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AFRICAN DEVELOPMENT BANK GR	OUP	
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PROJECT APPRAISAL REPORT		
EMERGENCY FOOD & NUTRITION SEC PRODUCTION PROJECT (PUPSAN/		
MALI		

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AFRICAN DEVELOPMENT BANK GROUP



MALI

EMERGENCY FOOD & NUTRITION SECURITY AND PRODUCTION PROJECT (PUPSAN/AEFPF)

AHVP/RDGW/AHAI/COML/PGCLDEPARTMENTS

December 2022

Translated Document

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CURRENCY EQUIVALENTS

(October 2022)

Currency unit = **CFAF**

UA1 CFAF 861.25 = UA 1 **USD 1.28 EUR 1.31** UA 1

FISCAL YEAR: 1st January – 31st December

WEIGHTS AND MEASURES

2204 pounds 1 metric tonne 1 kilogramme (kg) 2.20 pounds 1 metre (m) 3.28 feet 1 millimetre (mm) 0.03937 inch 1 kilometre (km) 0.62 mile 1 hectare (ha) 2.471 acres

ACRONYMS AND ABBREVIATIONS

ADRIFI : African Disaster Risk Financing

: African Emergency Food Production Facility **AEFPF**

AfDB : African Development Bank

APCAM : Permanent Assembly of the Chambers of Agriculture of Mali

: African Risk Capacity **ARC** : Seed Association of Mali ASSEMA : bidding documents BD

CPS-SDR : Rural Development Sector Planning and Statistics Unit

CREDD : Strategic Framework for Economic Recovery and Sustainable Development

CSA : Food Security Commission **CSP** : country strategy paper

DGDP : General Directorate for Public Debt **DNA** : National Department of Agriculture

: European Union \mathbf{EU}

: foreign direct investment **FDI** : gross domestic product **GDP**

ICRISAT : International Crops Research Institute for the Semi-Arid Tropics

IER : Institute of Agricultural Economics : International Monetary Fund **IMF** : Ministry of Rural Development **MDR**

NGP : National Gender Policy

: Nitrogen-phosphorus-potassium N-P-K ODR : Rural Development Authority

: Niger Basin Authority (Office du Niger) ON

ORS : Ségou Rice Authority

: Integrated Development and Climate Resilience Project in the Delta 2 Plains PDIR-PD2

: Sustainable Development Goals **SDGs SDR** : Special Drawing Rights FP : National Seed Service **SSN**

TA : technical adviser

TFPs : technical and financial partners
TS : Technical Services

TS: Technical Services
UA: Unit of Account
UN: United Nations

WAEMU: West African Economic and Monetary Union

PROJECT INFORMATION SHEET

Client Information	
BORROWER/DONEE :	Republic of Mali
	in charge of Agriculture (Ministry of Rural Development at the time of writing) gh the PDIR-PD2 Management Unit
Financing Plan	

Source	Amount (UA)	Instrument
TSF	3080000	Loan
TSF	2420000	Grant
TOTAL COST	5500000	

Timeframe – Main Milestones (projected)

Project approval	December 2022
Grant Effectiveness	December 2022
Loan effectiveness	January 2023
Closure	December 2023
Last disbursement	April 2024
Completion	1st quarter 2024

MALI - RESULTS MATRIX

A. PROJECT INFORMATION

<u>I PROJECT NAME AND SAP CODE:</u> EMERGENCY FOOD AND NUTRITION SECURITY AND PRODUCTION PROJECT -MALI (PUPSAN/AEFFF)- SAP CODE: P-ML-AA0-041

I COUNTRY: MALI

• PROJECT OBJECTIVE: Contribute to an increase in agricultural production and mitigation of the effects on the Malian population of rising food and agricultural input prices caused by global surge in cereal prices

a) **Country objective:** Mali seeks to develop an area of 8,829 ha for food crops (rice, maize, wheat) and horticultural crops (potato, tomato).

■ ■ PROJECT ALIGNMENT WITH COUNTRY, AFCREF, RMF

b) AFCREF: (i) Increased grain production; (ii) Grain yield.

- (c) Alignment indicators (RMF):
- Alignment indicator 1 : Cereal yield (ton/hectare);
- Alignment indicator 2 : Fertilizer consumption (kg/hectare of arable land).

B RESULTS MA	TRIX				
DESCRIPTION OF THE RESULTS CHAIN AND INDICATORS	UNIT	BASIC DATA [2022]	TARGET DATA AT COMPLETION [2023]	MEANS OF VERIFICATION	FREQUENCY OF REPORT
OUTCOME 1: The productivity o	f targeted pla	ant species is s	ustainably improved		
OUTCOME INDICATOR 1.1: Cereal yield - Maize - Rice - Wheat	T/Ha T/Ha T/Ha	Maize:2.35 Rice: 2.77 Wheat: 3.008	3.00 3.20 3.20		Half-yearly
OUTCOME INDICATOR 1.2: Vegetable yield - Tomato - Potato	T/Ha T/Ha	15 16.5	18 18	DNA Report	Half-yearly
OUTCOME 2: The productivity o improved	f targeted pla	ant species is s	ustainably		
OUTCOME INDICATOR 2.1: Production increase - Maize - Rice - Wheat	Tonnes Tonnes Tonnes	9,870 5540 4833	12600 6400 5155.2		Half-yearly
- Tomato - Potato	Tonnes Tonnes	10659 4752	12790.8 5346		
OUTPUT 1: The availability of support services for extension workers is improved					
OUTPUT INDICATOR 1.1: Extension workers trained in climate-resilient intensive production best practices by national rural development structures, 30% of them being	Number	0	T: 360 <u>W: 108</u>	DNA and PMU reports	<u>Half-yearly</u>

women					
OUTPUT INDICATOR 1.2: Advisory support staff trained under the TAAT assistance (30% for women and 20% for youth)	Number	0	T: 20 W: 6 Y: 4	PMU progress reports	<u>Half-yearly</u>
OUTPUT INDICATOR 1.3: ASI threshers with tablets having the Rice Advice weedMaster applications installed (20% for women and 30% for youth)	Number	0	T: 20 W: 4 Y: 6	PMU progress reports	<u>Half-yearly</u>
OUTPUT 2: The use of productive	resources is	improved for	the targeted crop sp	ecies	
OUTPUT INDICATOR 2.1: Additional quantity of certified climate-smart agricultural seeds (maize, rice, wheat, tomato and potato) distributed to beneficiaries (of which 30% are women, 20% are youth and 10% are IDPs)	Tonnes	0	T: 1027,1 F: 308,13 J: 205,42 IDPs: 102,71	DNA reports and PMU progress reports	Half-yearly
OUTPUT INDICATOR 2.2: Additional quantity of NPK/DAP/urea fertilizers distributed for maize, rice, wheat, tomato and potato cultivation (30% to women, 20% to the youth and 10% to IDPs)	Tonnes	0	T: 2234 F: 670,2 J: 446,8 IDPs.: 223,4	DNA reports and PMU progress reports	Half-yearly
OUTPUT INDICATOR 2.3: People benefiting from improvements in agriculture	Number (% women, % youth, % IDPs)	0	T: 35274 F: 10582 J: 7054,8 IDPs.: 3527,4	DNA reports and PMU progress reports	Half-yearly
OUTPUT 3: Reforms are being carried out to improve the supply of inputs					
OUTPUT INDICATOR 3.1: Gender-sensitive seed policy is updated and validated	Report	0	1	Validation document; DNA and PMU reports	Half-yearly
OUTPUT INDICATOR 3.2: Additional quantity of laboratory- certified seeds	Tonnes	0	1027.1	DNA Report	Half-yearly

PROJECT SUMMARY

Mali is currently grappling with food insecurity caused by the multidimensional crisis it has been experiencing since 2012 and especially the 2020-2021 agricultural season, which has been difficult because of insufficient rainfall that is poorly distributed over time and space, as well as the COVID-19 crisis. The crisis in Ukraine has made it extremely difficult to access agricultural inputs such as fertilizers and has triggered a record increase in grain prices. The results of the March 2022 harmonized framework exercise showed that for the projected period (June-August 2022), 1.8 million people were in crisis or worse, including 156,560 people in the emergency phase (0.78% of the total population) and 1,684,507 people in the crisis phase (8.42% of the population). The number of people in phase 2 (under pressure), is 4,411,105, or 22% of the country's population. In response to this situation, the Government, acting through the Food Security Commission, developed a National Response Plan 2022 (NRP 2022) which is the annual breakdown of all actions to promote food and nutritional security in the country. This financing, which is a contribution by the Bank to help curb the effects of the food crisis, will help improve the livelihoods of 35,274 farmers and their families, approximately 222,000 people, through the procurement and distribution of 1,027 tons of selected climate-smart seeds, 682 tons of N-P-K fertilizer, 200 tons of DAP fertilizer and 1,352 tons of urea fertilizer. Policy reform actions aimed at improving the seed policy and the fertilizer procurement and distribution system will also be pursued. The Project will generate an additional output of 11,145.6 tons.

I. STRATEGIC THRUSTS AND RATIONALE

1.1. Key Development Constraints

- ✓ Analysis of the Impact of the Crisis on the Country
- 1.1.1. Growing insecurity and the socio-political crisis led to a weaker than expected economic recovery in 2021. Growth prospects for 2022 were further undermined by economic sanctions, regional food insecurity, and the war in Ukraine.
- 1.1.2. **Economic growth:** The Malian economy experienced only a modest rebound in 2021 (real growth estimated at 3.2%, or 0.2% per capita) driven by the recovery in agriculture and services, after the recession of 2020 (-1.2%). Meanwhile, over the 2019-2020 period and following the rise in gold prices, trade slowed considerably in 2021, depriving the country of one of its main growth engines. Economic growth is expected to shrink to 2.1% in 2022.
- 1.1.3. *Monetary policy and inflation:* The decline in inflationary pressures should enable Mali to achieve an inflation rate of 3.1% in 2023, which is close to the WAEMU threshold of 3%, despite the Ukrainian crisis.
- 1.1.4. **Risks:** The realization of these economic forecasts is threatened by several risks arising from the fragile security situation in the country and in the Sahel region, as well as the persistent multidimensional crisis that the country has been experiencing since 2012. This is compounded by the risk of a tightening of conditions on international financial markets, the impact of the Ukrainian crisis, which could worsen and further drive up the prices of foodstuff and raw materials, and the resurgence of the COVID-19 pandemic.

Macro-economic Indicators 2017-2022							
	2017	2018	2019	2020	2021(e)	2022(p)	
Real GDP growth rate (%)	5.3	4.7	4.8	-1.2	3.2	2.1	
Real GDP growth rate per capita (%)	2.2	1.6	1.7	-4.1	0.2	-0.8	
Inflation (%)	1.8	1.7	-2.9	0.5	4.1	7.8	
Budget balance (% of GDP)	-2.9	-4.8	-1.7	-5.4	-4.7	-4.4	
Current account (% of GDP)	-7.2	-4.9	-7.5	-2.3	-4.5	-5	

Source: AfDB Statistics Department; IMF: World Economic Outlook, April 2022 and International Financial Statistics, April 2022;

Analysis of the Impact on Agricultural, Food and nutritional Security

1.1.5. The crisis in Ukraine has exacerbated the surge in prices, worldwide in general and in Mali in particular, leading to a reduction in the supply and an increase in the price of essential foodstuffs (particularly wheat and its derivatives, maize, sugar, oil...). It has also made the supply of fertilizer difficult, resulting in a sharp drop in productivity for farmers.

> Social Impact Analysis

1.1.6. The outbreak of the Russian-Ukrainian conflict, which has caused global supply disruptions, has led to higher inflation in 2022. This trend, coupled with the slowdown in economic growth, has had an impact on the decline in real incomes in a context of rising food and fuel prices. According to the Bank's projections, the impact of the Russian-Ukrainian conflict will push more than 500,000 new people into extreme poverty by 2022.

1.2. Project Linkages to Country Strategies and Objectives

1.2.1. The proposed operation is perfectly aligned with the Government's strategic vision, defined in the Strategic Framework for Economic Recovery and Sustainable Development (CREDD 2019-2023), the National Food and Nutritional Security Policy (PolNSAN 2019-2025), the Agricultural Orientation Law (LOA) and the Agricultural Development Policy (PDA). PUPSAN contributes to the implementation of the National Response Plan (NRP) to food and nutrition insecurity.

1.3 Rationale for the Bank's Involvement

1.3.1. This operation is in line with the Bank's CSP (2021-2025) whose main objective is to address the challenges of economic fragility, with a single priority area focused on improving agricultural value chains. It is fully consistent with the objectives of the Bank's Feed Africa strategy and the Ten-Year Strategy. The proposed actions are consistent with the pillars of the African Emergency Food Production Facility (AEFPF). The Bank has a clear comparative advantage in designing emergency operations to reduce the impact of exogenous shocks.

1.4. Aid Coordination

1.4.1. In Mali, technical and financial partners are organized within the Executive Cooperation Group of Technical and Financial Partners (GEC-PTF) which has an executive secretariat. The GEC functions through five (05) thematic groups corresponding to the 5 thematic groups of the CREDD. Each thematic group comprises dialogue groups on specific topics. Thus, the "Inclusive and Sustainable Economy" WG has within it an "Agricultural and Rural Economy/Irrigation - EAR/I" Dialogue Group. The Human Capital Development and Social Inclusion WG has within it a "PSSAN (Social Protection, Food and Nutrition Nutrition)" dialogue group. Since the end of 2020, the Bank has been coordinating the EAR/I WG, among other things.

II. PROJECT DESCRIPTION

2.1 Project Objectives and Components

Objectives

2.1.1. The objective of PUPSAN is to contribute to an increase in agricultural production and mitigate the impact, on the Malian population, of rising food and agricultural input prices caused by a global surge in cereal prices.

Component 1: Expanding access to improved seeds and adapted technologies

Context and Challenges

2.1.2. The certified seed utilization rate in agriculture is extremely low, at approximately 25% to 30%. Climate-resilient and smart technologies are not widely available at the management level, which suffers from a lack of manpower and work resources. The challenge for the agricultural sector is to increase the certified seed utilisation rate and to provide the advisory support needed to boost farmers' resilience.

Measures Taken by the Government to Date

2.1. 3. The Government of Mali has made significant efforts to improve the supply of certified seed. The Institute of Agricultural Economics (IER) is conducting research on efficient seed varieties adapted to the agro-ecological conditions of the country and produces pre-basic and basic seeds. The National Seed Service (SSN) attached to the National Directorate of Agriculture (DNA) works closely with a network of seed farmers producing R1 and R2 seeds whose main function is the multiplication of certified seeds. The seed laboratory (LABOSEM), which is part of the National Directorate of Agriculture, certifies seeds through field controls and laboratory testing. In 2021, 21 tons of subsidized hybrid maize seed were distributed to producers. The government has initiated the updating of the national seed policy to adapt it to current developments.

Measures Supported by the Program to Address Food Security Challenges

2.1.4. Several activities will be carried out in the field in collaboration with all the stakeholders concerned to promote certified seeds and adapted technologies for an amount exceeding CFAF 1.8 billion. Accordingly, the following has been planned: (i) procurement and distribution of 1,027.14 tons of certified rice, maize, wheat, tomato and potato seeds; (ii) training for extension workers and producers by DNA/SSN in collaboration with IER. In addition, Technologies for African Agriculture Transformation (TAAT) will conduct training for agricultural extension workers in the rice and wheat crop sectors, on agricultural best practices and on the establishment of innovation platforms.

Expected Results

2.1.5. A substantial increase of 30 to 50% in productivity (yields) and in the production of targeted crops is expected, that will generate an additional output of 11,145.6 tons of food products.

Component 2: Facilitation of producers' access to quality fertilizers

Context and Challenges

2.1.6 Fertilizer use remains limited in Mali despite the government's efforts to subsidize inputs such as seeds and fertilizers. The result is low productivity in Malian agriculture. The war in Ukraine has led to a scarcity and a sharp increase in fertilizer prices. In Mali, the commercial price of chemical fertilizers increased exponentially from the beginning of January 2022 to May 2022. Urea that cost CFAF 450,000 per ton from December 2021 to January 2022 was sold at CFAF 900,000 and sometimes more from May 2022. Currently, available fertilizer stocks are low.

> Measures Taken by the Government

2.1.7. Since the 2008 food crisis, the government has implemented a proactive policy of subsidizing agricultural inputs, including 90% for mineral fertilizers. The amount invested in input subsidies is CFAF 17 billion, of which more than 95% is for fertilizer for the 2021-2022 crop season.

Measures Supported by the Program to Address Food Security Challenges

2.1.8. To increase fertilizer use by producers, the project will procure and distribute the various mineral fertilizers needed for the targeted crop species as follows: (i) 682 tons of N-P-K; (ii) 200 tons of DAP; and (iii) 1352 tons of urea. Inputs will be distributed to target populations in accordance with the government's input subsidy strategy. The producers targeted by the project will be trained specifically on (i) the use of fertilizer (dose, date of application, etc.), (ii) techniques for increasing soil carbon stock (limiting ploughing, mulching and plant cover - establishment of hedges and trees associated with market garden and cereal crops, crop diversification, etc.) by agents from the technical services of the DNA and ODR who have been trained by the project.

Expected Results

2.1.9. The use of chemical fertilizers will significantly improve crop yields. The training provided will build the capacity of producers to improve crop yields and will reduce greenhouse gas emissions.

Component 3: Improving governance and supporting the implementation of reforms in the seed and fertilizer sectors and project coordination and management

Context and Challenges

2.1.10 The country's regulatory and institutional architecture is undergoing major changes in order to adapt to the new challenges brought about by the war in Ukraine within the agricultural sector, among others. The fertilizer procurement difficulties in 2021-2022 have exposed the limitations of the current procurement and distribution system. The marketing circuit for agricultural inputs faces constraints that hinder its proper functioning. It is necessary to identify and analyse them in order to find appropriate solutions.

