule 2, Section I.D of the Financing Agreement: The Recipient shall ensure that not later than six (6) months after the Effective Date, a Food Security Preparedness Plan is prepared and adopted in form and substance acceptable to the Association

### Conditions

Type Effectiveness	Financing source IBRD/IDA	Description Article IV. Section 4.01 of the Financing Agreement: The Project Implementation Manual, prepared in accordance with provisions in Section I.B.1 of Schedule 2 to the Financing Agreement has been deemed satisfactory by the Association and has been adopted by the Recipient.
Type Disbursement	Financing source IBRD/IDA	Description Schedule 2. Section III.B.1(b) of the Financing Agreement: No withdrawal shall be made for Eligible Expenditures under Category (2), unless the Recipient has entered into contracts for the hiring of a financial management specialist and a procurement specialist, with terms of reference satisfactory to the Association, and which contracts are procured in accordance with the Procurement Regulations.
Type Disbursement	Financing source IBRD/IDA	Description Schedule 2. Section III.B.1(c) of the Financing Agreement:



		<p>No withdrawal shall be made for Emergency Expenditures under Category (3), unless and until all of the following conditions have been met in respect of said expenditures:</p> <p>(i) (A) the Recipient has determined that an Eligible Crisis or Emergency has occurred, and has furnished to the Association a request to withdraw Financing amounts under Category (2); and (B) the Association has agreed with such determination, accepted said request and notified the Recipient thereof; and</p> <p>(ii) (the Recipient has adopted the CERC Manual and Emergency Action Plan, in form and substance acceptable to the Association.</p>
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## I. STRATEGIC CONTEXT

### A. Country Context

- 1. South Sudan, home to 12 million people and 64 ethnic groups, is characterized by high levels of poverty and food insecurity.** The country is rich in natural resources including rivers, arable and pasture land, livestock, fisheries, forests, wildlife, precious stones, metals, petroleum, minerals, hardwoods and limestone. South Sudan is one of the most oil dependent countries in the world. Oil, which accounts for a 40 percent share of Gross Domestic Product (GDP)<sup>1</sup> and 90 percent of export earnings, is the mainstay of the economy. Key exports are crude petroleum, forage, raw cotton, dried legumes and gold<sup>2</sup>. While rich in resources, South Sudan is one of the poorest countries in the world, owing to a combination of prolonged conflict, poor governance, economic mismanagement, and climate shocks. The South Sudanese are chronically vulnerable, and according to some recent estimates, 82 percent can be designated poor, based on the US\$1.90 in the 2011 Purchasing Power Parity (PPP) poverty line<sup>3</sup>. The country ranks second to last in the World Bank's Human Capital Index 2020. Among several factors, this rating is based on low life expectancy (only 68 percent of 15-year old children are expected to survive up to age 60), inadequate education (approximate average grade level is 2.5), and stunting affecting 31 percent of children. Roughly half the population is severely food insecure and 1.8 million suffer from acute malnutrition.
- 2. South Sudan has a long and volatile history.** After two civil wars spread over almost 50 years, South Sudan gained its independence in July 2011. Intermittent conflicts with Sudan, age-old inter-communal conflicts, and failed attempts at negotiating a peaceful settlement<sup>4</sup> resulted in the loss of US\$99 million in monthly oil revenues in 2012. In December 2013, armed conflict erupted between government forces and opposition groups, resulting in the displacement of over one million civilians and a two-fold increase in the number of severely food insecure people. The September 2018 Revitalized Agreement on the Resolution of the Conflict in South Sudan called for the establishment of a Revitalized Transitional Government of National Unity (RTGoNU). Owing to political differences, formation of the RTGoNU met several roadblocks and it was not established until February 22, 2020. Conflict is growing at the sub-national level, fuelled by intercommunal violence, the state capture of resource and power struggle amongst the ruling political groups, distrust of government, dispute over representation, and a legacy of unresolved grievances. The communal violence is driven by disputes over access to natural resources, including land and water, food and services, while the elite incite discord for economic and political gains. The traditional cattle culture, shared among the Nuer, Dinka, and Murle tribes is based on a cycle of rustling and, to this day, remains a source of conflict and displacement more recently.
- 3. South Sudan's economy collapsed in 2016 and recovery has been slow.** Increased conflict in 2013, a fall in oil production, poor economic management and a resistance to reforms undermined economic growth and other gains achieved after the 2005 Comprehensive Peace Agreement (CPA). Despite an abundance of natural resources, Foreign Direct Investment has been slow in the face of insecurity and corruption. GDP contracted by 11.2 percent, 6.9 percent and 3.5 percent in 2016, 2017 and 2018 respectively. In 2019, GDP was US\$4.9 billion, with per capita income at US\$375. Inflation remains high, and the value of the local currency might depreciate further, in part owing

<sup>1</sup> <https://www.worldbank.org/en/country/southsudan/overview>.

<sup>2</sup> <https://oec.world/en/profile/country/afssd>.

<sup>3</sup> <https://www.worldbank.org/en/country/southsudan/overview>.

<sup>4</sup> Between South Sudan and the former Sudan.



to low foreign exchange reserves and limited capacity to service existing debt<sup>5</sup>.

4. **South Sudan is heavily reliant on foreign aid to deliver basic needs.** Real incomes have declined 50 percent since 2013<sup>6</sup>. Food prices remain high and the cost of the minimum expenditure basket increased by 489 percent between May 2016 and May 2018. Household income is primarily and increasingly spent on food; during the December 2018 harvest, 52 percent of the population was spending more than 75 percent of their income on food<sup>7</sup>. The outbreak of the COVID-19 pandemic, resulting lower oil prices, combined with adverse weather conditions, flooding and desert locust infestation<sup>8</sup>, is aggravating already fragile dynamics. The economic projections of 9.3 percent economic growth in FY19-20 has been revised and it is projected that the economy will contract by 3.4 percent in FY20/21. The FY20 fiscal financing gap is estimated to be 4 percent of GDP. In the backdrop of COVID-19, prices of basic commodities surged by 30 to 150 percent in 2020. According to a Household Monitoring Survey in June 2020, half of all households reported a fall in income since the start of the pandemic<sup>9</sup>, about 45 percent reported not being able to buy their main staple food at some point in time since the containment started. The volatile political environment encourages more budget allocation for security which further reduces the fiscal space for public investments, government sector salaries and food imports<sup>10</sup>.
5. **South Sudan has not achieved food self-sufficiency since 2009<sup>11</sup>.** Cereals, primarily sorghum and maize, millet and rice are the dominant staple crops. Underinvestment (only 0.3 percent of national budget in 2019 against the recommended 10 percent of the annual budget by Malabo Declaration) in agriculture, economic and market impact of conflict, population displacement, low crop yields, climate shocks and difficulty for human access are some of the key factors for worsening food insecurity in South Sudan<sup>12</sup>. Insufficient local food production has led South Sudan to become a net food importer with an estimated gap of 483,000 mt in 2020 (7 percent lower than 2019, but 22 percent higher than the previous five years average)<sup>13</sup>.

<sup>5</sup> SAEF3 food security briefing, August 31, 2020.

<sup>6</sup> IMF (2016), IMF staff completes 2016 Article IV mission on South Sudan, Press release No. 16/556. [www.imf.org/en/News/Articles/2016/12/13/pr16556-IMF-Staff-Completes-2016-Article-IV-Mission-on-South-Sudan](http://www.imf.org/en/News/Articles/2016/12/13/pr16556-IMF-Staff-Completes-2016-Article-IV-Mission-on-South-Sudan).

<sup>7</sup> FAO (2020), Special Report – 2019 FAO/WFP Crop and Food Security Assessment Mission to the Republic of South Sudan. CFSAMs Special Reports – May 2020. <https://doi.org/10.4060/ca9282en>.

<sup>8</sup> FAO (13 July 2020), Desert Locust situation update

<sup>9</sup> Finn, Arden and von der Goltz, (January 2020), Monitoring COVID-19 Impacts on Households in South Sudan: Results from a High-Frequency Phone Survey of Households. 24 July 2020.

<sup>10</sup> World Bank (2020), Jobs, Recovery, and Peacebuilding in South Sudan, Synthesis Report (P168807). Draft document, July 1, 2020.

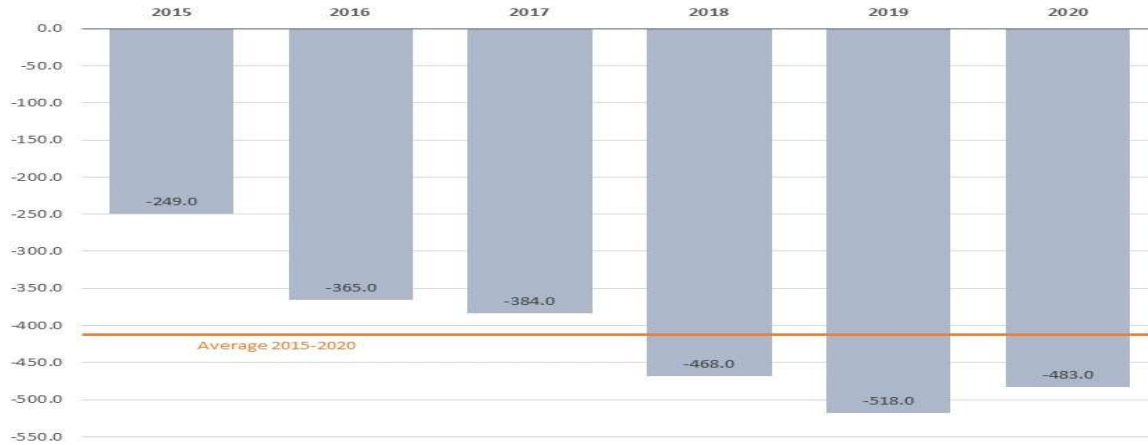
<sup>11</sup> World Bank (2020), Reviving markets and market-linked agriculture in South Sudan. Draft document, March 16, 2020.

<sup>12</sup> World Bank (2020), South Sudan Conflict Economy, chapter “Agricultural and Food Insecurity Dynamics (2006-2020)”. Draft document, July 9, 2020 & United Nations Security Council (2019), Letter dated 9 April 2019 from the Panel of Experts on South Sudan addressed to the President of the Security Council (S/2019/301). <https://digitallibrary.un.org/record/3801695?ln=en>.

<sup>13</sup> FEWS NET (2020), South Sudan Security Outlook, June 2020 to January 2021. <https://fews.net/east-africa/south-sudan/food-security-outlook/june-2020>.



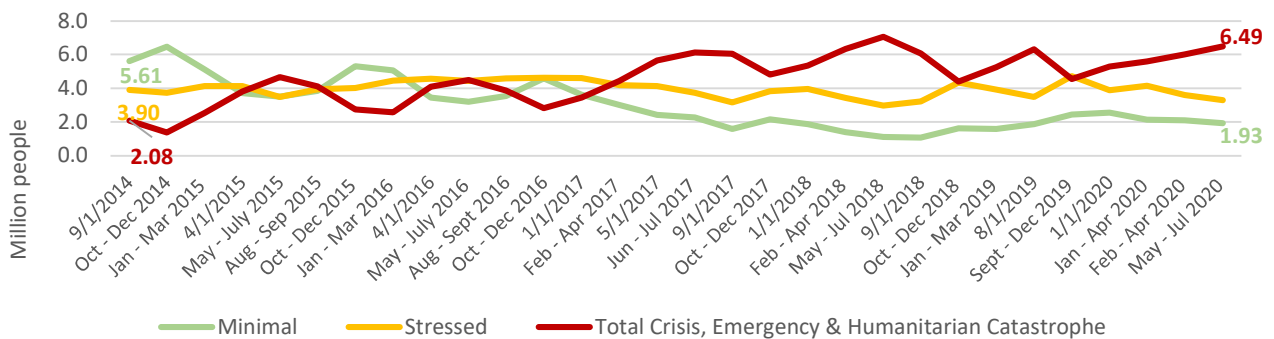
Figure 1: South Sudan Cereal Deficit Trend (thousand metric tons)



Source: Authors' calculations derived from WFP/FAO CLIMIS Data Warehouse <https://climis-southsudan.org/>

6. **Years of conflict, economic crisis, climate shocks and displacement destroyed productive capacity, markets, road infrastructure, and the social and economic institutions that supported agriculture, as well as created a humanitarian crisis.** As of August 2020, nearly 3.8 million people were displaced. Of those, 1.6 million are Internally Displaced Persons (IDPs) and 2.26 million are international refugees. Throughout the year, there are consistently about 7.5 million people in need of humanitarian assistance. About 6.48 million people (54 percent of total population) experience food security crisis Integrated Food Security Phase Classification<sup>14</sup> (IPC) Phase 3) or worse<sup>15</sup>. The number of people in IPC3 (crisis) trends upward in the lean season, which reaches its height around July/August and then trends downward after harvest starts in September. Nevertheless, the number of food insecure people in South Sudan is among the highest in the world and the fluctuation has lessened over time and the total number of people in IPC3 or worse has steadily increased. Essentially the status of food security reversed between 2014 and 2020.

Figure 2: Number of People affected by Food Insecurity (millions)



Source: IPC South Sudan 2021- <https://climis-southsudan.org/ipc>.

<sup>14</sup> Integrated Food Security Phase Classification (IPC) is a tool for food security analysis and decision making using a standardized 5-phase scale (1=minimal stress, 2=stress, 3= crisis, 4=emergency, and 5=famine. For more details, see <http://fews.net/sectorest%C3%B3picos/abordagem/classifica%C3%A7%C3%A3o-integrada-de-fases>.

<sup>15</sup> Integrated Food Security Phase Classification (2020), South Sudan: IPC Acute Food Insecurity and Acute Malnutrition Analysis for January – July 2020, issued in February 2020.



7. **Gender disparities and inequalities are very high.** South Sudan ranks in the bottom third of countries for the Human Development Index (HDI)'s life-course gender gap<sup>16</sup> and women's empowerment<sup>17</sup>. Before the current crisis, almost 80 percent of women had no education and girls were less likely to attend school. South Sudan has one of the highest maternal mortality ratios in the world, fed by high number of child marriages, low education levels, and extreme poverty. Traditional patriarchal structures keep women out of community leadership and decision-making roles. Women have limited income-generating opportunities and their earnings are often seized by male family members<sup>18</sup>. Gender-Based Violence (GBV) against women and girls is commonplace, with about 65 percent of women and girls reporting some form of physical or sexual assault in their lifetime<sup>19</sup>. Key factors that influence GBV include underlying norms and dynamics that underpin gender inequality more broadly and acceptability of use of violence against women and girls, the legacy of conflict and violence, a breakdown of the rule of law and key security institutions to protect against violence, and increases in opportunistic crime often linked to high levels of poverty.
8. **South Sudan has made significant strides in creating the policies, institutions and systems for socioeconomic recovery.** Their implementation, however, has lagged because financing priorities are skewed towards security and the military. Translating independence into a broad-based sustained development and prosperity remains the central objective of the South Sudan Government according to the draft National Development Strategy, 2018-2021.

## B. Sectoral and Institutional Context

9. **South Sudan has vast agricultural potential.** Agriculture, livestock, forestry and fisheries play a significant role in South Sudan's economy, accounting for 36 percent of non-oil GDP<sup>20</sup>. With about 80 percent of households listing agriculture as their primary source of livelihood, agriculture plays a central role in the lives of South Sudanese people. It accounted for over 60 percent of female employment and more than one-third of male employment in 2018<sup>21</sup>. Out of the total land area of approximately 64 million hectares, 50 percent is prime agricultural land, while the remaining 50 percent comprises marginal arable land, forests, mountains, rivers and wetlands. Only a small proportion (4 percent) of the land (2.7 million hectares) is cultivated<sup>22</sup>. A large part of the country, that is, southern region, has plentiful water resources. Main crops cultivated are sorghum (70 percent of cereal cultivated area in 2019<sup>23</sup>), maize (22 percent of cereal area), cassava, groundnuts, sesame, pearl and finger millets, beans, peas, sweet potato and rice. While vegetables, peas, beans and fruit are grown primarily for home consumption, most

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<sup>16</sup> HDI's life-course gender gap compiles 12 indicators that analyze gender gaps in choices and opportunities across the lifespan including education, labor and work, political representation, time use, and social protection. HDI's women's empowerment dashboard compiles 13 woman-specific empowerment indicators in three categories: reproductive health and family planning, violence against women and girls, and socioeconomic empowerment.

<sup>17</sup> UNDP (2018) Human Development Indices and Indicators: 2018 Statistical Update - South Sudan.

<sup>18</sup> For example, while women compose 80 percent of the labor force in agriculture, they have little control over how the fruits of their labor are used/sold or access to income.

<sup>19</sup> <https://www.rescue.org/sites/default/files/document/2294/southsudanlgsummaryreportonline.pdf>.

<sup>20</sup> FAO/WFP (2015), FAO/WFP Crop and Food Security Assessment Mission to Southern Sudan, Special Report.

<sup>21</sup> World Bank (2020), Reviving markets and market-linked agriculture in South Sudan. Draft document, March 16, 2020, and World Bank (2020), South Sudan Conflict Economy, chapter "Agricultural and Food Insecurity Dynamics (2006-2020)". Draft document, July 9, 2020.

<sup>22</sup> FAO (2019), Seed System Security Assessment (SSSA).

<sup>23</sup> FAO (2020), Special Report – 2019 FAO/WFP Crop and Food Security Assessment Mission to the Republic of South Sudan. CFSAMs Special Reports – May 2020. <https://doi.org/10.4060/ca9282en>



marketable fresh vegetables are imported from Kenya, Sudan and Uganda<sup>24</sup>. The widely different climactic zones, fertile soil and plentiful rainwater create ideal conditions for meeting national dietary needs plus a surplus for the market. South Sudan has about five times the area of agricultural land per capita compared to Kenya, Uganda or Ethiopia, and could feed itself and several other countries.

10. **Agricultural productivity and production in South Sudan remain low.** In 2018, average cereal yield (kg/ha) was about 18 percent of South Africa, and about a third (31 to 41 percent) of that of Ethiopia, Kenya or Uganda<sup>25</sup>. Most farmers are smallholders, operating at a subsistence level with an average farm size of 1.8 ha<sup>26</sup>. Cultivation is mostly by hand, (often carried out by women) which limits the area households can cultivate. Farmers usually do not use any synthetic fertilizer, quality seed, herbicide or pesticide, improved soil and water management practices, which, in part, account for the low yields. Other challenges include knowledge erosion, loss of diversification, poor production practices, destruction of tree crops, high cost of production particularly for labor and inputs, and underdeveloped infrastructure for transportation, irrigation, storage and processing. According to Food and Agriculture Organization of the United Nations (FAO) and United Nations World Food Program (WFP) data, only 2.6 percent of agricultural land was under cereal production in 2017, and cereal production area has not exceeded 3.6 percent of agricultural area since 2010. To meet its food security needs, South Sudan would need to significantly increase its productivity or double the cultivation area, both from very low levels, and reduce post-harvest losses currently as high as 40-50 percent. Moreover, conflict, violence and mass displacement continue to force farmers from their fields during key times in the cropping season. It has led to many abandoned farms and a breakdown in agricultural production to supply chains, knowledge and infrastructure. Agricultural markets and value chains have been disintegrated due to protracted conflict and violence, insecurity, looting, loss of assets and tools, significant decline in production, and depressed market demand. Furthermore, high costs and risks, and lack of working capital have forced many traders, processors, aggregators and middlemen out of business or to suspend their activities<sup>27</sup>. Nevertheless, following the signing of the CPA in 2018, the market activity has shown some signs of recovery, but the range of available goods and services remains very limited.
11. **Agriculture and food security in South Sudan are extremely vulnerable to climate shocks.** Key climate change factors include unpredictable rainfall pattern, recurrent droughts, floods and excessive heat resulting in crop failures and, hence, causing loss of livelihoods, food insecurity and famine<sup>28</sup>. Rainfall is one of the main climatic determinants of food production in South Sudan and some analyses suggest that, due to climate change, there has been a shift in the start and cessation of rainfall, leading to more erratic and unpredictable rainfall patterns<sup>29</sup>. Climate and disaster risk screening indicates that a combination of warmer and drier weather may exacerbate evapotranspiration and droughts, while projected increases in rainfall intensity may increase the risk of floods in Southern Sudan<sup>30</sup>. Changes in climate will also affect pest infestation patterns, destroy crops, damage productive infrastructure, and increase disease vectors. Increasing resilience is, therefore, inextricably linked to risk-sensitive, climate-adaptive knowledge,

<sup>24</sup> [https://wits.worldbank.org/CountryProfile/en/Country/UGA/Year/2018/TradeFlow/Export/Partner/all/Product/06-15\\_Vegetable](https://wits.worldbank.org/CountryProfile/en/Country/UGA/Year/2018/TradeFlow/Export/Partner/all/Product/06-15_Vegetable);  
[https://wits.worldbank.org/CountryProfile/en/Country/KEN/Year/LTST/TradeFlow/Export/Partner/by-country/Product/06-15\\_Vegetable](https://wits.worldbank.org/CountryProfile/en/Country/KEN/Year/LTST/TradeFlow/Export/Partner/by-country/Product/06-15_Vegetable);  
[https://wits.worldbank.org/CountryProfile/en/Country/SUD/Year/2017/TradeFlow/Export/Partner/all/Product/06-15\\_Vegetable](https://wits.worldbank.org/CountryProfile/en/Country/SUD/Year/2017/TradeFlow/Export/Partner/all/Product/06-15_Vegetable)

<sup>25</sup> <http://www.fao.org/faostat/en/#compare>

<sup>26</sup> FAO/WFP (2015), FAO/WFP Crop and Food Security Assessment Mission to Southern Sudan, Special Report.

<sup>27</sup> World Bank (2020), Reviving markets and market-linked agriculture in South Sudan. Draft document, March 16, 2020.

<sup>28</sup> WFP/VAM Nairobi Regional Bureau (2014), Climate risk and food security in South Sudan: Analysis of climate impacts on food security and livelihoods.

<sup>29</sup> FSC (Food Security Cluster), (17 June 2020), Situation Report

<sup>30</sup> <https://climateknowledgeportal.worldbank.org/country/south-sudan>.



skills and practices.

12. **This project will address the identified climate risks and vulnerabilities by prioritizing investments that help to increase agricultural resilience.** This will include building the capacity of farmers and institutions to implement climate-smart agriculture, strengthening the climate-smart agriculture knowledge base, improving access to drought-resistant seeds and other climate-smart technologies, climate-proofing infrastructure and supporting the Ministry of Agriculture and Food Security (MAFS) in integrating climate change into national policies and planning processes. To reduce Greenhouse Gas (GHG) emissions from project interventions, the project will also finance activities from the approved list in Annex A.C.1 of the Joint Report on Multilateral Development Banks' (MDBs) Climate Finance<sup>31</sup> and the World Bank's Guidance for Addressing Climate Change Corporate Commitments in Agriculture<sup>32</sup>. The project activities fully qualify as generating climate change mitigation co-benefits under the Joint Report's "Category 4.1. Agriculture: Agricultural projects that improve existing carbon pools", from the A.C.1 list of activities eligible for classification as climate mitigation finance. The GHG accounting results is summarized in Section IV, Project Appraisal Summary of this document.
13. **Farm production is hampered by the limited availability of and access to quality seeds and planting materials.** An assessment in 2018 showed that the informal seed sector contributed almost 85 percent of the overall seed sources used by the farmers, including own-saved (51 percent), local market (21 percent) and social network (13 percent). Despite the existence of about 13 local seed companies and a few agro-input dealers, their direct supply of seed to farm households is insignificant. The local production by seed companies could only meet about 15 percent of quality seed demand of adapted varieties in 2018. In general, seed aid remains the primary supply channel of quality seeds to farmers, and it contributes to about 14 percent of seed source use.
14. **Agricultural mechanization remains low in South Sudan.** The limited mechanization has resulted in the absence of production at scale and poor yields of main crops. Predominantly, large scale agricultural mechanization is limited to some areas of the upper Nile states, with production of sorghum and sesame as the major export crops to Sudan and other countries. Over the years, the government has provided over 400 tractors across the country to mechanize agriculture for increased food production and productivity<sup>33</sup>. This, however, has not significantly changed the traditional farming practices due to lack of well-trained technicians and tractor operators, spare parts, service centers, and associated equipment and implements. While use of animal traction has also been on the increase, limited supply of plough, spare parts, technical skill in addition to cultural perception on use of cattle for animal traction, have hindered wide adoption and use across the country. The primary objective of the government's Agricultural Mechanization Policy Framework (2012-2017) was to improve efficiency and effectiveness of agricultural production and related operations to sustainably increase crop production and productivity, household incomes, food security and rural economic development.
15. **While traditionally, women have been central to household farming, their contribution is neither understood nor appreciated** due to a prevailing patriarchal system that has led to women's marginalization. Men and women play complementary roles in agriculture, food and nutrition security, but women often end up with more tasks and more

<sup>31</sup> Joint Report on Multilateral Development Banks' Climate Finance (2019).

<sup>32</sup> World Bank (2018), Climate Change Requirements: Guidance Note for Meeting Corporate Requirements in Climate Smart Agriculture <https://worldbankgroup.sharepoint.com/sites/Agriculture/Knowledge%20Base/GuidanceNoteClimateChangeRequirementsAgriculturalOperations.pdf>.

<sup>33</sup> AfDB (2013), South Sudan: An Infrastructure Action Plan - A Program for Sustained Strong Economic Growth.



time at work. Roles and responsibilities vary across geographies and ethnic groups, and they are being reshaped by the effects of the armed conflict. Cropping is the main livelihood for 71 percent of female-headed households, followed by wage labor (10 percent). The gender gap in agriculture is found mainly on assets, inputs and services such as land, livestock, labor, education, information services, and technology, all affecting the capacity to protect communities from crises<sup>34</sup>.

16. **The COVID-19 outbreak and desert locust crises pose considerable threat to agriculture and food security in South Sudan.** Restrictions on movement, business and cross-border trade impacted commercial activity with Uganda and Sudan, the two main sources of agricultural inputs and food commodities for South Sudan, with a reduction of up to 70 percent of volumes of trucks entering South Sudan<sup>35</sup>. The current locust crisis, the worst to hit the country since 1961, represents an unprecedented threat to agriculture, food security and livelihoods, and could lead to further suffering, and displacement<sup>36</sup>. Changes in climate have led to increases in cyclones accompanied by water and warmth that encourage extensive proliferation of locust swarms. The continued and combined effects of these factors are expected to further worsen the food security situation across the country. Under the aegis of the International Development Association (IDA)-funded Africa Emergency Locust Response Program (P173702), a standalone operation Emergency Locust Response Project (ELRP, P174546) is under preparation with expected approval date of June 1, 2021 to control, mitigate and address short, medium- and long-term adverse effects of locusts on South Sudan.
17. **Agriculture has a fundamental role in producing food and generating income for changing levels of malnutrition and enhancing resilience.** The recent IPC estimates for 2020 shows that 1.3 million children and 352,000 pregnant and lactating women are subject to acute malnutrition, 292,300 people with severe acute malnutrition and another one million are facing moderate acute malnutrition<sup>37</sup>. Nutrition and resilience are strongly interlinked; households that are nutrition secure are better equipped to withstand external shocks. Nutrition-sensitive agriculture together with the entire food system, from inputs and production, through processing, storage, transport and retailing, to consumption, can significantly contribute to the eradication of malnutrition.
18. **Recognizing the significant role of agriculture in South Sudan's overall economic growth agenda, MAFS is undertaking critical measures for the development and transformation of the sector.** MAFS and associated ministries have developed a Comprehensive Agriculture Master Plan (CAMP) 2015, an Irrigation Development Master Plan (2015), National Agriculture and Livestock Extension Policy (NALEP) 2011 and several draft policies/bills on seed systems, livestock fisheries, nutrition and land administration. Implementation of these policies and plans is lagging and there are noticeable policy gaps that hinder agricultural growth including punitive intra and inter-county checkpoint taxation laws, and duty on imported agricultural inputs and equipment. Low government funding<sup>38</sup> for the agricultural sector does not allow for any meaningful investments in the research and extension systems needed to rebuild farming and food production in the country. Budget execution also continues to be problematic, with significant divergences between budgets and outturns. An FAO study in 2020 revealed that despite availability of technical staff, public provision of agricultural extension services is hardly functional and faces several challenges including lack of motivation and commitment of staff, absence of agricultural extension kits and

<sup>34</sup> FAO (2019), South Sudan Resilience Strategy 2019-2021.