Measures Taken by the Government to Date

2.1.11. The fertilizer and seed sectors are liberalized in Mali. A national seed policy has been adopted since 2009 and has begun to show its objective limits with the successive crises affecting the agricultural sector. The State is updating this policy and revising the fertilizer procurement and distribution system to make it more efficient and transparent. The MDR wants to initiate an evaluation and update of the farm inputs subsidy management manual.

Measures Supported by the Program to Address Food Security Challenges

2.1.12. The project will support: (i) the ongoing national seed policy update process; (ii) transparency of the input distribution system through the use of an electronic platform (seeds and fertilizers); (iii) the evaluation and updating of the farm inputs subsidy management manual; and (iv) project coordination and management.

Expected Results

2.1.13. It is expected that the national seed policy will be updated and adapted, that the input supply system will be sustainable and transparent, that the management manual for agricultural input subsidies will be adapted, that the constraints hindering the development of input marketing channels will be identified, that recommendations for their removal will be formulated, and that project management and coordination will be properly ensured.

Table 2.1: Project Components

Component	Cost (in UA million)	Description of components
Component 1: Expanding access to improved seeds and adapted technologies		Procurement and distribution of 1,027.14 tons of certified wheat, rice, maize, tomato and potato seeds; capacity-building by technical services and TAAT for extension workers and agricultural advisors.
Component 2: Facilitation of producers' access to quality fertilizers		Procurement and distribution of 682 tons of N-P-K, 200 tons of DAP and 1,352 tons of urea; Training on techniques to increase soil carbon stock; Electronic registration of beneficiaries.
Component 3: Improving governance and supporting reform implementation in the seed and fertilizer sectors and project coordination and management	0.84	Update of the national seed policy; evaluation of the agricultural input subsidy management manual; transparency of the input distribution system; project coordination and management.
Total	5.50	

2.2 Theory of Change

- **2.2.1.** The emergency food security and production project is aimed at contributing to address food shortages by supporting the production of cereal and horticultural crops, which occupy a strategic place in the response to food and nutrition insecurity in Mali. The project provides farmers with improved seeds and fertilizers, advisory support to enable households to increase their production to meet their food needs and to have the possibility of selling part of the yield to cover other essential needs. The emergency project will contribute to the improvement of the national seed system through the updating of the seed policy and improvement of the management of agricultural inputs through the evaluation and updating of the subsidy management manual.
- **2.2.2.** The underlying assumptions of this theory are: (i) the operation is integrated into the national agricultural extension and advisory system; and (ii) there is political will to carry out the necessary reforms;

2.3 Technical Solutions Adopted and Alternative Solutions Explored

2.3.1. The initial proposal was to procure seeds from local seed cooperatives in order to revitalize the local economy. However, it was decided to use certified high-yielding climate-resilient seeds and to open competition to sub-regional and international suppliers, taking into account: (i) the significant gap between local supply and national demand; (ii) the good performance of certain varieties available at the sub-regional level; and (iii) the procurement options available to PUPSAN.

2.4 Type of Project

2.4.1. This is a national investment operation.

2.5 Cost Estimates

- **2.5.1** The estimated project cost is UA 5.50 million, excluding taxes and customs duties (CFA.F 4,736.9 million), comprising UA 3.75 million in foreign currency (CFA.F 3,227.0 million) and UA 1.75 million in local currency (CFA.F 1,509.9 million). Customs duties and taxes shall be borne by the State, which shall take the necessary measures to ensure the implementation of this measure. A physical contingency rate of 4% and a provision for price increase of 3% were applied to all components.
- **2.5.2** The Project will be financed with **Transition Support Facility (TSF)** resources (loan and grant), up to UA 5.50 million, broken down as follows: TSF loan (UA 3.08 million) and TSF grant (UA 2.42 million). *See tables below and the detailed costs in Annex 4*.

Table 2.2: Summary of Estimated Project Costs by Component

		CFA.F million			% Total project		
Components	F.E.	L.C.	Total	F.E.	L.C.	Total	cost
Component 1:	1,249.5	533.1	1782.6	1.45	0.62	2.07	37.6
Component 2:	1,596.7	367.6	1964.3	1.85	0.43	2.28	41.5
Component 3:	166.3	508.8	675.1	0.19	0.59	0.78	14.3
Total baseline cost	3012.5	1409.5	4422.0	3.50	1.64	5.13	93.4
Provision for physical contingencies	120.5	56.4	176.9	0.14	0.07	0.21	3.7
Provision for price escalation	94.0	44.0	138.0	0.11	0.05	0.16	2.9
Total project cost	3,227.0	1509.9	4736.9	3.75	1.75	5.50	100.0

Table 2.3: Project Financing Sources

		CFA.F million	l		% bv		
Financing Sources	F.E.	L.C.	Total	F.E.	L.C.	Total	source
TSF loan	1,867.9	784.8	2652.7	2.17	0.91	3.08	56.00
TSF grant	1,359.1	725.1	2084.2	1.58	0.84	2.42	44.00
Total project cost	3,227.0	1509.9	4736.9	3.75	1.75	5.50	100.00

Table 2.4: Project Expenditure Schedule by Component (in UA million)

Components	2023	Total	%
Component 1	2.22	2.22	40.31
Component 2	2.44	2.44	44.42
Component 3	0.84	0.84	15.27
Total project cost	5.50	5.50	100.00

2.6. Target Area and Project Population

2.6.1. The project intervenes in ten (10) regions, two (2) Rural Development Authorities (ODR) and the District of Bamako, targeting 35,274 vulnerable male and female producers of the selected crop species. The regions concerned are Kayes, Kita, Sikasso, Koutiala, Bougouni, Koulikoro, Dioila, Timbuktu, Gao, Ménaka and the District of Bamako. The Niger Basin Authority and the Ségou Rice Authority in the Ségou region are involved in rice production.

2.7 Participatory Approach to Project Identification, Design and Implementation

2.7.1. The project was designed through a participatory and inclusive approach that involved all stakeholders. The project will conduct a participatory and accurate identification of beneficiaries taking into account gender criteria including women, youth, internally displaced persons, and various other vulnerable people.

2.8 Bank Experience and Lessons Reflected in Project Design

2.8.1 The main lessons learned from emergency projects are: (i) the need to use an existing implementing agency to speed up project commencement; (ii) the use of an efficient procurement system to ensure the rapid availability of goods for distribution. The design of this project takes these lessons into account through: (i) the selection of the PMU of the ORS' PDIR-PD2 to implement the project; (ii) use

of the ORS' independent procurement system; and (iii) recourse to advance procurement actions, supplier consultation and direct agreement.

2.9 Key Performance Indicators

2.9.1 The main M&E and management tool for the project is its results framework. The key performance indicators, aligned with the Feeding Africa Strategy, which will be monitored are: (i) yield and production of targeted crops; (ii) rural population using improved agricultural technologies; (iii) agricultural inputs provided including fertilizers and seeds.

III. PROJECT FEASIBILITY

3.1 Economic and Financial Performance

3.1.1 Implementation of the project will contribute to the improvement of producers' incomes in the targeted sectors, as shown in the table below. (cf. details in Annex 5).

Crop specie	Income per ha (baseline situation)	Income per ha (project situation)	Additional income per ha (project situation)	Total additional income
Maize	0.070	0.133	0.062	261.5
Rice	0.069	0.192	0.123	246.4
Wheat	0.539	0.582	0.043	69.1
Tomato	2.040	2.731	0.691	491.4
Potato	3.708	5.488	1.780	528.7
Total				1,597.0

Table 3.1.: Summary of Incomes per Crop Sector (in CFAF million)

- **3.1.2** The internal rate of return (IRR) calculated over a period of 10 years is 27.4% for a net present value (NPV) of 5,512 billion CFA francs. Sensitivity tests conducted based on a 10% decrease in income, a 10% increase in costs and a decrease in revenues accompanied by an increase in costs, bring the IRR to 21.9%, 22.4 % and 17.3% respectively.
- 3.1.3 The economic rate of return (ERR) is 33.6% (by applying a correction coefficient of 90% on factor costs, linked to market distortions) for an NPV of CFAF 5.869 billion. Sensitivity tests performed on the same basis as above increase the ERR to 27.4%, 28.0% and 22.4% respectively.
- **3.1.4** Additional Positive Effects: The project will help reduce food deficits by supporting targeted cereal and horticultural crops. These crops have a high market value, appreciable nutritional qualities and contribute to 70% of the national cereal production. The expected total food production of nearly 38,000 tons will increase the supply of food products and help stabilize food prices. In the medium and long term, the reforms that will be initiated will allow for a sustainable and transparent input supply system.

3.2 Environmental and Social Safeguards

- **3.2.1.** Categorization: The project is classified in environmental and social category B in accordance with Decree No. 95-325/P-RM on the implementation of Law No. 91-47/AN-RM to protect the environment and the living environment, which sets out the basic rules for environmental protection in Mali, and in category 2 according to the Bank's Integrated Safeguards System (ISS). This classification is justified by activities that are likely to induce moderate environmental and social risks and impacts.
- **3.2.2.** Environmental and Social Safeguard Documents: To comply with Malian environmental and social assessment legislation and the Bank's Integrated Safeguards System, a Pest and Pesticide Management Plan (PMP) and a Complaint Management Mechanism are required. The Terms of Reference

for the PMP study must be submitted to the Bank for review and approval; as well as the resulting study report.

- **3.2.3.** Environmental and social risks of the project: The environmental risks relate to water and soil pollution following the increased use of fertilizers and pesticides due to the intensification of agricultural production; to the poisoning of terrestrial and/or aquatic fauna following the spreading of fertilizers and pesticides; and to the eutrophication of aquatic environments. On the social level, these are health risks, gender-based violence (GBV), violence against children, etc. These different risks will be addressed through the project's complaint management mechanism (CMM) set up before the start of activities and the Pest and Pesticide Management Plan (PMP) developed during implementation.
- **3.2.4.** Global institutional arrangement on safeguards: The environmental and social safeguards expert of PDIR-PD2 will be appointed under the project and tasked with implementation of the E&S safeguard measures. Furthermore, the Project Management Unit will recruit independent experts on a competitive basis to conduct the annual environmental and social performance audit. The DNACPN will play an external monitoring role in the implementation of the safeguards and the Bank will deploy implementation supervision missions at least twice a year. The budget for the development and implementation of the PMP and the MGP is estimated at CFAF 34,000,000.
- **3.2.5 E&S Compliance:** Coordination of the project's environmental management activities will be provided by the PMU Environmental and Social Safeguards Specialist. The NOCES is attached.
- **3.2.6. Gender and women's empowerment:** The Emergency Food and Nutrition Security and Production Project-Mali (PUPSAN/AEFPF) is classified under category 2 of the Gender Marker System. The empowerment of women and young women, as well as the reduction of gender disparities in the agricultural sector are key objectives of the project. The project will provide women farmers with access to rice, maize, and wheat seeds as well as horticultural seeds. Vulnerable people represent 52% of the target population, including 31.5% for women.
- **3.2.7. Resilience-building opportunities:** The project's contributions in terms of climate-smart technologies and climate-adapted seeds will strengthen the population's resilience. The resulting surplus production and capacity-building will help secure the livelihoods of communities and protect them from agricultural product price instability. The alignment of the project with PolNSAN in general and the National Response Plan in particular contributes to building the resilience of the population in the short and medium term. By focusing on increased production, the project is aligned with the Bank's Strategy for Addressing Fragility and Building Resilience in Africa (2022-2026), which makes "building resilient societies" its second priority. At least 30% of the project's activities will benefit vulnerable people, including women, children, the disabled, and the unassisted elderly.
- **3.2.8.** Climate change and green growth: The project is classified in category 2 according to the Bank's climate safeguard system, as the project could be affected by climatic risks such as insufficient rainfall, excessive heat, flooding, salinization of the land and the proliferation of crop diseases and pests. Being an emergency operation, interventions have been directed mainly towards areas with favourable climatic conditions or benefiting from water control infrastructures, notably those of the Ségou Rice Authority, the Office du Niger and the irrigated areas of the North. The project area will also benefit from ARC's ADRIFI sovereign insurance financed under the Grassroots Community Resilience Building Support Project (PARCB), as a risk management and climate change adaptation strategy. In addition, in order to reduce the project's carbon footprint, beneficiaries will receive specific training on the use of fertilizers (dose, date of application, etc.) and techniques for increasing soil carbon stock (limiting plowing, mulching and plant cover planting hedges and trees associated with market garden and cereal crops, crop diversification, etc.).

IV. IMPLEMENTATION

4.1 Implementation Arrangements

- 4.1.1. Implementation: After analysis, it was agreed with the MDR to entrust the management of the project to the PMU of PDIR-PD2/Ségou Rice Authority. This unit was evaluated on technical and fiduciary aspects, including financial management and contracting. The Project Management Unit is composed of: (i) a coordinator, (ii) a monitoring/evaluation expert in charge of gender issues, (iii) an accounting manager, (iv) an accountant, (v) an expert in environmental and social safeguards, (vi) a procurement specialist, (vii) an agricultural engineer with experience in agricultural inputs (seeds and fertilizers), (viii) a courier based in Bamako and support staff (driver, labourer, secretary, messenger).
- **4.1.2.** The steering and guidance of the project will be assured by a Steering Committee (SC). The Steering Committee will be chaired by the Secretary General of the Ministry of Rural Development and will include, among others, the DNA, CPS-SDR, CSA, SSN, IER, ASSEMA, APCAM, ORS, DGDP/MEF, DGPD/MEF, the Coordination and Monitoring Unit of PPs financed by the PT/DGDP/MEF, and the Ministry in charge of the environment (DNACPN). The SC meets twice a year, at the beginning of the crop year to validate the AWPB and at the end of the crop year to evaluate the implementation report.
- **4.1.3.** Project activities will be implemented by the technical services of the Ministry of Rural Development in the field. These are the National Directorate of Agriculture (DNA), its decentralized services, the National Seed Service (SSN), the IER and the Rural Development Authorities (ODR). Furthermore, TAAT will support the implementation of the project. The technical services will intervene in project implementation through agreements/protocols financed by the project.
- 4.1.4. Procurements: Applicable Procurement Policy and Framework: Under the Emergency Food and Nutrition Security and Production Project Mali (PUPSAN/AEFPF), goods (including non-consultancy services) and consultancy services financed by the Bank will be procured in accordance with the Procurement Policy for Bank Group-funded Operations ("AfDB Procurement Policy"), October 2015 edition and the provisions set out in the financing agreement. Pursuant to this policy and following the various assessments conducted, it was agreed that: (a) Goods, including the non-consultancy services listed in paragraph 4.5.2.1(a) of Technical Annex 4.5, will be procured in accordance with the country's procurement system ("Country System"); and (b) all other procurements financed with Bank resources and not mentioned in (a) above will be procured in accordance with the Bank's procurement system ("AfDB System"). Details of the procurement arrangements are available in Table 4.5.d in Annex 4.5.

Assessment of Procurement Risks and Capacity (APRC): In a bid to take account of the specificities of the budget, the Bank assessed: (i) the risks at the national, sectoral and project levels; and (ii) the capacity of the executing agency. This level of risk assessed in the specific context of PUPSAN/AEFPF implementation was deemed "substantial" (see tables 4.5.b and c in Annex 4.5).

4.1.5. Financial Management and Audit: Responsibility for the administrative, accounting and financial management of the Project will fall under the Office Riz Ségou (ORS), which will delegate the day-to-day implementation of activities to the PMU of the PDIR-PD2, financed by the Bank and currently implemented at ORS. To this end, ORS Management will have to inform that the designated PMU will also be implementing the activities of this new operation. A review of the financial management system of the ORS was undertaken. It concluded that ORS as an implementing agency has adequate assets, in particular human resources able to implement the Project, however, improvements must be made on the various components of financial management. These improvements are detailed in the following lines. ORS has administrative, financial and accounting guidelines, which has been drafted for several years, but these are no longer adapted to the structure and activities of the Office, and to the implementation of development projects. The integrated accounting and financial management system in place is more fit

for commercial management than for development project management. The PDIR-PD2 has accounting and financial management procedures approved by the Bank and an integrated software fit for accounting and financial management of development projects, but it can only handle one project on one site, and therefore does not allow accounts management for another project. In view of the above: (i) the accounting manager of PDIR-PD2 being at the same time the accounting officer of the ORS, there are risks as to his availability to manage the activities of PUPSAN. Given this, the ORS will submit to the Bank three CVs of three qualified experts for the appointment of a specific accounting and financial manager. The accountant for the PDIR-PD2 project will be assigned accountant for the PUPSAN. All selected project staff will sign annual performance contracts at the beginning of each year with clear key performance indicators approved by the Bank; (ii) the Project will produce an annual work program and budget (AWPB), as well as quarterly financial monitoring reports based on the implementation of the AWPB, appended to the quarterly activity reports submitted to the Bank forty-five (45) days at the latest after the end of each quarter; (iii) the PDIR-PD2 administrative, accounting and financial guidelines should be reviewed to take into account the activities and architecture of the PUPSAN; (iv) the financial controller in place at the ORS will be involved in the management of the Project and will approve all disbursement requests as an internal control measure; (v) integrated accounting and financial management software adapted to development projects will be deployed within the PMU. It will be multi-project, multi-donor, multi-site and multi-currency. The capacities of the financial management staff should be strengthened in the use of the software and the guidelines; (vi) Project accounts will be kept on the basis of accrual accounting and on integrated software adapted to the management of development projects. The chart of accounts will be drawn up on the basis of the standards of the Uniform Act relating to accounting law and financial information (AUDCIF) as well as the revised SYSCOHADA, in force in Mali; (vii) the external audit will be carried out by an independent firm recruited on the basis of terms of reference available at the Bank and in accordance with its rules and procedures. A single audit will be carried out if the duration of the Project does not exceed 18 months and two audits will be carried out if the duration of the Project exceeds 18 months, without exceeding 36 months. The audit report must reach the Bank no later than six months after the end of the financial year to which the assignment relates. The overall fiduciary risk was deemed substantial.

4.1.6. Disbursements: The Bank's resources will be disbursed in accordance with its rules and procedures, in particular the disbursement manual. Disbursements will be made through the following three (3) methods: (i) the direct payment method; (ii) the special account method; and (iii) the reimbursement method.

4.2. Monitoring

4.2.1. Monitoring mechanisms: The PMU is responsible for monitoring/evaluation, using this framework to provide a quarterly update on project progress and results at all levels (gender-sensitive outputs and outcomes). The PMU will submit a technical report every three months to the Government and the AfDB on the progress of project activities using an agreed format and will hold briefing sessions at least twice a year with the relevant departments and the AfDB. External monitoring-evaluation will be ensured by CPS-SDR through an agreement with the project.

4.3 Governance

4.3.1 According to Mali's latest CSP for 2021-2025, recent assessments show that the country's public financial management system has recorded encouraging results, although the <u>overall fiduciary risk remains substantial</u>. There are still some persistent internal control weaknesses, particularly with respect to non-salary expenditures. The implementation of certain WAEMU directives and the strengthening of legal texts on external control bodies, as well as the continuation of ongoing reforms, are keeping the national public finance system on a good trajectory.

4.4 Sustainability

4.4.1 Projected yields will result in production levels that will enable beneficiaries to break even at the end of a crop year. The successes obtained at the end of the crop season constitute grounds for replication and scale-up of the project's achievements. The reforms envisaged will produce results in the short, medium and long terms. The participatory design of the project and the involvement of technical services in its implementation are guarantees of the sustainability of achievements during the post-project period.

4.5. Risk Management

4.5.1 The risks identified during the implementation of PUPSAN and their mitigation measures are summarized in the table in Annex 3.

4.6. Knowledge Development

4.6.1. The actions planned under PUPSAN that will lead to better knowledge management and development can be summarized as follows: (i) strengthening local expertise in key agricultural techniques; (ii) disseminating new production technologies and greenhouse gas reduction; (iii) setting up demonstration units and disseminating best practices.

V. LEGAL INSTRUMENT

5.1. Legal Instrument: The financing instrument to be used for this operation is: (i) a loan agreement between the Bank and the Fund (collectively referred to as the "Fund"), as administrators of the Transition Support Facility (TSF) and the Republic of Mali (the "Host Government") and (ii) a grant agreement between the Bank and the Fund (collectively referred to as the "Fund"), as administrators of the Transition Support Facility (TSF) and the Republic of Mali (the "Host Government").

5.2 Conditions Associated with the Bank's Intervention

- a) **Effectiveness**: The grant protocol agreement shall become effective on its date of signature by the Fund and the Republic of Mali. The loan agreement shall become effective subject to the Borrower's fulfilment of the conditions provided for in Section 12.01 (Effectiveness) of the General Conditions.
- b) Disbursement and disbursement conditions: In addition to the entry into force of the Loan and Grant Agreements, the Bank's obligation to make the first disbursement of the loan and grant is subject to (i) the decision of the Minister in charge of agriculture (i.e. the Ministry of Rural Development at the time of the PAR) entrusting the ORS with the implementation of the Project; (ii) the extension of the mandate of the PDIR/PD2 management unit to the implementation of the Project; (iii) the provision to the PMU by the ORS of an accounting manager who will be dedicated to the Project, whose profile and qualifications will be deemed acceptable to the Fund.

5.3 Compliance with Bank Policies

The project is aligned with the Bank's CSP 2021-2025 for Mali, the Ten-year strategy 2013-2022, its High-5 priorities "Feed Africa" and "Improve quality of life for the people of Africa" as well as the Bank's Gender Strategy (2021-2025). It also complies with the Bank's environmental and social safeguards for ISS Category 2 operations.

5.4 Environmental and Social Safeguard Commitments The Borrower shall and will obligate the Executing Agency and all its contractors, subcontractors and agents to: (a) implement the project in accordance with the Pest and Pesticide Management Plan ("PPMP"), the Bank's requirements, and

applicable national legislation; (b) prepare and submit to the Bank, no later than the 5th of the month following the end of the quarter, a consolidated quarterly E&S implementation report; (c) transmit by January 31 of each year, the environmental and social performance audit report of the previous year carried out by an independent auditor; d) refrain from taking any action that would prevent or hinder the implementation of the PMP; and (e) cooperate fully with the Bank in the event that the implementation of the project or a change in the scope of the project results in hitherto unforeseen displacement and/or resettlement of people, and will not commence any work in the affected area under the project unless all PAPs in these areas have been compensated and/or resettled in accordance with a RAP.

VI. RECOMMENDATION

Management recommends that the Board of Directors should approve the award of a loan and a grant not exceeding UA 3.08 million and UA 2.42 million, respectively, to the Republic of Mali from TSF (Pillar I) resources, within the framework of the African Emergency Food Production Facility, to assist communities affected by soaring prices, under the terms and conditions set forth in this report.

Annex 1: THEORY OF CHANGE

The objective of PUPSAN is to contribute to an increase in agricultural production and mitigate the effects, on the Malian population, of rising food and agricultural input prices.

In fact, through the PUPSAN project, the Bank will provide financing to strengthen the significant impacts on the resilience of vulnerable populations, with a view to supporting the crop production sector by strengthening productivity gains, through the mastery of climate-resilient techniques, the provision of plant material and other appropriate agricultural inputs. The Bank's support will increase the availability of foodstuff needed to cover the food and nutritional needs of the Malian population, create value added in the project areas, generate substantial additional income for producers and other stakeholders in the targeted sectors, improve the balance of trade and reduce Mali's dependence on imports of these targeted products. The project will also contribute to strengthening the resilience of the population by improving the employability of the youth and women in the targeted sectors.

The expected changes will produce sector transformation outcomes obtained through, inter alia, the following outputs:

- Extension workers trained in climate-smart intensification best practices by national rural development structures;
- Advisory support staff is trained under the TAAT assistance initiative;
- ASI threshers are deployed along with tablets that have Rice Advice weedMaster apps installed;
- Certified climate-smart agricultural seeds (maize, rice, wheat, tomato and potato) are distributed to beneficiaries;
- NPK/DAP/urea fertilizers are applied to maize, rice, wheat, tomato and potato crops;
- Producers are supported in mastering climate-resilient farming best practices, particularly the use of certified seeds and fertilizers;
- The gender-sensitive seed policy is updated and validated;
- The certification capacity of the seed control laboratory is strengthened.
- These actions will facilitate decision-making and increase the transparency and traceability of support to farmers, particularly in terms of input distribution and subsidies.

The Project's theory of change is underpinned by a series of key assumptions as follows:

- 4 Political, economic and security conditions will improve in the project area.
- The project stakeholders play their respective roles to the fullest.

The diagram showing the associated theory of change is as follows:

Impact

ntermediate Outcomes

Immediate outcomes

utputs

ctivities

The resilience of the Malian population is strengthened in response to the effects of the rise in food and agricultural input prices caused by the war in Ukraine

- ✓ The incomes of targeted rice, maize, wheat, tomato and potato farmers increase
- ✓ Value-added is improved in the project areas
- ✓ The productivity of target crops (rice, maize, wheat, tomato and potato) is improved
- ✓ The production of targeted crops is increased
- Extension workers trained in climate-smart intensive production best practices and GHG reduction by national rural development structures
- Advisory support staff is trained under the TAAT assistance initiative
- ASI threshers are deployed along with tablets that have Rice Advice weedMaster applications installed
- Certified climate-smart agricultural seeds (maize, rice, wheat, tomato and potato) are distributed to beneficiaries

- NPK/DAP/Urea fertilizers are applied to maize, rice, wheat, tomato and potato crops
- Producers are supported in mastering climateresilient farming best practices, particularly the use of certified seeds and fertilizers
- The gender-sensitive seed policy is updated and validated
- The certification capacity of the seed testing laboratory is strengthened
- Training of extension workers in climate-smart intensive production best practices and GHG reduction by national rural development structures
- Training of advisory support staff under the TAAT assistance initiative
- Procurement and deployment of ASI threshers along with tablets that have Rice Advice weedMaster applications installed
- Acquisition and distribution of certified climate-smart agricultural seeds (maize, rice, wheat, tomato and potato) to beneficiaries
- Support for the application of NPK/DAP/Urea fertilizers on farms producing maize, rice, wheat, tomato and potato crops
- Support and advice to producers in mastering climate-resilient farming best practices, particularly the use of certified seeds and fertilizers
- Update and validation of the gender-sensitive seed policy
- Strengthening of the certification capacity of the seed testing laboratory

Basic assumptions

- Security conditions improve in the project areas
- ♣ The operation is integrated into the national agricultural extension and advisory system
- Project stakeholders play their respective roles to the fullest

Annex 2: RESULTS MONITORING PLAN

	A. Ali	gnment Indicators									
Name of indicator	Definition/Description				Source						
Cereal yield (ton/hectare)	The indicator measures the crop yiel sufficiency in the main staple crops,			ent's self-	MDR Statistics, Specific Surveys FAO / ECST						
Fertilizer consumption (kilogrammes per hectare of arable land).	This indicator measures the amount and nutrition. It demonstrates efforts and phosphate.				MDR Statistics, Specific Surveys, FAO / ECST						
В. С											
Name of indicator	Definition/ c of indicator Description Collection method collection frequency entity										
			·		2022	2023					
Cereal yield (t/ha) : - Com	This indicator measures, in tons per hectare, the productivity trends of the targeted crops	Crop yield squares prepared by the MDR extension service	ORS ON DNA	Half-yearly	Rice 2.77 May 2.35 Wheat 3.00 Tomato 15	Rice 3.20 Maize 3.00 Wheat 3.2 Tomato 17 Potato: 18					
- Rice - Wheat	relative to the baseline situation				Potato: 16						
Yield of vegetable crops (T/ha) - Tomato	This indicator measures in tons per hectare the evolution of the productivity of the horticultural	Yield squares from the MDR crop year tracker	ORS, ON, DNA	Half-yearly	Tomato : 15 Potato : 16,5	Tomato : 18 Potato : 18					
- Potato	crops envisaged compared to the reference situation										
Increased production (t) - Com	This indicator measures in tons the total yield obtained for the selected speculations, after the	Crop yield squares prepared by the MDR extension service	ORS ON DNA	Half-yearly	Rice 5,540 Maize 9 870 Wheat 4 833 Tomato 10,66	Rice 6,400 May 12,600 Wheat 5,155.2 Tomato 12,790					
- Rice - Wheat - Tomato - Potato	use of selected seeds, mineral fertilizers and adapted technologies				Potato: 4,752	Potato: 5,346					
Extension workers trained in climate-resilient intensification best practices by national rural development structures, 30% of them being women	This indicator describes the number of supervisors trained in climate-smart intensive production practices. 30% of these agents will preferably be women (W).	Reports from the project, DNA, and the various authorities. Specific surveys	ORS ON DNA	Half-yearly	0	T: 360 W: 108					

Advisory support staff trained under the TAAT assistance	This indicator presents the number of advisory support staff trained under the TAAT initiative. 30% of these agents will preferably be women (W).	MDR Statistics Project reports, TAAT Report Training reports Specific surveys	ORS ON DNA	Half-yearly	0	T: W: Y:	20 6 4
ASI threshers deployed together with tablets having the Rice Advice weedMaster applications installed (20% women and 30% youth)	This indicator describes the number of ASI threshers with tablets equipped with Rice Advice weedMaster applications acquired and deployed. 20% of the beneficiaries of these threshers will be women (W) and 30% will be youth (Y).	MDR Statistics Project reports, TAAT Report Specific surveys	ORS ON DNA	Half-yearly	0	T: W: Y:	20 4 6
Additional quantity of certified climateresilient agricultural seed (maize, rice, wheat, tomato and potato) distributed to beneficiaries (of which 30% are women, 20% are youth and 10% are IDPs)	This indicator provides the quantity (in tons) of certified seeds distributed to producers. 30% of which will be targeted to women, 20% to youth and 10% to internally displaced persons (IDPs)	MDR Statistics Project reports, DNA Report, ODR Specific surveys	MDR	Half-yearly	0	T: W: Y: IDPs :	1027,14 308,14 205,43 102,71
Additional quantity of NPK / DAP / Urea fertilizers distributed to beneficiaries for maize, rice, wheat, tomato and potato (30% to women, 20% to the youth and 10% to IDPs)	This indicator provides the quantity of fertilizer (in tons) procured and distributed to producers of the targeted crops. 30% of the beneficiaries will be women, 20% youth and 10% IDPs	MDR Statistics Project reports, DNA Report, ODR Specific surveys	MDR	Half-yearly	NA	T: W: Y: IDPs	2234 670,2 446,8 223,4
People benefiting from improvements in agriculture	This indicator shows the number of producers supported in mastering agricultural best practices and having received inputs acquired within the framework of the project. 30% of these people will be preferably women, 20% youth	MDR Statistics Project reports, DNA Report, ODR TAAT Report Specific surveys	MDR	Half-yearly	0	T: W: Y: IDPs.	35274 10582 7054,8 3527,4

	and 10% internally displaced persons (IDPs)					
Seed policy updated and gender- sensitive	This indicator shows the degree of improvement of the national seed policy	Study report Document validating the updated policy	MDR	Half-yearly	0	1
Additional quantity of certified seed in the lab	This indicator presents (in tons) the additional quantity of seeds certified at LABOSEM, the seed laboratory	DNA and LABOSEM reports Specific surveys Crop year balance sheet	MDR	Half-yearly	0	1027,1

Annex 3: RISK ASSESSMENT MATRIX

Risk Category	Risk description	RATING	Mitigation measures	Responsible for the risk
THE COUNTRY'S	Institutional instabilities that can lead to sanctions (suspension of disbursements, etc.)	Н	 Fulfillment of commitments made by the Government. Strengthening resilience by covering basic needs, supporting livelihood activities and the socio-economic inclusion of the most vulnerable. Maintain dialogue and consultation with the beneficiary communities. 	Government Local authorities PMU
POLITICAL GOVERNANCE CONTEXT	Institutional instabilities that can lead to sanctions (suspension of disbursements, etc.)		 Targeting areas where the security situation is relatively under control. Political commitment from the authorities. Approach of using in situ technical services for the implementation of the project. Strong involvement of grassroots communities in the design and implementation of the project. Awareness and information campaign. 	State of Mali The grassroots communities
MACROECONOMIC	Agricultural commodity price volatility related to the effects of the global price surge	Н	 Increased agricultural productivity. Mitigation measures by providing poor people with direct access to food. Upward revision of project unit costs from recent bidding and a provision of 7% (4% for physical contingencies and 3% for price escalation) has been added to the base project cost. 	Government PMU
SECTORAL STRATEGIES AND POLICIES	Inadequacy of the national seed policy and the management manual for agricultural input subsidies	M	 Update of the National Seed Policy Evaluation and updating of the management manual for agricultural input subsidies 	PMU MDR
TECHNICAL DESIGN OF THE OPERATION	Failure to achieve project objectives due to the large size of the project area and the low cost of the project	M	 Selection of beneficiaries by targeting both the vulnerable and areas of high agricultural potential. 	MDR DNA PMU

Risk Category	Risk description	RATING	Mitigation measures	Responsible for the risk
TECHNICAL ASPECTS OF THE DESIGN OF THE OPERATION	The low participation of women due to local socio-cultural constraints.	L	 -More stringent targeting of beneficiaries -Conduct awareness campaigns on a regular basis. 	PMU DNA ODR
FIDUCIARY RISK AND VALUE FOR MONEY	Non-compliance with the principles of economy, efficiency, effectiveness and fairness in contracting. Failure to reach target beneficiaries	М	 Technical assistance from TAAT in the selection of suppliers. Capacity building and sensitization of actors in charge of procurement. External audit of the procurement process. Supervision of the Bank. Electronic registration of beneficiaries. 	TAAT PMU / DNA ADB
ENVIRONMENTAL AND SOCIAL RISKS	Negative effects of climate change on agricultural productivity	M	 Promotion of climate-smart and GHG-reducing agricultural practices. Use of climate-resilient seeds. 	PMU DNA ODR
	Insufficient human and material resources for the timely distribution of inputs	M	Technical support from DNA and CSA who are experienced in these types of operations.	PMU DNA CSA
CAPACITY RISK OF THE IMPLEMENTING ENTITY	Delay in the implementation of the procurement plan due to poor knowledge of the Bank's rules and procedures and the delay in issuing Bank notices	L	 Use of a PMU that is familiar with the Bank's R&P. Extensive use of the RSA's independent procurement system. Provision for simplified procurement methods (direct agreement, supplier consultation, etc.) Establishment of performance contracts between the project and PMU staff. 	Government PMU ORS ADB
OTHER RISKS	Socio-cultural barriers that do not always favor the access of women and youth to production factors	М	Specific actions in favor of women and youth.	PMU