<sup>35</sup> WFP, (March 2020), Likely Impact of Covid-19 Pandemic on Markets and Food Security in South Sudan.

<sup>36</sup> FAO (13 July 2020), Desert Locust situation update

<sup>37</sup> [http://www.ipcinfo.org/fileadmin/user\\_upload/ipcinfo/docs/IPC\\_SouthSudan\\_AFI\\_AMN\\_2020Jan2020July.pdf](http://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_SouthSudan_AFI_AMN_2020Jan2020July.pdf).

<sup>38</sup> World Bank (2020), South Sudan Economic Update Poverty and Vulnerability in a Fragile and Conflict Environment.



limited transport facilities. Efforts by development organizations (UN, NGOs) have minimally bridged the public extension gap.

19. **While humanitarian response saves lives and livelihoods, extreme food insecurity persists, and hence a new way of thinking is critical.** Humanitarian aid since 2012 has been significant, reaching over US\$1 billion per year as of 2019, with at least 75 percent going to food aid. Yet during the same time, the number of people at IPC-3+ increased from 9 to 60 percent. Development aid is, however, prone to political considerations as aid inflow declined by 27 percent between 2017 and 2018<sup>39</sup>. Furthermore, it appears that long-term dependency on humanitarian assistance has further exacerbated the food supply and demand constraints with decreased trade volume by 2.8 percent, since most aid programs do not work through local supply chains or procure food locally. Arguably, dependency syndrome could lead to local communities less willing to participate in their own development and farmers investing less in agriculture. The government, donors and development community recognize that South Sudan must be self-reliant and that there is an urgent need to start the transition from humanitarian aid to financing agricultural recovery and resilience building integrated with peacebuilding and conflict resolution efforts. This will require investments that go beyond meeting the short-term household food security needs, and that start rebuilding the productive and institutional base of agriculture in South Sudan. The World Bank is, therefore carrying out an Advisory Services and Analytics (ASA) exercise, *'Transforming Agriculture: from Humanitarian Aid to a Development Oriented Growth Path'* expected to be completed by end June 2021. The proposed project will coordinate closely with the ASA and incorporate the findings and recommendations, as appropriate.

### C. Relevance to Higher Level Objectives

20. The proposed project is well aligned with the CAMP that anchors the vision of South Sudanese Agriculture until 2040<sup>40</sup>. The CAMP recognizes that agriculture is an important driver of economic growth and employment generation and for alleviating food insecurity and poverty in South Sudan. The CAMP priorities include: (a) sequencing of development themes – reconstruction and recovery, food and nutrition security, economic growth and livelihood improvement, agriculture sector transformation, and the crosscutting and continuing theme of institutional development; (b) building human resource capacity; and (c) supporting the legislative and institutional frameworks fundamental to public service delivery and regulation of private sector activities and markets. The project will support CAMP by addressing the immediate need to resume crop production, particularly of cereals, which have underpinned food insecurity in the country. Enhancing agricultural production will help ease the country from food aid dependency while generating income for a large portion of the population. In addition, the project will support the institutional framework fundamental to a sustainable agriculture system in the longer term. Through these investments, the project will contribute to the Sustainable Development Goals (SDGs) on ending hunger, achieving food security and improved nutrition (SDG2), and SDG1 on ending poverty in all its forms. The proposed support will help beneficiaries build assets and income to graduate out of poverty, reduce local conflict and restore lasting peace. To the extent that the project will contribute to poverty reduction, it is also aligned with the World Bank's strategic goal of ending extreme poverty.

21. **The project will also support the South Sudan National Adaptation Program of Actions (NAPA) to Climate Change**

<sup>39</sup> OECD Aid at a glance Charts, retrieved Sept. 11, 2020. <https://www.oecd.org/countries/southsudan/aid-at-a-glance.htm>.

<sup>40</sup> CAMP was prepared under the framework of the Comprehensive Africa Agriculture Development Program (CAADP) to achieve continental and regional agricultural development objectives.



**and Nationally Determined Contributions (2017) (NDC).** The proposed project will contribute to all Priority Adaptation Projects of NAPA: (i) Environment: Promotion of reforestation and agroforestry to reduce vulnerability to droughts and floods; (ii) Agriculture: Promotion of climate-smart agricultural techniques to improve livelihoods and food security under changing climatic patterns; (iii) Disaster risk reduction: Establish improved drought and flood Early Warning Systems through improved hydro-meteorological monitoring network; and (iv) Policy and Institutional Framework: Strengthening institutional capacity of the government to integrate climate change into national policies and planning processes. Regarding the NDC, the proposed project will contribute to Pillar 1.2 Afforestation and Reforestation and Pillar 2.1 Agriculture and Livestock and Pillar 2.3 Adapting Vulnerable Communities to Climate Change.

22. **The project is closely aligned with the World Bank's climate change and resilience agenda.** Climate change, as manifested by rising temperatures, increasing climate variability, and a growing frequency and intensity of climate-related disasters, heavily affects vulnerable populations. These populations are often more affected, lose more when hit, and generally receive less support to cope and recover<sup>41</sup>. The World Bank (WB) Action Plan on Climate Change Adaptation and Resilience (2019) acknowledges the urgency of the adverse development impacts of climate change, especially in Fragility, Conflict and Violence (FCV) countries. The project is also aligned with the Next Generation Africa Climate Business Plan (2020) that calls for bold, development centered climate actions to address food insecurity, climate vulnerability and other challenges. The proposed project will support these goals by implementing climate change adaptation and mitigation activities, as well as activities that will reduce greenhouse gas emissions in the agricultural sector.
23. **The project is also in line with the objectives of the World Bank Group Country Engagement Note (CEN, P169369) for South Sudan for FY2021-22,** currently under preparation, that pursues development approaches in FCV settings, while gradually moving away from humanitarian aid dependence. The CEN incorporates three focus areas, the objectives of which also intend to meet the challenges posed by COVID-19 pandemic: (i) laying groundwork for institutional building; (ii) continuing support to basic service delivery; and (iii) promoting resilience and livelihood opportunities. These are expected to provide a platform for implementing the World Bank Group's global approach to addressing the pandemic's impact. Support proposed under Focus Area 3 includes reference to the World Bank Group's program that will support resilience among citizens confronted with multiple shocks and enhance livelihood opportunities, with a focus on food security and social protection.
24. **The WB portfolio has been retrofitted and adapted to the COVID-19 context.** In response to the Government of South Sudan's request and to help the country better manage the COVID-19 pandemic and strengthen national systems for public health preparedness, the World Bank, on April 6, 2020, activated the Contingent Emergency Response Implementation Plan (CERIP) of US\$7.6 million under the Provision of Essential Health Services Project (P168926). CERIP is being implemented in partnership with United Nations Children's Fund and finances priority activities of South Sudan's national COVID-19 Preparedness and Response Plan to develop counter measures to limit the transmission and thus reduce the COVID-19 potential overwhelming effects on the country. Specifically, it finances the procurement of medical supplies and equipment, strengthens the infection prevention and control measures, provides training to health workers and improves health screening at points of entry. The plan also supports risk communications and information outreach activities to encourage behavioral change, such as social distancing and hygiene. Given the country's projected fall in growth, increased unemployment, increased food

<sup>41</sup> Hallegatte, S. et al (2017), Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters. Climate Change and Development Series. Overview booklet. Washington, DC, World Bank.



insecurity and overall expected increase in poverty, the proposed project will be an important intervention during the recovery phase by promoting resilience and livelihood opportunities and addressing food security concerns through improved agricultural production. The project, therefore, provides essential support for COVID-19 affected population during the recovery phase.

25. A technical assessment review of the deteriorating food insecurity situation in the country, submitted under the local activation approach, concluded that South Sudan meets the technical requirements for an eligible food security event under the Crises Response Window Early Response Financing (CRW ERF). Accordingly, an amount of US\$12.5 million of CRW-ERF has been allocated to the proposed project to facilitate transitions from humanitarian support to recovery and resilience by: (i) investing in local institutions and technology; promoting knowledge, skills, access to inputs, and solutions to reduce losses; and enhancing food production and resilience at the farm level; and (ii) providing longer-term solutions at the field and institutional levels to ensure sustainability of outcomes.
26. **The proposed project complements previous and ongoing projects funded by the WB and development partners** including: (a) expanding efforts to support recovery of agriculture initiated under the WB Southern Sudan Emergency Food Crisis Response Project (P113586) and the South Sudan Emergency Food and Nutrition Security Project (P163559); and (b) building on the community mobilization developed under the ongoing WB Enhancing Community Resilience and Local Governance Project (P169949) and the South Sudan Safety Net Project (SSSNP, P169274). Working through the Partnership for Recovery and Resilience (PfRR) (2018), the proposed project will also coordinate and collaborate with similar projects by bilateral donors, the European Union, UN, and African Development Bank (AfDB) including Building Food System Resilience in Protracted Crises (Netherlands); Strengthening the Livelihoods Resilience of Pastoral and Agro-Pastoral Communities in South Sudan's Cross-Border Areas with Sudan, Ethiopia, Kenya and Uganda (The European Union); Sustainable Agriculture for Economic Resiliency (United States Agency for International Development (USAID)); Emergency Livelihood Response Program (Norway); Improving Resilient Livelihoods through Food and Nutrition Security of Vulnerable Communities, especially women-headed households in Wau and Torit States of South Sudan (Sweden); Strengthening the Capacity of Smallholder Farmers in Vulnerable Regions for Disaster Risk Management and Climate Resilient Agricultural Practices (Switzerland); Building Resilience through Asset Creation and Enhancement - Phase Two (United Kingdom Aid Direct (UKAID); Humanitarian Response and Resilience in South Sudan (UKAID); and Rapid livelihood assistance to flood affected populations in South Sudan (FAO).
27. **The proposed Resilient Agricultural Livelihoods Project (RALP) will be the flagship project of MAFS that is expected to jumpstart agricultural production to get farm families working and earning income and to lower food prices in local markets.** It is, thus, expected to contribute to improving national and subnational food security by increasing the availability of the core basket of foods in the local diet. It will invest in capacity building, skills enhancement, agriculture extension, seed systems and productive assets. The project will also develop messages to promote behavior change to improve nutrition outcomes among the most vulnerable, such as infants, pregnant women, and nursing mothers. Progress towards improved nutrition will be tracked through FAO's Food Security Information Systems activities such as the Food Security and Nutrition Monitoring System among others. The primary objective of the project, however, remains increasing agricultural production and productivity. As farmers adopt new technology, markets strengthen, and policy and institutions develop, future investments could focus more on achieving nutrition impact.

## **II. PROJECT DESCRIPTION**

### **A. Project Development Objective**

28. In the backdrop of the prevalent FCV environment and ongoing localized conflict in the country, the World Bank is engaging with the government with a flexible approach so that the necessary adjustments can be made along the way according to the evolving situation. The proposed project puts increased production and climate resilience at the core of agricultural growth in South Sudan. It strives to move support from humanitarian assistance to self-reliance by: (i) promoting knowledge, skills, access to inputs and solutions for enhancing production and resilience at farm level; and (ii) providing longer-term solutions at the field and institutional levels to ensure sustainability of the outcomes. This approach is reflected in the project design, ensuring that investments promoted by the project and efforts to reduce farmers' climate vulnerability, enhance their resilience and ensure that smallholder farming becomes and remains a financially viable economic activity. The project will also contribute to reducing conflict, especially over access to resources, nurturing social harmony and promoting peace at the local level.
29. While the agricultural development agenda is vast, the proposed project is envisaged as a first step towards transforming South Sudan's agriculture. The myriad political, social and economic challenges facing the country require a gradual and sequenced approach to revitalizing the sector. RALP, therefore, has been designed to address the key constraints upstream in the value chain that constitute the fundamental building blocks of a vibrant agriculture and food system, that is, strengthening farmer capacity and improving farm production. The proposed project focuses on the crop sub-sector as a first-phase effort in support to the sector. It is expected that building on the successes of the proposed interventions, future operations can help to expand and scale up support for achieving commercialization and competitiveness in remunerative crop and livestock agricultural value chains for longer-term positive impacts towards sustainable economic growth and development.

### **PDO Statement**

30. The project development objective (PDO) is to strengthen capacity of farmers and their organizations and improve agricultural production.

### **Project Development Objective Indicators**

31. The achievement of PDO will be measured against the following proposed key outcomes:
- a) Increase in production volume of select crops (sorghum, maize, groundnuts) amongst target beneficiaries (percentage).
  - b) Increase in farming area (hectares).
  - c) Targeted farmers adopting improved agricultural practices (percentage out of total number of farmers reached with productive assets and services).
  - d) Increase in the number of farmer organizations that are active.

## B. Project Components

32. The project comprises the following four components:

### **Component 1: Capacity Building in Good Agricultural Practices (US\$21 million equivalent)**

33. The objective of this component is to mobilize and build the capacity of targeted farmers and extension services to improve adoption of climate-smart agriculture, increase agricultural production and enhance adaptive capacity to climate risks. The key interventions are as follows:

#### ***Sub-component 1.1: Formation and Strengthening of Farmer Organizations (US\$9.66 million equivalent)***

34. Farmer adaptive capacity is a function of the ability to access, organize or reorganize resources, and of linkages to farmer organizations that influence their access to the necessary resources to adapt to climate change. This project will build climate resilience by increasing farmer's adaptive capacity and access to resources through proper functioning of farmers' organizations (FOs). FOs will act as sources of information, learning platforms, and social support that farmers can rely on when dealing with climate change and adoption of climate-smart agriculture. FOs can influence farmer adaptive capacity through extension services, providing farmers with learning opportunities that enhance their adaptive capacity for climate-resilience. This sub-component will support the formation of new FOs and build the resilience of existing ones<sup>42</sup> through capacity building and providing resources and infrastructure required to make them fully functional. These groups will range from village-level (*boma*<sup>43</sup>) farmer groups to *payam*<sup>44</sup> and county-level organizations or cooperatives according to the interests, objectives as well as resilience and business needs of the members. Bringing farmers together into organizations and cooperatives will enable them to harness the multi-fold benefits of group activity including increased access to inputs, knowledge and skills, modern technologies, extension services, farm labor and personally-relevant information for adapting to climate and weather variability. Interventions will be designed to enhance the capacity of FOs and Cooperatives to address the ongoing climate urgency in the agricultural sector. Training will be provided to enable the farmers to better understand climate risks and apply coping methods both from an adaptation and mitigation perspective<sup>45</sup>. Those FOs that are well-established at the village-level, as well as those that become viable with project support, will be encouraged to federate into cooperatives which would serve to enhance their farming operations and increase their level of competitiveness. Cooperatives in South Sudan are registered entities with an official standing and, therefore, membership in these associations will provide farmers with additional leverage and bargaining power for enhanced access to credit, inputs and extension/advisory services. The project will provide capacity building support to FOs and Cooperatives in order to ensure their effective functioning and sustainability. Training will be provided on a range of issues, including, leadership, codes of governance, conflict resolution, capital formation through savings, financial management, basic accounting and bookkeeping, business planning and marketing.
35. The project will promote a gender-responsive approach to climate-smart agriculture by assessing the gender division

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<sup>42</sup> A rigorous mobilization effort will raise awareness of the project and its goals. Mobilization will draw on existing *Payam* and *Boma* development plans and identify what services other programs are already providing in the community to avoid duplication.

<sup>43</sup> A *boma* is the lowest level administrative division below *payam*.

<sup>44</sup> A *payam* is the second-lowest administrative division under county. A *payam* is required to have a minimum population of 25,000

<sup>45</sup> As a co-benefit to many of the adaptation options.



of labour and gendered benefits on a farm, accessing inputs, land preparation, sowing, pest and weed management, harvesting, sorting, value addition, and transporting, in each project area. Gender-responsive Climate Smart Agriculture (CSA) technologies will include: (a) those based on needs and interest of both female and male farmers; (b) those that reduce time and labor for women farmers; and (c) those that are accessible and affordable to both men and women. Females, besides their largely unpaid agriculture work, are responsible for “care work”, for example, all household chores, caring for children, elders, and the extended family; and contributing to community activities. Special efforts will be made to promote recognition of women’s role in agriculture; ensure that women have equal access to agricultural inputs, services and benefits; and minimize risks of GBV, in particular Sexual Exploitation, Abuse and Sexual Harassment (SEAH). Training will be provided on the importance and contribution of women in agriculture, women empowerment and equal opportunities to women, girls’ education, management of GBV risks faced by the project communities. The project will encourage the inclusion and proactive participation of women and youth in farmer organizations, so that at least 30 percent of key management committee positions are held by women, as well as the formation of women and youth specific interest groups. Most women do not have access to extension services as their interactions are restricted to informal groups in *bomas* due to mobility constraints and care burden compared to men who are able to interact in groups beyond their communities. Although traditional knowledge and skills, transmitted from parent to children, are often valuable, access to new skills and practices is imperative given the changing environment with new opportunities and challenges in South Sudan. Interactive approaches (demonstration gardens, face-to-face interactions, pictorial, video and audio materials) suited for women given their low literacy levels will be used and tailor-made to offer practical learning sessions in local languages for each specific topic. Training will be delivered in proximity to the community, at a time when women will be able to attend, in a format that does not require literacy, and with childcare facilities as needed to encourage their attendance. Similarly, special attention will be accorded to the inclusion and participation of youth in the project interventions, including training and skills enhancement for providing more socioeconomic opportunities to them.

36. To promote effective functioning of FOs, the project will finance infrastructure and equipment<sup>46</sup> and ensure meaningful participation of all farmer households through its community engagement framework. All infrastructure will be climate-proofed to enhance their resilience and adaptation to climate change. Changes in weather and climate may impact infrastructure design thresholds for safe and efficient operation. Design thresholds, which traditionally have been developed according to historical environmental conditions, vary and may be set by physical limitation, regulations, contract, or social acceptance<sup>47</sup>. Assessing climate and weather-related risks is critical to the sustainability of infrastructure investments. Climate-proofing of infrastructure will, thus, be informed by climate and weather data, vulnerability assessment, and documented impacts of climate change on the infrastructure. Gaps in climate adaptation measures (past and present) will be assessed with a view to informing the design of the infrastructure and making them resilient to climate change. Climate-resilient materials will be used for the construction of houses and storage facilities, while energy efficient designs will be incorporated to minimize carbon emissions. Solar panels will also be installed for improved energy efficiency, thereby further contributing to emissions reduction.
37. Initially, village-level infrastructure would be a simple Farmer organization Center (FC) as a common space for farmers (and communities) to interact, network and conduct business. In the long run, depending upon the farmers’

<sup>46</sup> The project will not finance/support any World Bank declared negative activities/interventions. The list of World Bank declared negative activities/interventions will be added to the project implementation manual.

<sup>47</sup> [https://www.weadapt.org/sites/weadapt.org/files/investment\\_guide\\_1.8\\_single\\_hi-q\\_17012018.pdf](https://www.weadapt.org/sites/weadapt.org/files/investment_guide_1.8_single_hi-q_17012018.pdf)



business needs, the FC, managed by the farmer organization, is envisaged to develop into a multi-purpose center for the benefit of farmers, including, *inter alia*, office space for farmer groups; a business venue for farmers, off-takers, communities; a training center (see sub-component 1.2); storage space for agricultural commodities and goods (such as grain and machinery); processing and value addition center and a rental space for social events, with the rent proceeds being used for operational costs. The FCs could also serve as a hub for youth incubation and provide entrepreneurial opportunities for youth in CSA. Additionally, it could act as a facility for public awareness activities related to the project as well as for the dissemination of CSA knowledge and community-related topics of interest to the farmers/communities through print media, posters, pamphlets, brochures and video recordings. The project will support the provision of equipment to enable the centers to become operational and overtime the farmer groups could invest their resources to expand it according to their business needs. The project support would include, for example, computers, desks, chairs, printers, projectors, weighing scales for produce. For security purposes, all FC premises would be surrounded by a compound wall and equipped with metal doors. The installation of solar panel roofs, as the primary source of energy, would be encouraged for energy efficiency and to demonstrate the benefits of renewable energy to communities, thereby providing mitigation co-benefit.

***Sub-component 1.2: Improving Farming Knowledge and Skills (US\$11.34 million equivalent)***

38. This sub-component will focus on increasing the knowledge and skills of farmers, extension staff, and agriculture officials in well-tested and proven agricultural practices including CSA, technologies and tools to enhance farm productivity as well as strengthen farmers' resilience and adaptive capacity to climate change and variability, and reduce emissions from agricultural production. The project will focus on advising farmers to grow high value crops such as sesame, groundnuts, legumes for cash income and staple crops for self-consumption and increased food security. Working consultatively with farmers, the project will identify knowledge gaps and areas for training related to all segments along the value chain of these crops, viz. planning, production, harvesting, storage, processing and marketing. This analysis will inform the training curricula and topic-specific training modules on Good Agricultural Practices (GAP). Climate risk-sensitive and resilience enhancing CSA planning tools and technologies, with due regard to the role of women, will be included as an integral part of the training program to strengthen farmers' capacity to address climate-related events such as floods and droughts. These would include, *inter alia*, participatory climate-sensitive training and climate services for agriculture, improved and stress-tolerant crop varieties (high yielding varieties, nutrient dense crops, heat, drought and pest and disease resistant varieties); flood water management, conservation agriculture and integrated soil fertility management (minimum tillage, crop rotations, crop residue management, soil fertility management practices); irrigation (surface irrigation, drip irrigation, sprinkler irrigation, water harvesting); and agroforestry schemes (establishment of tree nurseries, fruit tree cultivation, windbreaks, hedgerows, fodder stress, farmer-managed natural regeneration).
39. In consideration to the increasing number of households facing acute food insecurity (IPC3 and above), awareness raising about locally available nutritious foods and training on nutrition-sensitive agriculture will be mainstreamed into the curricula to increase the knowledge and skills for production and consumption of nutrient-dense foods and promote dietary diversity among rural households. Both short and medium-term strategies to address the targeted household's immediate food needs, fill the knowledge gap and strengthen the skills base for the production of a diversity of foods to contribute to household nutrition self-sufficiency would be developed. This would include: (a) training on the *Five Color Agricultural Approach*, a color-based vegetable and fruits cultivation and consumption approach developed to prevent malnutrition and increase agricultural productivity as well as substitution of a more nutritious variety of a crop already grown for consumption (for example, substituting yellow vitamin A maize for white maize or orange-flesh sweet potato for regular cassava); (b) practical demonstrations on improved food



practices and utilization (handling, food loss and waste prevention, food quality, safety and hygiene); (c) introduction/promotion of appropriate technologies and implements for food preparation, processing and preservation and storage such as energy saving cook stoves, solarized dryers for vegetables; and (d) social behaviour change communication for vulnerable households to better manage their food resources for self-sufficiency. The location, timing and mode of training will be determined to incentivize maximum women participation.

40. Given the lack of extension staff at the *payam* and *boma* levels, the project will adopt a three-pronged approach to delivering effective advisory services to farmers: (a) hiring and training of two extension agents, one for climate-smart crop production and protection and a second for farmer group mobilization and organization, totaling approximately 28-30 extension agents; (b) supporting community-based extension systems to deliver relevant knowledge and skills to farmers for improved agricultural production and climate resilience; and (c) building capacity of Country Agriculture Development (CAD) extension staff. Through a Training of Trainers' (ToT) program, the project will develop a cadre of qualified trainers and provide intensive training to identified lead farmers, extension agents, CAD extension staff, relevant NGO staff and community resource persons with the goal of enabling them to deliver effective and quality extension services to farmers. In addition to the provision of classroom training, field-based learning will be emphasized to provide hands-on training and encourage uptake of the demonstrated climate-smart technologies through the "seeing is believing" approach. The training would be imparted through a variety of mechanisms, including Farmer Field Schools, workshops, field demonstrations as well as regional/international study tours to benefit from regional and global knowledge and experiences.
41. This approach is expected to achieve the dual objectives of national capacity building by strengthening state/county and community human resource capacities in delivery of extension services to farmers while facilitating the implementation of the project. Based on the target counties, these county extension staff will be accountable to and work closely with the project staff and will return to their respective county offices after the project closure. The institutional capacity building of CAD offices will also include the provision of small pieces of equipment considered essential to the functioning of an effective advisory service, including but not limited to laptops, printers, copying machine, camera, cell phone; and financial support to the travel and subsistence budgets of the extension agents to enable them to undertake field visits as necessary in the implementation of their terms of reference.

## **Component 2: Investment Support for Improved Agricultural Production (US\$35.16 million equivalent)**

42. The objective of this component is to move the farmer beyond subsistence to climate-smart agricultural value chains that increase production for household level food security as well as producing surplus for market. The component will capitalize on the training received under component 1, and contribute to generating income and improving livelihoods under changing climatic conditions with the concomitant benefits of a better quality of life through meeting basic household needs as well as expanding their productive activities for longer-term economic prosperity. The component will enhance farmers' access to climate-smart agricultural inputs and other appropriate climate-smart technology, implements and tools to enhance agricultural production, value addition, and resilience. The project will work towards helping farmers engage in farming, expand their production area, adopt new technologies and implement and build an asset base for improved livelihoods. The component comprises the following key climate resilience-building interventions:



### ***Sub-component 2.1 Increasing Access to Food for Household Facing Acute Food Insecurity (US\$12.5 million equivalent)***

43. Given the food security crisis affecting the country, RALP will rapidly provide inputs, assets, and support to targeted households (IPC-3+) so that they are able to start growing food to meet their immediate needs. To ensure that all the targeted households in the RALP counties have immediate access to the required inputs, the project will coordinate with the SSSNP and other relevant initiatives that are focusing on stabilizing the households facing food insecurity (IPC-3+). The households will be supported to purchase the required inputs including: (a) seeds and samplings for kitchen gardens, growing indigenous vegetables (tomatoes, onions, amaranth, okra, mushrooms), seasonal fruits to meet the immediate food needs of the family; and b) small assets including poultry and small ruminants which have short gestation periods, and bring in immediate benefits in form of eggs, milk and meat for consumption by the household. Importantly they provide surplus for sale, a source of income to the household, providing a cushion against future shocks. This has proven to improve the food security of the household in a short time and enable them to re-engage in crop production by the next planting period.

### ***Sub-component 2.2: Increasing Availability of Quality Seeds (US\$12.66 million equivalent)***

44. One of the most effective ways to adapt to climate change on the farm is to switch crop varieties, and climate-smart seeds help both to adapt to climate change and increase climate resilience of farmers. The primary purpose of this sub-component is to increase local production, trade and use of good quality, climate-smart seeds and planting materials by farmers. A two-pronged strategy of Community-led Quality Declared Seed (QDS) production system and Farmer-led Seed Enterprise Model (FLSE) will be deployed. QDS will promote community-based, climate-smart seed propagation and bulking, and the formation of farmer-managed seed banks and seed cooperatives to increase local trade in good quality, climate-smart seeds. FLSE will support farmer-led contract climate-smart seed production with private seed companies and the establishment of seed aggregation centers to link with seed out-growers and enterprises engaged in seed development, multiplication and distribution/sales. The project will also improve carbon sequestration and climate mitigation by promoting tree planting and supporting agroforestry practices on degraded landscapes. Bush fires will be reduced through forestry extension, thereby reducing GHG emissions.
45. The project will work closely with MAFS and CAD for variety testing, especially climate-smart (drought tolerant, flood tolerant) and biofortified varieties to confirm the suitability of the seed to the intended agro-ecological zone, release of improved crop varieties and on-farm trials. The project will access foundation seed of approved varieties in collaboration with MAFS and institutions such as the Consultative Group on International Agriculture Research centers<sup>48</sup> (International Institute of Tropical Agriculture (IITA), International Centre for Tropical Agriculture (CIAT), International Maize and Wheat Improvement Centre (CIMMYT), neighboring National Agricultural Research Systems, and the Alliance for Green Revolution for Africa (AGRA). Additionally, the project will assess capacities and needs for producing different classes of seeds; support collection, profiling, conservation and multiplication of local landraces; register community seed producers and seed out-growers.
46. Customized training, skills enhancement programs and infield seed extension support will be provided to improve productivity and climate benefits to project beneficiaries. Training will be provided to community seed producers, plant breeders and seed out-growers on topics like climate change and climate-smart agriculture, GAPs, post-

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<sup>48</sup> Such as The International Institute of Tropical Agriculture (IITA), The International Centre of Tropical Agriculture (CIAT), and International Maize and Wheat Improvement Centre (CIMMYT).



harvest handling and management, as well as exchange visits to develop technology generators. Furthermore, to kick-start seed production, the project will provide seed production tools, post-harvesting and processing equipment with Operation and Maintenance (O&M) backup to seed growers. Postharvest handling will entail the implementation of climate-smart pest prevention approaches to discourage the establishment and development of pest populations. Climate Smart Pest Management is an approach that aims to reduce pests and diseases-induced crop losses, enhance ecosystem services, reduce greenhouse gas emissions and strengthen the resilience of agricultural systems in the face of climate change<sup>49</sup>. Postharvest handling in priority crops will help to minimize pest-induced losses, reduce perishability and the associated methane emissions from rotten food. By reducing food losses, postharvest handling will help to increase resilience of farmer livelihoods and overall local and national food security to climate change.

47. Furthermore, the project will provide capacity building training to the MAFS staff to fully operationalize the Ministry's seed testing laboratory being set up with the assistance of AfDB. In coordination with AfDB the lab staff's training needs will be identified and training events will be organized to ensure that staff is adequately trained, and the lab becomes operational as soon as it is fully equipped.

### ***Sub-component 2.3 Enhancing Access to Technology and Mechanization (US\$10 million equivalent)***

48. This sub-component aims to raise awareness and accelerate the adoption of modern farm technologies, mechanization, the use of renewable energy for farm power thereby reducing GHG emissions. The sub-component will provide the much-needed financial support to target FOs and farmers for investments to increase agricultural productivity, agroecosystem resilience and value addition under changing climatic conditions. The project team, in collaboration with FAO and CAD, would conduct a rapid assessment of the technological and mechanization needs of farmers in project areas, with special attention to women and youth, for improving production, postharvest handling and storage, and guide and develop, in consultation with the FO, a menu of appropriate, location-specific equipment needs along with a cost recovery plan of depreciation, operational and maintenance costs and requisite training and skills to ensure that it is well managed, climate-smart and sustainable. The menu of technological and mechanization support will be guided by climate change considerations and other factors related to environmental and economic sustainability, as well as risk-sensitivity. The project, in collaboration with suppliers within the private sector, will support demonstration of selected farm technologies and tools in the project areas to create a demand for their uptake by farmers.
49. Financing support in the form of assets will be provided to FOs and Cooperatives who meet the eligibility criteria<sup>50</sup> (included in the project implementation manual) from a menu of suitable inputs and activities, including, *inter alia*, farmer organizations that have climate training readily available or promote and utilize climate-smart seeds, adoption of climate resilient and adaptive technologies such as shade nets, tunnel houses, drip irrigation kits, water storage equipment, improved seed varieties and seedlings, agro-processing, packaging and storage equipment, small farm implements, machinery and relevant equipment, where these investments lead to increased production and marketed surplus for the selected value chains. The project will encourage sourcing and procurement of inputs, equipment and technologies from local companies where after sales services and spare parts will be made available.

<sup>49</sup> <http://www.fao.org/3/BU464EN/bu464en.pdf>

<sup>50</sup> Provision of the farm mechanization technologies will be determined against several criteria, for example, beneficiaries must be in groups and guided to submit a proposal detailing the rationale and justification for the equipment and demonstrate the availability of resources for the operation and maintenance of the productive asset.



50. The project will also support local artisans and youth in the production and maintenance of farming tools and equipment. One of the key challenges to agricultural mechanization in South Sudan is the lack of after-sale services, spare parts and skilled technicians for implements and tools. The project will offer skills enhancement training and kits to interested artisans and youth on production, operation and maintenance, and repair of old and newly introduced equipment and tools that would require replacement of parts. This will also provide opportunities for self-employment and jobs in agricultural inputs, services, agro-logistics, as well as off-farm opportunities to project beneficiaries, with special attention to engaging, selecting and training eligible youth (both males and females).

### **Component 3: Project Management and Technical Assistance (US\$6.34 million equivalent)**

51. The proposed grant is processed under the World Bank Policy for Investment Project Financing, paragraph 12: Projects in Situations of Urgent Need of Assistance or Capacity Constraints due to conflict, impending natural disaster and capacity constraints. With the formation and continuation of the National Unity Government, the World Bank and the Government of South Sudan have agreed to begin moving to normalization of the World Bank's lending portfolio in the country after adopting alternative implementation arrangements in August 2018 (renewed in January 2020). MAFS was one of the better performing ministries of the government prior to the alternative arrangements being adopted. RALP is one of two projects that will be implemented through the government for the first time since August 2018. This shift is an important milestone for strengthening the government institutions and country systems, in this case MAFS to improve its role and functions for development and transformation of the agriculture sector and to effectively manage its resources, programs, and projects. The objective of this component is, therefore, to provide support to the MAFS for making the necessary arrangements for implementation of the project and to extend technical assistance and capacity building support to strengthen its policy, planning, managerial and technical role and functions. The key interventions are as follows:

#### ***Sub-component 3.1: Project Management and Coordination (US\$4.34 million equivalent)***

52. MAFS will be the implementing agency for the project. This component will, thus, cover the costs associated with project management and implementation support, including financial management, procurement, scoping and monitoring of project environmental and social risks and impacts as well as undertaking social assessments to address provisions under Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities (ESS7) and commitments in the Environmental and Social Commitment Plan (ESCP), and overall Monitoring and Evaluation (M&E). This component will also finance a Third-Party Monitoring (TPM) mechanism, the establishment and maintenance of a Grievance Redress Mechanism (GRM) and conducting Gender-Based Violence/Sexual Exploitation, Abuse and Harassment (GBV/SEAH) risk assessment and consequent development and implementation of a GBV/SEAH Action Plan. It will be ensured that there is necessary staff, that is, environmental specialist, social specialist and GBV Specialist to ensure: (a) effective implementation of the project activities in compliance with the requirement of the Environmental and Social Framework (ESF); (b) Environmental and Social (E&S risk) management, regular E&S implementation progress reports; and (c) oversight from Third Party Monitoring Agent (TPMA).

#### ***Sub-component 3.2: Technical Assistance and Capacity Building Support to Ministry of Agriculture and Food Security (US\$2 million equivalent)***

53. The project will support Technical Assistance (TA) and capacity strengthening of MAFS, CAD and select associated departments in priority policy making including integrating climate change into national policies and planning



processes and other technical areas. Integrating climate change into national policies will address the following areas: (a) Data and knowledge generation and sharing for evidence-based planning and informed decisions on climate change impacts, local vulnerability, and GHG emissions from different production and agro-ecosystems; (b) developing adequate national policy frameworks for governing seed systems, and strengthening institutions and coordinating responsibilities for adoption of climate-smart agriculture; (c) qualitative changes in land and water management to address climate-change threats and enhance the resilience of ecosystems; (d) capacity building at the local level to complement the adoption and dissemination of climate-smart technologies and practice; and (e) strengthening climate and disaster risk reduction through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people, better management of land and the environment and improved preparedness for adverse events.

54. The project will commission a capacity needs assessment exercise, identify priority training areas and arrange training for the officials and technical staff. The topics would include, *inter alia*, policy formulation and objective setting, budget planning and execution, expenditure tracking towards the achievement of stated objectives, financial management, procurement, monitoring and evaluation and technical issues such as crop production and protection, food safety, nutrition, agricultural technology. To the extent feasible, capacity building of agriculture officials and staff would be coordinated with ELRP and the similar projects funded by other development partners, especially International Fund for Agricultural Development (IFAD) is interested to join hands.
55. This sub-component will also finance costs associated with the provision of TA and training for the MAFS staff with respect to World Bank ESF, fiduciary and M&E requirements. There will be technical capacity building of extension staff at the national level and in project areas to support the government in progressively developing technical expertise and competence to coordinate, monitor, evaluate and implement agricultural programs and projects.

#### Component 4: Contingent Emergency Response (zero allocation)

56. In the event of an eligible crisis or emergency, this contingent component will provide immediate and effective response to said Eligible Crisis or Emergency, defined as “*an event that has caused, or is likely to imminently cause a major adverse economic and/or social impact associated with natural or man-made crises or disasters*”<sup>51</sup>. A formal declaration of a national emergency by the government will trigger the Contingent Emergency Response Component (CERC) which will allow undisbursed and uncommitted funds from other project components to be reallocated to finance the emergency response. The World Bank’s assistance may consist of immediate support in assessing the emergency’s impact and developing a recovery strategy or the restructuring of existing, or provision of a new, Investment Project Financing (IPF). In all cases, the World Bank would adapt its rapid response in form and scope to the emergency circumstances, in line with the World Bank Group’s Country Partnership Framework for the country. To ensure that this component operates effectively, a Contingent Emergency Response Manual will be prepared as part of the Project Implementation Manual (PIM), detailing the fiduciary, safeguards, monitoring and reporting, and any other necessary implementation arrangements in the event of a specific eligible disaster.

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<sup>51</sup> Eligible emergency is defined in OP 8.00, Rapid Response to Crises and Emergencies.

### C. Project Locations

57. The project is targeting those counties that have high agricultural potential, relatively good security situation and potential to generate rapid supply response. In due consideration to the above and based on the Project Targeting Index (PTI) developed for all WB projects in South Sudan, in consultation with the MAFS, implementing partners, county-level participatory planning committees, and within the context of the community engagement framework, a customized criteria to identify and prioritize a list of potential locations and to give enough flexibility, if insecurity requires the project to pull out of one location, is provided in table 1. Accordingly, targeted data (coordination, need, potential, connectivity and security) will be used to identify priority counties and *payams* which are safe for implementation. The project will use a phased approach which is contingent on the security situation on the ground.

**Table 1: Criteria for Selection of Project Location**

Need (Vulnerability)	Potential (For agricultural production)	Access	Equity	Catalytic and complementary program	Footprint of Service Providers
<ul style="list-style-type: none"> <li>• Poverty rate,</li> <li>• Food insecurity,</li> <li>• Malnutrition,</li> <li>• Returnees, IDPs.</li> </ul>	<ul style="list-style-type: none"> <li>• Suitability of area for agricultural production as defined by agro-ecological or livelihood zone or both.</li> </ul>	<ul style="list-style-type: none"> <li>• Physical access road, river, and air (including seasonality).</li> <li>• Security consideration for both beneficiaries and service providers.</li> </ul>	<ul style="list-style-type: none"> <li>• Population density of farmers.</li> <li>• Number of ongoing program investments compared to other regions.</li> <li>• Spread across political and ethnic groups.</li> </ul>	<ul style="list-style-type: none"> <li>• Farm inputs (seeds).</li> <li>• Social safety nets.</li> <li>• Markets.</li> <li>• Main and feeder roads.</li> <li>• Soil and water management infrastructure.</li> <li>• Financial services, etc.</li> <li>• Downscaling of climate information.</li> </ul>	<ul style="list-style-type: none"> <li>• Public</li> <li>• Private</li> <li>• Civic Organizations and Community Based Organizations (CBOs)</li> </ul>

58. Based on the above criteria, a total of 13 counties across nine states have been identified for the project (map in annex-1). In due consideration to the volatile political economy of the country, the project, in the first phase, will start implementation in eight relatively more stable and accessible counties which offer considerable promise to pilot test and scale up the project approach and interventions. Based on the experience and learning under phase 1, the project will expand its interventions to another five counties. The project will contact the county authorities and relevant institutions to get more granular data on which *payams* are safe for implementation. It would include ensuring that the: (a) *payam* is free from conflict; (b) risk of spillover of conflict in neighboring *payams* is low; (c) transport corridor to the implementation area is secure; and (d) *payam's* communities are willing to participate in the project and will protect the project implementers and implemented assets. Project-supported counties are expected to be the growth nodes for the neighboring counties and beyond. It is expected that through the multiplier effect, the farmers in adjoining and neighboring counties would adopt the good practices and replicate the successes of the project for enhanced agricultural production and value addition leading to greater economic activity and growth. The proposed geographical coverage is provided in table 2.

**Table 2: Proposed Project Geographical Coverage**

County	State
<b>Phase 1</b>	
1. Renk	Upper Nile
2. Bor South	Jongeli
3. Magwi	East Equatoria
4. Torit	East Equatoria
5. Aweil East	Northern Bahr el Ghazal
6. Aweil South	Northern Bahr el Ghazal
7. Wau	Western Bahr el Ghazal
8. Jur River	Western Bahr el Ghazal
<b>Phase 2</b>	
9. Melut	Upper Nile
10. Akobo	Jonglei
11. Twic East	Jonglei
12. Yei	Central Equatoria
13. Maridi	Western Equatoria

#### D. Project Beneficiaries

59. Direct beneficiaries will include smallholder farmers (producers), who will benefit from training, skills enhancement improved agronomic practices, pest control, pre- and post-harvest management, and increased access to improved agricultural inputs including good quality seeds, appropriate tools and machinery, and output markets. Project support is expected to result in improved agricultural production, value addition and increased opportunities for market access. Other beneficiaries will include local youth, women, community resource persons, and staff and officials of CAD, MAFS, FAO and NGOs. It is estimated that there will be 140,000 direct beneficiaries of the project.

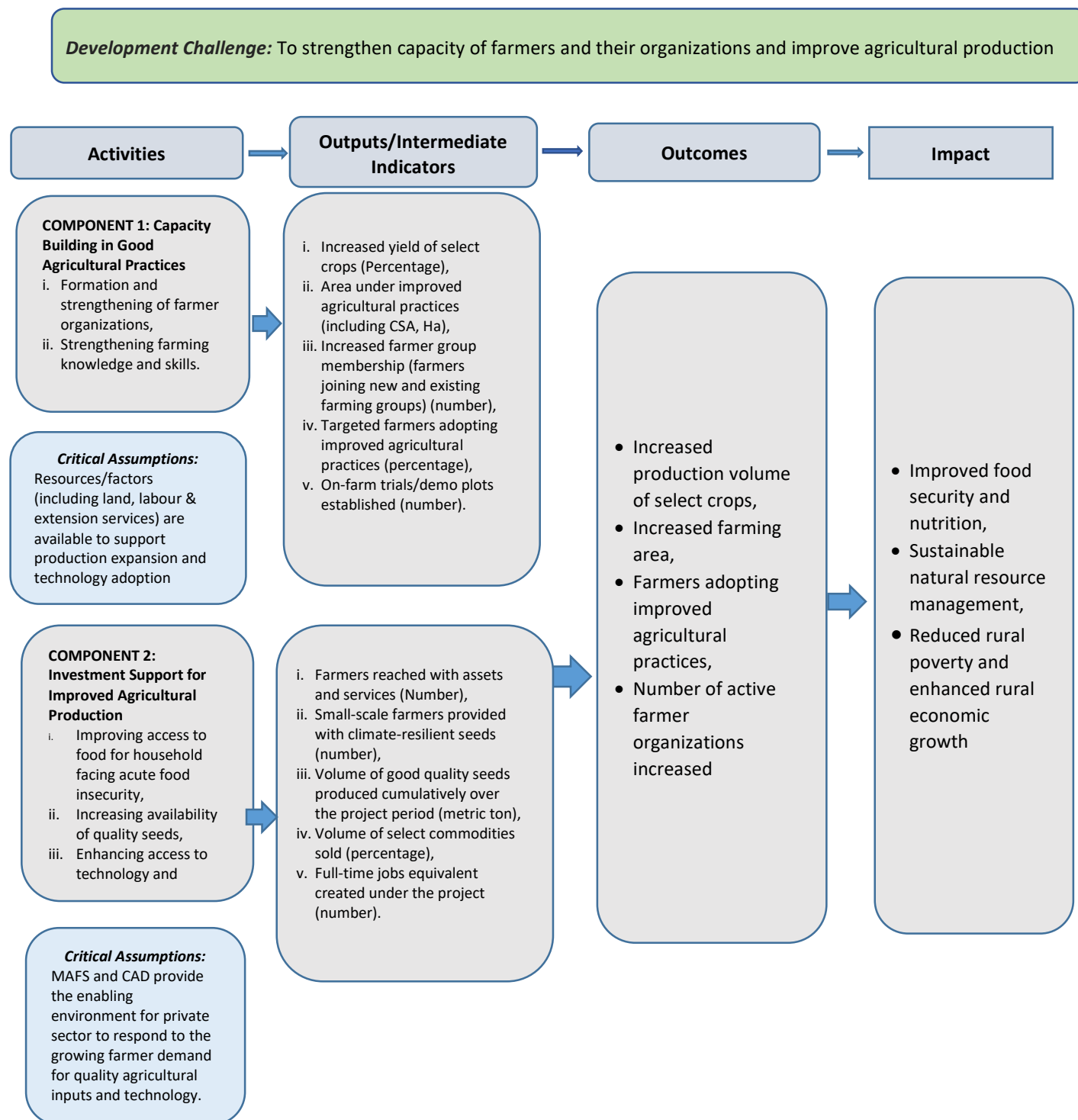
#### E. Results Chain

#### Theory of Change

60. The project outcomes will be achieved through two main technical components: (a) Capacity Building in Good Agricultural Practices; and (b) Investment Support for Improved Agricultural Production. Figure 3 outlines the Theory of Change (ToC) anchored in the PDO. Although component 3 (Project Management and Technical Assistance) is not presented in the ToC, the critical assumptions made at appraisal are: (a) the Government of South Sudan's commitment and continued support to RALP throughout the project period; (b) MAFS staff capacity and skills strengthened including good agricultural practices, compliance of environmental and social framework, effective fiduciary control and management to oversee and implement World Bank-funded projects in the future; (c) TA provided to strengthen the policy and regulatory, budgetary, fiduciary and monitoring and oversight functions of MAFS; and (d) effective implementation of WB instituted internal controls and procedures by the MAFS-PCU.



Figure 3: Theory of Change



#### F. Rationale for Bank Involvement and Role of Partners

61. As indicated in the Country and Sectoral Context, most of the donor aid is currently focused on humanitarian assistance. Notwithstanding its importance, there is substantially limited focus on the urgency for a transition from humanitarian assistance to a development-oriented growth path, despite the tremendous potential that the agriculture sector offers to address chronic food insecurity, stimulate economic recovery and create job opportunities, especially for the youth. The World Bank engagement in the agriculture sector through the ongoing *ASA - Transforming Agriculture: from Humanitarian Aid to a Development Oriented Growth Path* (P174726), the proposed *RALP* and the forthcoming *Emergency Locust Response Project* (ELRP, P174546) will provide the much-needed momentum and outline a roadmap for developing agriculture, building agricultural knowledge, practices and skills as well as enhancing in-country implementation experience towards execution and scaling up of appropriate activities and successes.
62. The World Bank is in a unique position to bring its regional and global experiences in agriculture development to bear and provide well-tested, low-cost solutions for building a climate-resilient agricultural sector, improving agricultural productivity, creating jobs, improving rural incomes and incentivizing participation of women and youth in the agricultural sector. Similar work in other FCV countries such as Somalia and DRC offer opportunities for replication of success and the application of lessons learned for tailored approaches to South Sudan's context. Also, given its strong convening power, the World Bank can facilitate participation of the best development practitioners in implementation of the project as well as organize study and field visits for project beneficiaries (local and national stakeholders) to relevant Centers of Excellence around the globe.
63. Furthermore, as mentioned earlier, the agriculture sector in South Sudan receives some of the lowest budgetary allocations in the government (0.3 percent in FY20). It means that the sector that could produce surplus food, encourage economic growth and rural employment is being starved of investment. World Bank brings in funding critical to start investing in productive assets that will strengthen agriculture beyond meeting the immediate household food security needs. The project funds will provide the space to test appropriate technologies to identify the implements and tools that fit farmers' needs and can either be made locally or imported with regular O&M back up.
64. **Role of Partners.** As mentioned earlier, working through the Partnership for Recovery and Resilience (PfRR), the project will coordinate, collaborate and complement other-donor initiatives, including bilaterals (such as the European Union, USAID, DFID, UN organizations and AfDB) to enhance agricultural production and productivity in the short- and medium-term, and initiate a dialogue for transformation and modernization of the agriculture sector with active participation of the private sector. The public sector is expected to play a lead role in creating the enabling policy and regulatory environment for attracting local and foreign investments and attracting youth to engage lucratively in the agriculture and food system from farm to fork.

#### G. Lessons Learned and Reflected in the Project Design

65. The key lessons learned from the World Bank and donor supported completed and current projects and incorporated in the project design include the following:



- a) Communicate with and engage MAFS in project design and during implementation to facilitate project implementation and enhance sustainability of the results.
- b) Coordinate regularly with the humanitarian organizations both at the central and local levels so that humanitarian aid and project interventions together enable local communities/farmer households to re-engage in agriculture relatively quickly.
- c) Regular liaison and working relationship with the local administration, agriculture staff and officials create a good will for the project both amongst the government functionaries and local communities as well as support a relatively safe working environment for the project staff.
- d) A functional platform, especially at the state or county level helps to bring all development partners/projects together to keep each other informed, avoid duplication and complement field work to the extent possible.
- e) Socially inclusive and conflict sensitive community mobilization approach secures an impactful involvement of beneficiaries in project implementation and monitoring.
- f) Ensure a consistent effort as conflict affected communities need awareness raising, training and time to overcome mutual suspicion, fear and distrust of each other, backed up by a robust, transparent and quick grievance redressal system to nurture harmony and social cohesion.
- g) Prevent elite capture of project benefits, by employing a participatory community-based beneficiary identification process to reach the needy farmer households that are food insecure.
- h) Due to the ongoing conflict and contest over access to resources, ensure that women (given the important role they play in agriculture), IDPs and vulnerable groups are not left behind and that they actively participate and benefit from the project interventions, that is information, seeds and inputs distribution, technical knowledge, training, extension services and access to productive assets.
- i) Apply innovative and gender-sensitive strategies to: (i) ensure access to land and security of tenure to all targeted groups, and (ii) where necessary IDPs through a social contract with the *Boma* and *Payam* level leadership.
- j) Ensure membership and empowerment of women in farmer organizations including women's groups as targets for extension and outreach activities.
- k) Ensure inclusion of youth who currently are less inclined to participate in agriculture.
- l) Confirm flexibility in project design and execution, for projects operating within a volatile security situation, to keep implementation at pace.
- m) Using retroactive financing and advance contracting as a strategic tool but on a selective basis. The World Bank's recent experiences in complex emergencies and FCV situations highlight the benefits of using retroactive and advance contracting as effective tools to immediately contribute towards ongoing crises by freeing up client government or in cases, partner resources and scaling-up ongoing early and medium-term recovery interventions.

### III. IMPLEMENTATION ARRANGEMENTS

#### A. Institutional and Implementation Arrangements

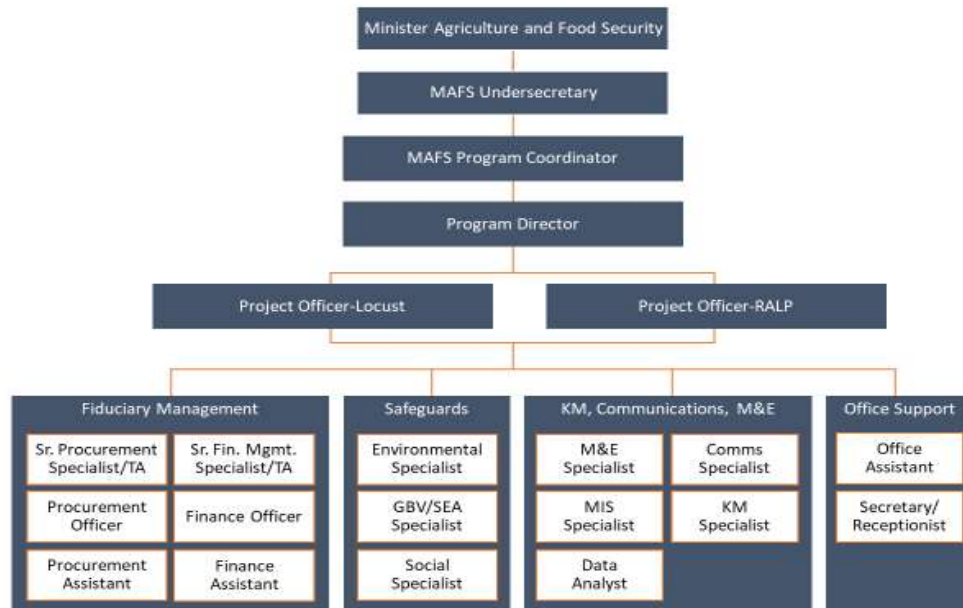
66. This is a grant to the Republic of South Sudan, and the implementing agency will be MAFS as the lead Ministry for food security and food production systems.



67. **Governance and Oversight:** On behalf of the Government of South Sudan, MAFS will be responsible for overall liaison and coordination. High-level oversight and guidance on project implementation will be provided by a Project Steering Committee (PSC) comprising Finance and Planning Minister, MAFS Minister, and Governors of participating states. The PSC's main task will be to: (a) review and advise the overall project approach and methodology; (b) provide guidance and advice on policy issues, including resolving conflicts or problems related to national agriculture policies; (c) foster synergies between various stakeholders to maximize project effectiveness and complementarities; and (d) identify and resolve any jointly faced, or coordination-specific, issues and challenges. The PSC will meet at least twice a year.
68. **Project Management Unit (PCU).** MAFS, as implementing agency, will set up a Project Coordination Unit (PCU) which will be responsible for day-to-day oversight and management of the project. The PCU will manage all core functions including program management, coordination, partner and community mobilization and facilitation, capacity building, training, environmental and social risk management, Financial Management (FM), procurement, and Monitoring and Evaluation (M&E). Environmental and social risk will be managed in line with the World Bank Environmental and Social Framework (ESF), applicable World Bank Environmental and Social Standards and the project Environmental and Social Risk Management instruments. MAFS shall prepare, in accordance with terms of reference acceptable to the World Bank, a manual, which contains detailed Project arrangements and procedures for: (i) institutional coordination and day-to-day execution of the Project; (ii) monitoring, evaluation, reporting and communication; (iii) criteria, procedures (including participatory approaches) and responsibilities for selection of Project locations, Project beneficiaries, vouchers to be provided under Part 2.1 of the Project and sub-projects and investments under Part 2.3 of the Project; (i) administration, procurement, financial management and accounting; (ii) mechanisms for accommodating changes in Project implementation due to COVID-19; and (iii) such other administrative, technical and organizational arrangements and procedures as shall be required for purposes of implementation of the Project ("Project Implementation Manual" or "PIM"). The project implementation manual, prepared in accordance with provisions in Section I.B.1 of Schedule 2 to the Financing Agreement has been deemed satisfactory by the Association and has been adopted by the Recipient is the condition of effectiveness. The PCU will submit a six-monthly workplan with a detailed budget to the World Bank for prior approval. To achieve more efficient use of budget resources and promote increased collaboration, RALP and ELRP will share the PCU. Below is an indicative organogram of the PCU showing the critical positions that need to be filled throughout project implementation.