ANNEX 4: TABLE OF PROJECT COSTS

Annex 4.1: Detailed Project Cost

Basis of calculation: exchange rate in October 2022: UA 1= CFAF 861.252

Physical contingencies: 4%; Composite price escalation: 3%

Component 1: Improvement of Access to Improved Seeds and Adapted Technologies

		Quan	tities			s in CFAF (base cost)									Physical	Total Cost in
Expenditure Item	Unit	2023	Total	UP in CFAF 1 000	2023	Total	LBS	% TSF Loan	% TSF Grant	% Gvt. Fin.	% Ben.	% Co- fin.	Contracts	Total Cost in UA 1 000	Cont. & Tot. Fin in UA 1 000	UA 1 000 (including physical cont. and price escalation)
1.1 Preparation of emergency project-specific campaign plan involving the participatory, transparent and precise targeting of beneficiaries																
Identification and selection of project impact areas and sites	LSP	1	1.0	10 000	10	10.0	S	0	100	-	-	-	Agrmt.	11.6	0.8	12.4
Information/sensitization of beneficiaries	LSP	1	1.0	15 000	15	15.0	S	0	100	-	-	-	Agrmt.	17.4	1.2	18.7
Identification and selection of beneficiaries	LSP	1	1.0	30 000	30	30.0	S	0	100	-	-	-	Agrmt.	34.8	2.5	37.3
1.2 Training of supervisory staff by trainers from technical services and ODRs, particularly the IER, the DNA, the ON and the ORS.																
Preparation/multiplication of training modules	LSP	1	1.0	15 000	15	15.00	S	100	-	-	-	ı	Agrmt.	17.4	1.2	18.7
Facilitators' travel and per diem allowances	Number	30	30.0	1 200	36	36.00	S	100	-	-	-	-	Agrmt.	41.8	3.0	44.8
Facilitation of training and payment of trainers (20% of them women and 30% young people)	Number	360	360.0	400	144	144.00	S	100	-	-	-	1	Agrmt.	167.2	11.9	179.1
1.3 Management staff training and support (TAAT assistance initiative)																
1.3.1 Wheat (including overhead costs and CSP)																
Training in crop improvement (selection)	Number of days	10	10.0	970	10	9.70	S	100	-	-	1	1	Agrmt.	11.3	0.8	12.1
Training in the dissemination of plant varieties and seed certification	Number of days	10	10.0	970	10	9.70	S	100	-	-	1	1	Agrmt.	11.3	0.8	12.1
Seed sector consultation meeting	Number of days	10	10.0	1 158	12	11.58	S	100	-	-	1	1	Agrmt.	13.4	1.0	14.4
Training in the formation and operationalization of innovation platforms with the assistance of FARA	Number of days	21	21.0	1 051	22	22.07	S	100	-	-	ı	ı	Agrmt.	25.6	1.8	27.5
Training of producers (30% of them women and 30% young people) in good agricultural practices	Number of days	20	20.0	970	19	19.40	S	100	-	-	1	-	Agrmt.	22.5	1.6	24.1
Update of wheat training materials	Number of days	20	20.0	782	16	15.64	S	100	-	-	-	-	Agrmt.	18.2	1.3	19.5
1.3.2 Rice (including overhead costs and CSP)																
Update of training modules and materials	Number of days	20	20.0	293	5.9	5.85	S	100	-	-	ı	-	Agrmt.	6.8	0.5	7.3
Training kit (materials)	kits	40	40.0	13	0.5	0.52	В	100	-	-	-	-	Agrmt.	0.6	0.0	0.6

		Quan	tities			s in CFAF (base cost)									Physical	Total Cost in
Expenditure Item	Unit	2023	Total	UP in CFAF 1 000	2023	Total	LBS	% TSF Loan	% TSF Grant	% Gvt. Fin.	% Ben.	% Co- fin.	Contracts	Total Cost in UA 1 000	Cont. & Tot. Fin in UA 1 000	UA 1 000 (including physical cont. and price escalation)
Travel of experts	Number	2	2.0	1 625	3.3	3.25	S	100	-	-	-	-	Agrmt.	3.8	0.3	4.0
Travel and per diem allowances of extension officers to be trained	Number	20	20.0	1 170	23.4	23.40	S	100	-	-	-	-	Agrmt.	27.2	1.9	29.1
Refreshments	h/d	220	220.0	6.5	1.4	1.43	S	100	-	-	-	-	Agrmt.	1.7	0.1	1.8
Lunch	h/d	220	220.0	6.5	1.4	1.43	S	100	-	-	-	-	Agrmt.	1.7	0.1	1.8
Premises and training aids (projector, etc.)	Number of days	10	10.0	195	2.0	1.95	S	100	-	-	-	-	Agrmt.	2.3	0.2	2.4
Per diem allowance and accommodation of training staff (2)	h/d	20	20.0	975	19.5	19.50	S	100	-	-	-	-	Agrmt.	22.6	1.6	24.3
Transportation of training staff (vehicle, fuel and lubricant costs)	FR	2	2.0	650	1.3	1.30	S	100	-	-	-	-	Agrmt.	1.5	0.1	1.6
Overhead costs (18%)	%	0.18	0.18		9.4	9.41	S	100	-	-	-	-	Agrmt.	10.9	0.8	11.7
CSP (2%)	%	0.02	0.02		1.0	1.05	S	100	-	-	-	-	Agrmt.	1.2	0.1	1.3
1.3.3 Deployment of ASI threshers and tablets with RiceAdvice WeedMaster software packages (30% of them for women and 30% for young people).																
ASI threshers (including technical training)	Number	20	20.0	2 665	53.3	53.30	В	100	-	-	-	-	CF (100%)	61.9	4.4	66.3
RiceAdvice tablet with software package	Number	20	20.0	650	13.0	13.00	В	100	-	-	-	-	CF (100%)	15.1	1.1	16.2
1.3.4 Building the capacity of agricultural extension officers in the use of the ASI thresher																
Update of training modules and materials	h/d	4	4.0	292.5	1.17	1.17	S	100	-	-	-	-	Agrmt.	1.4	0.1	1.5
Training kit (materials)	kits	20	20.0	13.0	0.26	0.26	В	100	-	-	-	-	Agrmt.	0.3	0.0	0.3
Cost of training 10 extension officers (transportation, per diem allowances, housing, etc.)	h/d	20	20.0	260.0	5.20	5.20	S	100	-	-	-	-	Agrmt.	6.0	0.4	6.5
Technical assistance for training in the use of the ASI thresher (2 experts for 5 days)	h/d	10	10.0	614.3	6.14	6.14	S	100	-	-	-	-	Agrmt.	7.1	0.5	7.6
Refreshments	f/ref.	120	120.0	6.5	0.78	0.78	S	100	-	-	-	-	Agrmt.	0.9	0.1	1.0
Lunch	h/lunch	60	60.0	13.0	0.78	0.78	S	100	-	-	-	-	Agrmt.	0.9	0.1	1.0
Premises and training aids (projector, etc.)	Number of days	5	5.0	195.0	0.98	0.98	S	100	-	-	-	-	Agrmt.	1.1	0.1	1.2
Per diem allowance and accommodation of 2 resource persons	Days	10	10.0	975.0	9.75	9.75	S	100	-	-	-	-	Agrmt.	11.3	0.8	12.1
Transportation of resource persons (vehicle, fuel and lubricant costs)	Number	2	2.0	650.0	1.30	1.30	S	100	-	-	-	-	Agrmt.	1.5	0.1	1.6
Transportation of resource persons (plane fare)	Number	2	2.0	1 625	3.25	3.25	S	100	-	-	-	-	Agrmt.	3.8	0.3	4.0
Overhead costs (18%)	%		-		4.49	4.49	S	100	-	-	-	-	Agrmt.	5.2	0.4	5.6
CSP (2%)	%		-		0.50	0.50	S	100	-	-	-	-	Agrmt.	0.6	0.0	0.6
1.4 Procurement and distribution of certified seeds																

		Quan	tities			s in CFAF (base cost)									Physical	Total Cost in
Expenditure Item	Unit	2023	Total	UP in CFAF 1 000	2023	Total	LBS	% TSF Loan	% TSF Grant	% Gvt. Fin.	% Ben.	% Co- fin.	Contracts	Total Cost in UA 1 000	Cont. & Tot. Fin in UA 1 000	UA 1 000 (including physical cont. and price escalation)
1.4.1 Procurement of seeds nationwide (30% of them for women, 20% for young people and 10% for internally displaced persons)																
Maize	Tonnes	84	84.0	500	42.0	42.0	В	100	-	-	-	i	CF (100%)	48.8	3.5	52.2
Rice	Tonnes	140	140.0	750	105.0	105.0	В	100	-	-	-	-	CF (100%)	121.9	8.7	130.6
Wheat	Tonnes	209	209.0	500	104.5	104.5	В	100	-	-	-	-	CF (100%)	121.3	8.6	130.0
Potato	Tonnes	594	594.0	1 250	742.5	742.5	В	100	-	-	-	-	CF (100%)	862.1	61.4	923.5
Tomato	Tonnes	0.142	0.14	83 000	11.80	11.8	В	100	-	-	-	-	CF (100%)	13.7	1.0	14.7
1.4.3 Distribution costs																
Distribution fees	LSP	1	1	25 000	25	25.0	S	100	-	-	-	i	SL (100%)	29.0	2.1	31.1
1.5 Provision of advisory support to beneficiaries for the use of improved and adapted varieties																
Supervision of beneficiaries, 52% of them women	Number	35 274	35 274	5	159	158.7	S	100	-	-	-		Agrmt.	184.3	13.1	197.4
1.6 Monitoring and reporting	LSP	1	1.0	30 000	30	30.0	S	100	-	-	-	•	Agrmt.	34.8	2.5	37.3
1.7 Yield, acreage and production monitoring	LSP	1	1.0	55 000	55	55.0	S	0	100	-	-		Agrmt.	63.9	4.5	68.4
TOTAL COMPONENT I			-		1 783	1 783	-		400	-	-	-	-	2 070	147	2 217

Component 2: Facilitation of Producers' Access to Quality Fertilizers

		Quantities			Amounts in CFAF Million (base cost)									Total	Physical	Total Cost in UA 1 000
Expenditure Item	Unit	2 023	Total	UP in CFAF 1 000	2 023	Total	LBS	% TSF Loan	% TSF Grant	% Gvt. Fin.		% Co- fin.	Contracts	Cost in UA 1 000	Cont. & Tot. Fin in UA 1 000	(including physical cont. and price escalation)
2.1 Procurement and distribution of fertilizers																
2.1.1 Procurement of fertilizers (30% of them for women, 20% for young people and 10% for internally displaced persons)																
a/ Maize																
NPK	Tonnes	420	420.0	720	302.4	302.4	В	100	-	-	-	-	CF (100%)	351.1	25.0	376.1
Urea	Tonnes	630	630.0	730	459.9	459.9	В	51.5	49	-	-	-	CF (100%)	534.0	38.0	572.0
b/ Rice																
DAP fertilizer	Tonnes	200	200.0	750	150.0	150.0	В	0	100	-	-	•	CF (100%)	174.2	12.4	186.6
Urea	Tonnes	400	400.0	730	292.0	292.0	В	0	100	-	-	•	CF (100%)	339.0	24.1	363.2
c/ Wheat																
NPK	Tonnes	161	161.0	720	115.9	115.9	В	0	100	-	-	-	CF (100%)	134.6	9.6	144.2
Urea	Tonnes	322	322.0	730	235.1	235.1	В	0	100	-	-	-	CF (100%)	272.9	19.4	292.4
d/ Potato																
NPK	Tonnes	30	30.0	720	21.60	21.6	В	0	100	-	-	•	CF (100%)	25.1	1.8	26.9
e/ Tomato					-	-	В	0	100	-	-	-	CF (100%)	-	-	-
NPK	Tonnes	71	71.0	720	51.12	51.1	В	0	100	-	-		CF (100%)	59.4	4.2	63.6
2.1.2 Fertilizer distribution	LSP	1	1	40 000	40	40.0	S	0	100	-	-	•	LR (100%)	46.4	3.3	49.8
2.2 Support to producers for the optimum use of fertilizers and the implementation of environmental and social safeguards.																
2.2.1 Support to producers (30% of them women, 20% young people and 10% internally displaced people) in the use of fertilizers and good agricultural practices.	Number	35 274	35 274	6.5	229	229.3	S	0	100	-	-	ı	Agrmt.	266.2	19.0	285.2
2.2.2 Implementation of environmental and social safeguards																-
Development of a Pest and Pesticide Management Plan (PMP) and a Grievance Redress Mechanism (GRM).	LSP	1	1	10 000	10	10.0	S	0	100	-	-	-	LR (100%)	11.6	0.8	12.4
Implementation of a Pest and Pesticide Management Plan (PMP) and a Grievance Redress Mechanism (GRM).	LSP	1.0	1	35 000	35	35.0	S	0	100	-	-	-	LR (100%)	40.6	2.9	43.5
Environmental and social performance audit	LSP	1.0	1	10 000	10	10.0	S	0	100	-	-	-	LR (100%)	11.6	0.8	12.4
External environmental and social monitoring (agreement with DNACPN)	LSP/yr	1.0	1.0	12 000	12.0	12.0	S	0	100	-	-	-	Agrmt.	13.9	1.0	14.9
TOTAL COMPONENT II					1 964	1 964	-						-	2 281	162	2 443.1

Component 3: Improvement of Governance and Support for the Implementation of Reforms in the Seed and Fertilizer Sectors and Project Coordination and Management

Expenditure Item		Quantities		UP in	Amounts in CFAF Million (base cost)					%		%		Total Cost	Physical Cont. &	Total Cost in UA 1 000
	Unit	2 023	Total	CFAF 1 000	2 023 Total	LBS	% TSF Loan	% TSF Grant	Gvt. Fin.	% Profit	Co- fin	Contracts	in UA 1 000	Tot. Fin in UA 1 000	(including physical cont. and price escalation)	
3.1 Seed and fertilizer sector good governance and reform support			-		-	-				-	-	-				-
Support for the update and validation of the gender- sensitive seed policy	ft	1.0	1.0	20 000	20.0	20.0	S	100	-	ı	-	-	LR (100%)	23.2	1.7	24.9
Building capacity in seed certification at the national level	ft	1.0	1.0	144 500	144.5	144.5	S	100	-	-	-	-	LR (100%)	167.8	11.9	179.7
Support for greater transparency in the input distribution system (seeds and fertilizers) through the use of digital technologies (electronic vouchers).	ft	1.0	1.0	100 000	100.0	100.0	S	100	-	-	-	-	LR (100%)	116.1	8.3	124.4
Establishment of a customs system to accelerate input clearance.	ft	1.0	1.0	25 000	25.0	25.0	S	0	100	-	-	-	LR (100%)	29.0	2.1	31.1
Input digitization activities.	ft	1.0	1.0	67 300	67.3	67.3	S	0	100	-	-	-	LR (100%)	78.1	5.6	83.7
3.2 Project Management																
3.2.1 Goods																
Computer hardware	ft	1	1.0	12 000	12.0	12.0	В	0	100	-	-	-	CF (100%)	13.9	1.0	14.9
Office equipment and furniture	ft	1	1.0	6 000	6.0	6.0	В	0	100	-	-	-	CF (100%)	7.0	0.5	7.5
Electronic and video-conference equipment	ft	1	1.0	10 000	10.0	10.0	В	0	100	-	-	-	CF (100%)	11.6	0.8	12.4
Double cabin pick-up truck (PMU)	Number	2	2.0	20 000	40.0	40.0	В	0	100	-	-	-	CF (100%)	46.4	3.3	49.8
Motorcycle	Number	1	1.0	2 500	2.5	2.5	В	0	100	-	-		CF (100%)	2.9	0.2	3.1
3.2.2 Staff			-		-					-	-	-		-	-	-
a/ PDIR-PD2 PMU staff supplementary allowances			-		-					-	-	-		-	-	-
Coordinator	h/m	12.0	12.0	1 300	15.6	15.6	Pers.	0	100	-	-	-	Other (100%)	18.1	1.3	19.4
Monitoring and evaluation expert in charge of gender issues	h/m	12.0	12.0	800	9.6	9.6	Pers.	0	100	-	-	-	Other (100%)	11.1	0.8	11.9
Accounting manager	h/m	12	12.0	800	9.6	9.6	Pers.	0	100	-	-	-	Other (100%)	11.1	0.8	11.9
Accountant	h/m	12	12.0	400	4.8	4.8	Pers.	0	100	-	-	-	Other (100%)	5.6	0.4	6.0
Social safeguards expert	h/m	12	12.0	800	9.6	9.6	Pers.	0	100	-	-	-	Other (100%)	11.1	0.8	11.9
Environmental safeguards expert	h/m	12	12.0	800	9.6	9.6	Pers.	0	100	-	-	-	Other (100%)	11.1	0.8	11.9
Procurement specialist	h/m	12	12.0	800	9.6	9.6	Pers.	0	100	-	-	-	Other (100%)	11.1	0.8	11.9
Secretary	h/m	12	12.0	200	2.4	2.4	Pers.	0	100	-	-	-	Other (100%)	2.8	0.2	3.0
Drivers (3)	h/m	36	36.0	130	4.7	4.7	Pers.	0	100	-	-	-	Other (100%)	5.4	0.4	5.8
Labourers (2)	h/m	24	24.0	100	2.4	2.4	Pers.	0	100	-	-	-	Other (100%)	2.8	0.2	3.0
Messenger	h/m	12	12.0	130	1.6	1.6	Pers.	0	100	-	-	-	Other (100%)	1.8	0.1	1.9
b/ ORS staff on secondment (allowances)						-	Pers.	0	100	-	-	-	Other (100%)	-	-	-
Agronomist specialized in seeds and fertilizers	h/m	12	12.0	900	10.8	10.8	Pers.	0	100	-	-	-	Other (100%)	12.5	0.9	13.4
Messenger based in Bamako	h/m	12	12.0	150	1.8	1.8	Pers.	0	100	-	-	-	Other (100%)	2.1	0.1	2.2
c/ Focal points																