**Figure 4: Organogram for Shared PCU**

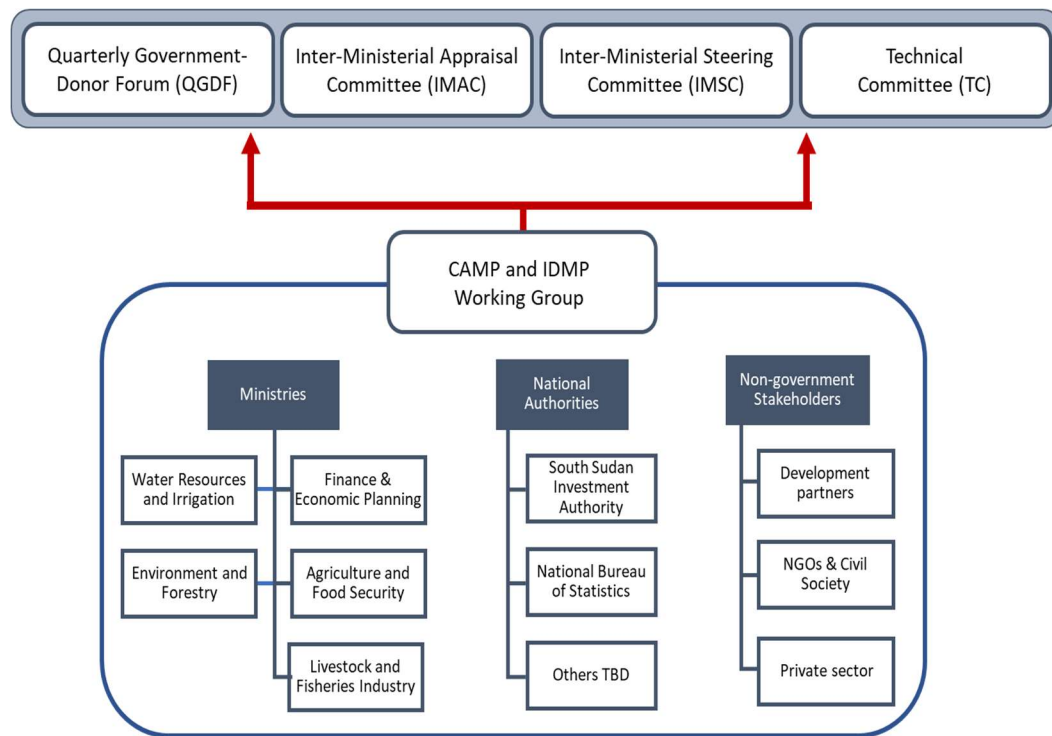


69. MAFS will use direct contracting to engage Food and Agriculture Organization of the United Nations (FAO) as lead technical partner for implementation and technical assistance of components 1, 2, sub-component 3.2 and ESF and other management priorities within three months of project effectiveness<sup>52</sup>. FAO's South Sudan Office is one of the largest FAO operations globally, and it works closely with MAFS on policy, regulatory, and investment issues across the sector. FAO has a large field presence as well as a network of vetted international and national Non-Governmental Organization (NGOs) that further expand its reach throughout the country. FAO will set up Project Implementation Units (PIUs) in the project areas. FAO engagement will also help ensure fiduciary accountability, risk mitigation, and strong monitoring. In a similar arrangement, FAO performed well as an implementation partner under the World Bank funded South Sudan Emergency Food and Nutrition Support Project (EFNSP, P163559) and the precursor Southern Sudan Emergency Food Crisis Response Project (EFCRP, P113586).
70. The US\$12.5 million of CRW-ERF funds provided to RALP require that Government of Republic of South Sudan (GRSS) shall ensure that not later than six (6) months after the effective date, a Food Security Preparedness Plan (FSCPP) is prepared and adopted in form and substance acceptable to the World Bank. This would be a government led plan that details specific actions the country will take to mitigate the impacts of future food security crises. Essential elements of the preparedness plan include defining how the government will monitor and identify emerging food security crisis risks, what actions the government will take to mitigate those risks, and what resources and additional assistance the government can draw on to bolster its response (including from partners where possible). The Plan will require an inter-ministerial and multi-stakeholder consultation process, which MAFS is well placed to lead, most likely through the CAMP and IDMP Working Group, which comprises the leading ministries for food security and food production, other national authorities, civil society, donors, and private sector (see figure 5 below).

<sup>52</sup> The contents of the contract between MAFS and FAO are to be reflected in/governed by the procurement strategy, procurement plan, and subject to the World Bank's Procurement Regulations.



Figure 5: CAMP and IDMP working group structure and reporting relationships



71. The CAMP and IDMP Working Group (CIWG) builds on the system of Sector Working Groups and is part of the national budget process. It exists to provide a broad-based consultation and coordination platform for stakeholders in food security and the food production system. The CIWG reports to the Inter-Ministerial Appraisal Committee, Quarterly Government-Donor Forum, the national Technical Committee (TC), and the Inter-Ministerial Steering Committee.
72. The CIWG seeks to strengthen coordinated, efficient, and effective government-led policy formulation, implementation, and monitoring and evaluation to achieve the overall goal of agriculture sector development in order to achieve food security for all the people of the Republic of South Sudan, enjoying improved quality of life and environment. This makes it essential to the governance, strategy, and planning functions of the project, providing oversight of activities and overseeing development of the FSCPP.

## B. Results Monitoring and Evaluation Arrangements

73. MAFS will be responsible for overall coordination and implementation of project monitoring and evaluation systems. The M&E objectives are to regularly monitor the implementation process and measure inputs, outputs, and outcome indicators to provide regular information and analysis on project implementation and outcomes, identify potential problems, determine to what extent the project is achieving its development objectives, and regular information flow to the project management for timely decision making. Data collection, analysis and reporting will be on the results framework and will be disaggregated by gender as much as possible. The project will use the Geo-Enabled Monitoring and supervision system (GEMS) supported by the World Bank to gather data



using open source software that will feed into the overall monitoring system. Furthermore, the M&E system will be a valuable knowledge management mechanism for learning and experience sharing.

74. MAFS-PCU will regularly submit semi-annual progress reports as well as Mid-Term Review (MTR) and project completion reports to the World Bank. A baseline survey will be conducted during the first three months of the project as well as additional surveys at the MTR and project completion, and periodic reviews, assessments and case studies as appropriate. Furthermore, MAFS will, within 180 days of project effectiveness hire an independent TPMA to independently monitor and review project performance on a six-monthly basis. The TPMA will be expected to: (a) track project performance through collection and analysis of appropriate and credible gender disaggregated data and other evidence; (b) review compliance of financial management and procurement arrangements; (c) ESF implementation and compliance; (d) identify any technical and procedural gaps, issues, bottlenecks and recommend improvements as necessary, and (e) document key experiences and learning. The Terms of Reference (ToR) for the TPMA will be developed and agreed by the MAFS and World Bank. The TPM reports will be shared simultaneously with the MAFS and World Bank to enable concurrent supervision and timely assessment of project implementation.
75. **Communication and Knowledge Management.** The centrality of knowledge sharing and learning as a platform for technical change and innovation, rather than the increased use of inputs, is the essential driver of productivity and sustainability. The PCU will constantly develop and improve its knowledge services and platforms, stimulate higher rates of engagement and willingness to collaborate in the creation of high-value content, and generate new insights that contribute to the established knowledge base and feeding into policy reforms that can further enhance performance of the agricultural sector in South Sudan.

### C. Sustainability

76. RALP aims to lay the foundations for recovery of the agriculture sector. It is designed to act as a bridge from humanitarian aid to development-oriented growth path. The project builds from the ongoing food crisis emergency programs and transitions support towards effective and sustainable approaches to deliver agriculture services and inputs and enhance agricultural production and productivity. Sustainability is a core guiding principle for the project which includes: (a) supporting a solution-oriented agriculture advisory and extension system to address the major challenges faced by farmers; (b) building capacity of farmers through training and skills enhancement, including CSA, resilience and adoption, nutrition and dietary diversity, addressing GBV risks and promoting women empowerment; (c) increasing domestic production and availability of good quality seeds, including seed systems that involve the private sector in seed multiplication and distribution; (d) increasing adoption of improved seeds by enhancing farmers' awareness on the importance of investing in quality seed; and (e) increasing farm production, improving postharvest-management and value addition.
77. The project's technical assistance and capacity building support to MAFS such as completion of key agricultural policies and regulations will help to improve the Ministry's performance and promote institutional sustainability. Furthermore, RALP activities will be implemented primarily through FOs and Cooperatives, in coordination with the local authorities. This would leverage the inherent social networks to sustain project outcomes and promote peer-to-peer learning. It will also leave behind stronger and more cohesive FOs/Cooperatives that could continue to apply the good agricultural knowledge and practices delivered by the project. The extension services will be delivered through community facilitators and CAD extension staff that would remain active long after the project ends. Part of the project's exit strategy will be to form an association of community facilitators and they will be encouraged to

develop business models for advisory and extension services that would be expected to continue to serve farmers beyond the life of the project.

78. The project's support to increase local production, trade and use of good quality seeds and planting materials through Community-led QDS production system and FLSE including farmer managed seed banks and seed cooperatives engaged in local trade of good quality seeds and farmer-led contract seed production with private seed companies engaged in seed development, multiplication and distribution/sales are likely to be financially sustainable. This contrasts with the current practice where expensive seed is imported without proper screening and adaptation to local conditions.
79. While the project's technical components are designed to support sustainable approaches of delivering agricultural services, the sustainability of project outcomes and impacts depends on improvements in the country situation. Without improved security and peace, the systems established by the project will be stressed and there will be no way to guarantee sustainability. In this scenario, the government and its development partners will be called upon to make complementary investments aimed at sustaining and protecting the project investments and continue the path towards the long-term development of agriculture.

#### **IV. PROJECT APPRAISAL SUMMARY**

##### **A. Technical, Economic and Financial Analysis**

80. The project will directly benefit at least 140,000 smallholders/farmers (producers). They will gain from training, skills enhancement, improved agronomic practices, pest control, pre- and post-harvest handling and increased access to improved agricultural inputs including good quality seeds, appropriate tools and machinery. It is expected to result in improved agricultural production and increased opportunities for market access. Beneficiaries will also include local youth, women, community resource persons, village based, small enterprises, inputs suppliers, and CAD FAO, NGO and MAFS staff. The key economic benefit resulting from the project investment is mainly the incremental production of agricultural crops by increasing yields and cropping area. The project area with improved agricultural practices is expected to reach 100,000 ha by closing.
81. The analysis focuses on three groups of beneficiaries: producers, agro-processors and seed multipliers. The total amount of improved seeds to be made available to producers is around 3.3 million kg. All seeds and farming equipment will be divided into 220,000 kits, and each kit will comprise 15 kg of seeds. Each of the 140,000 beneficiaries will be provided with these kits on average twice during the project lifetime. The vegetable seeds will be distributed amongst 140,000 smallholders, especially for dietary diversity and improved nutrition at the local level. The total local procurement of assorted crop kits is around 500,000 units. Seed multiplication will be carried out by some 5,000 participating farmers with each receiving around 5 kits of seeds for seed multiplication. The beneficiaries will be also provided with assets worth US\$1.05 million for support of tillage services, local agricultural tools, and other agricultural goods and services. Furthermore, there is a special support, for households facing food insecurity, providing inputs and assets like seeds, small ruminants, poultry, under sub-component 2.1 that can stabilize the target households (IPC-3+) to improve their immediate access to food. It is expected that inputs worth US\$6.00 million will be distributed to about 50,000 households in the above-described way to improve their food insecurity status immediately.

82. **Financial Analysis:** Most of the project activities and interventions will be demand driven. The ex-ante financial cost-benefit analysis of individual investments is, therefore, only illustrative. In order to quantify the benefits deriving from the improved access to better inputs, production techniques and equipment supported by RALP, six indicative business activities were developed for the financial and economic analysis. The results of the analysis were then extrapolated to the whole project in order to identify the overall project's economic impact. Eight illustrative farm models were prepared to demonstrate the financial viability of potential investments. The land plot taken for analysis of crop production models is 1 ha. All farm models show the prospective benefits and rate of return derived from the access to required financing, training, demonstration and advisory services. The production models included: (a) rainfed sorghum; (b) irrigated groundnut; (c) irrigated tomato; (d) irrigated sorghum; (e) solar dryer agro-processing; (f) seed multiplication model; (g) kitchen garden model (to improve immediate access to food); and (h) small ruminant livestock model (to improve immediate access to food). The financial analysis results show a significant increase in gross and net returns from each model when compared to the without project situation illustrating the financial worth of the investments. The Net Present Value (NPV) range from US\$192 to US\$7,957, while the IRRs from 18.29 percent to 37.12 percent.
83. **The Economic Analysis** was obtained from the financial analysis by converting financial/market prices into economic values, phasing project interventions and benefits in a conservative pace and aggregating costs and benefits at the scale of the entire project. Though all project costs would not lead to direct economic benefits (for example, project management), the entire cost of the project was incorporated in the calculations. The period of economic analysis is 20 years to account for the phasing and gestation period of the proposed interventions. Given the above benefit and cost streams, the base case Economic Rate of Return (ERR) is estimated at 11.1 percent. The base case net present value of the project's net benefit stream, discounted at 6 percent, is US\$46 million in economic terms. The summary of economic analysis is presented in table 4. The ERR is relatively low considering that several benefits of the project have not been quantified, such as social and institutional benefits, for example, from organizing the farmers into groups and cooperatives, which form the bulk of component 1.
84. **GHG Analysis:** The World Bank uses the Ex-Ante Carbon-Balance Tool (EX-ACT) to estimate the impact of agricultural investment lending on GHG emissions and carbon sequestration. EX-ACT is a land-based appraisal system for assessing a project's net carbon balance – the net balance of tons of CO<sub>2</sub> equivalent (tCO<sub>2</sub>eq) of GHGs that were emitted or carbon sequestered as a result of project interventions – compared to a “without project” scenario. The estimated areas to be brought under CSA intervention is 252,384 ha (half of the total 504,764 ha targeted), 11,822 ha will support improved afforestation practices, 31,371 ha of set aside land will be transformed to annual crop land, and 100 ha of trickle irrigation will be constructed along with seed nurseries. The net carbon balance over a period of 20 years is estimated to be -4,651,502 tCO<sub>2</sub>e (approximately -232,575 tCO<sub>2</sub>e per year). At a conservative carbon price (US\$40/t), the value of the reduced GHG emissions under RALP is about US\$186 million.
85. Considering the estimated shadow price of carbon, that will evolve from year to year according to the World Bank Shadow Price of Carbon Guidance Note, the ERR and the ENPV were calculated. The results of scenarios with low carbon price (starting from US\$41 and evolving over years), high carbon price (starting from US\$82 and evolving over 20 years) and without carbon are presented in the table 4 below. Low shadow price of carbon scenario has a potential to improve the ERR from 11.3 percent to 20.3 percent, while the high shadow price of carbon scenario would improve the ERR up to 27.3 percent.

**Table 3: Project Economic Indicators with Carbon Externalities**

	Without carbon benefits scenario	Low carbon price scenario	High carbon price scenario
ENPV (US\$ mln)	46.0	144.9	243.7
ERR	11.1%	19.3%	25.8%

86. **Sensitivity analysis.** Economic returns were tested against changes in benefits and costs and for various lags in the realization of benefits. In relative terms, the ERR is equally sensitive to changes in costs and in benefits. In absolute terms, these changes do not have a significant impact on the ERR, and the economic viability is not threatened by both a 20 percent decline in benefits nor by a 20 percent increase in cost, since the ERR in both cases remains well above the discount rate. A one-year delay in project benefits reduces the ERR to 10.1 percent. The results are presented in the following table 4 below.

**Table 4: Summary of Economic Analysis and Sensitivity Analysis**

Sensitivity Analysis ( 20-year period)	Base case	Costs Increase			Increase of Benefits		Decrease of Benefits			Delay of Benefits	
		+10%	+20%	+50%	+10%	+20%	-10%	-20%	- 30%	1 year	2 years
ERR	11.1%	10.4%	9.8%	8.1%	11.8%	12.3%	10.3%	9.5%	8.8%	10.1%	9.0%
ENPV (USD mln)	46.0	41.1	36.2	21.7	55.4	64.9	36.5	27.1	19.8	36.0	26.2

## B. Fiduciary

### (i). Financial Management

87. The overall fiduciary responsibility for the implementation of the project will be vested in MAFS through a PCU that will include staff responsible for providing effective FM oversight. An FM assessment of MAFS, conducted by the World Bank team in March 2021 revealed, significant capacity gaps and internal control weaknesses which could materially affect the implementation of the proposed project. The weaknesses included inadequate accounting system, lack of internal audit function, lack of clear approval and authorization arrangements and inadequate segregation of functions and internal check mechanisms in payment processing. MAFS will, therefore, ensure adequate accounting capacity at the PCU headed by a consultant Senior Financial Management Specialist supported by a Finance Officer and an Accounts Assistant. Project accounting records will be maintained using acceptable computerized accounting system to ensure efficiency in transaction processing and timely financial reporting. FAO will be contracted by MAFS to implement components 1, 2 and sub-component 3.2 under the project. FAO South Sudan maintains adequate accounting capacity that will support the implementation of the project.
88. The PCU will be responsible for the preparation of the project budget based on approved six monthly workplans and cash flow forecasts. Budget execution will be monitored through vote book, budget progress/control book or similar electronic record maintained by the PCU. Budget execution will be monitored through the PCU prepared quarterly Interim Unaudited Financial Reports (IFRs) submitted to the World Bank within 45 days after the end of the quarter in line with the Financing Agreement. In addition, FAO will submit quarterly interim financial reports to the World Bank through the PCU within 45 days after the end of the quarter. The PCU will also prepare annual financial statements for the project (incorporating expenditures incurred by FAO) which will be submitted for external audit within 3 months after the end of financial year.
89. The detailed budget for the components implemented by FAO will be reflected in the output agreement signed with



the MAFS. Annual financial statements for RALP will be audited by the South Sudan National Audit Chamber (NAC) and the audit report and management letter will be submitted to the World Bank within six months after the end of financial year. Any incremental cost of project audit will be met out of the project funds. The project will also be covered by FAO's internal and external audit arrangements. As part of these arrangements, FAO will conduct annual project-specific internal audit and submit reports to MAFS and the World Bank by June 30 each year. For the components implemented by FAO, the World Bank's audit requirements are expected to be fulfilled through the normal audit function of FAO's own external auditors. FAO's annual external audit reports will be published on its website where the World Bank can access and review them.

90. Disbursement of the Grant will use advances, reimbursement, direct payments, and payments under Special Commitments including full documentation or against statements of expenditure, as appropriate. For components 1 and 2 and sub-component 3.2, a lump sum amount will be committed in the form of UN blanket commitments to FAO following submission of a duly executed contract between FAO and MAFS and a payment request from the UN agency. FAO will then provide quarterly financial reports to the PCU within 45 days after the end of the quarter, which will be used to account for expenditures in the World Bank records. FAO will submit the final certified financial statements to the World Bank within six months after the completion of all project activities. Any unused balance will be refunded to the World Bank before the disbursement deadline date (four months after the project closing date).
91. For sub-component 3.1, the proceeds of the Grant will be disbursed into the DA following the transaction-based Statement of Expenditure (SoE) method. The PCU will submit withdrawal applications accompanied by a statement of expenditures incurred to the World Bank for replenishment of the DA. The project will also maintain a local currency subproject account for making payments denominated in local currency. Funds will only be transferred from the main DA to the local currency sub-account in order to meet immediate payment obligations. No significant cash balances will be maintained in local currency to reduce the foreign exchange rate exposure risk. MAFS will be responsible for initiating, incurring and authorizing expenditures under the project in accordance with the specified procedures and initiating the payment process with all the required supporting documentation. Detailed disbursement arrangements are documented in the Disbursement and Financial Information Letter.
92. The main fiduciary risks in this project relate to activities under components 1 and 2 which are decentralized in nature. Due to the inadequate capacity of the implementing ministry, there is a risk that construction and equipment of FO centers under component 1 and distribution of assets to FOs and Cooperatives (sub-component 2.3), may not benefit the intended beneficiaries. Other risks relate to the rapidly deteriorating macroeconomic situation in South Sudan coupled with the significant depreciation of the local currency relative to the US\$, which could further present a risk of misapplication of project resources. These risks are effectively mitigated by the involvement of FAO in the implementation of the project. The UN agency has got adequate technical and fiduciary capacity to implement similar types of emergency operations. FAO will sign a contract/agreement with MAFS as a basis for the engagement within 90 days of project effectiveness. During the course of implementation, FAO will submit quarterly financial reports, which will be validated by the PCU in line with the signed agreement, before sharing with the World Bank. The financial reports will be generated from the FAO Global Resource Management System (GRMS) to guarantee accuracy and fiduciary assurance. Disbursement of funds to FAO will be made through direct payment from the World Bank to mitigate the risks associated with holding funds in the DA. Further, FAO has got adequate footprint in the country including in the particular project sites.
93. Funds disbursed into the DA for the implementation of activities under sub-component 3.1 will be ring-fenced from



ministry-wide fiduciary risks by ensuring segregated project accounts (DA), cashbooks and financial statements, operated, maintained, and prepared by the PCU. The PCU will maintain an up-to-date contract register as well as an asset register. Similarly, the FM team will prepare monthly bank reconciliation statements to ascertain the accuracy of the cash balances in the DA. Fiduciary oversight will be effected by internal auditors deployed from the Internal Audit Directorate and annual external audit by the National Audit Chamber. The in-year internal audit reviews will be conducted at least once a year and the audit reports will be shared with MAFS, MoFP and the World Bank for review and comments. FAO will also conduct annual project-specific internal audit and submit reports to the Government and the World Bank by June 30 each year.

94. **Technology-enabled monitoring.** To strengthen fiduciary oversight and address the inherent risks of the highly decentralized project, MAFS will engage TPMA to verify the physical implementation of activities and the compliance with the internal controls and financial management arrangements based on the TOR agreed with the World Bank. TPMA reports will be submitted simultaneously to MAFS and to the World Bank within 45 days after the end of six months period. All exception reports involving fiduciary noncompliance, errors, irregularities, and suspected fraud will be shared with the World Bank in a timely manner. The COVID-19 pandemic is restricting travel, so the project will explore use of technology such as GEMS to ensure remote supervision of project activities in diverse field locations. The residual FM risk rating for the project is, therefore, considered Substantial. The World Bank and the MAFS will review the project FM arrangements on a regular basis as part of project implementation support.

## **(ii). Procurement**

95. Procurement in South Sudan is governed by the Public Procurement and Asset Disposal Act 2018. The Procurement Act 2018 was supposed to replace the Interim Public Procurement Regulations adopted in 2006, however, the Procurement Act remains nonoperational. The public procurement does not have a procurement regulative authority as provided by the law, and further still procurement regulations and standard procurement documents including manuals have not been finalized. The government, however, has made efforts to expedite the procurement reforms including establishing the procurement authority and preparation of regulations to operationalize the law. It is envisaged that the Procurement Act 2018 will be fully operational by the end of 2021. Recently, the Ministry of Finance and Planning (MoFP) has established a PFM Oversight and Technical Committee with membership comprising of both the government and development partners with the aim to support the economic reforms envisaged in the Peace Agreement. Establishing a functional procurement system is on the government's priority reforms agenda.
96. All project procurements will be carried out in accordance with the 'World Bank Procurement Regulations for Borrowers under Investment Project Financing', dated July 1, 2016, revised in November 2017 and August 2018, hereafter, referred to as 'Procurement Regulations'. The project will be subject to the World Bank's Anticorruption Guidelines, dated July 1, 2016. As per the requirements of the Procurement Regulations, the MAFS has prepared a Project Procurement Strategy for Development (PPSD) which sets out the selection methods to be followed by the Borrower during project implementation in the procurement of goods, works, and non-consulting and consulting services financed by the World Bank and in the procurement plan for the first 18 months, which also will be reflected in the project implementation manual.
97. Procurement under the project will be carried out at the central level by the PCU established at the MAFS with



dedicated Procurement Specialist and Financial Management Specialists hired under the project. While PCU will have the overall responsibility for project coordination, oversight, and management, it will hire FAO through an output agreement as the technical lead to execute the project activities, especially components 1 and 2 and sub-component 3.2. The project will leverage on the procurement management arrangements established under the previous World Bank financed project, EFSNP, that was implemented by the ministry. In addition, MAFS will designate 2-3 procurement staff to the project for capacity building. The project will also hire a senior procurement specialist to provide trainings to the MAFS Staff on the new Country Public Procurement and Asset Disposal Act 2018 as well as the procurement regulations. The senior procurement specialist will also support MAFS to establish and train the Procurement Committee as required under the Procurement Law.

98. **Advance Contracting.** To ensure timely finalization of the Output Agreement and any other contracts, MAFS may initiate an advance procurement of FAO before effectiveness of the project. All advanced procurement activities shall be consistent with Section V (Paragraphs 5.1 and 5.2) of the Procurement Regulations for Borrowers under IPF dated July 1, 2016 (revised November 2017 and August 2018). The advance contracting will enable the Borrower to contract FAO and subject to agreement may prefinance the preparatory activities.
99. A procurement capacity assessment of MAFS was conducted in March 2021 as part of project preparation and it was noted that the project management will make use of the existing procurement management arrangements. While MAFS in the past has had some experience in implementing the World Bank funded projects (EFNSP and Emergency Food Crises Response Project (EFCRP, P113586)), the procurement oversight, in general, remains weak due to the country context and incomplete legal and regulative Public procurement system. The project will hire experienced consultants in procurement and other technical areas to support the MAFS in project implementation. FAO within the contract (agreement) will follow their own procedures in execution of the contract activities. The World Bank has assessed FAO's procurement system and generally found it to be consistent with the core procurement principles and Governance requirements. The FAO country Office Internal Audit Report 2018/2019, however, was found to be unsatisfactory with the report highlighting procurement as one of the challenges. Since then, the World Bank and FAO have been closely monitoring the implementation of the recommendations of the audit report and noted that most of the recommended actions were addressed by the FAO. For implementation of the RALP, the project procurement is according to the following procurement arrangements.
- (a) Carryout the project procurement activities in accordance with the World Bank Procurement Regulations;
  - (b) Initiate the procurement process only after obtaining a No Objection Letter (NOL) from the World Bank to the Procurement Plan (PP). Enter the PP through the World Bank's portal - Systematic Tracking of Exchanges in Procurement (STEP) and update the PP at least biannually. Update the PPSD, at least annually or whenever substantial changes are required to be made to the PP. Submit the updated PPSD to the World Bank for seeking concurrence before changing the PP in STEP.
  - (c) Use the World Bank's Standard Procurement Documents for goods, non-consultancy service and works and World Bank's Standard RFP for consultancy services.
  - (d) Publish the contract award details in the Implementing Agency (IA)'s official website.
  - (e) Adhere to the prior/post review thresholds prescribed in the PP for the first 18 months and subsequent revisions according to the World Bank's instructions.
  - (f) Extend the necessary cooperation for conducting the World Bank's post-procurement review or any other reviews desired by the World Bank including any complaints cases. The IA regularly uploads all relevant procurement documents to the STEP portal.

(g) Maintain separate complaint registers and procedures for redressing grievances and complaints, if any.

100. The Procurement risk for the project is rated as High. The World Bank's experience and assessment of key issues and risks concerning project procurement processes in South Sudan has shown several challenges which include: (a) the narrow window of opportunity (only about six months) in the dry season during which most of the country is accessible; (b) significant delays in procurement processing, with a significant part of the time spent on preparation of tender specifications, TORs and evaluation; (c) a nascent market and high costs for goods and services which has been affected by the recent renewed war that has seen many firms and NGOs closing their operations in the country; and (d) weakness in capacity of procurement staff, procurement planning, procurement process administration including award of contracts, contract management, contract oversight and procurement record keeping. These experiences have been carefully factored into the design of procurement arrangements.

### C. Legal Operational Policies

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

### D. Environmental and Social

101. Environmental risks will emerge from refurbishment and renovation of priority community facilities and infrastructure such as market access roads, market facilities, water harvesting infrastructure, health and educational infrastructure. Risks associated with this kind of infrastructure are generally low-to-moderate. Any potential adverse environmental impacts are reversible, temporary in nature and scope, and can be easily managed and mitigated by application and enforcement of environmental and social instruments and tools. Nevertheless, social risks that result from the overall FCV situation including IDPs, GBV/SEAH, and the specific needs of culturally distinct communities make this project a high-risk operation. Land acquisition impacts are not expected to be high, but in the conflict situation, even minor voluntary land giving needs to be handled sensitively.
102. Based on due diligence as required by the Environmental and Social Framework (ESF) and Assessment and Management of Environmental and Social Risks and Impacts (ESS1), conducted so far, the project's E&S risk rating is assessed High, mainly due to complexity of the fragile country context, violence such as political, criminal, ethnic.) and high risk of GBV/SEAH. The inability of the World Bank to conduct on-the-ground implementation support, monitoring, coupled with the country's weak legal and institutional arrangements to manage, monitor, support and enforce ESF compliance during implementation, predisposes the project to a High environmental and social risk rating.
103. **Implementing Agency Responsibilities for E&S Management.** MAFS is responsible for the application and compliance with the ESF and respective applicable ESS. The ESS relevant to the project are ESS1, ESS2: Labor and Working Conditions, ESS3: Resource Efficiency and Pollution Prevention and Management, ESS4: Community Health and Safety, ESS6: Biodiversity Conservation and Sustainability Management on Living Natural Resources, ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities, ESS8:



Cultural Heritage, and ESS10: Stakeholder Engagement and Information Disclosure. To comply with the requirements of the relevant standards, ESF instruments have been prepared, namely: (a) Environmental and Social Management Framework (ESMF) which is the ESF umbrella instrument; (b) Labor Management Procedures (LMP) which includes Occupational, Health and Safety procedures; (c) Stakeholder Engagement Framework (SEF); and (d) Environmental and Social Commitment Plan (ESCP). In addition, MAFS has prepared the GBV Framework, Security Management Plan, Workers' Code of Conduct, and a Social Assessment (SA). Any voluntary land acquisition will be guided by the respective regulations included in the ESMF. ESCP and SEF have been consulted upon, prepared and disclosed on the Bank's external website and in-country on April 30 and May 7, respectively. The remaining ESF instruments are under preparation and will be finalized and disclosed within sixty days of project effectiveness. PIM will refer to the ESF instruments, and the additional plans that will be prepared during implementation. Tender documents and contracts will require contractors to comply with the agreed LMP, national regulations, labor and working conditions, occupational health and safety plans and procedures. The contractors will also be required to prepare Construction-Occupational Health and Safety Plans (COHSP) based on the measures described in the LMP, ESMF, Environmental and Social Impact Assessment (ESIA)/ESMP and the requirements of ESS2. The project and its contractors and subcontractors will ensure application of the World Bank Environmental, Health and Safety Guidelines (EHS Guidelines), Health and Safety Good International industry practices (GIIP), such as OSHA) to avoid, minimize or reduce adverse impacts on human health and the environment. MAFS will contract FAO to support project implementation, in compliance with the ESF requirements, and prepared environmental and social risk management instruments for the project. Environment and social risk management responsibilities shall cascade down to FAO to ensure compliance to ESF requirements. This will be clearly articulated in the contract to be signed between MAFS and FAO. MAFS shall ensure FAO compliance to the ESCP and all prepared ESF instruments and regularly report to MAFS on implementation of ES mitigation measures. MAFS shall in return be responsible for overall ESF compliance and reporting to the World Bank.

104. **Gender and Gender-Based Violence Risks (GBV).** A project specific GBV risk assessment was carried out using the SEA/H risk screening tool. The existing contextual risks intersect with key project related risks, such as the targeting of vulnerable populations: women and children, IDPs, disabled for project interventions. Contextual GBV risks relate to the FCV context and impact of conflict and instability, as well as pervasive social norms that undermine women's status and contribute to acceptability of use of violence against women and girls. Whereas, project related risks may include, among others, changes in gender inequitable household dynamics due to project participation, exposure to sexual exploitation, abuse by contractors and project related workers, and risks linked to women's mobility and participation in agriculture and livelihoods-related activities. The assessment rated the project GBV risk as High. The project will integrate the full suite of GBV/SEAH risk mitigation measures including a GBV action plan, a dedicated GBV/SEAH specialist, safety audits, awareness raising and training, accountability and response framework, reporting and response protocol, TPMA oversight, and support services for survivors. MAFS will prepare a detailed GBV action plan within 60 days of project effectiveness which will then form part of the Contractors' ESMP.
105. **Labor and Working Conditions.** The project will include direct workers, contracted workers, primary supply workers, and MAFS workers, which will, therefore, need to meet requirements for terms and conditions of employment, non-discrimination and equal opportunity, workers' organizations, child labor, forced labor, a grievance mechanism and occupational health and safety plans. Stakeholders and beneficiaries working in connection with the project fulltime or parttime basis will remain subject to the terms and conditions of their existing public sector employment or agreement, unless there has been an effective legal transfer of their employment or engagement in the project. The project will also include occupational health and safety procedures



or plans and a grievance mechanism for labor disputes as required by ESS2.

106. **Stakeholder Engagement.** The project will ensure early, continuous, and inclusive (including vulnerable and disadvantaged groups) stakeholder engagement as documented and disclosed in the Stakeholder Engagement Framework (SEF). This plan will address specific risks identified by stakeholders, including the risks to vulnerable persons, and will be updated as and when necessary. The objective is to establish a systematic approach for stakeholder engagement, maintain a constructive relationship with them, consider stakeholders' views, promote and provide means for effective and inclusive engagement with project affected parties throughout the project lifecycle, and ensure that appropriate project information is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner. The project will set up a project specific grievance redress and feedback mechanisms for people to report concerns or complaints if they feel unfairly treated or are affected by any of the subprojects.
107. **Grievance Redress Mechanism (GRM).** A locally based, project-wide GRM, proportionate to the potential risks and impacts of the project, will be established prior to the commencement of project activities. In addition, a GRM specifically for direct and contracted workers will be provided. Specific channels for safe, confidential reporting of cases of SEAH or other forms of GBV will be identified, while specific procedures for managing reporting of and responding to GBV/SEAH cases will be developed as part of the GBV/SEAH Action Plan.

## V. GRIEVANCE REDRESS SERVICES

108. An effective and culturally appropriate project GRM will be implemented to resolve complaints in a timely, effective, and efficient manner. The lead technical partner, FAO has a Grievance Mechanism for beneficiaries to lodge complaints or provide feedback. FAO will raise awareness amongst the project communities about the GRM and actively seek the feedback of beneficiaries and non-beneficiaries through its established feedback mechanism that is sensitive to women, men, boys and girls, as well as people living with disabilities. Particular attention will be paid to facilitate GRM access by the most vulnerable and marginalized. The feedback channels currently in use are feedback desks, suggestions boxes, toll free hotlines and community Accountability Committees managed by Accountability to Affected Populations (AAP) personnel who often give clarity on the feedback channels and sensitize communities on prevention of sexual exploitation and abuse. All grievances received are directed to the call center, the helpline operator follows up internally as per the established procedures and policies to ensure that the feedback loop is closed.
109. Communities and individuals who believe that they are adversely affected by a WB supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org)



## VI. KEY RISKS

110. **The overall risk for RALP is rated High** as the political and governance, macroeconomic, institutional capacity for implementation and sustainability, fiduciary, and security situation remain fragile and volatile. The government's limited capacity to govern, strengthen institutions, deliver services, manage programs and projects and adequately responds to emerging risks and challenges is further weakened by the rising intercommunal violence, natural disasters, COVID-19 pandemic, and resultant economic meltdown.
111. **Political and governance risk is rated High.** Atrocities, widespread violence against civilians and conflict at the local level are common in South Sudan, and new armed groups continue to emerge. Inadequate governance capacity, particularly in terms of fiduciary capacity, is particularly challenging for neutral, accountable, transparent, and effective service delivery. The hope created by the peace agreement in September 2018 was not long-lived as the promised reforms were slow to materialize and factions continued to fight. After a delay of almost one year, the Transitional Government of National Unity was formed on February 22, 2020. These raise doubts as to the long-term viability of the peace process, and prospects of large-scale violence remain a high possibility. RALP aims to mitigate the risk by: (a) instituting a transparent and inclusive planning process; (b) helping foster social cohesion among different groups through participatory planning process with a special consideration to women, ultra-poor and marginalized farmer households, as well as local conflict mitigation training; (c) introducing flexibility so that required adjustments can be made during implementation; and (d) strengthening monitoring for early identification of risks.
112. **Macroeconomic risk is rated High** due to high inflation and depreciation of the local currency. The dire macroeconomic situation in the country presents a risk to project implementation through three channels: (a) increased prices and low incomes will reduce the purchasing power of the poorest and most vulnerable, likely pushing more people into hunger; (b) significant variance between the parallel and official exchange rates will affect the value of assets for livelihood rehabilitation and construction materials and other equipment to be provided under the project, which are imported; and (c) the combination of increased hunger and lost livelihoods in the current conditions of the country, could increase outbreaks of violence as people compete for resources and food. The project will mitigate these risks through a variety of measures. It will coordinate closely with the government, other donors, and the United Nations to leverage food for families in IPC-3 or higher. Second, the risk will be partly mitigated by incurring most project expenditures in US\$ as supply contracts to implementing agencies.
113. **Sector strategies and policies risks are rated Moderate.** South Sudan's fragmented Agricultural policy and regulatory framework could impact long-term sustainability of investments. They, however, would not impede the implementation of this project. The project will mitigate these risks through: (a) more strategic and coordinated approach among the key partners<sup>53</sup> through the various coordination platforms such as PfRR; and (b) the project sub-component 3.2 will contribute to improved policy and regulatory reforms, for example, pesticide management, and plant protection services that can then be adopted by the government.

<sup>53</sup> PfRR partners that is, USAID, DFID, South Sudan NGO Forum, United Nations South Sudan, Kingdom of the Netherlands and United Nations Mission in South Sudan (UNMISS).



114. **Institutional capacity for implementation and sustainability risk is rated High.** RALP is among the first to return to implementation through the government, and there are several locational and systemic risks. Due to protracted conflict, violence, economic meltdown, the management and technical capacity of MAFS and CAD have been further eroded. The systemic risk emerges from budgetary lapses that lead to significant salary arrears for civil servants who would work on the project. The project cannot cover salaries but can cover incremental costs. For example, daily subsistence allowance, travel, accommodation, incurred by extension staff carrying out their duties under the project. Beyond the project, GRSS is working with the World Bank and International Monetary Fund on public financial management systems, which help remove the issue of arrears. The World Bank will also urge the government to ensure timely payment of civil service salaries so as not to threaten implementation progress. The capacity of local-level structures and farmers may also be quite low or non-existent. Access to project areas can be difficult due to increased localized conflict, and resultant high levels of mistrust among communities. The project will mitigate these risks by focusing on capacity building, training, skills enhancement and hands on support and guidance to the MAFS and CAD staff and farmers, women, and youth in conflict management and resolution. These risks will be further mitigated by working closely with relevant partners and local authorities to engage early and diffuse conflict among local factions. If the project needs to withdraw from an area due to insecurity, it will continue working in the relatively safe project areas and restore its operations in the affected area once the security situation improves.
115. **Technical design of project risk is rated High.** While the project will be implemented through agencies with considerable experience of project implementation in high risk FCV environment, in close collaboration with the MAFS technical team, the agriculture sector is subject to risks from climate change, disease outbreak, pests and conflict. The existing in-country systems are not equipped to fully manage these risks. To mitigate the risk, the project will contract with organizations such as FAO with demonstrated competence in technical agricultural activities, for example, participatory plant breeding, agriculture tools and equipment and climate smart agriculture. RALP will work with research agencies and MAFS to introduce resilient good quality seeds that can withstand drought, flood and heat. The project will, therefore, start in a few locations to test the implementation approach for expanding out to cover more farmland. As with SNP and ECRP, the project will use a geographically focused implementation approach for sustained interaction with communities to build confidence in new technology and practices. Finally, frequent supervision backed up by TPMA will be carried out.
116. **Fiduciary risk is rated High** due to access restrictions, weak institutional capacity, weak governance and accountability systems in government, and wider macroeconomic risks including rising inflation and weak local currency. The main fiduciary risks in this project relate to activities under components 1 and 2 which are decentralized in nature. Due to the inadequate capacity of the implementing ministry, there is a risk that construction and equipment of FO centers under component 1 and distribution of assets to FOs and Cooperatives (sub-component 2.3), may not benefit the intended beneficiaries. This is because of restricted access to project sites due to insecurity and COVID-19, difficulty in coordinating, supervising and monitoring multiple activities in diverse locations and the potential for diversion of resources to unintended beneficiaries. These risks will be mitigated by the project by: (a) establishing a PCU led robust, financial management and procurement system, supported by regular external audits; and (b) contracting FAO as the lead technical agency that has appropriate expertise, adequate local access and relevant in-country experience. FAO will maintain adequate capacity in South Sudan to ensure fiduciary due diligence as well as monitoring and verification of community level subprojects. Given the World Bank staff's mobility constraints outside of Juba, monitoring will include multiple layers of monitoring, GEMS, social audit by the communities, third party verification, and an iterative conflict assessment.



117. **Environmental and social risks are rated High** due to the: (a) overall the FCV situation and its potential interrelation with the project including IDPs, prevalence of sexual and gender-based violence, specific needs of culturally distinct communities etc.; (b) decades of war in South Sudan have engendered a culture of mistrust, revenge killing, and competition over resources that can quickly turn violent; (c) While land acquisition impacts are not expected to be high, even minor voluntary land giving needs to be handled sensitively; (d) low capacity of local communities to manage natural resources sustainably in the backdrop of conflict and dispute over control of natural resources which are largely undisturbed and undermanaged; (e) National legal and institutional arrangements to manage, supervise and enforce environmental health and safety compliance are almost dysfunctional especially in rural areas; and (e) low capacity in controlling and monitoring environmental performance during implementation. The risk would be mitigated by the PCU effectively implementing ESMF, TPMA regular monitoring of ESMF compliance, and building ESMF capacity of farmers, project staff and participating implementation partners. Feedback mechanisms will be set up to ensure meaningful consultations with communities, individuals, and institutions. Nuanced communication and social messaging will also systematically reinforce peaceful cooperation and unity, particularly among men and women and against GBV, and promote greater interaction and dialogue among diverse ethnic groups in a community. As part of the environmental and social risk management instruments, an indicative MAFS environmental and social risk management capacity building activities and indicators shall be defined and agreed.
118. **Gender-based violence risk is rated High.** GBV perpetration is driven by underlying norms, economic structures and dynamics that perpetuate power imbalances between men and women. The ongoing conflict, displacement and pervasive insecurity have worsened the incidence of GBV and contributed to the increased exposure particularly of women and girls to varying forms of violence. A GBV risk assessment was carried out as part of the project's social assessment. However, given the seriousness of the issue, a more detailed assessment will be carried out in the project areas upon the selection of project sites, integrating proactive mitigation measures, including awareness raising and training for men, women, girls and youth. The detailed assessment will also identify gender imbalances that exist and come up with tangible activities that can be built into the project to address them. The project will also strengthen specific GRM systems to better capture GBV issues related to the project.
119. **There is a perennial risk from climate change and extreme weather events,** delayed rains, excessive rains, drought, high temperatures, which will be managed through careful monitoring of weather models to guide and advice the farmers. The project activities will contribute to mitigating these risks by carrying out adaptive tests for seed varieties that are resilient to drought and diseases, and by developing community-based extension services and early warning system to promote innovations and management practices that are gender sensitive and climate-smart such as better crop management practices, including land preparation, crop rotation, intercropping, manure management, soil conservation, and crop water management. The technologies introduced by the project will help farming families manage those risks better. The project has adopted the social assessment prepared for EFNSP. The assessment includes a consultation process, priority interventions, farmer group composition, etc. to help ensure the inclusion of women, youth and displaced populations in the project. Given the contentious nature of land ownership and use, the project will work with local traditional authorities to ensure that land use rights are assigned equitably.
120. **Other. Among the other risks, security risk for project implementation and completion is rated high.** Despite the many mitigation measures envisaged, insecurity remains the main risk to achievement of the PDO. Insecurity can constrain movement of Implementation Partners (IPs) and stall subproject implementation through delaying the transportation of construction materials, and pose a security risk to project staff, especially females and those



working for contracted NGOs on the frontline. Similarly, beneficiaries especially project committee members, women and children are at risk from violent looting, cattle raiding, being caught between warring parties, and attacks in highly insecure areas. IPs working in South Sudan have developed standard operating procedures to manage security risks as part of the security cascade among agencies in the country. The project will draw on the good practices of UN agencies and NGOs that have been supporting agriculture in the country. For example, the agencies stress that close collaboration with county, *payam*, and *boma* authorities increases the security of the area in general. Carrying out frank consultations with the participating communities about the risk of battle and/or violence against civilians and how they would prefer to mitigate that risk would help to determine, for example, where storage infrastructure should be positioned and how the community would organize themselves to protect their fields and storage facilities. Where insecurity would preclude going to farm fields away from a village for largescale cultivation, the project could support homestead production to help families maintain food security while remaining within safer community areas.

121. MAFS and FAO will take all the necessary steps in increasing security for frontline operators, for example, security training to staff, security reviews of procedures and physical structures by the contractor. Where possible, the project will co-finance upgrading of frontline physical infrastructure such as metal doors to bolster security for staff. In addition, attention will be paid to increased communications (for example, satellite phones) and to the procedures for responding to security incidents such as evacuations and investigations. This will be done in close coordination with the World Bank corporate security. The project aims to operate in more secure areas but will follow the described operational procedures should situation on the ground change suddenly. If an IP is unable to access an area, project activities will be suspended in that area. If the security situation deteriorates significantly, options for restructuring would be considered. Hence, it has been agreed that MAFS and FAO will adopt and implement the Security Management Plan (SMP) prepared for the project to safeguard all project workers and project-affected parties.



### Results Framework

COUNTRY: South Sudan

South Sudan Resilient Agricultural Livelihoods Project

#### Project Development Objectives(s)

The project development objective is to strengthen capacity of farmers and their organizations and improve agricultural production.

#### Project Development Objective Indicators

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Improved Agricultural Production							
Production volume of select crops (sorghum, maize, groundnuts) amongst target beneficiaries (Percentage)		0.00	0.00	5.00	10.00	15.00	20.00
Sorghum (Percentage)		0.00	0.00	5.00	10.00	15.00	20.00
Maize (Percentage)		0.00	0.00	5.00	10.00	15.00	20.00
Groundnuts (Percentage)		0.00	0.00	5.00	10.00	15.00	20.00
Increase in farming area (Percentage)		0.00	2.00	4.00	6.00	8.00	10.00
Strengthened Capacity of Farmers and Farmer Organizations							
Targeted farmers adopting		0.00	0.00	20.00	30.00	40.00	50.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
improved agricultural practices (Percentage)							
Farmer Organizations active (Number)		0.00					85.00

### Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Capacity Building in Good Agricultural Practices							
Yield of select crops (sorghum, maize, groundnuts) (Percentage)		0.00	0.00	0.00	0.00	0.00	0.00
Sorghum (Percentage)		0.00	0.00	63.00	66.00	69.00	72.00
Maize (Percentage)		0.00	0.00	95.00	99.00	104.00	108.00
Groundnuts (Percentage)		0.00	0.00	42.00	44.00	46.00	48.00
Area under improved agricultural practices (including CSA) (Hectare(Ha))		0.00	0.00	10,000.00	20,000.00	35,000.00	50,000.00
Farmer groups membership increased (farmers joining new and existing farming groups) (Number)		0.00	0.00	1,000.00	2,000.00	4,000.00	6,000.00
Including female farmers (Number)		0.00	0.00	500.00	1,000.00	2,000.00	3,000.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
On-farm trials/demo plots established (Number)		0.00	0.00	20.00	50.00	70.00	100.00
National staff trained in delivering agricultural services (Number)		0.00	15.00	29.00	43.00	57.00	70.00
<b>Investment Support for Improved Agricultural Production</b>							
Farmers reached with assets and services (Number)		0.00	25,000.00	62,000.00	100,000.00	120,000.00	140,000.00
including female farmers (Number)		0.00	12,500.00	31,250.00	50,000.00	60,000.00	70,000.00
Farmers reached with assets and services financed by the CRW ERF funds (Number)		0.00	5,000.00	22,500.00	40,000.00	40,000.00	40,000.00
including female farmers (Number)		0.00	2,500.00	11,250.00	20,000.00	20,000.00	20,000.00
Small scale farmers provided with climate-resilient seeds (Number)		0.00	10,000.00	20,000.00	30,000.00	40,000.00	50,000.00
Including female farmers (Number)		0.00	5,000.00	10,000.00	15,000.00	20,000.00	25,000.00
Targeted farmers producing seed (Number)		0.00	0.00	400.00	800.00	1,300.00	1,800.00
Including female farmers (Number)		0.00	100.00	300.00	500.00	700.00	900.00
Volume of good quality seeds produced cumulatively over the project period (Metric ton)		0.00	0.00	1,000.00	2,000.00	4,000.00	6,000.00
Volume of select commodities		0.00	0.00	0.00	5.00	7.00	10.00



Indicator Name	PBC	Baseline	Intermediate Targets				End Target
			1	2	3	4	
sold (Percentage)							
Full-time jobs equivalent created under the project (Number)		0.00	0.00	25.00	50.00	100.00	150.00
including females (Number)		0.00	0.00	10.00	30.00	50.00	70.00
<b>Project Management, Monitoring and Learning</b>							
Submission of six-monthly workplans, project progress reports and Interim Financial Reports in a timely manner and of quality satisfactory to the Bank. (Yes/No)		No					Yes
Satisfaction of project beneficiaries with services provided (survey results will be used to inform future project implementation) (Percentage)		0.00	0.00	80.00	80.00	80.00	80.00
Complaints responded to and/or resolved within the stipulated standard for response times (GRM) (Percentage)		0.00	100.00	100.00	100.00	100.00	100.00



**Monitoring & Evaluation Plan: PDO Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Production volume of select crops (sorghum, maize, groundnuts) amongst target beneficiaries	Total harvest quantity of each selected crop across the country, in metric ton (dry weight).	Annually	FAO/WFP Crop and Food Security Assessment Mission (CFSAM), Post-harvest assessment (PHA), FAOStat,	A combination of sampled crop-cutting and farmer recall (household interviews), with countrywide interpolation / triangulation through geospatial analysis	MAFS and FAO
Sorghum					
Maize					
Groundnuts					
Increase in farming area	Total area cultivated/ planted of each selected crop across the country, in ha (including intercrops)	Annually	CFSAM, FAOStat, Post-harvest assessment	Sampled geospatial measurement and farmer recall (household interviews), with countrywide interpolation	MAFS and FAO
Targeted farmers adopting improved agricultural practices	Farmers/households applying recommended practices/technologies in their fields	Annually	Project Planning Matrix (PPM); Knowl	Household interviews, triangulated with observation	MAFS and FAO



			edge, Attitude and Practices (KAP) surveys		
Farmer Organizations active	Count of Farmer Organizations who have active members with project support	Biannually	Intervention records /continuous project process monitoring records	Compilation of farmer organizations operations records; key informant interviews with officials of the farmer organizations	MAFS and FAO

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

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Yield of select crops (sorghum, maize, groundnuts)	Increased productivity of select crops: sorghum, maize and groundnuts.	Annually	CFSAM, PHA, FAOStat	Sampled crop-cutting and farmer recall with samples taken across different agro-ecological zones	MAFS and FAO
Sorghum					
Maize					
Groundnuts					



Area under improved agricultural practices (including CSA)	Crop field under improved practices (rotation/fallow, agroforestry, soil and water conservation, etc.)	Annually	Post-Planting Monitoring (PPM) and Post Harvest Assessment (PHA)	Farmer interview, observation, geospatial measurement of land area	MAFS and FAO
Farmer groups membership increased (farmers joining new and existing farming groups)	Count of farmers who have joined the active farmer groups with project support	Annually	Farmer organization/group records (Management Information System, MIS)	Record-keeping by farmer groups. Records extracted and analyzed for all groups.	MAFS and FAO
Including female farmers					
On-farm trials/demo plots established	Count and description (crops, technologies tested) of different on-farm trial sites for set up	Annually	Records obtained from research sites	Compilation of on-farm trial records; key informant interviews with researchers / extension officers	MAFS and FAO
National staff trained in delivering agricultural services	Count of national staff who have received training in delivering agricultural services under the project	Biannually	Intervention records /continuous project process monitoring records	Compilation of intervention (training) records	MAFS and FAO



Farmers reached with assets and services	Count of farmers who have received inputs/equipment/training under the project	Bi-annually	Farmer training and delivery/input delivery records	Compilation delivery and training reports and records / documentation	MAFS and FAO
including female farmers					
Farmers reached with assets and services financed by the CRW ERF funds					
including female farmers					
Small scale farmers provided with climate-resilient seeds	Count of farmers who received climate-resilient seeds	Annually	Farmer training delivery/input delivery records	Compilation delivery and training reports and records/documentation	MAFS and FAO
Including female farmers					
Targeted farmers producing seed	Direct count of seed outgrowers	Annually	Intervention records /process monitoring (project MIS)	Compilation of intervention (mobilization and training) records	MAFS and FAO
Including female farmers					
Volume of good quality seeds produced cumulatively over the project period	Total quantities of QDS of different crop types produced in metric ton.	Cumulative annual stock-	Research records on QDS	Compilation of research records; KI interviews with seed	MAFS and FAO