		Quantities		TID.	Amounts in CFAF Million (base cost)					0/		0/		Total Cost	Physical Cont. &	Total Cost in UA 1 000
Expenditure Item	Unit	2 023	Total	UP in CFAF 1 000	2 023	Total	LBS	% TSF Loan	% TSF Grant	% Gvt. Fin.	% Profit	% Co- fin	Contracts	in UA 1 000	Tot. Fin in UA	(including physical cont. and price escalation)
DNA focal point	h/m	12	12.0	150	1.8	1.8	Pers.	0	100	-	-	-	Other (100%)	2.1	0.1	2.2
CSA focal point	h/m	12	12.0	150	1.8	1.8	Pers.	0	100	-	-	-	Other (100%)	2.1	0.1	2.2
Seed Service focal point	h/m	12	12.0	150	1.8	1.8	Pers.	0	100	-	-	-	Other (100%)	2.1	0.1	2.2
3.2.3 Operating Expenses									-	-	-	-		-	-	-
Per diem allowance	ft/yr	1.0	1.0	17 000	17.0	17.0	fon	0	100	-	-	-	Other (100%)	19.7	1.4	21.1
Steering Committee meetings	ft/yr	1.0	1.0	5 000	5.0	5.0	fon	0	100	-	-	-	Other (100%)	5.8	0.4	6.2
Project launching workshop	Number	1.0	1.0	15 000	15.0	15.0	fon	0	100	-	-	-	Other (100%)	17.4	1.2	18.7
External monitoring mission (agreement with the CPS-SDR)	ft/yr	1.0	1.0	15 000	15.0	15.0	fon	0	100	-	-	-	Other (100%)	17.4	1.2	18.7
Fuel, vehicle maintenance and upkeep	ff/yr	1.0	1.0	15 000	15	15	fon	0	100	-	-	-	Other (100%)	17.4	1.2	18.7
3.2.4 Overhead Costs					-									-	-	-
Internet/Telephone	ft/yr	1.0	1.0	1 200	1.2	1.2	fon	0	100	-	-	-	Other (100%)	1.4	0.1	1.5
Electricity/water	ft/yr	1.0	1.0	2 200	2.2	2.2	fon	0	100	-	-	-	Other (100%)	2.6	0.2	2.7
Consumables/Office supplies	ft/yr	1.0	1.0	2 000	2.0	2	fon	0	100	-	-	-	Other (100%)	2.3	0.2	2.5
3.2.5 Contractual services			-						-	-	-	-		-	-	ī
Procurement of a SYSCOHADA-compliant account management software	ft	1.0	1.0	8 000	8.0	8.0	S	0	100	-	-	-	LR (100%)	9.3	0.7	10.0
Training in management and revised SYSCHOADA accounting	ft	1.0	1.0	6 000	6.0	6.0	S	0	100	-	-	-	LR (100%)	7.0	0.5	7.5
Establishment of the baseline situation	ft	1.0	1.0	15 000	15.0	15.0	S	0	100	-	-	-	SL (100%)	17.4	1.2	18.7
External financial auditing	ff/yr	1.0	1.0	10 000	10.0	10.0	S	0	100	-	-	-	SL (100%)	11.6	0.8	12.4
Completion report	ft	1.0	1.0	12 000	12.0	12.0	S	0	100	-	-	-	SL (100%)	13.9	1.0	14.9
Impact assessment and capitalization of results	ft	1.0	1.0	15 000	15.0	15.0	S	0	100	-	-	-	SL (100%)	17.4	1.2	18.7
Project communication and visibility activities	ft/yr	1.0	1.0	12 000	12.0	12.0	S	0	100	-	-	-	SL (100%)	13.9	1.0	14.9
TOTAL COMPONENT III: PROJECT MANAGEMENT					675	675	-							784	56	839.7

Annex 4.2: Resource Allocation by Expenditure Category (UA million)

CATEGORIES		TSF Loan			TSF Grant		Total				
	F.E.	L.C	Total	F.E.	L.C	Total	F.E.	L.C	Total		
Works	-	-	-	-	-	-	-	-	-		
Goods	1.68	0.19	1.87	1.21	0.13	1.35	2.90	0.32	3.22		
Services	0.34	0.66	1.00	0.24	0.47	0.72	0.58	1.14	1.72		
Staff	-	-	-	-	0.11	0.11	-	0.11	0.11		
Operating cost	-	-	-	0.02	0.07	0.08	0.02	0.07	0.08		
Total base cost	2.02	0.85	2.88	1.47	0.79	2.26	3.50	1.64	5.13		
Provision for physical contingencies (4%)	0.08	0.03	0.12	0.06	0.03	0.09	0.14	0.07	0.21		
Provision for price escalation (3%)	0.06	0.03	0.09	0.05	0.02	0.07	0.11	0.05	0.16		
Total project cost	2.17	0.91	3.08	1.58	0.84	2.42	3.75	1.75	5.50		

Annex 4.3: Allocation of TSF Loan Resources by Expenditure Category

Catagorias		Amount in UA					
Categories	Foreign Exchange	Local Currency	Total				
Goods	1 680 000	190 000	1 870 000				
Consulting services	340 000	660 000	1 000 000				
Unallocated resources	150 000	60 000	210 000				
Total cost	2 170 000	910 000	3 080 000				

Annex 4.4: Allocation of TSF Grant Resources by Expenditure Category

Catagorias	Amount in UA					
Categories	Foreign Exchange	Local Currency	Total			
Goods	1 210 000	130 000	1 340 000			
Consulting services	250 000	470 000	720 000			
Staff	0	110 000	110 000			
Operating cost	20 000	70 000	90 000			
Unallocated resources	100 000	60 000	160 000			
Total cost	1 580 000	840 000	2 420 000			

Annex 4.5: Procurement Arrangements

4.5.1 Summary of Key Findings Following the Assessment of the National Procurement System by the Bank

Given the shortcomings identified in Mali's procurement system, the overall risk associated with the use of the system in Bank-funded operations is deemed "substantial". The table below presents a list of proposed reform actions to be implemented to remedy the shortcomings identified following the assessment of the national procurement system by the Bank based on 21 out of the 54 critical OECD/Development Assistance Committee (DAC) Methodology sub-indicators. These weaknesses will be examined together with the Government within the context of ongoing dialogue with the Bank.

Table 4.5(a): List of Weaknesses and Proposed Reform Actions

No.	Weaknesses Identified	Proposed Reform Actions
1	The provision in the Public Procurement Code (PPC) relating to the public opening of bids does not provide for the opening of bids immediately after the deadline for submission of bids, insofar as Section 71 of the Code provides that bids should be opened on the date and time specified in bidding documents.	Revise the PPC to specify that bids should be opened on the bid closing date.
2	The PPC does make the public opening of technical proposals submitted by consultants mandatory.	Revise the PPC to make the public opening of technical proposals submitted by consultants mandatory.
3	Section 71 of the PPC authorizes the bid opening committee to reject bids, in pursuance of the provisions of Sections 22 and 23 of the PPC which entrust part of the responsibility for evaluating bids to the committee.	Revise the PPC to repeal the provision authorizing the bid opening committee to determine the inadmissibility of bids.
4	The different methods used to select contractors for provision of intellectual services are listed in Article 55 of Decree No. 2015-0604/P-RM which, unfortunately, does not define the content and selection procedure for each of these methods, nor the conditions under which each of the methods should be used.	Define the content of each method used to select contractors for provision of intellectual services, including the conditions under which each selection method as well as procedure should be used.
5	The country does not have standard national bidding documents for each public procurement method for selecting contractors to	Given the specificities of each of the selection methods, it is necessary to prepare a specific

No.	Weaknesses Identified	Proposed Reform Actions			
	provide intellectual services. A single standard bid package is available and adaptable for each of the selection methods. Given the specificities of these selection methods, there is a risk that users may confuse, misunderstand and misuse this single standard bid	national standard bid package for each of the selection methods			
	package.				
6	The current general conditions of contract (GCC) have not yet been adopted by decree, in accordance with the provisions of Section 44 of the PPC.	Issue a regulatory instrument adopting the existing GCC.			
7	The report on the opening of bids is not systematically sent to all bidders. Rather, it is sent only to those who request it. In addition, the regulatory framework does not include provisions for public access to the report on the opening of bids.	Amend the regulations in force to make it mandatory to send the report on the opening of bids to all bidders and to publish it and set up mechanisms to allow for free access by the public to bidding documents.			
8	The use of the procedure for the request of information and quotations under restricted bid solicitation for the execution of intellectual service contracts worth more than or equal to CFAF 5 million, but less than CFAF 15 million is based solely on the lowest evaluated compliant bid and does not take into account the quality of the technical bid. Besides the lowest bid, it is advisable to take into account the quality of the technical bid during bid evaluation.	Revise the PPC to ensure that intellectual service contracts worth more than or equal to CFAF 5 million, but less than CFAF 15 million are awarded based on the lowest and technically qualified bid.			
9	The procurement units of contracting authorities (CA) are not yet fully operational to ensure effective ex ante control of contracts that do not fall under the competence of the DGMP-DSP.	Operationalize procurement units, particularly by building their capacity through the deployment of qualified staff.			
10	The ex-post control that should be carried out by the internal control bodies of ACs (Section 113 of the PPC) is not yet effective.	Carry out the ex-post control of procurements regularly as provided for by Section 113 of the PPC in order to (i) verify the regularity of procurements not subject to ex-ante control by the DGMP-DSP; (ii) assess the capacity of procurement actors; (iii) ascertain the relevance of control thresholds as defined, etc.; and (iv) agree on an action plan for correcting the shortcomings identified, and ensure its monitoring.			
11	The ARMDS does not audit public procurements regularly and publish the reports.	Ensure that audit reports are prepared and published regularly.			

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4.5.2 Procurement Risk and Capacity Assessment (PRCA)

No

4.5.2.1 Project Relevant Information on Procurement in the Country

Weeknesses Identified

The Bank has adjusted its assessment of the national procurement system (NPS) to place it within the context of the Emergency Food Production and Nutrition Security Project (PUPSAN/AEFPF) implementation and determine the level of risk associated with its use under the project. This adjustment helped to identify the level of risk in using the national procurement system for procurement under this project. The overall level of risk assessed in Section 4.5.1 is a generic risk assuming that it is used under the Bank's operations. This country generic risk has been reassessed within the context of all PUPSAN/AEFPF activities and used in determining the overall project procurement risk. The level of risk reassessed within the specific context of PUPSAN/AEFPF implementation, coupled with the assessments made at the rural development sector, project and executing agency levels, led to the conclusion that the overall risk for project implementation is "substantial" (cf. Tables 4.5.b and 4.5.c). Thus, although all project procurements financed with Bank Group resources must be in accordance with the Procurement Policy for Bank Group-funded Operations approved in October 2015, each procurement of works or goods or consultancy services will be done, depending on its nature, size and specific risks, using the following systems:

(a) National Procurement System (NPS): the following procurements will be done in accordance with the country procurement system ("National System"), as provided for by Decree No. 2015-0604/P-RM of 25 September 2015 instituting the Public Procurement Code and public service delegations, as well as its amending Decree No. 2016-0920/P-RM of 6 December 2016 and various implementing instruments ("PPC"), using standard national bidding documents (SNBDs):

Concerning the procurement of goods, this will include: (i) Procurement of computer hardware and office equipment; (ii) Procurement of SYSCOHADA-compliant accounting software; and (iii) Procurement of vehicles and motorcycles.

The use of the national procurement system for the aforementioned goods is justified by the fact that they are routine and non-complex goods most of which are available locally and can be procured from a large number of qualified local suppliers through open competition in order to obtain competitive prices. In all cases, the NPS can be used without major risk for procurement of the aforementioned goods if the mitigating measures proposed in Section 4.5.9 are considered.

(b) Bank's System characterized by the Procurement Methods and Procedures (BPMP) set out in the Bank Group's Procurement Framework.

The Bank's Procurement Framework methods and procedures ("Bank's System") will be used for procurement of all goods other than those specified in Subsection (a) above and all consulting services to be financed by the Bank under this project.

Concerning the procurement of goods, this will include: (i) Procurement and distribution of certified seeds; and (ii) Procurement and distribution of fertilizers.

Concerning consultancy services, this will include: (i) Consolidation of seed certification; (ii) Development and implementation of the Pest and Pesticide Management Plan (PMP) and a Grievance Redress Mechanism (GRM); (iii) Accounting, financial and procurement audit; (iv) Environmental and social performance audit; (v) Evaluation of the subsidy management manual; (vi) Update of the seed policy; (vii) Agreement with TAAT; (viii) Agreement with the DNA; (ix) Agreement with Niger Basin Authority (ON); (x) Agreement with the IER; (xi) Agreement with the DNACPN; and (xii) Agreement with the CPS-SDR; (xiii) Support to the transparency of the input distribution system (seed and fertilizer) through the use of digital technologies; (xiv) Establishment of the baseline situation; and (xv) Elaboration of the completion report and capitalization of results.

The decision to use the Bank's system for the procurement of these goods is justified by the contract size and specificity of the goods to be procured (seeds and fertilizers). Similarly, the consultancy services to be procured under the BPMP are relatively complex or large in scope, sometimes requiring specific expertise or the fielding of strategic Bank missions. These procurements will be carried out using the Bank's most appropriate Standard Bidding Documents (SBDs) to ensure the participation of suppliers from various backgrounds in order to ensure the provision of high-quality services.

4.5.2.2 Sector and Market Analysis

Sector Analysis

The Bank examined the overall capacity of the sector which includes the following key institutions: (i) the Ministry of Rural Development (MDR) which will oversee the implementation of project activities; (ii) the Ségou Rice Office (ORS) which will be the Project Executing Agency through the Management Unit of the Integrated Development and Climate Resilience Project in the Delta 2 Plains (PDIR-PD2); and (iii) the General Directorate of Public Contracts and Public Service Delegations (DGMP-DSP).

Based on available information, the Bank considered that the experience and competence of technical institutions are acceptable for performing the procurement function (providing technical advice, developing terms of reference and technical specifications, supervising activities and conducting technical controls, etc.). The same applies to the entities involved in sector procurements. The complexity of the project and scope of the activities necessitate solid experience and technical qualifications for the implementation of project activities. For its part, the Ségou Rice Office, a public administrative institution with financial and management autonomy, gained experience considered acceptable through the implementation of the Bank-funded PDIR-PD2 project, as well as two other projects financed by the Islamic Development Bank.

No sector-specific procurement practices or instruments were identified. However, delays and cumbersome procedures in the procurement process (bid evaluation) and the signing of country-specific contracts continue to be a serious cause for concern given the urgency of this operation.

In light of the foregoing, therefore, the level of risk in the sector is considered "Low". Mitigation measures have been proposed in the action plan provided in Section 4.5.9.

Market Analysis

The market analysis was carried out keeping in mind project requirements and procurements. The analysis yielded the following results:

Concerning goods:

Category I includes the following goods:

(i) Procurement and distribution of certified seeds; and (ii) Procurement and distribution of fertilizers. Considering the quantity and specificity of the goods (seeds and fertilizers) sought, suppliers will have to import a large portion of the goods. Local service providers lack both the technical capacity and financial resources needed to supply the required quantity and quality of goods provided for under the project on their own.

Category II includes the following goods:

(i) Procurement of computer hardware and office equipment; (ii) Procurement of SYSCOHADA-compliant accounting management software; and (iii) Procurement of vehicles and motorbikes. These goods can be obtained from local suppliers or representatives of qualified foreign suppliers who are in sufficient number to guarantee competitive prices for goods that are not produced locally, but are available in sufficient quantities.

Concerning consulting services: the consulting services expected under this project can be classified into three (3) categories.

Category I includes the following services:

(i) Evaluation of the Subsidy Management Manual; (ii) Establishment of the baseline situation; and (iii) Preparation of the completion and capitalization of results report.

A competitive bidding process open to individual national and international consultants will be required for the afore mentioned services.

Category II includes the following services:

(i) Consolidation of seed certification; (ii) Development and implementation of a Pest and Pesticide Management Plan (PMP) and a Grievance Redress Mechanism (GRM); and (iii) Accounting, financial and procurement audit and (iv) Support for the transparency of the input distribution system (seed and fertilizer) through the use of digital technologies.

This service category necessitates the use of consulting firms. According to the market analysis, most of the required expertise is available locally. However, some of the international expertise available may be of interest.

Category III includes agreements with national public bodies.

Instead of public contracts, there are plans to conclude agreements directly with specialized national public bodies that are the only entities authorized to perform or monitor the performance of tasks that fall within their specific area of competence. The aforementioned agreements will help to cover the additional expenses incurred by missions fielded under the said agreements, but they will not be used to pay salaries or yield profit. The institutions identified are the National Directorate of Agriculture (DNA); the Niger Basin Authority (ON); the IER, the DNACPN and the CPS-SDR.

Category IV: Agreements signed with TAAT

Technologies for African Agriculture Transformation (TAAT) is a program launched in 2018 as part of the African Development Bank's "Feed Africa" strategy.

With its experience, networks, local and regional presence, and leadership, TAAT is positioned as the structure of choice for the Project.

The agreement to be signed with the TAAT will cover the technical assistance services in the supply of seeds and capacity building of the Ministry of Rural Development's directorates (DNA, IER, ODR, SSN, etc.).

Lastly, regarding socio-economic considerations in procurement, the country adopted a sustainable (or eco-friendly) procurement policy in May 2018 that defines some rules to encourage the orientation of public procurement towards small- and medium-size enterprises as well as promote local production (Decree No. 2018-473/PM-RM of 28 May 2018 laying down measures to orient public procurement towards small- and medium-size enterprises and local production). Furthermore, sections of the country's Public Procurement Code allow for the application of a Community preference margin of at most 15% (Section 76 of the PPC). Lastly, the country has laws/decrees governing environmental management, the Labour Code, as well as national strategies for social protection, sustainable development and gender promotion. These policies could, where possible (and after the Bank's prior approval), be considered when determining contract award criteria (evaluation and qualification) and contractual arrangements to assist the Government in meeting its social and environmental requirements.