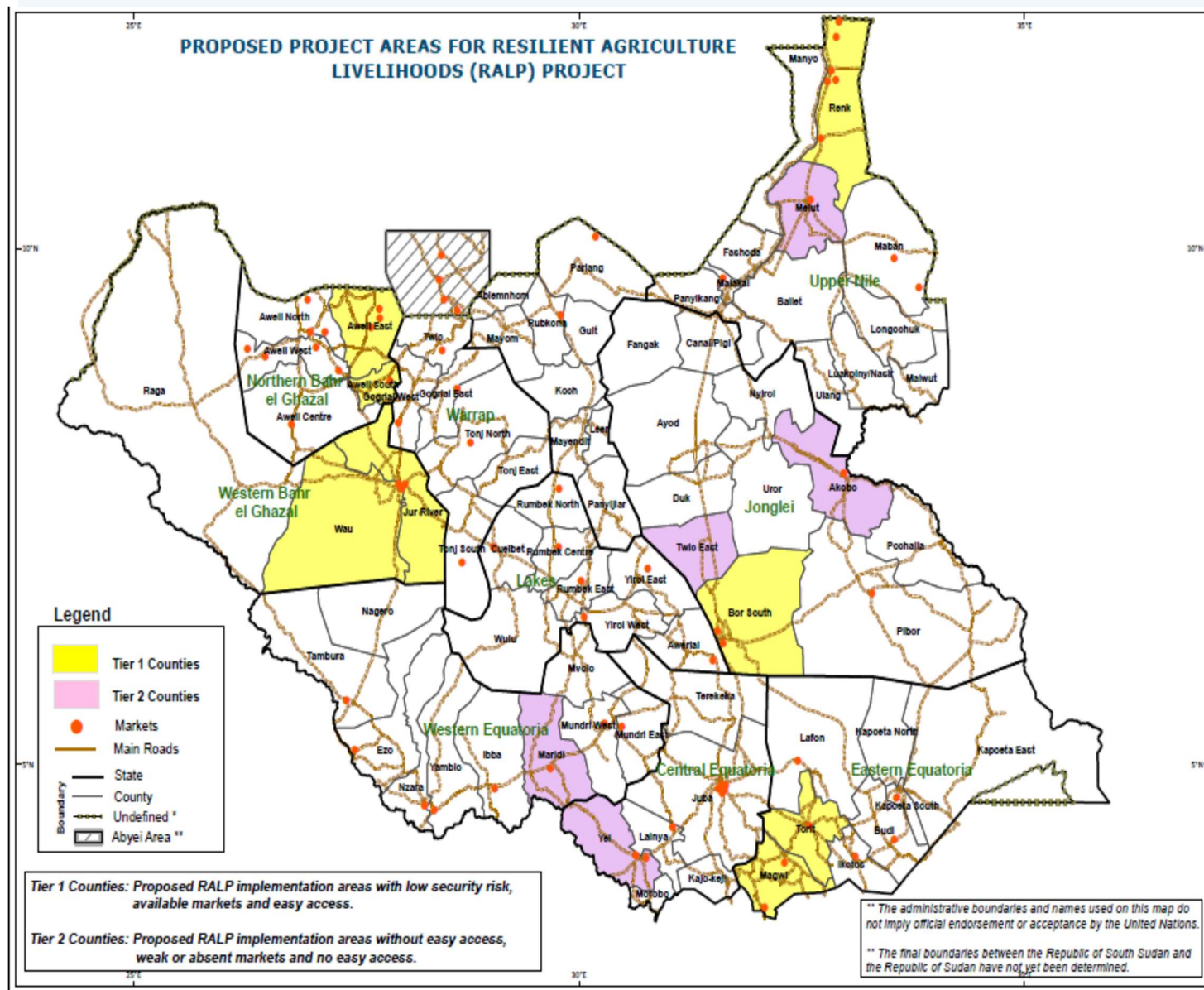
		taking	production	researchers/out growers	
Volume of select commodities sold	Aggregated totals of selected crop commodities sold by farmers and/or through the market chain	Annually	Value chain studies / analysis, Household surveys	Household and market trader interviews	MAFS, Ministry of Trade/Commerce, FAO
Full-time jobs equivalent created under the project	Number of fulltime job equivalent created under the project	Annually	MIS database, Intervention records /continuous project process monitoring records	Compilation of intervention records	MAFS and FAO
including females					
Submission of six-monthly workplans, project progress reports and Interim Financial Reports in a timely manner and of quality satisfactory to the Bank.					MAFS and FAO
Satisfaction of project beneficiaries with services provided (survey results will be used to inform future project implementation)	This is an indicator to monitor citizen engagement. It tracks satisfaction of project beneficiaries with services provided	Annually	Survey results	MTR and Final Project stage survey results	MAFS and FAO



Complaints responded to and/or resolved within the stipulated standard for response times (GRM)	Percentage of complaints responded to and/or resolved within the stipulated standard for response times (GRM)	Annually	Project's GRM Database	Project's GRM Database	MAFS and FAO
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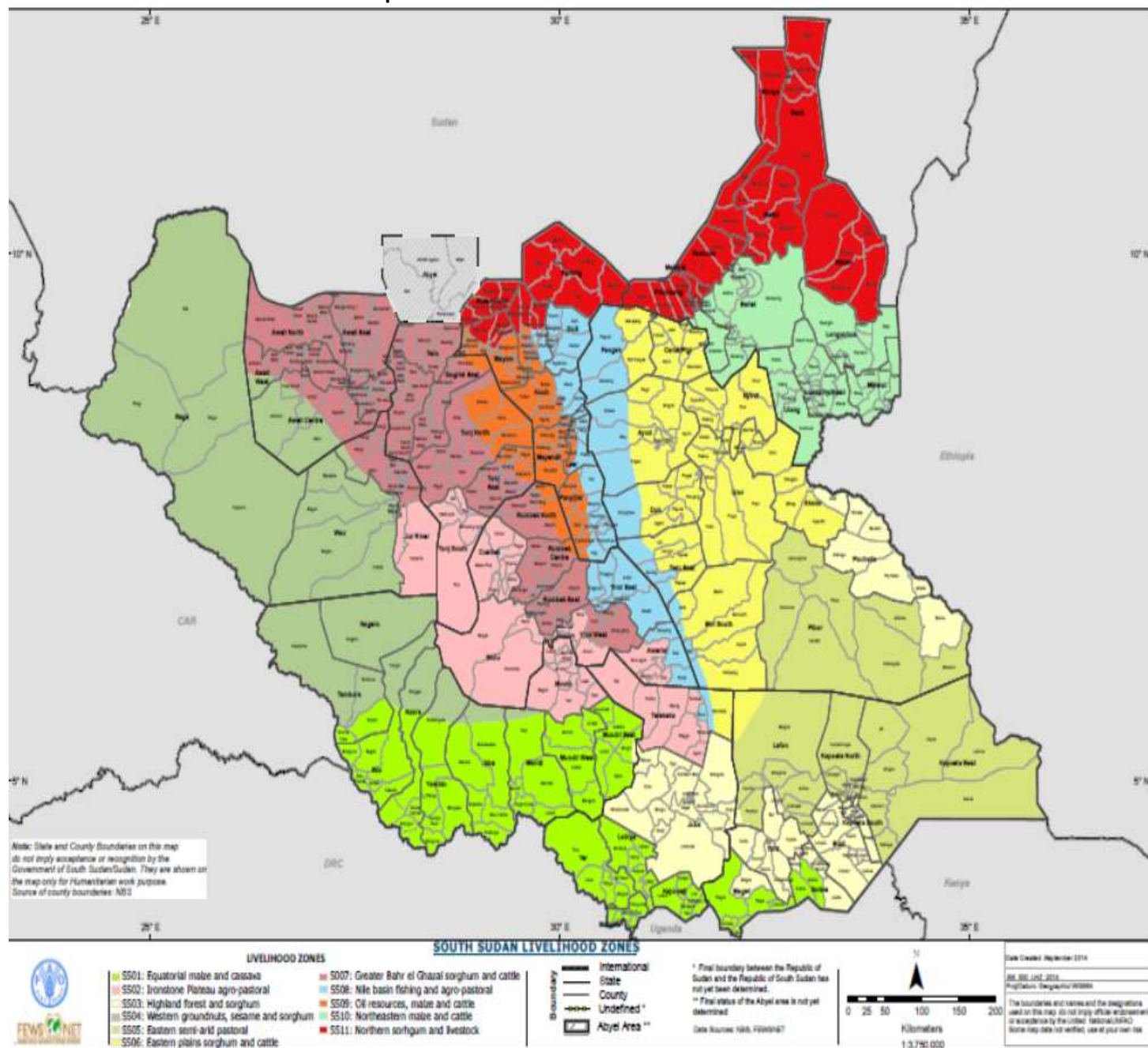
### ANNEX 1: Selected Project Geographical Locations





## ANNEX 2: Livelihood Zones of South Sudan

Map of Livelihood Zones in South Sudan





1. *Equatoria maize and cassava zone (SS01)*: This zone is characterized by equatorial rainforest concentrated particularly on the Uganda, Democratic Republic of Congo (DRC) and Central African Republic (CAR) borders. This is the only part of South Sudan with typical bimodal rainfall pattern and two reliable seasons. Precipitation is about 1100 millimeter (mm) to 1500 mm per annum in both rainy seasons. First rains normally commence around March with a break in late June and restart a second time in July through November. Major crops include maize, beans, sorghum, groundnut, cassava and sweet potato. The project areas that fall within this zone are Magwi, Morobo, Yei and Maridi Counties.
2. *Ironstone plateau agro-pastoral livelihood zone (SS02)*: This zone cuts across the Central Equatoria State (CES), Western Equatoria State (WES) Lakes, Warrap and Western Bahr El Ghazal (WBEG) state. Predominantly cultivated crops are sorghum, groundnut and sesame. Other crops are maize, cowpea, green gram (lakes) cassava and sweet potato. More than 80 percent of the households in this zone keep livestock. The only project county that falls within this zone is River County.
3. *Highland forest and sorghum zone (SS03)*: This zone cuts across CES and Eastern Equatoria State (EES) but is located along the mountain ranges of the Greater Equatorial region and the border with Ethiopia and Uganda. Its topography is characterized by highlands and foothills with a mixture of forest, bush shrubs and grasslands. The zone has a unimodal rainfall pattern with average precipitation of about 1100 mm to 1300 mm per annum. There are two distinct seasons; a rainy season from April to November and a short dry season from December to March. The main crops are sorghum and maize, with the latter growing mainly in the eastern parts of the zone. Other crops cultivated in this zone include millet, sesame, cowpeas/green grams, sweet potatoes, cassava and groundnut. The livestock kept are mainly goats, a few sheep and poultry with relatively few cattle mainly owned by the better-off groups. The project area within this zone is Torit County.
4. *Western plains groundnut, sesame and sorghum (SS04)*: This zone is mainly located in WBEG and some parts of WES and Northern Bahr El Ghazal (NBEG) state. It is characterized by highlands, foothills and parts of the Ironstone plateau. Vegetation in the area is a mixture of forest and grasslands with mahogany and bamboo trees. The zone has a unimodal rainfall pattern, with average precipitation of about 900 mm to 1 100 mm. There are two main seasons: the rainy season, which starts in April to October, and the dry season from November to March. Soils are mainly relatively fertile sandy clays. The main crops cultivated include sorghum, cassava, groundnut, sesame, cowpeas, sweet potatoes and assorted vegetables. The project area in this zone is Wau County.
5. *Eastern plains sorghum and cattle zone (SS06)*. This livelihood zone is located in eastern flood plains in Jonglei state. It can be described as zone of short unimodal rainfall with annual precipitation ranging from 600 mm to 900 mm. The rainy season is normally between June and mid-October, and dry season from mid-October to May, respectively. The major crops grown include sorghum, groundnut and maize in addition to cowpeas and groundnuts. The project areas within this zone are Bor South and Twic East Counties.
6. *Western flood plain sorghum and cattle zone (SS07)*. This is predominantly pastoral zone covering Warrap state, parts of Lakes and Northern Bahr El Ghazal (NBEG) states. It has a very short rainy season that often starts in May and ends in September, with annual precipitation being between 500 mm to 700 mm. The most commonly grown crops being sorghum, millet and groundnuts. Cowpeas, green grams and sesame are also grown on a limited scale. The areas to be covered by the project in this zone include Aweil South and Aweil North Counties.
7. *Nile basin fishing and agro-pastoral (SS08)*. This zone runs along the Nile, cutting across CES, Jonglei, Lakes, Unity and



Upper Nile, with significant livestock as well. The total annual rainfall is about 400 mm. The rainy season is normally short from June-September. The major crops grown are sorghum, maize and groundnut. Other minor crops are millet, cowpeas, sesame and green grams. The project areas within this zone include Bor South and Twic East. However, only about 10 and 30 percent of Bor South and Twic East Counties fall within this zone. Precise locations for project implementation within these two counties will be defined by stakeholders during project inception.

8. *North-Western Nile basin cattle and maize (SS09)*. This is another agro-pastoralist zone with recurrent flooding, located mainly in Unity state. The rainy season are very short, hardly reaching three months with an annual precipitation of about 300 mm. Farmers grow sorghum, maize, ground nuts and sesame as well as cowpea. Other crops of insignificant importance to locals are sweet potato and millet. This zone is not targeted by the project.
9. *North-Eastern maize, cattle and fishing (SS10)*. This zone is located mainly parts of Upper Nile state. It is characterized by flat land of black cotton soil with very poor drainage, and therefore prone to flooding. It is a pastoralist zone, but farmers cultivate maize and cowpea as major crop. This zone is not targeted by the project though might benefit from the spillover effects and outputs from the project, especially from Renk and Melut.
10. *Northern sorghum, sesame and livestock (SS011)*. This livelihood zone is located mainly in the Upper Nile state and has very short rainy season of about 2.5 to 3 months starting from July with annual precipitation of about 300 mm. It is an agro-pastoralist zone where farmers grow sorghum and sesame in large acreages (Renk mechanized agriculture) ranging from 100 to 1 000 feddans<sup>54</sup>. Other crops grown by farmers are maize, groundnuts and cowpeas. The counties targeted by the project in this zone are Renk and Melut.

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<sup>54</sup> A feddan= 4200 m<sup>2</sup>, Approx. 1 Acre



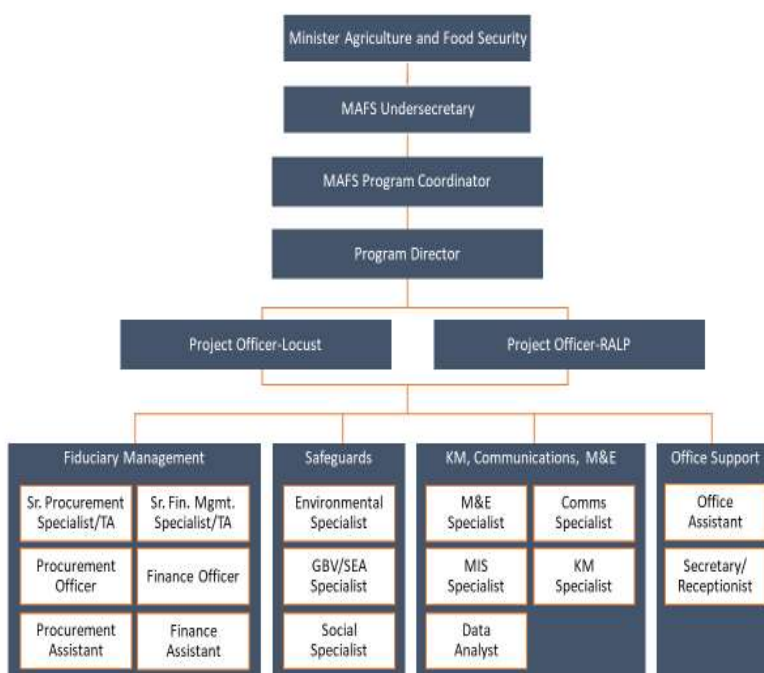
### ANNEX 3: Implementation Arrangements and Support Plan

#### A. Project Institutional and Implementation Arrangements

1. **Governance and Oversight:** On behalf of the government, MAFS will be responsible for overall liaison and coordination. High-level oversight and overall guidance on project implementation will be provided by the PSC comprising the Minister for Finance and Planning, Minister for Agriculture and Food Security, Governors of participating states. The PSC's main task will be to: (a) review and advise the overall project approach and methodology; (b) provide guidance and advice on policy issues, including resolving conflicts or problems related to national agriculture policies; (c) foster synergies between stakeholders to maximize project effectiveness and complementarities; and (d) identify and resolve any jointly faced, or coordination-specific, issues and challenges. The PSC will meet at least twice a year.
2. **Project Management and Coordination.** Day-to-day oversight and management of the project will be delegated to the PCU constituted within the MAFS. The PCU will manage all core functions including program management, coordination, partner and community mobilization and facilitation, capacity building, training, environmental and social framework, procurement, financial management and monitoring and evaluation. Environmental and social risks will be managed in line with the World Bank Environmental and Social Framework, applicable World Bank Environmental and Social Standards and the project Environmental and Social Management Framework. MAFS shall prepare: (a) in accordance with terms of reference acceptable to the World Bank, a manual, which contains detailed Project arrangements and procedures for: (i) institutional coordination and day-to-day execution of the Project; (ii) monitoring, evaluation, reporting and communication; (iii) criteria, procedures (including participatory approaches) and responsibilities for selection of Project locations, Project beneficiaries, vouchers to be provided under Part 2.1 of the Project and Sub-projects and investments under Part 2.3 of the Project; (i) administration, procurement, financial management and accounting; (ii) mechanisms for accommodating changes in Project implementation due to COVID-19; and (iii) such other administrative, technical and organizational arrangements and procedures as shall be required for purposes of implementation of the Project ("Project Implementation Manual" or "PIM"). The project implementation manual, prepared in accordance with provisions in Section I.B.1 of Schedule 2 to the Financing Agreement has been deemed satisfactory by the Association and has been adopted by the Recipient is the condition for effectiveness. The PCU will regularly submit a six monthly workplan with a detailed budget to the World Bank for prior approval. To achieve more efficient use of budget resources and promote increased collaboration, RALP and ELRP will share the PCU. Below is the PCU organogram showing the critical positions that need to be filled throughout project implementation.



**Figure 1: Organogram for shared PCU**



3. Following Board approval, MAFS will designate two Ministry officials—the MAFS Program Coordinator and an Acting Program Director from MAFS until the fulltime Program Director is recruited. These two officials would open the project designated accounts and recruit the Financial Management Specialist and Procurement Specialist, so they can join the PCU within one month of effectiveness. On a priority basis, they would initiate the process for hiring the services of FAO for project implementation. They will also manage the recruitment of the fulltime Program Director, Project Officers for ELRP and RALP, the Senior Procurement and Financial Management Specialists and Technical Assistance Providers, and the national ESF team (Environment, GBV/SEA, and Social Specialists), within three months of effectiveness.
4. MAFS will use direct contracting to engage Food and Agriculture Organization of the United Nations (FAO) as lead technical partner for implementation and technical assistance for components 1, 2, sub-component 3.2, ESF and other management priorities. FAO will set up PIUs in the project areas. The environmental and social risk management responsibilities shall cascade down to FAO through direct contracting agreement with MAFS. FAO's South Sudan Office is one of the largest FAO operations globally, and it works closely with MAFS on policy, regulatory, and investment issues across the sector. FAO has a large field presence as well as a network of vetted international and national NGOs that further expand its reach throughout the country. FAO engagement will also help ensure fiduciary accountability, risk mitigation, and strong monitoring. In a similar arrangement, FAO performed well as an implementation partner under the World Bank funded South Sudan Emergency Food and Nutrition Support Project (EFNSP, P163559) and the precursor Southern Sudan Emergency Food Crisis Response Project (EFCRP, P113586).
5. FAO have established institutional and implementation mechanisms for the delivery of the project interventions in South Sudan. They have offices both at the national, state and country levels throughout the country where project



management, coordination, administrative and technical staff are located. FAO has extensive track record of production enhancement; training and skills enhancement; resilience building; provision of good quality seed, technology and implements; livelihood support; and food security and nutrition activities that are the intervention areas of the proposed project. As a specialized technical agency, FAO would provide the technical backstopping required in view of specific agriculture angle of the project interventions. FAO is also a key global stakeholder in the generation of essential data and analyses with focus on food security and nutrition aiming at building food security information systems.

6. FAO Representation in South Sudan comprises a multidisciplinary core team of about 320 international and national staff in the main and regional hubs with specialization in animal health, agronomy, water resource management, food security and information systems, livelihood, operations and finance. Project activities will be backstopped technically and operationally by the multidisciplinary team of experts at the FAO Sub regional Office for Eastern Africa in Addis Ababa, in close collaboration with the Technical Divisions at FAO Headquarters in Rome.
7. FAO will establish project coordination structures at national and regional levels which will coordinate and manage implementation of the project activities. The coordination structure will consist of the Project Support Unit (PSU) at the national level, and six Project Implementation Units (PIU) in the field. Apart from the project implementation aspect, FAO project team will work closely with the MAFS and CAD staff and all the relevant stakeholders, where feasible, to update them on the project status and ensure coordination of the project activities with other agricultural, livelihood and food security interventions on the ground. The FAO team will comprise 36 fulltime and 25 part-time shared staff.
8. The project will use a modular format for implementation, with FAO coordinating project activities. Under the overall guidance of the PCU, FAO-PIU will be responsible for implementation, mobilization, technical inputs, asset transfer, financial management, procurement, environmental and social safeguard, monitoring & evaluation, training and quality, TA and capacity building support to MAFS, and will coordinate with other agencies (UN organizations, NGOS, INGOs, private sector) as needed.

**Table 1: FAO Staff Strength in Project offices**

Office	Location	Fulltime Core Staff	Parttime/Shared Staff
PMU	Juba	12	24
PIU 1	Aweil	5	
PIU 2	Bor	6	
PIU 3	Wau	5	
PIU 4	Malakal	5	
PIU 5	Torit	5	
PIU 6	Juba	5	



**Table 2: Details of FAO Project Staff**

Office	Location	Fulltime Core Staff	Parttime/Shared Staff
PSU	Juba	<p><i>Technical and Support Staff (2)</i></p> <ol style="list-style-type: none"> <li>1. Project Manager</li> <li>2. Implementation Specialist</li> </ol> <p><i>Operations &amp; Administrative Staff (10)</i></p> <ol style="list-style-type: none"> <li>3. Procurement Officer</li> <li>4. M&amp;E Officer</li> <li>5. Security Assistant</li> <li>6. Drivers (6)</li> </ol>	<p><i>Technical Staff (14)</i></p> <ol style="list-style-type: none"> <li>1. *SEA/GB Expert</li> <li>2. *Environmental Risk Management Officer</li> <li>3. *Social Risk Management Officer</li> <li>4. *National Seed Officer</li> <li>5. Crop Production &amp; Protection Officer</li> <li>6. *Natural Resource Management Specialist</li> <li>7. Agric-Engineer</li> <li>8. Nutrition Officer</li> <li>9. NRM Officer</li> <li>10. Technical Expert - Forestry</li> <li>11. Senior National Policy Advisor</li> <li>12. Value Chain Specialist</li> <li>13. Radio Programming Specialist</li> <li>14. Head of Programme</li> </ol> <p><i>Operations &amp; Administrative Staff (10)</i></p> <ol style="list-style-type: none"> <li>15. *Communication Officer</li> <li>16. Administrative Officer</li> <li>17. Resource Planning Officer</li> <li>18. Logistics Officer</li> <li>19. M&amp;E Associate</li> <li>20. Finance/Human Resource /Travel Assistant [2]</li> <li>21. Operations Associate (Budget Management &amp; LoA Management - [2]</li> <li>22. Logistics Assistant/Warehouse/Storekeeper [2]</li> </ol>
PIU 1	Aweil	<ol style="list-style-type: none"> <li>1. Area Coordinator</li> <li>2. Seed Extension Officer</li> <li>3. Field Extension Officers (2)</li> <li>4. AAP Officer</li> </ol>	
PIU 2	Bor	<ol style="list-style-type: none"> <li>1. Area Coordinator</li> <li>2. Seed Extension Officer</li> <li>3. Field Extension Officers (3)</li> <li>4. AAP Officer</li> </ol>	
PIU 3	Wau	<ol style="list-style-type: none"> <li>1. Area Coordinator</li> <li>2. Seed Extension Officer (2)</li> <li>3. Field Extension Officers (2)</li> <li>4. AAP Officer</li> </ol>	
PIU 4	Malakal	<ol style="list-style-type: none"> <li>1. Area Coordinator</li> <li>2. Seed Extension Facilitator (2)</li> </ol>	



		3. Field Extension Officers (2) 4. AAP Officer	
PIU 5	Torit	1. Area Coordinator 2. Seed Extension Facilitator 3. Field Extension Officers (2) 4. AAP Officer	
PIU 6	Juba	1. Area Coordinator 2. Seed Extension Facilitator 3. Field Extension Officers (2) 4. AAP Officer	

\*Staff shared with the Bank funded ELRP

9. **Beneficiary communities.** The participatory approach adopted by RALP promotes the central role and active participation of farmers and beneficiaries in the development and implementation of investment proposals under the project. Beneficiary communities are the populations of settlements or villages in the 13 targeted project counties who share a common interest and joint subproject. Farmer beneficiaries can be organized in groups (meaning any group of eligible individuals who have come together to implement an activity or have a common interest – these can be formally registered community level organizations, cooperatives or informal groups which may in future register formally). They will be actively involved in the identification, selection, implementation, monitoring and operation and maintenance of subprojects under RALP. FAO will have adequate staff and consultants (male and female) to facilitate the mobilization of communities and assist communities to develop subproject proposals and contribute in their implementation in a participatory and inclusive way. Preparation and review of proposals for subprojects and investments will be done in accordance with the project implementation manual that includes detailed guidelines to ensure the openness, inclusiveness and fairness of the process to reduce the risk of elite capture.

## Financial Management

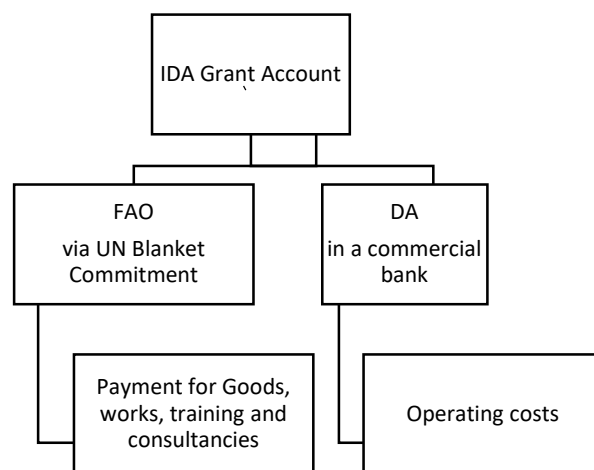
10. The overall fiduciary responsibility for the implementation of the project will be vested in the MAFS through a PCU that will include staff responsible for providing effective FM oversight. An FM assessment of MAFS conducted by the World Bank team revealed significant capacity gaps and internal control weaknesses which could materially affect the implementation of the proposed project. This includes inadequate accounting system, lack of internal audit function, lack of clear approval and authorization arrangements and inadequate segregation of functions and internal check mechanisms in payment processing. MAFS will, therefore, ensure adequate accounting capacity at the PCU headed by a consultant Senior Financial Management Specialist supported by a Finance Officer and an Accountant Assistant. Project accounting records will be maintained using acceptable computerized accounting system to ensure efficiency in transaction processing and timely financial reporting. FAO will be contracted by MAFS to implement components 1, 2 and sub-component 3.2 under the project. FAO South Sudan maintains adequate accounting capacity that will support the implementation of the project.
11. The PCU will be responsible for the preparation of biannual work plan and budget, and cash flow forecasts. Budget execution will be monitored through vote book, budget progress/control book or similar electronic record maintained by the PCU. Budget execution will be monitored through the PCU prepared quarterly Interim Unaudited Financial Reports (IFRs) which will be submitted to the World Bank within 45 days after the end of the quarter in line with the Financing Agreement. In addition, FAO will submit quarterly interim financial reports to the



Bank through the PCU within 45 days after the end of the quarter. The PCU will also prepare annual financial statements for the project (incorporating expenditures incurred by FAO) which will be submitted for external audit within 3 months after the financial year end.

12. The detailed budget for the components implemented by FAO will be reflected in the agreement signed with the MAFS. Annual financial statements for RALP will be audited by the National Audit Chamber (NAC) and the audit report and management letter will be submitted to the World Bank within six months after the end of financial year. Any incremental cost of project audit will be met out of the project funds. The project will also be covered by the FAO internal and external audit arrangements. As part of these arrangements, FAO will conduct annual project-specific internal audit and submit reports to the MAFS and the Bank by June 30 each year. For the components implemented by FAO, the World Bank's audit requirements are expected to be fulfilled through the normal audit function of FAO's own external auditors. FAO annual external audit reports will be published on its website where the World Bank can access and review them.
13. Disbursement of the grant will use advances, reimbursement, direct payments, and payments under special commitments including full documentation or against statements of expenditure, as appropriate. For components 1, 2, and sub-component 3.2 a lumpsum amount will be committed in the form of UN blanket commitments to FAO following submission of a duly executed contract between FAO and MAFS and a payment request from the UN agency. FAO will then provide quarterly financial reports to the PCU within 45 days after the end of the quarter, which will be used to account for expenditures in the World Bank's records. FAO will submit the final certified financial statements to the Bank within six months after completion of all project activities. Any unused balance will be refunded to the Bank before the disbursement deadline date (four months after the project closing date).

**Figure 2: Funds flow Arrangements**



14. For sub-component 3.2, the proceeds of the grant will be disbursed into the DA following the transaction-based Statement of Expenditure (SoE) method. The PCU will submit withdrawal applications accompanied by a statement of expenditures incurred to the World Bank for replenishment of the DA. The project will also maintain a local currency subproject account for making payments denominated in local currency. Funds will only be transferred



from the main DA to the local currency subaccount in order to meet immediate payment obligations. No significant cash balances will be maintained in local currency to reduce the foreign exchange exposure risk. MAFS will be responsible for initiating, incurring and authorizing expenditures under the project in accordance with the specified procedures and initiating the payment process with all the required supporting documentation. Detailed disbursement arrangements are documented in the Disbursement and Financial Information Letter.

15. The main fiduciary risks in this project relate to activities under components 1 and 2 which are decentralized in nature. Due to the inadequate capacity of the implementing ministry, there is a risk that construction and equipment of farmer organization centers under component 1 and distribution of assets to FOs and Cooperatives (sub-component 2.3), may not benefit the intended beneficiaries. This is because of restricted access to project sites due to insecurity and COVID-19 pandemic, difficulty in coordinating, supervising and monitoring multiple activities in diverse locations and the potential for diversion of resources to unintended beneficiaries.
16. Other risks relate to the rapidly deteriorating macroeconomic situation in South Sudan coupled with the significant depreciation of the local currency relative to the US dollar, which could further present a risk of misapplication of project resources. These risks are effectively mitigated by the involvement of FAO in the implementation of the project. The UN agency has got adequate technical and fiduciary capacity to implement similar types of emergency operations. FAO will sign a contract/agreement with MAFS as a basis for the engagement. During the course of implementation, FAO will submit quarterly financial reports, which will be validated by the PCU in line with the signed agreement, before sharing with the World Bank. The financial reports will be generated from the FAO Global Resource Management System (GRMS) to guarantee accuracy and fiduciary assurance. Disbursement of funds to FAO will be made through direct payment from the Bank to mitigate the risks associated with holding funds in the DA. Further, FAO has got adequate footprint in the country including in the particular project sites.
17. Funds disbursed into the DA for the implementation of activities under sub-component 3.1 will be ringfenced from ministry-wide fiduciary risks by ensuring segregated project accounts (DA), cashbooks and financial statements, operated, maintained and prepared by the PCU. The PCU will maintain an up-to-date contract register as well as an asset register. Similarly, the FM team will prepare monthly bank reconciliation statements to ascertain the accuracy of the cash balances in the DA. Fiduciary oversight will be effected by internal auditors deployed from the Internal Audit Directorate and annual external audit by the National Audit Chamber. The in-year internal audit reviews will be conducted at least once a year and the audit reports will be shared with MAFS, MoFP and the World Bank for review and comments. FAO will also conduct annual project-specific internal audit and submit reports to the Government and the World Bank by June 30 each year.
18. **Technology-enabled monitoring.** To strengthen fiduciary oversight and address the inherent risks of the highly decentralized project, MAFS will engage a TPMA to verify the physical implementation of activities and the compliance with the internal controls and financial management arrangements based on TOR agreed with the World Bank. TPMA reports will be submitted simultaneously to MAFS and to the World Bank within 45 days after the end of six months. All exception reports involving fiduciary noncompliance, errors, irregularities, and suspected fraud will be shared with the World Bank in a timely manner. The COVID-19 pandemic is restricting travel, so the project will explore use of technology such as GEMS to ensure remote supervision of project activities in diverse field locations. The residual FM risk rating for the project is, therefore, considered Substantial. The World Bank and MAFS will review the FM arrangements for the project on a regular basis as part of project implementation support.



## Procurement

19. Procurement in South Sudan is governed by the Public Procurement and Asset Disposal Act 2018. The Procurement Act 2018 was supposed to replace an Interim Public Procurement Regulations adopted in 2006, however, the Procurement Act remains nonoperational. Public procurement does not have a procurement regulative authority as provided by the law, and further still procurement regulations and standard procurement documents including manuals have not been finalized. The government, however, has made efforts to expedite the procurement reforms including establishing a Procurement Authority and preparation of regulations to operationalize the law. It is envisaged that the Procurement Act 2018 will be fully operation by end 2021. Recently, the MoFP has established a PFM Oversight and Technical Committee with membership comprising both the government and development partners with the aim to support the economic reforms envisaged in the Peace Agreement. Establishing a functional procurement system is on the Government's priority reform agenda.
20. All project procurements will be carried out in accordance with the 'World Bank Procurement Regulations for Borrowers under Investment Project Financing', dated July 1, 2016, revised in November 2017 and August 2018, hereafter, referred to as 'Procurement Regulations'. The project will be subject to the World Bank's Anticorruption Guidelines, dated July 1, 2016. As per the requirements of the Procurement Regulations, the MAFS has prepared a Project Procurement Strategy for Development (PPSD) which sets out the selection methods to be followed by the Borrower during project implementation in the procurement of goods, works, and non-consulting and consulting services financed by the World Bank and in the procurement plan for the first 18 months, which also will be reflected in the project implementation manual.
21. Procurement under the project will be carried out at the central level by PCU established at the MAFS with a dedicated Procurement Specialist and Financial Management Specialist hired under the project. While PCU will have the overall responsibility for project coordination, oversight, and management, it will hire FAO through an output agreement as the technical lead to execute the project activities, especially components 1, 2 and sub-component 3.2. The project will leverage on the procurement management arrangements established under the previous World Bank financed project EFSNP that was implemented by the ministry. In addition, MAFS will designate 2-3 procurement staff to the project for capacity building. The project will also hire a senior procurement consultant to provide trainings to the MAFS Staff on the new Country Public Procurement and Asset Disposal Act 2018 as well as the procurement regulations. The procurement consultant will also support MAFS to establish and train the procurement committee as required under the procurement law.
22. A procurement capacity assessment of MAFS was conducted in March 2021 as part of project preparation and it was noted that the project management will make use of the existing procurement management arrangements. While MAFS has the experience in implementing the Bank funded projects which the project will leverage the gain in procurement capacity training of MAFS procurement staff, the procurement oversight, in general, remains weak due to the country context. The project will hire experienced consultants in procurement and other technical areas to support the MAFS in project implementation. FAO within the Agreement (contract) will follow their own procedures in execution of contract activities. The FAO country office Internal Audit Report 2018/2019, however, was found to be unsatisfactory with the report highlighting procurement as one of the challenges. Since then, the World Bank and FAO have been closely monitoring the implementation of the recommendations of the audit report and noted that most of the recommended actions were addressed by the FAO. For implementation of the RALP,



the project procurement is according to the following procurement arrangements:

- a) Carryout the project procurement activities in accordance with the World Bank Procurement Regulations.
- b) Initiate the procurement process only after obtaining a No Objection Letter (NOL) from the World Bank to the Procurement Plan (PP). Enter the PP through the World Bank's portal, STEP and update the PP at least biannually. Update the PPSD, at least annually or whenever substantial changes are required to be made to the PP. Submit the updated PPSD to the World Bank for seeking concurrence before changing the PP in STEP.
- c) Use the World Bank's Standard Procurement Documents for goods, non-consultancy service and works and World Bank's Standard RFP for consultancy services.
- d) Publish the contract award details in the Implementing Agency (IA)'s official website.
- e) Adhere to the prior/post review thresholds prescribed in the PP for the first 18 months and subsequent revisions according to the World Bank's instructions.
- f) Extend the necessary cooperation for conducting the World Bank's post-procurement review or any other reviews desired by the World Bank including any complaints cases. The IA regularly uploads all relevant procurement documents to the STEP portal.
- g) Maintains separate complaint registers and procedures for redressing grievances and complaints, if any.

23. **PPSD and Procurement Plan:** MAFS has prepared a PPSD aimed at improving project implementation and help in achieving the results. The PPSD provides the basis for the preparation of an initial 18 months procurement plan setting forth the selection methods to be followed by the PCU during project implementation for the procurement of goods, works, and non-consulting and consulting services financed by the Bank. The procurement plan will be updated at least every six months or as required to reflect the actual project implementation needs and improvements in the institutional capacity. Procurement profile of RALP is mainly comprised of: (a) Contracting UN Agency (FAO) using the output agreement template for the project; (b) Hiring the TPMA; and (c) Hiring the project management individual consultants. Details of the procurement activities will be finalized in the procurement plan.
24. **Monitoring and Supervision Arrangement:** Based on the nature of the project activities, the following proposed monitoring and supervision modalities have been discussed and agreed with MAFS. In its supervisory and implementation support role, the World Bank will ensure that: (a) MAFS will hire a TPMA to verify the progress of outputs of procurement activities. The project will maintain a Procurement Management Information System as part of the project monitoring system that will regularly collect data from the field using geo-enabled digital technology whenever possible. It will also establish a GRM procedure for procurement complaints. A review the six-monthly procurement progress reports and procurement plan updates as part of the overall project progress reports to be prepared by MAFS and submitted to the World Bank; and (b) review and clear terms of reference (ToR) for all implementing partners and key individuals financed under the project. The MAFS will include procurement performance and compliance in the scope of the annual project-specific audit.
25. The overall procurement risk for the project is assessed as High before the mitigation measures. The fiduciary assessment identified a number of risk mitigations measures and an action plan prepared in consultation with the MAFS and other implementation agents, and are included in table 3 below:



**Table 3: Procurement Risk and Mitigation Measures**

	<b>Risk</b>	<b>Risk Mitigation Measures</b>	<b>Responsible</b>	<b>Proposed Completion Date</b>
1	MAFS capacity/experience to implement procurement of the project is limited.	The PCU will hire a dedicated Senior Procurement Specialist with experience satisfactory to the World Bank.	MAFS	Within three months after effectiveness.
2	Operational context: volatile political situation and weak macro-economic projection; current constraints in making payments to another party outside of the country due to foreign exchange shortages.	Direct payments to suppliers at the request of the government.	MAFS	Starting with effectiveness continued throughout project implementation.
3	Fiduciary risk: Corruption and bribery concerns with regards to internal controls within the Ministry and broader context of the country; South Sudan is ranked second most corrupt country in the world on transparency corruption perception index.	Project to be implemented with the support of UN Agencies as the main suppliers of goods and services. In addition, direct payments are proposed.	MAFS	Throughout the project period.
4	High inflation of local currency resulting lack/limited participation of service providers/suppliers in tendering process especially for low value contracts and NCB.	Bidders given options in the bidding document to bid in other foreign currencies other than local currency.	MAFS	Throughout the project period.
5	Lack of knowledge of the stakeholders involved in procurement and related activities.	The project implementation manual will include a procurement section clearly describing the procurement arrangement, roles and responsibilities	MAFS	Effectiveness.
6	Lack of continuous availability of designated procurement counterpart staff at MAFS hinders transfer of knowledge.	MAFS shall ensure continuous availability of qualified counterpart staff in PCU to work alongside the senior procurement specialist.	MAFS	Throughout the project period.

26. **Procurement and Selection Method:** The procurement of goods, works and non-consulting services will utilize the methods such as international competitive bidding (RFB-International, National Competitive Bidding (NCB) procurement from UN agencies, shopping, single source selection and direct contracting. Procurement from UN Agencies such as UNOPS will be used for procurement of vehicles. Selection of consultants will follow QCBS, QBS, CQS, LCS, FBS, selection of individual consultants and SSS.
27. **Contract Management.** High-risk and high-value procurements will be identified in the PPSD for increased contract management support and indicated in the PP. The IA will develop KPIs for such identified contracts, and the indicators would be monitored during actual execution of contracts. The World Bank team would provide additional due diligence and independent review of the contract performance of such identified procurements. The project will be implemented by the fully staffed PCU and is responsible for the overall coordination and project/contract management.
28. **Workshops, Conference Attendance and Study Tours.** These will be carried out based on the approved six monthly workplan that would identify the general framework of training or similar activities, including the nature of training/study tours/workshops, number of participants, and estimated cost.



29. **Operating Costs.** Incremental operating costs will include expenditures for the maintenance of goods and equipment such as vehicles and computers, fuel, office supplies, consumables, communication costs, workshop venues and materials, and authorized travel costs of officials of the government, including per diems, travel costs, and accommodation for staff when travelling on duty during the implementation of this project, but excluding salaries of civil/public servants. Items under this category would be procured using the IA national procurement and administrative procedures acceptable to the Bank. These operational expenditures for implementation of the project will be reflected in the six-monthly workplan and budget submitted to the World Bank. Such expenditures, however, shall not be included in the PP and STEP.
30. **Disclosure of procurement-related information.** The following documents shall be disclosed on the ministry/implementing agency's official website: (a) PP and updates; (b) invitations for bids for goods and works for all contracts; (c) request for expression of interest for selection/hiring of consulting services; (d) contract awards of goods, works, and non-consulting and consulting services; (e) monthly financial and physical progress report of all contracts; and (f) reports on actions taken to address any complaints received on a quarterly basis.
31. **Complaints handling.** For the procurement-related complaints, the project will follow the procedure prescribed in the procurement regulations (paragraphs 3.26 and 3.31). To deal with the complaints from bidders, contractors, suppliers, consultants, and the public at large, a complaint handling mechanism will be set up for the project.
32. **Record keeping and Management.** All records pertaining to the award of tenders including bid notification, registers pertaining to sale and receipt of bids, bid opening minutes, bid evaluation reports, and all correspondence pertaining to bid evaluation, communication sent to the Bank in the process, bid securities, and approval of invitation/evaluation of bids, would be retained by the IA and regularly uploaded on STEP. The PCU will be responsible for recordkeeping for ease of retrieval of procurement information. In this respect, each contract will have its own file and should contain all documents on the procurement process.
33. **Procurement Oversight.** The World Bank shall prior review contracts according to the prior-review thresholds set out in the PPSD/PP. All contracts not covered under prior review by the World Bank shall be subject to post review during implementation support missions or special post-review missions or both, including missions by the consultants or TPMA. The World Bank, however, may conduct, at any time, independent procurement reviews of all the contracts financed under the credit if it determines the need for such a review based on the assessment of risk. All TORs regardless of the contract amount shall be subject to the World Bank's prior review.

#### **Environmental and Social (including Safeguards)**

34. Environmental risks will emerge from refurbishment and renovation of priority community facilities and infrastructure such as farmer organization centers, water harvesting infrastructure, health and educational infrastructure. Risks associated with this kind of infrastructure are generally low-to-moderate. Any potential adverse environmental impacts are reversible, temporary in nature and scope, and can be easily managed and mitigated by application and enforcement of environmental and social instruments and tools. Nevertheless, social risks that result from the overall FCV situation, including IDPs, GBV/SEAH, and specific needs of culturally distinct communities, make this project a high-risk operation. Land acquisition impacts are not expected to be high, but in the conflict situation, even minor voluntary land giving needs to be handled sensitively.



35. Based on due diligence as required by the ESF and ESS1 conducted, the project E&S risk rating is assessed High, mainly due to complexity of the fragile country context, violence (political, criminal, ethnic, etc.) and high risk of GBV/SEAH. The inability of the World Bank to conduct on-the-ground implementation support, monitoring, coupled with the country weak legal and institutional arrangements to manage, monitor, support and enforce ESF compliance during implementation, predisposes the project to a “High” environmental and social risk rating.
36. MAFS is responsible for the application and compliance with the ESF and respective ESS. The ESS relevant to the project are ESS1: Assessment and Management of Environmental and Social Risks and Impacts, ESS2: Labor and Working Conditions, ESS3: Resource Efficiency and Pollution Prevention and Management, ESS4: Community Health and Safety, ESS6: Biodiversity Conservation and Sustainability Management on Living Natural Resources, ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities, ESS8: Cultural Heritage, and ESS10: Stakeholder Engagement and Information Disclosure. To comply with the requirements of the relevant standards, ESF instruments have been prepared, namely: (a) Environmental and Social Management Framework (ESMF) which is the ESF umbrella instrument; (b) Labor Management Procedures (LMP) which includes occupational, health and safety procedures; (c) Social and Environmental Framework (SEF); and (d) Environmental and Social Commitment Plan (ESCP). In addition, MAFS has prepared the GBV Framework, Security Management Plan, Workers Code of Conduct, and a Social Assessment (SA). Any voluntary land acquisition will be guided by the respective regulations included in the ESMF. ESCP and SEF have been consulted upon, prepared and disclosed on the Bank’s external website and in-country on April 30 and May 7 respectively. The remaining ESF instruments are under preparation and will be finalized and disclosed within sixty days of project effectiveness. Furthermore, these ESF instruments operationalization steps will be included in the project implementation manual. The PIM will refer to the ESF instruments, and the additional plans that will be prepared during implementation. Tender documents and contracts will require contractors to comply with the agreed LMP, national regulations, labor and working conditions, occupational health and safety plans and procedures. Contractors will also be requested to prepare COHSP based on the measures described in the LMP, ESMF, ESIA/ESMP and the requirements of ESS2. The project and its contractors and subcontractors will ensure application of the World Bank Environmental, Health and Safety Guidelines (EHS Guidelines), Health and Safety Good International Industry Practices (GIIP, such as OSHA) to avoid, minimize or reduce adverse impacts on human health and the environment. As MAFS will direct contract FAO to support this project implementation, in compliance to ESF requirements, and prepared ES instruments for this project, environment and social risk management responsibilities shall cascade down to FAO to ensure compliance to ESF requirements. This will be clearly articulated in contract signed between MAFS and FAO. MAFS shall ensure FAO compliance to the ESCP and all prepared ESF instruments and regularly report to MAFS on implementation of ES mitigation measures. MAFS shall in return be responsible for overall ESF compliance and reporting to the Bank.
37. **Gender and GBV Risks.** As part of project preparation, a project-specific GBV risk assessment was carried out using the SEA/H risk screening tool. The existing contextual risks intersect with key project related risks, such as the targeting of vulnerable populations, such as women and children, IDPs, disabled for project interventions. The assessment rated the project GBV risk as High. Contextual GBV risks relate to the FCV context and impact of conflict and instability, as well as pervasive social norms that undermine women’s status and contribute to acceptability of use of violence against women and girls. Project related risks may include, among others changes in gender inequitable household dynamics due to project participation, exposure to sexual exploitation and abuse by contractors and project related workers, risks linked to women’s mobility and participation in agriculture and livelihoods related activities. The project will integrate the full suite of GBV/SEAH risk mitigation measures including a GBV action plan, dedicated GBV/SEAH specialist, safety audits, awareness raising and training, accountability and



response framework, reporting and response protocol, TPMA oversight, support services for survivors. FAO will prepare a detailed GBV action plan which will then form part of the Contractors' ESMP.

38. **Labor and Working Conditions.** The project will include direct workers, contracted workers, primary supply workers, and MAFS workers, which will, therefore, need to meet requirements for terms and conditions of employment, non-discrimination and equal opportunity, worker's organizations, child labor, forced labor, a grievance mechanism and occupational health and safety plans. Stakeholders and beneficiaries working in connection with the project fulltime or parttime basis will remain subject to the terms and conditions of their existing public sector employment or agreement, unless there has been an effective legal transfer of their employment or engagement in the project. The project will also include occupational health and safety procedures or plans and a grievance mechanism for labor disputes as required by ESS2.
39. **Stakeholder Engagement.** The project will ensure early, continuous, and inclusive (including vulnerable/disadvantaged groups) stakeholder engagement which will be documented in a SEP and disclosed. This plan will address specific risks identified by stakeholders, including the risks to vulnerable persons, and will be updated as and when necessary. The objective is to establish a systematic approach for stakeholder engagement, maintain a constructive relationship with them, consider stakeholders' views, promote and provide means for effective and inclusive engagement with project affected parties throughout the project lifecycle, and ensure that appropriate project information is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner. The project will set up a project specific grievance redress and feedback mechanisms for people to report concerns or complaints if they feel unfairly treated or are affected by any of the subprojects.
40. **Grievance Redress Mechanism (GRM).** A locally based, project wide GRM, proportionate to the potential risks and impacts of the project, will be established prior to the commencement of project activities. In addition, a GRM specifically for direct and contracted workers will be provided. Specific channels for safe, confidential reporting of cases of SEAH or other forms of GBV will be identified, while specific procedures for managing reporting of and responding to GBV/SEAH cases will be developed as part of the GBV/SEAH action plan.
41. **Monitoring and reporting** will be supervised by MAFS staff. Members of the community, through their representatives, will have a role to undertake both compliance monitoring and impact monitoring. This will be done throughout the subproject cycle, namely: during the planning phase, communities will participate in the identification of indicators for monitoring the mitigating measures. During the implementation phase, monitoring the execution of any works with respect to environmental aspects. During the operation and maintenance phase, the overall environmental monitoring (including monitoring human-natural resources conflict) and alerting on any emerging environmental hazards in conjunction with the ongoing subproject activities. Communities will pass on their observations and concerns through the local FAO project staff. FAO through the TPMA reports will monitor ESF compliance as well. Additional field visits or further investigations will be undertaken when necessary.
42. **Community Participation.** The participatory approach is the basic principle underlying the implementation mechanism for this project. There are a number of excellent reasons for this choice, including: (a) When people have planned their own activities and the activities respond to their needs, their commitment to quality and timely implementation is significantly higher; (b) Operating in a participatory manner encourages cooperation between people within the same community and can be an opportunity for reducing tensions and increasing solidarity among the community members; (c) In the current fluid context about institutions and institutional levels in South Sudan,



focusing on the community level would ensure that benefits from efforts and investments are maximised; (d) Community involvement is a very good way of ensuring quality delivery by service providers, as community members would not accept work which is below their expected standards; and (e) Participation mechanisms and procedures would be described in detail in the project implementation manual.

### **Knowledge Management, Monitoring and Evaluation**

43. The project knowledge management and M&E system would be focused on: (a) documentation, collation and dissemination of project learning and experiences, (b) several types of data specific to activities under each component/sub-component in accordance with the results framework. PCU would comprise a fulltime knowledge management specialist, M&E specialist, MIS specialist and a data analyst. M&E specialist will be responsible for coordinating the M&E tasks, organizing and updating the database. Project results at the community level would be collected by FAO, and consequently consolidated and reported by the FAO M&E unit at the central level. The World Bank's GEMS would be adapted to include RALP indicators and targets and project activities would be geo-referenced. The information will be utilized to both track the progress and problems and serve as useful management tool. Monitoring reports would be issued biannually.
44. The project plans to conduct baseline, mid-term and end-of-project surveys. A baseline survey, that is, needs assessment, will be conducted during the first three months of the project. MAFS will conduct an end-of-project evaluation before the project closing date. The final evaluation will assess the performance, including the relevance, effectiveness and efficiency, sustainability of results and the likelihood of impact. In particular, the evaluation will assess the processes and achievements made as well as document the project impacts, outputs and results to draw lessons from implementation in conflict context that will inform the development of any similar project in the country in future.



## **ANNEX 4: Technical, Economic and Financial Analysis**

### **A. Economic and Financial Analyses**

#### **Expected Results and Benefits**

1. **Project Outreach.** It is expected that the Project interventions would contribute to: (a) Increased production of selected crops; (b) Yield increase in selected crops; (c) Increase in farming area; and (d) Farmers adopting improved agricultural practices (percentage out of total number of farmers reached with productive assets and services). RALP will directly benefit at least 140,000 smallholders/farmers (producers). They will benefit from training, skills enhancement, improved agronomic practices, pest control, minimized pre- and post-harvest losses, and increased access to improved agricultural inputs including good quality seeds, appropriate tools and machinery, and output markets. It is expected to result in improved agricultural production and increased opportunities for market access. Beneficiaries will also include local youth, women, community resource persons, micro/small enterprises, inputs suppliers, agro-dealers, staff from CAD, third party implementation agency, participating NGOs and MAFS staff etc. The key economic benefit resulting from the project investment is mainly the incremental production of the agricultural crop by increasing yields as well as increased cropping area. The project area concerned with improved agricultural practices is expected to reach 100,000 ha at full development.
2. The analysis focuses on three groups of beneficiaries: producers (crops), agro-processors, and seed multipliers. The total amount of good quality seed to be made available to producers is around 3.3 million kg. All seed and farming equipment will be divided into 220,000 kits and each kit will consist of 15 kg of seeds. Each of the 140,000 beneficiaries will be provided with these kits on average twice during the project lifetime. The vegetable seeds will be distributed among those 140,000 smallholders with a special aim of increasing the quality of nutrition of befitting smallholders/farmers. The total local procurement of assorted crop kits is around 500,000 units. Seed multiplication will be carried out by some 5,000 participating farmers. Each of these smallholders will receive around five kits of seeds for seed multiplication purposes. Also, the beneficiaries will be provided with assets worth US\$1.05 million with the purpose of the support of tillage services, local agricultural tools, and other agricultural goods and services. Furthermore, there is a special support, for households facing food insecurity, providing inputs and assets like seeds, small ruminants, poultry, under sub-component 2.1 that can stabilize the target households (IPC-3+) to improve their immediate access to food. It is expected that inputs worth US\$6 million will be distributed to about 50,000 households in the above-described way to improve their food insecurity status immediately.
3. Most of the project activities and interventions will be demand driven. The ex-ante financial cost-benefit analysis of individual investments is, therefore, only illustrative. In order to quantify the benefits deriving from the improved access to better inputs, production techniques and equipment supported by the RALP project, eight indicative business activities were developed for the financial and economic analysis. The results of the analysis were then extrapolated to the whole project to identify the overall project's economic impact.

#### **Key Assumptions**

4. Key assumptions are based on the result framework. At the end of the 2021 to 2026 implementation period, according to the four PDO indicators, agricultural production volume of selected crops has been assumed to



increase from current level by an average of 20 percent, whereas the yields of major crops is assumed to increase in average by 5 percent, and the farming area by an average of 10 percent.

5. The parameters for the farm models are based on information gathered during the project design, from the FAO staff working on agriculture projects in areas similar to the ones covered by this project. In particular, the information on labor and input requirements for various operations, capital costs, prevailing wages, yields, farm gate and market prices of commodities, input and farm-to-market transport costs were collected. Conservative assumptions were made both for use of inputs and potential outputs and considering the possible risks. Prices for commodities/inputs reflect annual average and those actually paid/received by the farmer and incorporate potential marketing risks.
6. The Shadow Exchange Rate (SER) has been calculated at US\$1 = SSP 148. Overall conversion factors for inputs and outputs vary between 0.71 and 1.09. The following factors were calculated based on import parity price used to convert financial prices into economic prices: sorghum CF = 1.09, meat CF = 0.71, vegetables CF = 0.94, urea CF = 0.9. A standard conversion factor of 0.91 has been applied to other inputs and outputs when converting financial prices into economic prices.
7. The farm models show incremental revenues and costs generated by the new investment. In each case, the result of the investment translates into increased quantities of produce from primary producers, their improved revenues and new permanent jobs. The Financial Discount Rate of 0.06 percent<sup>55</sup> is used in this analysis to assess the viability and robustness of investments, which is the current Opportunity Cost of Capital to a beneficiary. The selection criterion for the IRR is to accept all projects for which the IRR is above the opportunity cost of capital. Using the IRR as the measure, the farm models' sensitivity to the changes in parameters can be assessed by varying the cost of investments, production costs and revenues. The economic or social discount rate (SDR) of 6 percent<sup>56</sup> is applied for the economic analysis, which is a Social Opportunity Cost.
8. In the financial analysis, such indicators as IRR, NPV, Benefit-Cost Ratio (BCR) and Return to family and hired labor were calculated. The BCR shows the relationship between the relative costs and benefits of each farm model, expressed in monetary terms. It was calculated using the following formula:  $BCR = NPV/MCR + 1$ , where MCR is the maximum capital at risk indicator.
9. Ninety percent of the beneficiaries will be working on existing irrigated lands, and ten percent of the beneficiaries will be working on the newly irrigated lands mainly for cash crops production. On average 70 percent of the labor costs are family labor, which has an opportunity cost of labor US\$5 per day.

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<sup>55</sup> Deposit interest rate (%) in South Sudan was reported in 2019, according to the World Bank collection of development indicators, compiled from officially recognized sources.

<sup>56</sup> See Discounting Costs and Benefits in Economic Analysis of World Bank Projects, OPSPQ. May 9, 2016. "Where no country-specific growth projections are available, we suggest using 3 percent as a rough estimate for expected long-term growth rate in developing countries. Given reasonable parameters for the other parameters for the other variables in the standard Ramsey formula linking discount rates to growth rates, this yields a discount rate of 6 percent."