In light of the foregoing, particularly, the current global tension over the availability of some coveted goods (fertilizers and seeds) and the large number of public entities to be involved and coordinated, the market analysis risk is considered "substantial". Mitigation measures have been proposed in the action plan provided in Section 4.5.9.

4.5.2.3 Project Design and Complexity

The project's design and complexity were examined from the technical and procurement viewpoints. This project does not appear to pose a particular design challenge because, aside from the TAAT technology to be deployed, it involves the implementation of activities normally carried out by the Ministry of Rural Development. However, the project implementation phase poses a "substantial" risk as the expertise needed to implement TAAT technology is not available locally. Similarly, the quantities of products (seeds and fertilizers) to be procured from abroad, the multiplicity of actors involved in the process, and the urgent implementation schedule to ensure the efficient outcome of activities whereas public entities are expected to provide essential services will pose a serious risk and challenge during the project implementation phase, despite the assistance to be provided by specialized entities.

4.5.2.4 Assessment of the Project Executing Agency (PEA)

The Project Executing Agency will be the Ministry of Rural Development (MDR) through the Ségou Rice Office (ORS) which will be responsible for project implementation. To that end, the ORS will rely on the Project Management Unit of the Integrated Development and Climate Resilience Project in the Delta 2 Plains (PDIR - PD2). The PDIR-PD2 PMU is operational and it is staffed by a team of experts that includes a procurement specialist (PS). The PDIR-PD2 Project Management Unit, through the Procurement Specialist, will implement project procurement activities, in collaboration with other ORS and MDR services.

The overall capacity, compliance performance and operational capacity of the Project Executing Agency to implement procurement activities under the project were examined in light of its past performance within the framework of IRDP-PD2 implementation, among other things. On this basis, the assessment concluded that the PMU's capacity is satisfactory. The PMU procurement expert (who has a Master degree in Management Sciences, majoring in Auditing and Management Control) has about 5 years' experience in procurement and is familiar with the Bank's procurement procedures. The assessment also revealed that most of the contracts under the PDIR-PD2 have already been awarded and will be completed in April 2023, allowing the procurement expert time to focus on procurements under PUPSAN.

Besides the PMU, the Bank assessed the capacity of the entities in charge of procurement and control of public contracts within the ORS. Based on experience gained under the IRDP-PD2, the assessment

reveals delays in preparing bid evaluation reports and signing contracts, as well as the need to build the capacity of members of various committees in procurement.

In light of the foregoing, the Project Executing Agency's procurement capacity risk is considered "moderate".

Mitigation measures have been proposed in Section 4.5.9 on the procurement risk and capacity assessment (PRCA) action plan to address the issues identified.

4.5.2.5 Project Procurement Risk Rating (PPRR)

An assessment of project procurement risks covering the country, sector and project environments, as well as the Executing Agency in charge of carrying out procurement activities under the project, was conducted. The results of the assessments confirm the risks identified in the PPRR summary, as shown in the tables below.

Table 4-5(b): Risk Level Defined by Factor

	Levels	Assessment Score		
No.	Risk factor	Low (L) / Moderate (M) / Substantial (S) / High (H)		
Project	Procurement Risk Rating (PPRR)			
	Country			
1	Legal and regulatory framework for procurement	S		
2	Prohibited systemic practices	S		
	Sector			
3	Sector capacity	L		
4	Local industrial capacity	S		
P	Project			
5	Risks related to project design	M		
6	Risks related to the implementation of activities	S		
	Capacity of Executing A	agency		
7	Capacity	M		
8	Governance and practices proscribed	M		

The risks presented by level and overall project procurement risk rating (PPRR) at the time of assessment are as follows:

Table 4.5(c): Risk Level

Level	Н	S	M	L
Level of country risks (1)		X		
Sector risks (2)			X	
Project-specific risks (3)		X		
Executing Agency-related risks (4)			X	
Overall project procurement risk (determined from (1)		v		
to (4))		Λ		

Most of the problems/risks associated with procurement activities within the context of project implementation have been identified.

Mitigation measures have been discussed and agreed upon with the country and included in the PPRR Action Plan presented in Section 4.5.9. The project will include all the costs associated with the implementation of the PPRR Action Plan.

4.5.3 Details of the Procurement Methods and Procedures (PMP) to be Used under the Project

All procurement of goods, including non-consulting and consulting services financed with Bank resources will be done in accordance with the Procurement Policy for Bank Group-Funded Operations

("AfDB Policy"), October 2015 edition and the provisions specified in the Financing Agreement. In keeping with this policy and following the various assessments conducted, the following was agreed upon:

4.5.3.1 National Procurement System (NPS)

The contracts referred to in Section 4.5.2.1(a) will be awarded under the national procurement system (NPS) in accordance with Decree No. 2015-0604/P-RM of 25 September 2015 instituting the Public Procurement Code and public service delegations and its amendment, Decree No. 2016-0920/P-RM of 6 December 2016 instituting the Public Procurement Code, as well as its various implementing instruments. These procurements will be carried out using standard national bidding documents (SBDs) as follows:

Goods:

The goods to be procured under the project through the national procurement system (NPS) are estimated to cost UA 0.097 million.

Specifically, the procurement will be as follows:

Goods and non-consulting services whose total value is equal to or more than CFAF 80 000 000 (that is UA 94 117) will be procured through an open competitive bidding procedure, as provided for in Article 50 of Decree No. 2015-0604/P-RM of 25 September 2015 instituting the Public Procurement Code and Public Service Delegations, including its amending decree.

The goods and non-consulting services whose value is more than or equal to CFAF 25 000 000 (that is UA 29 411), but less than CFAF 80 000 000 (or UA 94 117) will be procured through the request for information and prices under an open competitive bidding procedure, in keeping with the provisions of Articles 23 and 24 of Order No. 2015-3721./MEF-SG of 22 October 2015 laying down the terms and conditions for the implementation of Decree No. 2015-0604/P-RM of 25 September 2015 instituting the Public Procurement Code and public service delegations.

The goods and non-consulting services whose value is more than or equal to CFAF 5 000 000 (that is UA 5 882) and less than CFAF 25 000 000 (or UA 29 411) will be procured through the request for information and price under a restricted competitive bidding procedure, in accordance with the provisions of Articles 23 and 24 of Order No. 2015-3721./MEF-SG of 22 October 2015 laying down the terms and conditions for the implementation of Decree No. 2015-0604/P-RM of 25 September 2015 instituting the Public Procurement Code and public service delegations.

The goods and non-consulting services whose value is strictly less than CFAF 5 000 000 (equivalent to UA 5 882) will be procured through the request for quotation procedure, in accordance with the provisions of Articles 6.1 and 72 of Decree No. 2017-0049/PRES/PM/MINEFID on the procedures for the award, execution and settlement of public contracts and public service delegations.

Sundry expenses:

Sundry expenses including (i) experts' allowances; (ii) mission expenses; (iii) PMU operating costs (office supplies and consumables, communication costs, Internet, cleaning, fuel, electricity and water, publication costs, and other expenses) will be defrayed in accordance with procedures specified in the project procedures manual, approved beforehand by the Bank.

4.5.3.2 Details of Bank Procurement Methods and Procedures (BPMP)

The requirements referred to in Section 4.5.2.1(b) will be procured in accordance with the Bank's procurement methods and procedures (BPMP) using the relevant Standard Bidding Documents (SBDs) available, as follows:

Goods:

The goods to be procurement under the project in accordance with the BPMP are estimated to cost UA 2.6988 million. The goods will be procured in the following manner:

The procurement and distribution of seeds estimated to cost UA 1.0308 million will be done through a Request for Quotations in accordance with the provisions of Section 8.5(b) and (c) of the Bank's Procurement Policy document ("Policy document") and Section D.2.2.10 of Volume 1 of Part A of the Bank's Operations Procurement Manual (OPM), or by single tender if: (a) one of the conditions specified in Section D.2.2.11 of Volume 1 of Part A of OPM is met and documented, or (b) where there are eligible suppliers recently selected on an acceptable competitive basis (carried out within the framework of Bank or other partner projects) for similar services under previous operations, as provided for in Sections I.2.29-31 of Volume 2 of Part A of the Bank's Operations Procurement Manual. In the event of a request for quotation and in order to enhance the transparency and integrity of the process (given the relatively large sums of money involved), provision will be made for the sealed submission of bids by qualified service providers and the public opening of bids.

The procurement and distribution of fertilizers estimated to cost UA 1.668 million will be done through open competitive bidding (OCB), in accordance with the provisions of Section 8.5(a) and (c) of the Bank's Procurement Policy document, as set forth in the Bank's Operations Procurement Manual (Part A, Volume 1), or through single tender if: (a) one of the conditions specified in Section D.2.2.11 of Volume 1 of Part A of the OPM is met and documented, or (b) where there are eligible suppliers recently selected on an acceptable competitive basis (carried out within the framework of Bank or other partner projects) for similar services under previous operations, as provided for in Sections I.2.29-31 of Volume 2 of Part A of the Bank's Operations Procurement Manual (OPM).

Consulting services

The consulting services to be procured under the project in accordance with the BPMP are listed in Section 4.5.2.1 (b) above and are estimated to cost UA 1.6215 million.

The selection of consultants for the tasks listed in Section 4.5.2.1 (b), which are to be financed in part or in full by the Bank under the project, will be done in accordance with the provisions of Article 8.6 of the Bank's Procurement Policy document, as well as the methods and procedures specified in the Bank's Operations Procurement Manual (Part A, Volume 1). More specifically, consultants will be selected as follows:

- The services related to the development and implementation of a Pest and Pesticide Management Plan (PMP) and a Grievance Redress Mechanism GRM (UA 42 300) will be procured through a shortlist of firms and the consultants qualifications selection (CQS) method.
- Accounting, financial and procurement audit services (UA 22 200) will be procured through shortlists of firms and the least cost selection (LCS) method.
- For the reasons stated in Section 4.5.2.2 above, the following services will be procured through direct negotiation with public and/or specialized entities:

The provision of advisory support services to project beneficiaries in the regions retained under the project estimated to cost UA 335.0, through an agreement signed with the DNA;

The provision of advisory support services to project beneficiaries in the area covered by the Office de Niger estimated to cost UA 116 100 through an agreement concluded with the Niger Basin Authority (ON);

Research, support and training of trainers services estimated to cost UA 34 800, through an agreement signed with the Rural Economics Institute (IER);

Environmental monitoring services estimated to cost UA 14 900, through an agreement concluded with the DNACPN;

External monitoring and evaluation services provided on behalf of the MDR worth about UA 17 700, through an agreement signed with the CPS/SDR;

The technical assistance services of Technologies for African Agricultural Transformation (TAAT) in the procurement of seeds and capacity building of the MDR's directorates estimated at UA 348.3 thousand, through an agreement concluded with TAAT.

• All other consulting services other than those mentioned in (i), (ii) and (iii) above will be procured through shortlists of firms and the quality- and cost-based selection (QCBS) method.

Individual consulting services will be procured through the comparison of the CVs of at least three candidates, as specified in the Bank's Operations Procurement Manual.

4.5.4 Summary of Project Procurement Arrangements

The procurement arrangements for the various components, elements and items in the different expenditure categories to be financed with grant resources and procured through the NPS and the BPMP are summarized in Table 4.5(d) below. Large value contracts, all similar groups of activities/contracts, various procurement systems, cost estimates, monitoring requirements and schedules, as agreed upon between the country and the Bank, are indicated in the procurement plan (Section 4.5.10).

Table 4.5(d): Summary of Procurement Arrangements

		Amount in UA 1 000						
CATEGORIES	Borrower's Procurement System (BPS)			Bank's Procurement Methods and Procedures (BPMP)				
	Open Competitive Bidding (OCB)	Request for Quotations (RFQ)	Other 1	Open Competitive Bidding (OCB)/ or Direct Contracting	Prudent Shopping of Single Tender Contracting	Shortlist 2	Other 2	Total
1. GOODS								
Procurement and distribution of certified seeds					1 030.8 (1 030.8)			1 030.8 (1 030.8
Procurement and distribution of fertilizers				1 668.0 (539.2) [1 128.8]				1 668,0 (539.2) [1 128.8]
Procurement of computer hardware and office equipment		34.8 [34.8]						34,8 [34,8]
Procurement of SYSCOHADA-compliant accounting software		10.0 [10.0]						10.0 [10.0]
Procurement of vehicles and motorbikes		52.2 [52.2]						52.2 [52.2]
Sub-total	0	97.0 [97.0]	0	1 668.0 (539.2) [1 128.8]	1 030.8 (1 030.8	0	0	2 795.8 (1 570.0) [1 225.8]
2. CONSULTING SERVICES								
Consolidation of seed certification						179.7 (179.7)		179.7 (179.7)

¹ In accordance with national regulations and the provisions of the project's Administrative, Accounting and Financial Procedures Manual.

² Shortlist for the selection of consulting firms and shortlist for the selection of individual consultants.

³ Single tender.

		Amount in UA 1 000						
CATEGORIES	Borrower's Procurement System (BPS)		Bank's Procurement Methods and Procedures (BPMP)					
CATEGORIES	Open Competitive Bidding (OCB)	Request for Quotations (RFQ)	Other 1	Open Competitive Bidding (OCB)/ or Direct Contracting	Prudent Shopping of Single Tender Contracting	Shortlist 2	Other 2	Total
Development and implementation of the Pest and Pesticide Management Plan (PMP) and a Grievance Redress Mechanism (GRM)		, ,				55.9 [55.9]		55.9 [55.9]
Accounting, financial and procurement audit						12.4 [12.4]		12.4 [12.4]
Environmental and social performance audit						12.4 [12.4]		12.4 [12.4]
Review of the Subsidy Management Manual						58.1 [58.1]		58.1 [58.1]
Update of the seed policy						24,9 (24,9)		24,9 (24,9)
Agreement with TAAT						, , ,	348,3 (348,3)	348,3 (348,3)
Agreement with the DNA							335,0 (167,5) [167,5]	335,0 (167,5) [167,5]
Agreement with the ON							266,0 (133,0) [133,0]	266,0 (133,0) [133,0]
Agreement with the IER							34,8 [34,8]	34,8 [34,8]
Agreement with the DNACPN							14,9 [14,9]	14,9
Agreement with the CPS-SDR							18,7 [18,7]	18,7 [18,7]
Support to the transparency of the input distribution system (seeds and fertilizers) through the use of digital technologies						208,1 (124,4) [83,7]	[,,]	208,1 (124,4) [83,7]

		Amount in UA 1 000						
CATEGORIES	Borrower's Procurement System (BPS)		Bank's Procurement Methods and Procedures (BPMP)					
CITEGORIES	Open Competitive Bidding (OCB)	Request for Quotations (RFQ)	Other 1	Open Competitive Bidding (OCB)/ or Direct Contracting	Prudent Shopping of Single Tender Contracting	Shortlist 2	Other 2	Total
Establishment of the reference situation						18,7 [18,7]		18,7 [18,7]
Development of the completion and capitalization of results report						33,6 [33,6]		33,6 [33,6]
Sub-total	0	0	0	0		603,8 (329,0) [274,8]	1017,7 (648,8) [368,9]	1 621,5 (977,8) [643,7]
3. OPERATING COSTS								
Sundry operating costs			1 082,7 (532.2) [550,5]					1 082,7 (532.2) [550,5]
Sub-total	0	0	1 082,7 (532.2) [550,5]	0		0	0	1 082,7 (532.2) [550,5]
TOTAL	0	97,0 [97,0]	1 082,7 (532.2) [550,5]	1 668,0 (539,2) [1 128.8]	1 030,8 (1 030,8)	603,8 (329,0) [274,8]	1017,7 (648,8) [368,9]	5 500,0 (3 080,0) [2 420,0]

The figures in square brackets [....] represent TSF grant financing, while those in brackets (...) represent TSF loan financing.

4.5.5 Announcements

The content of the General Procurement Notice (GPN) has been agreed upon with the country and will be transmitted to the Bank for publication³ on its website following the approval of the proposal for financing by the Board of Directors.

Specific procurement notices issued through the National Procurement System will comply with the publication rules outlined in Decree No. 2015-0604/P-RM of 25 September 2015 instituting the Public Procurement Code and public service delegations, including its amendment. Those relating to the procurements to be conducted through the Bank's system will adhere to the advertising rules outlined in the Bank's procurement framework.

4.5.6 Review of Contracts Awarded

The procurement control mechanism applicable to bid solicitation documents, bid/proposal evaluation reports and recommendations for the award of contracts will be determined by the procurement system (NPS or BPMP) used. This control mechanism may include one or more of the following mechanisms, as appropriate: (a) the national system's review mechanism; (b) the Bank's ex-ante and ex-post reviews; and (c) independent procurement reviews (IPRs) commissioned by the Bank.

4.5.6.1 Control in within the Framework of the NPS

Procurement under the national procurement system will be controlled in accordance with the country's relevant decrees and regulations, particularly through (i) the ex-ante controls of the DGMP-DSP; (ii) controls carried out by the Office of the Auditor General; (iii) the annual audits and ex-post reviews of the ARMDS, irrespective of other controls that may be required at the national level.

4.5.6.2 Control within the Framework of the Bank's PMP

All contracts concluded within the framework of the Bank's PMP will be subject to ex-ante or ex-post review as indicated below.

4.5.6.2.1 Pre-review thresholds: procurement decisions subject to pre-review by the Bank for procurement of goods.

No.	Procurement Method	Pre-review Thresholds (in UA)	Frequency of Reviews
1.	Open Competitive Bidding without Pre-qualification	-	All contracts will be subject to pre-review by the Bank.
2.	Request for Quotation (RFQ)	-	All contracts will be subject to pre-review by the Bank.
3.	Single tender	-	All contracts will be subject to pre-review by the Bank.

4.5.6.2.2 Pre-review thresholds: procurement decisions subject to pre-review by the Bank for the use of consultants.

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³The Donee will prepare and submit the General Procurement Notice to the Bank for publication in the United Nations Development Business (UNDB) and the Bank's website

No.	Selection Method	Pre-review Thresholds (in UA)	Ex-post Review Thresholds (in UA)	Frequency of Reviews
1.	QCBS Procedure (consulting firms)	Equal to or more than UA 100 000		All contracts will be subject to pre-review by the Bank
2.	QCS procedures	Not applicable	Not applicable	All contracts will be subject to prior review by the Bank.
3.	procedure (individual consultants)	Equal to or more than UA 50 000 and all contracts for the recruitment of key PMU staff and the drafting of the procedures manual.		All contracts will be subject to pre-review by the Bank.
4.	Single-source selection (firms / individuals)	-	-	All contracts will be subject to pre-review by the Bank.

To that end, the following documents must be reviewed and approved by the Bank before publication: O General Procurement Notice, O Specific Procurement Notice or Requests for Expression of Interest, O Bidding Documents or Requests for Proposals of Consultants, O Report on the evaluation of contractors'/suppliers' bids, including recommendations for the award of contracts or Report on the evaluation of the technical proposals of consultants, O Draft works and goods contracts, if amended and different from the draft contracts contained in bidding documents, O Reports on the evaluation of the financial proposals of consultants with recommendations for contract award, including negotiation reports and the initialled draft contract.

Besides the pre-review of some activities by the Bank, the capacity assessment recommended the conduct of one supervision mission each year in order to review the country's procurement activities and ensure that the capacity to supervise procurement activities is satisfactory and sustainable.

4.5.7 Special Provisions

4.5.7.1 Use of Advance Procurement Actions (APAs)

To accelerate project implementation, the Government has informed the Bank about its intention to use advance contracting (AC) for: (i) the procurement and distribution of certified seeds; and (ii) the procurement and distribution of fertilizers.

It should be noted that Section 11.2 of the Bank's Procurement Policy allows for the use of AC in certain circumstances, particularly: (i) the need to use procedures and methods that are in accordance with the Bank's Procurement Framework; (ii) the need for pre-review of such procurements by the Bank; and (iii) the country shall undertake such advance contracting at its own risk and any "no objection" given by the Bank prior to the approval of the financing by the Board does not commit the Bank to provide financing for the project in question. As a result, the Government will submit a petition to the Bank for comment justifying the use of AC, along with the procurement plan for the relevant procurement.

4.5.7.2 Special Arrangements Due to Use of the National Procurement System

4.5.7.2 (a) Waiver of the Rule of Origin Due to Use of the National Procurement System

The TSF, which is subject to the rules of origin of the ADF window, will provide the resources needed by the Bank to finance project activities. As a result, the ADF window eligibility rules will be applicable. Following the procurement risk and capacity assessment, the decision was taken to use the National Procurement System for a part of the project. Since the rules of eligibility for public contracts under Malian law are different from those of the ADF window, any practical incompatibility should be avoided. It was observed that Decree No. 2015-0604/P-RM of 25 September 2015 instituting the Public Procurement Code and public service delegations and its amendment, Decree No. 2016-0920/P-RM of 6 December 2016 instituting the Procurement Code and its implementing instruments do not impose

any specific restrictions on participation in competitive bids calls, except qualification and the absence of any sanction by the Public Procurement Regulation and Public Service Delegation Authority (ARMDS-DSP), as stipulated in Section 18 of Law No. 08-023 of 23 July 2008 establishing the Public Procurement Regulation and Public Service Delegation Authority. As a result, national eligibility rules will apply to all contracts concluded under this project through the Malian public procurement system. However, where the country's decision to use the national system results in the award of a contract to an entity under Bank or United Nations Chapter VII sanctions, Bank loan resources would not be used to finance such a contract. The list of debarred entities can be consulted at http://www.afdb.org/debarred.

4.5.7.2 (b) Special Procurement Audit

Under the National Procurement System. It is mandatory to conduct an annual audit of procurements to be funded by project resources. Given the small number of contracts involved, this audit will be performed by the consulting firm to be recruited to conduct the project accounting and financial audit, whose terms of reference will be adapted for this purpose. This audit will enable the Bank to form an opinion on the performance of the National System in the implementation of the project. The consultant will be selected in keeping with the Bank's System.

4.5.7.2 (c) Grievance Redress

Potential procurement-related grievances will be handled solely by national institutions. However, the Bank will have to be informed of all grievances received under the project and how they were handled through a reporting mechanism (whose frequency will be determined during negotiations). This mechanism will enable the Bank to monitor the manner in which complaints are handled and to communicate those involving prohibited behaviour to the Bank's Integrity and Anti-Corruption Department (PIAC).

4.5.7.2 (d) Publication of the Results of Bids

Section 79 of the PPC provides that bidders should be notified of the results of bids in writing. Within the framework of this project, the Government will publish the results of bids on the DGMP-DSD website and provide a half-yearly summary of contracts awarded through open competitive bidding in accordance with national procedures for posting on the Bank's website.

4.5.7.2 (e) Quarterly Reports

The executing agency will prepare a quarterly progress report that will include a special section on procurement as well as tables to inform the Bank on data such as the list of contracts signed through the national procurement system, the names of successful bidders, grievances received and how they were handled, and so on.

4.5.7.2 (f) Control of the Affordability of Contracts

Any decision to award a contract whose cost exceeds 20% of the estimated amount contained in the latest procurement plan approved by the Bank shall be subject to prior approval by the Bank, with appropriate justification for the cost overrun.

4.5.7.2 (g) Dematerialization of Bid Submission and Security

The National System allows public bidders to use e-procurement procedures (cf. Section 65 of the PPC). However, Section 8.13 of the Bank's Policy states that the Bank must be satisfied with the system's level of security before using it in Bank-funded procurement. This provision will not be applicable to the project at the moment because such a platform is inexistent in the country and the decree laying down the terms and conditions for implementing e-procurement procedures is not yet in force. When it becomes effective, the Bank will evaluate it before putting it to use.

4.5.8 Procurement Plan

During the project appraisal mission, the country prepared a summary procurement plan serving as a basis for project procurement. A detailed procurement plan for the activities to be implemented during the first 18 months will be prepared and submitted to the Bank during project negotiations. The

procurement plan will be systematically updated by the country project team at the start of each year or as required to reflect the actual project implementation needs and improvements in institutional capacity. Any revisions proposed to the Procurement Plan shall be submitted to the Bank for its prior no objection opinion. During the revision of the PP, the Executing Agency will verify and update estimates to reflect contract prices. The Executing Agency will implement the PP as agreed with the Bank. A summary of the PP is provided below (cf. Section 4.5.10).

4.5.9 Procurement Risk and Capacity Assessment (PRCA) Action Plan

The Bank and the Country, through the Executing Agency, have discussed and agreed on the Procurement Risk and Capacity Assessment (PRCA) action plan which proposes a series of actions and measures to be carried out during project implementation in order to mitigate the risks identified following the assessments of procurement risks at the country/sector/project levels and the Executing Agency's procurement capacity. The PRCA action plan will be monitored during project implementation. The action plan for mitigating the risks identified is as follows:

Table 4.5.9: Project Risks and Mitigation Measures Action Plan

No.	Risks Identified	Mitigation Measures	Timeframe	Responsible Entity
1	for some transactions financed by the Bank under the project.	Procedures.		Bank/Country
2	fiduciary responsibility for procurement under the national system.	national system.	months of project implementation	Country/Bank
3	contracts, resulting in non- compliance with PP implementation timeframes.	entities responsible for contractor tax audits and the contracting authorities.	Ongoing	Country
4	Delays in preparing bid evaluation reports.	Release staff involved in the evaluation of bids for major competitive bid calls from other obligations for a specified period of time.	Ongoing	Country
5	Inefficiency of the public entities involved in emergency project implementation through agreements.		Ongoing	Country
6		Monitor the incorporation of the PP in SIGMAP once it is revised and approved by the Bank.	Ongoing	Country
7		Recruit individual consultants to assist beneficiaries in preparing some technical documents and terms of reference and form technical committees to review technical specifications and terms of reference before they are included in BDs and requests for proposals (RFP).	Ongoing	Country
8	Weak capacity of local contractors and suppliers (seeds and fertilizers at national level)	 Ensure the wide publication of bid notices in order to attract qualified suppliers; Verify the capacity and past performance of suppliers before awarding contracts to them. 	Ongoing	Country
9	Lack of mastery of TAAT technology		At project start-up	Country

10	Need to build capacity in the Bank's	Retrain ORS and MDR staff involved	At project start-up	Country/Bank
	procurement procedures,	in project management, the PMU	and regularly	
	particularly those required for	team and beneficiary entities.	according to the	
	project implementation.		fiduciary clinic	
			programme	
			adopted.	
11	Failure of the Contracting	Ensure, through ToRs, that the	Annually	Country/Bank
	Authority's internal control body to	sample to be considered for public		
	carry out ex-post control of	procurement audits systematically		
	contracts as required by Article 113	covers contracts that have not		
	of the PPC.	previously been reviewed by the		
		DGMP-DSP.		

4.5.10 Procurement Plan

Ref	ference Number	Contract Description	Estimated Amount (UA 1 000)	Procurement Method	Pre- qualification? (Y/N)	National Preference (Y/N)	Bank Review (Ex- ante/Ex-post)	Provisional Process Launch Date
В	Procurement system	GOODS	2 795,8					
1	BPMP	Procurement and distribution of certified seeds	1 030,8	Request for Quotations (RFQ) or ST	N	N	Ex-ante	1st quarter of 2023
2	BPMP	Procurement and distribution of fertilizers	1 668,0	OCB or ST	N	N	Ex-ante	1st quarter of 2023
3	NPS	Procurement of computer hardware and office equipment	34,8	DRPO	N	N	Audit	1st quarter of 2023
4	NPS	Procurement of SYSCOHADA- compliant accounting software	10,0	DRPR	N	N	Audit	2nd quarter of 2023
5	NPS	Procurement of vehicles and motorbikes	52,2	DRPO	N	N	Audit	2nd quarter of 2023
	Sub-total		3 453.90					

Refe	erence Number	Contract Description	Estimated Amount (UA 1 000)	Procurement Method	Pre- qualification? (Y/N)	National Preference (Y/N)	Bank Review (Ex- ante/Ex-post)	Provisional Process Launch Date
C	Procurement system	CONSULTING SERVICES	1621,5					
1	BPMP	Consolidation seed certification	179,7	QCBS	Y	N	Ex-ante	1st quarter of 2023
2	ВРМР	Development and implementation of the Pest and Pesticide Management Plan (PPMP) and a Grievance Redress Mechanism (GRM)	55,9	SQC	Y	N	Ex-ante	1st quarter of 2023
3	BPMP	Accounting, financial and procurement audit	12,4	LCS	Y	N	Ex-ante	1st quarter of 2023

4	BPMP	Environmental and social performance audit	12,4	IC	Y	N	Ex-ante	3rd quarter of 2023
5	BPMP	Review of the Subsidy management manual	58,1	IC	Y	N	Ex-ante	3rd quarter of 2023
6	BPMP	Update of the seed policy	24,9	IC	Y	N	Ex-post	3rd quarter of 2023
7	BPMP	Agreement with TAAT	348,3	ED	N	N	Ex-ante	2 nd quarter of 2023
8	BPMP	Agreement with the DNA	335,0	ED	N	N	Ex-ante	2 nd quarter of 2023
9	BPMP	Agreement with ON	266,0	ED	N	N	Ex-ante	2 nd quarter of 2023
10	BPMP	Agreement with the IER	34,8	ED	N	N	Ex-ante	2 nd quarter of 2023
11	BPMP	Agreement with the DNACPN	14,9	ED	N	N	Ex-ante	2 nd quarter of 2023
12	BPMP	Agreement with the CPS-SDR	18,7	ED	N	N	Ex-ante	2 nd quarter of 2023
13	MPAB	Appui à la transparence du système de distribution des intrants (semence et engrais) à travers l'utilisation des technologies numérique	208,1	SFQC	О	N	Priori	1st quarter of 2023
14	MPAB	Établissement de la situation de référence	18,7	CI	О	N	A posteriori	1st quarter of 2023
15	MPAB	Élaboration du rapport d'achèvement et de capitalisation des résultats	33,6	CI	О	N	A posteriori	3rd quarter of 2023
	Sub-tota	1 C	1 621,5					

ANNEX 5: ECONOMIC AND FINANCIAL ANALYSIS

Annex 5.1: Estimated Additional Income from Support to Targeted Crop Species

	Surface				Gross	Output	Qty of	Price of		Price of	Production Cost	Seeds/ha	Ferti./ha	Other	Total		perating ome	
Crop	Area (ha)	Yield kg.ha	Prod. (t)	Price CFAF/kg	/ha (CFAF 1 000)	Total (CFAF million)	Seeds/ha (kg)	Seeds (CFAF/kg)	Qty of Fert. (kg/ha	Fert. (CFAF/kg)	Water Cons./ha (CFAF 1 000)	CFAF 1 000	CFAF 1 000	Costs/ha (CFAF 1 000)	(CFAF million)	/ha (CFAF 1 000)		
									Baseline Situa	tion								
Surface Area (100%)																		
Maize	4200	1300	5460	170	221	928.2	20.0	500.0	125.0	726		10	90.75	50	633.2	70	295.1	
Rice	2000	1400	2800	235	329	658.0	70.0	750.0	180.0	736		52.5	132.48	75	520.0	69	138.0	
Wheat	1611	1800	2899.8	450	810	1 304.9	129.7	500.0	180.0	726		64.9	130.68	75	435.9	539	869.1	
Tomato	711	15 000	10665	160	2400	1 706.4	0.200	83 000	60.0	720	100.0	16.6	43.2	200	255.8	2 040	1 450.6	
Potato	297	16 500	4900.5	400	6600	1 960.2	2 000.0	1 250.0	100.0	720	100.0	2500	72	220	858.9	3 708	1 101.3	
Total	8 819		26 725		744	6 558	2 220							307	2 704		3 854	
								ı	With-project Site	uation								
Surface Area (100%)			0															ı
Maize	4200	2 200	9240	170	374	1 570.8	20.0	500.0	250	726		10	181.5	50	1014.3	133	556.5	
Rice	2000	2 300	4600	235	540.5	1 081.0	70.0	750.0	300	736		52.5	220.8	75	696.6	192	384.4	
Wheat	1611	2 200	3544.2	450	990	1 594.9	129.7	500.0	300	726		64.9	217.8	125	656.8	582	938.1	
Tomato	711	20 000	14220	160	3200	2 275.2	0.200	83 000	100	720	100.0	16.6	72	280	333.2	2 731	1 942.0	
Potato	297	21 100	6266.7	400	8440	2 506.7	2 000.0	1 250.0	100	720	100.0	2 500	72	280	876.7	5 488	1 629.9	
Total	8 819		37 871		1 024	9 029	2 219.9								3 578		5 451	
									Additional Inc	ome								
Surface Area (100%)																	Year 2 & foll.	Year 1
Maize			3780			-										62.3	261.5	130.7
Rice			1800			-										123.2	246.4	123.2
Wheat			644.4			-										42.9	69.1	34.5
Tomato			3555			-										691.2	491.4	245.7

										1		
Potato		1366.2		-						780.0	528.7	264.3
Total		11145.6		-						ı	1 597.0	798.5
Additional	I income at full	l development		2 471					873.9		1 597.0	
Additiona	al income in 20	23 50%		1 235.4					436.9		798.5	
Additiona	al income in 20	100%		2 470.9					873.9		1 597.0	

Annex 5.2: Financial Cash Flow in CFAF million

		Cost				Additio	onal Income						Assumption of
Years	Project Cost	Maintenance, Upkeep and Operation at Project End (8% Project Cost)	Total Cost	Maize	Rice	Wheat	Tomato	Potato	Total	Financial Cash Flow	Assumption of a 10% Drop in Income	Assumption of a 10% Increase in Costs	a 10% Increase in Costs and Decrease in Income
2023	4 736.87		4 737	130.7	123.2	34.5	245.7	264.3	798.5	- 3 938	- 4 018.2	-4 412	- 4 491.9
2024		378.9	378.9	261.5	246.4	69.1	491.4	528.7	1 597.0	1 218	1 058.3	1 180	1 020,4
2025		378.9	378.9	261.5	246.4	69.1	491.4	528.7	1 597.0	1 218	1 058.3	1 180	1 020,4
2026		378.9	378.9	261.5	246.4	69.1	491.4	528.7	1 597.0	1 218	1 058.3	1 180	1 020,4
2027		378.9	378.9	261.5	246.4	69.1	491.4	528.7	1 597.0	1 218	1 058.3	1 180	1 020,4
2028		378.9	378.9	261.5	246.4	69.1	491.4	528.7	1 597.0	1 218	1 058.3	1 180	1 020,4
2029		378.9	378.9	261.5	246.4	69.1	491.4	528.7	1 597.0	1 218	1 058.3	1 180	1 020,4
2030		378.9	378.9	261.5	246.4	69.1	491.4	528.7	1 597.0	1 218	1 058.3	1 180	1 020,4
2031		378.9	378.9	261.5	246.4	69.1	491.4	528.7	1 597.0	1 218	1 058.3	1 180	1 020,4
2032		378.9	378.9	261.5	246.4	69.1	491.4	528.7	1 597.0	1 218	1 058.3	1 180	1 020,4
	TRI			<u> </u>				-		27.4%	21.9%	22.4%	17.3%
	NPV									5 512	4 517	5 072	3 999