## Financial analysis

### Indicative economic activities within the project

10. Eight illustrative farm models were prepared to demonstrate the financial viability of potential investments. The land plot taken for analysis of crop production models is 1 ha. All farm models show the prospective benefits and rate of return derived from the access to required financing, training, demonstration and advisory services.
11. *Rainfed sorghum production model (on existing land)*. The financial model illustrates the incremental benefits from 1ha rainfed sorghum land plot of a farmer who is the direct beneficiary of the project. The model shows a financial NPV of US\$193 over a twenty-year period and a financial IRR of 24.47 percent, which is financially viable. It is expected that the farmer has been already cultivating sorghum on the same land plot, however, the project would provide improved inputs and equipment as well as enhance his/her farming knowledge and skills.
12. *Irrigated groundnut production model (on existing irrigated land)*. The financial model illustrates the incremental benefits from 1ha irrigated groundnut land plot of a farmer who is the direct beneficiary of the project. The model shows a financial NPV of US\$723 over a twenty-year period and a financial IRR of 19.86 percent, which is financially viable. It is expected that the farmer has been already cultivating groundnut on the same land plot, however, the project would provide improved inputs and equipment as well as enhance his/her knowledge and farming skills.
13. *Irrigated tomato production model (on existing irrigated land)*. The financial model illustrates the incremental benefits from 1ha irrigated tomato land plot of a farmer who is the direct beneficiary of the project. The model shows a financial NPV of US\$3,783 over a twenty-year period and a financial IRR of 24.44 percent, which is financially viable. It is expected that the farmer has been already cultivating tomatoes on the same land plot, however, the project would provide improved inputs and equipment as well as enhance his/her knowledge and farming skills.
14. *Irrigated sorghum production model (on newly irrigated land)*. The financial model illustrates the incremental benefits from 1ha irrigated sorghum land plot of a farmer who is the direct beneficiary of the project. The model shows a financial NPV of US\$1,699 over a twenty-year period and a financial IRR of 26.71 percent, which is financially viable. It is expected that the farmer will rent an additional plot of land to cultivate sorghum.
15. *Solar dryer agro-processing model*. The financial model illustrates the incremental benefits from drying of cassava on a solar dryer of a farmer who is the direct beneficiary of the project. The model shows a financial NPV of US\$7,957 over a twenty-year period and a financial IRR of 33.49 percent, which is financially viable.
16. *Seed multiplication model (on existing irrigated land)*. The financial model illustrates the incremental benefits from 1ha seed multiplication land of a farmer who is the direct beneficiary of the project. The model shows a financial NPV of US\$192 over a twenty-year period and a financial IRR of 18.29 percent. It is expected that the farmer has been already working in seed multiplication on the same land plot, however, the project would provide improved inputs and equipment as well as enhance his/her knowledge and farming skills.
17. *Kitchen garden model (to improve immediate access to food)*. The financial model illustrates the incremental benefits from 100 meters square kitchen garden of a farmer who is the direct beneficiary of the project. The model shows a financial NPV of US\$214 over a twenty-year period and a financial IRR of 37.12 percent. It is expected that



the farmer has been owning the same land plot, but did not have enough resources and inputs to sustain some agricultural practices for livelihood.

18. *Small ruminant livestock model (to improve immediate access to food)*. The financial model illustrates the incremental benefits from providing a farmer 1 head of small ruminant who is the direct beneficiary of the project. The model shows a financial NPV of US\$371 over a twenty-year period and a financial IRR of 18.92 percent.

**Table 1: Financial Analysis Results of the Six Models**

South Sudan Resilient Agricultural Livelihoods Project										
	CATEGORY	Estimated Investment Costs (US\$)			Annual Net Benefits (US\$)			Annual Inc. net benefits per 1US\$ of Inv.	IRR (%)	NPV (US\$)
		Project	Beneficiary Costs	Total	Without Project	W. Project - Full Dvt	Incremental			
FINANCIAL ANALYSIS	Rainfed sorghum production model (1h)	159	8	167	139	145	7	0,04	24,47	193
	Irrigated groundnut production model (1h)	214	5	219	218	347	129	0,59	19,86	723
	Irrigated tomato production model (1h)	161	11	172	13,867	14,138	271	1,57	24,44	3,783
	Irrigated sorghum production model for new land users (1h)	159	108	267	0	107	107	0,40	26,71	1,699
	Solar dryer agro-processing model	1,500	15	1,515	0	520	520	0,34	33,49	7,957
	Seed multiplication model (1h)	158	5	163	299	314	15	0,09	18,29	192
	Kitchen garden model (to improve immediate access to food)	112.5	0	112.5	0	387	387	3,44	37,12	214
	Small ruminant livestock model (to improve immediate access to food)	150	0	150	0	228	228	1,52	18,92	371

## Economic analysis

19. The economic analysis was obtained from the financial analysis by converting financial/market prices into economic values, phasing project interventions and benefits in a conservative pace and aggregating costs and benefits at the scale of the entire project. Though all project costs would not lead to direct economic benefits (for example, project management), the entire cost of the project was incorporated in the calculations. It is anticipated that the project will reach about 30 percent of planned beneficiary households within the first two years of the project and that at completion, 60 percent of the total number of beneficiaries would have adopted improved technologies, leading to sustained benefits. The period of economic analysis is 20 years to account for the phasing and gestation period of the proposed interventions. Given the above benefit and cost streams, the base case ERR is estimated at 11.1 percent. The base case net present value of the project's net benefit stream, discounted at 6 percent, is US\$46.0 million in economic terms. The summary of economic analysis is presented in table 2. The ERR is relatively low considering that several benefits of the project have not been quantified, such as social and institutional benefits, for example from organizing the farmers into groups and cooperatives, which form the bulk of component 1.
20. **GHG analysis.** The World Bank uses the EX-ACT to estimate the impact of agricultural investment lending on GHG emissions and carbon sequestration. EX-ACT is a land-based appraisal system for assessing a project's net carbon balance – the net balance of tons of CO<sub>2</sub> equivalent (tCO<sub>2</sub>eq) of GHGs that were emitted or carbon sequestered



as a result of project interventions – compared to a “without project” scenario. The estimated areas to be brought under CSA intervention is 252,384 ha (half of the total 504,764 ha targeted), 11,822 ha will support improved afforestation practices, 31,371 ha of set aside land will be transformed to annual crop land, and 100 ha of trickle irrigation will be constructed along with seed nurseries. The net carbon balance over a period of 20 years is estimated to be -4,651,502 tCO<sub>2</sub>e (approximately -232,575 tCO<sub>2</sub>e per year). At a conservative carbon price (US\$40/t), the value of the reduced GHG emissions under the project is about US\$186 million (detailed analysis explained in the next part of this annex)

21. Taking into account the estimated shadow price of carbon, that will evolve from year to year according to the World Bank Shadow Price of Carbon Guidance Note, the ERR and the ENPV were calculated. The results of scenarios with low carbon price (starting from US\$41 and evolving over years), high carbon price (starting from US\$82 and evolving over year) and without carbon are presented in table 2 below. Low shadow price of carbon scenario has a potential to improve the ERR from 11.3 percent to 20.3 percent, while the high shadow price of carbon scenario would improve the ERR up to 27.3 percent

**Table 2: Project Economic Indicators with Carbon Externalities**

	Without carbon benefits scenario	Low carbon price scenario	High carbon price scenario
ENPV (US\$ mln)	46.0	144.9	243.7
ERR	11.1%	19.3%	25.8%

22. **Sensitivity Analysis.** Economic returns were tested against changes in benefits and costs and for various lags in the realization of benefits. In relative terms, the ERR is equally sensitive to changes in costs and in benefits. In absolute terms, these changes do not have a significant impact on the ERR, and the economic viability is not threatened by both a 20 percent decline in benefits nor by a 20 percent increase in costs, since the ERR in both cases remains well above the discount rate. A one-year delay in project benefits reduces the ERR to 10.1 percent. The results are presented in the following table 3:

**Table 3. Summary of Economic Analysis and Sensitivity Analysis**

Sensitivity Analysis ( 20-year period)	Base case	Costs Increase			Increase of Benefits		Decrease of Benefits			Delay of Benefits	
		+10%	+20%	+50%	+10%	+20%	-10%	-20%	- 30%	1 year	2 years
ERR	<b>11.1%</b>	10.4%	9.8%	8.1%	11.8%	12.3%	10.3%	9.5%	8.8%	10.1%	9.0%
ENPV (USD mln)	<b>46.0</b>	41.1	36.2	21.7	55.4	64.9	36.5	27.1	19.8	36.0	26.2



Figure 1: Project ENPV - US\$ Million

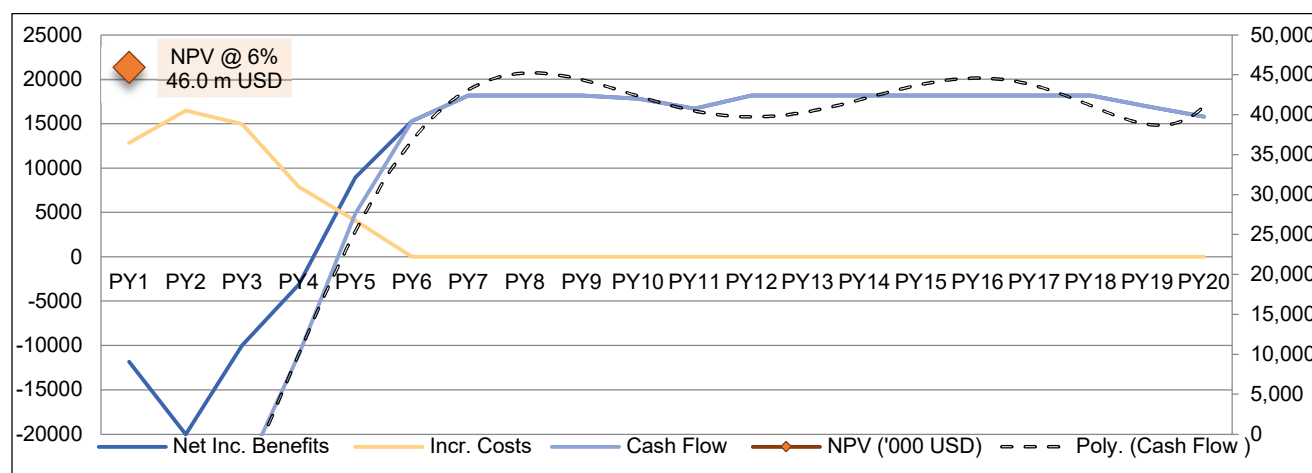


Table 4: Associated risks and implications on the Project ERR

	Δ%	Link with the risk matrix	ERR
<b>Base scenario</b>			11.1%
Project benefits	-10%	Combination of risks affecting output prices, productivity and adoption rates	10.3%
Project benefits	-30%		8.8%
Project costs	10%	Increase of goods costs	10.4%
Project costs	20%		9.8%
1 year lag in ben.		Risks affecting adoption rates and low implementation capacity	10.1%
2 years lag in ben.			9.0%

## B. Greenhouse Gas Accounting Analysis

### Background and Methodology

23. **Motivation.** The World Bank Environment Strategy (2012), adopted a corporate mandate to account GHG emissions for investment lending. The quantification of GHG emissions is an important step in managing and ultimately reducing emissions, as it provides an understanding of the project's GHG mitigation potential and can support sectoral strategies to promote low-carbon development.
24. **Accounting Methodology** by FAO in 2010<sup>57</sup> to estimate the impact of agricultural investment lending on GHG emissions and carbon sequestration in the project area. EX-ACT is a land-based appraisal system that allows the assessment of a project's net carbon-balance. The latter refers to the net balance of tons of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) of GHGs that were emitted, or carbon sequestered as a result of project interventions compared to a "without

<sup>57</sup> See <http://www.fao.org/tc/exact/ex-act-home/en/>.



project” scenario. EX-ACT captures project activities in the following modules: land use change, crop production, livestock and grassland, land degradation, inputs and investment, and aquaculture.

### **Application of EX-ACT**

25. **Project Boundaries.** The project is to strengthen farmer capacity and improve agricultural production. The project will mobilize and build the capacity of targeted farmers and agriculture staff to improve agricultural production, enhance adaptive capacity to climate risks and move the farmer beyond subsistence to produce surplus for market and generate income that can be invested in local livelihoods, household needs and expanding their productive activities. The project will enhance farmers’ access to agricultural inputs and appropriate technology, implements and tools to enhance agricultural production, and value addition. The project is expected to benefit 140,000 beneficiaries.
26. **Data Source.** Data is provided by the country team based on expert estimates.
27. **Basic Assumptions.** South Sudan has tropical climate with dry moisture regime. The dominant soil type of High Activity Clay (HAC) soils. The implementation phase is five (5) years and the capitalization phase is assumed to be fifteen (15) years. The “without project scenario” is assumed not to differ from the “initial scenario” unless specifically mentioned. The analysis further assumes the dynamics of change to be linear over the duration of the project.
28. **Afforestation and Land Use Change.** The project will promote tree planting by converting grassland (2,325 ha) and set aside land (9,497 ha). The project will increase support for agroforestry and afforestation practices and reduce bush fires through forest extension. The total estimated area that will be afforested is 11,822 ha. In addition, the project will also convert around 31,371 ha of set aside land for annual crop land use.
29. **Annual Cropland and Perennial Systems.** The project will target 504,768 ha of annual croplands, with half of it under improved practices (improved seed varieties, minimum soil disturbance and improved water management with the introduction of irrigation kits). Improved agroforestry practices such as alley cropping, multistrata systems, and silvoarable systems will be introduced to 1,680 ha of current perennial systems.
30. **Inputs.** The project will construct trickle irrigation on 100 ha and build seed nurseries.

### **Results**

31. **Net Carbon Balance.** The net carbon balance quantifies GHGs emitted or sequestered as a result of the project compared to the without project scenario. Over 20 years, the project constitutes a carbon sequestration of 4,651,502 tCO<sub>2</sub>e. Per hectare, the project will sequester 8.5 tCO<sub>2</sub>e which is 0.4 tCO<sub>2</sub>e per hectare per year (table 5).



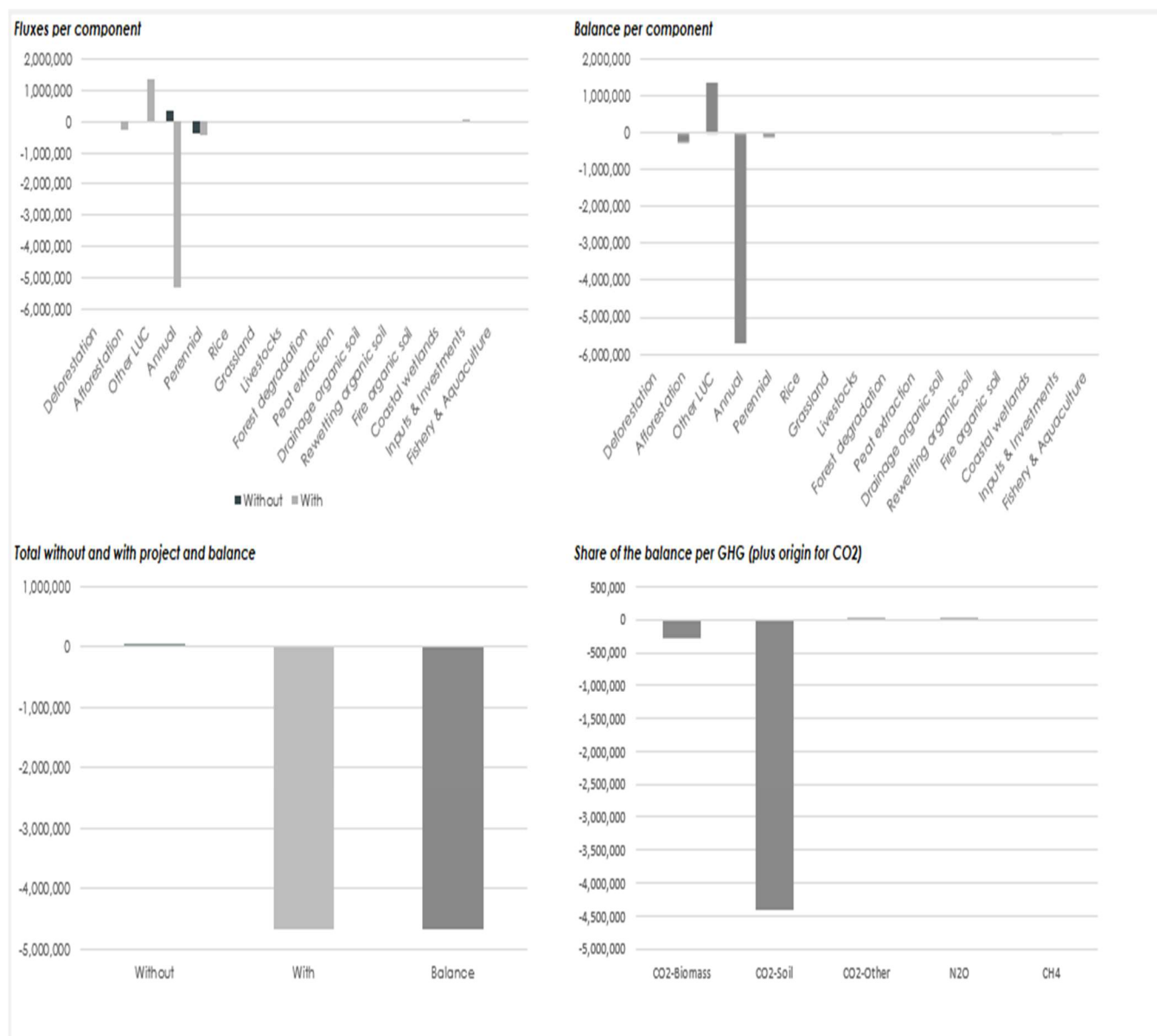
**Table 5: Results Ex-ante GHG Analysis in tCO<sub>2</sub>e**

Components of the project	Gross fluxes		GHG Balance
	Without	With	
	All GHG in tCO <sub>2</sub> eq		
	Positive = source / negative = sink		
Afforestation efforts to convert grassland and set aside land	0	-255,359	-255,359
Land use change from set aside land to cropland	0	1,345,140	1,345,140
Annual crop management through improved land management interventions	357,424	-5,281,764	-5,639,188
Perennial crop management through improved practices	-355,309	-457,762	-102,454
Construction of irrigation systems and seed nurseries	0	359	359
<b>Total</b>	2,115	-4,649,387	<b>-4,651,502</b>
<b>Per hectare</b>	0	-8.5	-8.5
<b>Per hectare per year</b>	0	-0.4	<b>-0.4</b>

32. **Carbon Sources and Sinks.** The main carbon source is from land use change. Improved practices to annual crops, perennial crops, and afforestation efforts will lead to a carbon sink for the project. See figure 2 below.



Figure 2: GHG emissions and carbon sequestration in tCO<sub>2</sub>e, as well as net carbon balance per project activity and the entire project, as well as the share of emission sources and carbon sinks in tCO<sub>2</sub>e for the entire project





## **ANNEX 5: World Bank Group Response to COVID-19 in South Sudan**

### **I. Impact of the COVID-19 pandemic on the country and Government response**

1. **The COVID-19 crisis has had significant health impacts for South Sudan.** Since the first confirmed case was reported in South Sudan on April 5, 2020, the trajectory of cases took an upward trend despite the very limited testing capacity with the number of cases exceeding 10,600 as of April 2021<sup>58</sup>. In addition to direct impacts, there is also substantial evidence that the pandemic has resulted in reduced health seeking behavior, including fewer outpatient consultations, child immunization and reduced antenatal care usage by pregnant women. Travel restrictions put in place to limit the disease's spread created delays in supply and staff movements, inhibiting health service delivery and hampered the delivery of the humanitarian program. Measures to prepare health facilities to prevent the spread of cases and treat COVID-19 patients further affected the fragile health system.
2. **The Government has taken measures to limit the spread of the pandemic.** The Government adopted several measures in April 2020, most notably: a) Suspension of travel to and from other countries except for certain flights; b) closure of schools and non-essential businesses; c) limited movement from 7 pm to 6 am; d) communication campaign on social distancing and hand washing; e) limiting of mass gathering including in churches and mosques; f) launching a risk communication and education campaign on prevention of COVID-19 including where to seek help, social distancing, and hand washing, as well as the launch of the 6666 COVID-19 helpline; g) Imposition of a 14 day quarantine on travelers between states and travelers coming from outside the country; and h) Reduction of the number of passengers in public vehicles to half the vehicle's capacity. Enforcement of the measures was poor and the Government gradually eased the measures since July 2020. On the economic front, the authorities took action to reduce both the Bank of South Sudan (BoSS) refinancing Rate (15 percent to 13 percent) and Reserve Requirement Ratio (20 percent to 18 percent) in April 2020. Additional measures reduced the BoSS Rate by a further 3 percentage points, down to 10 percent, and suspended the regulation of higher minimum paid-up capital for commercial banks<sup>59</sup>. In addition, South Sudan has created two special committees to oversee critical economic and PFM reforms in response to COVID-19.
3. **Notwithstanding the Government's response, the pandemic, associated containment measures, and global downturn have had severe economic impacts.** COVID-19 effects have been transmitted through lower oil prices, an increase of the prices of basic commodities due to trade disruptions, lower remittances receipts, and restrictions on humanitarian operations on the ground. The spread of the epidemic in countries with close trade ties with South Sudan and the restriction of travel to such countries, particularly Uganda, have had a significance impact. Following a rebound in FY2019/20 with real GDP growth estimated at 9.3 percent in FY2019/20, growth projections for FY2020/21 are that the economy will contract by -3.4 percent. The oil sector is expected to contract by -5.8 percent with production declining to 58.4 million barrels in FY2020/21 from 62.1 million barrels in FY2019/20 as Covid-19 restrictions impacted movement of machinery and OPEC+ production cuts affected production. With Covid-19 restrictions delaying new investment, activity in the oil sector is not expected to improve until FY2022/23, at which time oil production is projected to rise to 60.2 million barrels. The non-oil economy is expected to contract by -1.9 percent weighed down by a combination of Covid-19 effects as well as floods, locust infestation, and higher subnational conflict intensity.

<sup>58</sup> <https://coronavirus.jhu.edu/map.html>

<sup>59</sup> These measures were reversed in November 2020, increasing the central bank rate by 200 basis points to 15 percent and the reserve requirement ratio to 20 percent from 18 percent, signaling a tightening of the monetary policy stance.



4. **Limited data points to COVID-19 having had a significant impact on households.** Rapid phone surveys conducted by the World Bank over the past few months indicate lower purchasing power and a likely increase in poverty and vulnerability as 52 percent of respondents reported losing either some or all their income from their main income source post-COVID-19. In addition, 46 percent were unable to buy their main staple foods due to lack of money (44 percent) or higher food prices (11 percent) and 42 percent of domestic remittance-receiving households reported a decline, with 16 percent reporting a cessation of this income source. Over 80 percent of people surveyed reported that they or someone in their household were worried about food security due to lack of income. The reduction in household and business income as well as remittances lead to a projected increase in the poverty rate to 82 percent in FY21 from 76 percent in FY19 (at US\$1.90 per person per day).
5. **An already difficult fiscal situation has worsened owing to COVID-19 impacts.** Government revenues as a ratio to GDP in FY20/21 are estimated to decline by about 15 percent relative to the pre-pandemic projections, following the decline in both oil prices and oil production. Combined with a significant reduction in available financing, this would contribute to a fiscal financing gap of about 4 percent of GDP. The impact of the pandemic has created immediate and large external financing needs. An urgent balance-of-payments need of US\$272 million, or 6.4 percent of GDP, is expected in FY20/21. At the same time, the budget process has been significantly delayed and the draft budget includes a cash deficit of 13 percent of GDP despite the authorities' commitment to contain the fiscal deficit in FY20/21 at 2.5 percent of GDP. Monetization of the fiscal deficit resulted in sharp exchange rate depreciation leading to a surge in inflation. South Sudan faces significant weaknesses with the availability of debt data and has not participated in the Debt Servicing Suspension Initiative. As an expected recipient of an IDA Remaining Engaged in Conflict Allocation (RECA), South Sudan has not been required to submit performance and policy actions under the Sustainable Development Finance Policy.

## **II. WBG Programming Response to the COVID-19 Crisis**

6. **The World Bank responded quickly with adjustments to the portfolio to better support South Sudan deal with the impacts of COVID-19.** The WBG's strategy outlined in its Country Engagement Note FY21-23 (Report No. 158008-SS) had focused on resilience and was, therefore, smoothly adapted to addressing COVID-19 impacts. A Contingency Emergency Response Component of the Provision of Essential Health Services Project (PEHSP, P168926) was triggered in May 2020 to provide emergency support to the National COVID-19 Response Plan. Combined with accessing financing from the Pandemic Emergency Financing Facility, a total of US\$7.6 million financing was provided for activities including risk communication, community engagement, infection prevention controls at points of entry, and logistics and operations for procurement of required items. The US\$40 million South Sudan Safety Net Project (SSSNP, P169274), approved in April 2020, adjusted its implementation plan to follow a phased approach, initially prioritizing Juba in recognition of the increasing and deepening socio-economic vulnerabilities of the poor urban households. Requirements for public works have been waived to avoid crowding and physical interaction and additional activities, particularly related to Water, Sanitation, and Hygiene (WASH) and nutrition messaging, have been enhanced with COVID-19 related risk prevention guidance. While these two operations are implemented via third parties, each include activities designed to strengthen policies and institutions to help the GRSS address the COVID-19 crisis.
7. **The World Bank's technical advisory services and analytics (ASA) have also been adjusted in response to COVID-19.** In light of South Sudan's still weak systems for data, statistics, and evidence-based policy-making, the World



Bank has carried out a series of high frequency phone surveys to monitor the impact of the current COVID-19 crisis on households and businesses. The World Bank has also focused its macroeconomic monitoring on impacts of COVID-19. ASA in the education, health, and social protection sectors have included a focus on the implications of COVID-19 for service delivery. Finally, on the basis of renewed demand from the Government, the Bank has increased technical support for the development of core governance systems, particularly Public Financial Management (PFM). These ASA will also contribute to strengthening policies and institutions to help the GoSS address the COVID-19 crisis.

8. **The World Bank's lending pipeline is also aligned to responding to the COVID-19 health impacts and building resilience.** The US\$45 million Enhancing Community Resilience and Local Governance Project (P169949), which had been under preparation prior to the pandemic and was approved in July 2020, focuses on support for local infrastructure, including for WASH. An Emergency Locust Response Project (P174546) is being prepared for Q4 FY21 under the Emergency Locust Response Multi-Phase Approach (MPA) that includes social protection measures which will assist rural households facing shocks owing to the locust infestation as well as COVID-19. The pipeline for FY21-22 includes further additional financing to the PEHSP, including compensating for the financing utilized by the CERC (and financed by the COVID-19 Emergency Response MPA), as well as additional financing for the SSSNP. Additional Financing for the PEHSP is expected to include improved emergency preparedness as well as participation in the planned supplemental COVID-19 MPA for vaccines.
9. **The World Bank's efforts are part of a broad development partner effort to support South Sudan's response to COVID-19 impacts.** The World Bank's US\$190 million operational portfolio and ASA provide an important complement to other development and especially humanitarian agencies active in South Sudan. World Bank activities are particularly valued for providing medium to long term perspective to other agencies along the humanitarian-development nexus. With respect to health impacts, the PEHSP is coordinated with analogous service provision financed by the United Kingdom to provide for country-wide support. The SSSNP is coordinated with analogous cash and in-kind transfer as well as workfare programs supported by agencies from the United Nations system, particularly the World Food Program, and international NGOs. The World Bank is coordinating particularly closely with the International Monetary Fund (IMF) in providing technical assistance on the PFM agenda. In addition, the IMF has provided US\$52 million in budget support to the Government of South Sudan through its Rapid Credit Facility.