Annex 5.3: Economic Cash Flow in CFAF

			111110	A 3.3. E	COHOIIII			CITTI					
		Costs				Additio	nal Income						
Years	Project Cost	Coverage of Maintenance, Upkeep and Operation at Project End (8% Project Cost)	Total Cost	Maize	Rice	Wheat	Tomato	Potato	Total	Financial Cash Flow	Assumption of a 10% Drop in Income	Assumption of a 10% Increase in Costs	Assumption of a 10% Increase in Costs and Decrease in Income
										- 3	- 3	- 3	- 3
2023	4 263.18		4 263	130.7	123.2	34.5	245.7	264.3	798.5	465	544.5	891	970,9
2024	-	341.1	341.1	261.5	246.4	69.1	491.4	528.7	1 597.0	1 256	1 096.2	1 222	1 062,1
2025		341.1	341.1	261.5	246.4	69.1	491.4	528.7	1 597.0	1 256	1 096.2	1 222	1 062,1
2026		341.1	341.1	261.5	246.4	69.1	491.4	528.7	1 597.0	1 256	1 096.2	1 222	1 062,1
2027		341.1	341.1	261.5	246.4	69.1	491.4	528.7	1 597.0	1 256	1 096.2	1 222	1 062,1
2028		341.1	341.1	261.5	246.4	69.1	491.4	528.7	1 597.0	1 256	1 096.2	1 222	1 062,1
2029		341.1	341.1	261.5	246.4	69.1	491.4	528.7	1 597.0	1 256	1 096.2	1 222	1 062,1
2030		341.1	341.1	261.5	246.4	69.1	491.4	528.7	1 597.0	1 256	1 096.2	1 222	1 062,1
2031		341.1	341.1	261.5	246.4	69.1	491.4	528.7	1 597.0	1 256	1 096.2	1 222	1 062,1
2032		341.1	341.1	261.5	246.4	69.1	491.4	528.7	1 597.0	1 256	1 096.2	1 222	1 062,1
	TRI							-		33.6%	27.4%	28.0%	22.4%
	NPV									5 869	4 960	5 551	4 565

Annex 6: PROJECT APPRAISAL AND IMPLEMENTATION SCHEDULE

	Year		2022			20)23	
	Quarter	T2	Т3	T4	T1	T2	Т3	T4
0	PREPARATORY ACTIVITIES							
	Appraisal Mission							
	Drafting of project documents							
	Meeting of the Country Team							
1	INITIAL ACTIVITIES							
	Approval of TSF Loan and Grant							
	Signature of Financing Agreement							
	Effectiveness and fulfilment of conditions precedent to 1st disbursement							
2	START-UP ACTIVITIES							
	Development of a Pest and Pesticide Management Plan (PPMP)							
	Monitoring and implementation of the PPMP measures							
	Targeting of beneficiaries							
	In-charge training							
	Preparation of the ToRs for provision of services (update of the seed policy and							
	review of the subsidy management handbook)							
	Project information and sensitization missions							
3	PROCUREMENT OF INPUTS							

	Procurement of seeds				
	Procurement of fertilizers				
	Distribution of inputs				
	Horticultural activities				
4	INPUT SECTOR REFORM ACTIVITIES				
	Support for seed policy update				
	Review of the subsidy management manual				
5	MONITORING AND EVALUATION ACTIVITIES				
	Survey on crop harvest estimates carried out by the DNA, ODRs and the PMU				
	Project evaluation				

Annex 7: Quantity of Seeds Distributed by Region/ODR and by Crop

Regions	Number of Beneficiaries	Rice (t)	Maize (t)	Wheat (t)	Tomato (in kg)	Potato (t)
Kayes	2 787		12		19.36	
Koulikoro	3 734		12		59.32	74
Sikasso	3 919		12		23.32	520
Dioila	2 515		12		5.76	
Koutiala	2 607		12		10.36	
Bougouni	2 518		12		5.92	
Kita	2 645		12		12.24	
Tombouctou	6 000			195		
Gao	188			6		
Ménaka	16			1		
Bamako	104				5.20	
ON	6 240	105		8		
ORS	2 000	35				
Total	35 274	140	84	209	142.12	594

Annex 8: FRAGILITY NOTE

1. Introduction

Food insecurity in Mali is due to persistent extreme poverty, conflicts, interannual variability of rainfall and frequent and severe droughts. Nearly 44% of Malians live below the national poverty line, which makes it difficult to meet basic needs, including food needs. The civil conflict prevailing since 2012 has heightened food insecurity and led to population displacement. In early 2022, UN agencies estimated that nearly 363,000 Malians were displaced internally and nearly 163,000 more were refugees. More recently, the ongoing conflict has undermined livelihoods and increased food prices, particularly in conflict-stricken areas, preventing households from meeting their basic food needs, especially the poorest households in Central and Northern Mali. Interannual rainfall variation, extreme rainfall and drought have historically affected agricultural productivity, jeopardizing food security and nutrition. Three quarters of Malians depend on agriculture for food and income, much of which is small-scale, rain-fed and pastoral subsistence agriculture, and is highly sensitive to climate change drivers. The economic impact of the COVID-19 pandemic and more recently the effects of the war in Ukraine, which led to a rise in food commodity and input prices, have also had a negative impact on nutrition.

2. Fragility Factors in the Agricultural and Food Sector

Although agriculture is the country's economic driver, it faces many vulnerabilities. The agricultural sector is also the primary source of food and income for over 80% of the population living in rural areas. Albeit this important role, climate vagaries, insufficient inputs, inefficient agricultural subsidies, poorly structured value chains, and poor access to technology and markets are all challenges that impede the development of the agricultural sector in Mali. Moreover, this agriculture is essentially geared towards "survival", with almost all production being used to meet the subsistence needs of households. It is not very resilient to climate shocks and to disruptions in the input and output markets. The sector is negatively affected by the COVID-19 crisis and the war in Ukraine with rising input prices and food prices that are out of reach of households.

Food security is negatively affected by insecurity issue. The number of internally displaced persons in Mali is still high due to violence and conflict. While the majority of displaced people depend on agriculture for their survival, the WFP's analysis of satellite imagery has revealed a decline in agricultural activities in several insecure areas. Since the 2012 crisis, about 3.6 million people (18% of the population) are faced with food insecurity each year, 600 000 are severely affected. The impact of food insecurity varies from one region to another with Northern and Central regions being the hardest-hit. Violence is often coupled with large-scale theft or looting of resources and livestock, exacerbating population vulnerability. The functioning of certain rural markets is disrupted for fear of attacks, preventing people from buying or selling food.

Most farmers especially use ill-adapted and labour-intensive farming methods, with rudimentary farming tools, leading to low productivity and production. Hence, their activity becomes unsustainable and ineffective. Diversified farming is reduced, thus enhancing agricultural resilience to climate and economic challenges. Farmers do not invest much on farm inputs such as improved seeds or fertilizers, mainly because they have not been educated on

such practices and even those who are informed cannot afford the high cost of these farm inputs. In addition, the private sector is not sufficiently involved in the importation, production and distribution of improved seeds and fertilizers.

Weak capacity of various actors both at the local (farmers, smallholder organizations) and institutional levels. It is necessary, at the local level, to build farmers' capacity regarding the importance of using certified seeds and help them acquire technical know-how with the use of climate-resilient technologies, irrigation and soil adaptation techniques. It is also important to strengthen the entrepreneurial skills of women and young farmers for more sustainability in their work.

3. Resilience Sources

- The variety of produce from its agricultural sector is a major advantage for socio-economic resilience. The emergency programme aims to mitigate food deficiency through support to irrigation farming produce (rice, tomatoes, wheat and potatoes), which has high market and nutritional value. Providing farmers with improved seeds and fertilizers will enable households farm produce which meets their immediate nutritional needs. The emergency support, targeting high market value farm produce, enables households to sell part of their production to meet all their nutritional needs.
- The emergency programme is based on the resilience potential identified in the project impact area. First, it is possible to farm under unfavourable weather conditions. There is also great potential for irrigation farming thanks to villagers' efforts and State support through the construction of irrigation wells and equipment of farms with motor pumps. The implementation activities for fertilizer support are based on a government programme of digital funding which ensures that the final beneficiary effectively gets the support from the operation. By seeking to increase production, the project aligns with the Bank Group's Strategy for Addressing Fragility and Building Resilience in Africa (2022-2026), which makes "building resilient societies" its second thrust area.

4. Recommendations

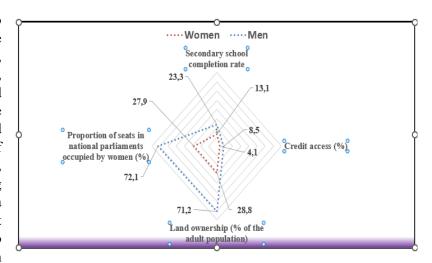
- To ensure inclusiveness, at least 30% of project activities under Component 1 will target vulnerable segments of the population, including women, children, people with disabilities, and elderly people living alone.
- Compile technology catalogues and provide hands-on training in good agricultural practices for extension officers, SMEs and lead farmers.

Annex 9: GENDER AND WOMEN'S EMPOWERMENT

9.1 Detailed Gender Analysis

In Mali, 70% of the working population is engaged in agriculture and more than 70% of jobs held by women are also in agriculture. Women are present throughout the agricultural chain and are champions of food resilience as they represent about 60% of total market gardeners and are responsible for feeding the household. However, women's empowerment through agriculture remains a development challenge. The African Gender Index ranks Mali 45th out of 51 countries in terms of gender equality, thus revealing the presence of gender disparities that extend to all sectors including the agricultural sector.

Cultural norms on access to and control of productive resources (land, inputs, training, equipment, credit, impose a gendered distribution of power where women discriminated 28.8% against. Only of landowners are women, i.e., twice as few as men. Regarding inputs, men use about 90 kg/ha of fertiliser compared to about 20 kg/ha for women cultivate maize. Similarly, men



use about 75 kg/ha of fertiliser compared to about 18 kg/ha of fertiliser to cultivate rice⁴. Women's representation in decision-making positions is also estimated at 8.8% with a lower secondary school completion rate for girls.

Thus, although the country has several instruments to support equal rights and opportunities for women and men in the agricultural sector, in particular the Agricultural Orientation Law and the Law on Agricultural Land, customary norms prevail.

Project Impact on the Promotion of Gender Equality and/or Women's Empowerment

The Emergency Food Production and Nutritional Security Project - Mali (PUPSAN/AEFPF) is classified as Category 2 under the Gender Marker System. The empowerment of women and young women, and the reduction of gender disparities in the agricultural sector are key objectives of the project. The project will provide women farmers with access to rice, maize and wheat seeds as well as horticultural seeds. Given the importance of horticultural crops for food security and women's empowerment, the project will particularly support women's access to inputs for tomato and potato farming.

On average, 30% of inputs for wheat, rice, maize and potato and 100% of inputs for tomato will go to women. Furthermore, an average of 20% of the above-mentioned inputs will be granted to people displaced by the socio-political crises and to young men and women. The project executing agency will have a gender specialist as one of its staff.

A budget of **UA 1,170,506**, or 21.28% of the total project budget, is dedicated to direct support to activities promoting gender equality and women's empowerment.

⁴ National gender profile in the agriculture and rural development sectors, FAO 2018

9.2 Gender Action Plan

PROJECT TITLE	EMERGENCY FOOD PRODUCTION A	ND NUTRITI	ON SECURITY
	PROJECT - MALI (PUPSAN/AEFPF)		
GMS CATEGORY	GEN II		
Components	Activities	Budget (UA)	Responsibility
Improved access to	Procurement of 25.2 tonnes of maize seed for	14 640	PMU and
certified seeds and	women, i.e., 30% of the total quantity		Gender
advisory support	Procurement of 42 tonnes of rice seeds for	36 570	Specialist
	women, i.e., 30% of the total quantity		
	Procurement of 62.7 tonnes of wheat seed for	36 390	
	women, i.e., 30% of the total quantity		
	Procurement of 178.2 tonnes of potato seeds	258 630	
	for women, i.e., 30% of the total quantity		
	Procurement of 0.14 tonnes of tomato seeds for	13 700	
	women, i.e., 100% of the total quantity		
	Support and advice on the use of improved and	106 496	
	adapted varieties for 16,782 women to whom		
	seeds would have been distributed, i.e., 52% of		
	the total target		
Improved access to	Procurement of 126 tonnes of NPK for women,	105 330	
fertiliser	i.e., 30% of the total quantity (maize farming)		
	Purchase of 189 tonnes of urea for women, i.e.,	160 200	
	30% of the total quantity (maize farming)		
	Procurement of 60 tonnes of DAP fertiliser for	52 260	
	women, i.e., 30% of the total quantity (rice		
	farming)		
	Procurement of 120 tonnes of urea for women,	101 700	
	i.e., 30% of the total quantity (rice speculation)		
	Procurement of 48.3 tonnes of NPK for	40 380	
	women, i.e., 30% of the total quantity (wheat		
	speculation)		
	Procurement of 96.6 tonnes of urea for women,	81 870	
	i.e., 30% of the total quantity (wheat farming)		
	Procurement of 9 tonnes of NPK for women,	7 530	
	i.e., 30% of the total quantity (potato farming)		
	Procurement of 71 tonnes of NPK for women,	59 400	
	i.e., 100% of the total quantity (tomato		
	farming)		
	Support for 10,582 women producers in the	86 010	
	optimal use of fertilisers		
Project	Monitoring and evaluation expert in charge of	9 400	
management and	gender issues		
policy reforms to	Support for integration into the seed policy		
improve access to			
inputs	WA 1 170 707		
Total	UA 1,170,506		

Annex 10: Project Areas and the Target Population

Crops	Regions	Rural	Beneficiaries		
		Development Agencies (RDAs)	Men	Gender targeting, of which 60% for women, 20% for IDPs and 20% for young people	Total
Rice		Niger Basin Authority (ON) and Ségou Rice Authority (ORS) in Ségou Region	4000	4000	8000
Maize	Kayes, Koulikoro, Sikasso, Dioila, Koutiala, Kita, Bougouni		8 400	8 400	16 800
Wheat	Timbuktu, Gao, Menaka	Niger Basin Authority	3 222	3 222	6 444
Tomato	Kayes, Koulikoro, Sikasso, Dioila, Koutiala, Kita, Bougouni Bamako		568	2 274	2 842
Potato	Koulikoro and Sikasso		594	594	1 188
Total			16 784	18 490	35 274

Annex 11: Crops, Surface Area and Output

Crops	Surface Area (ha)	Output (t)
Rice	2 000	4 600
Maize	4 200	9 240
Wheat	1 611	4 510
Tomato	711	14 220
Potato	297	6 266.70
Total	8 819	38 837.50

Annex 12: TAAT Technical Assistance Under PUPSAN Mali

Under PUPSAN, the Government of Mali plans to procure (a) 140 tonnes of rice seed; (b) 84 tonnes of maize seed; (c) 209 tonnes of wheat seed; (d) 0.14 tonnes of tomato seed; and (e) 594 tonnes of potato seed. The Technologies for African Agricultural Transformation (TAAT) Programme will provide the Project Management Unit with all information on certified seed suppliers for the value chains concerned.

Furthermore, the Ministry of Rural Development (MDR) through the National Directorate of Agriculture (DNA), has requested TAAT's support in terms of information, definition of technical specifications for improved irrigated rice and maize seeds and provision of appropriate adaptive technologies, including in post-harvesting. This support, which will be done as part of an agreement between TAAT and the MDR/DNA represented by the Project Management Unit, will cover:

For wheat:

- Build the capacity of IER staff on crop improvement (selection)
- Build the capacity of IER and DNA staff on varietal release and seed certification
- National consultation meeting on the seed sector
- Training on the establishment and operationalisation of innovation platforms with FARA
- Training in best agricultural practices
- Update and distribution of training materials on wheat farming.

For rice:

- Build the capacity of agricultural extension workers in Mali on best agricultural practices
- Build the capacity of agricultural extension workers in Mali to use the ASI threshing machine
- Deploy the ASI thresher and tablets with the RiceAdvice and WeedMaster applications installed.

About TAAT

Technologies for African Agricultural Transformation (TAAT) is a flagship programme of the African Development Bank as part of its "Feed Africa" strategy. Led by the International Institute for Tropical Agriculture (IITA) as the executing agency, the programme has pioneered new approaches to deploying proven technologies to African farmers. TAAT aims to help the continent realise its enormous potential in the agricultural sector by using high-impact technologies to boost production, improve food security and encourage inclusive growth by involving more women and youth. It also promotes greater resilience to climate variability and external shocks. TAAT is a major continent-wide initiative designed to boost agricultural productivity by rapidly delivering proven technologies to millions of farmers. The overall goal of TAAT is to double crop, livestock and fisheries productivity by expanding access to

productivity-enhancing technologies to more than 40 million smallholder farmers across Africa. In this regard, TAAT aims to generate an additional 120 million metric tons (MT) of food while lifting 130 million people out of poverty. A fundamental prerequisite for transforming African agriculture is to ensure that farmers have access to high-yielding, stress-tolerant, nutrient-rich crop varieties, productive livestock breeds and fish fingerlings.

IITA is responsible for implementing the TAAT Programme in close partnership with the Consultative Group on International Agricultural Research (CGIAR) centres and specialised institutions. These institutions work together with specific objectives targeting selected agricultural value chains and form 15 TAAT Compacts to deliver proven technologies to millions of farmers. The institutions include the African Agricultural Technology Foundation (AATF), AfricaRice, the Alliance Bioversity/CIAT, the Centro Internacional de la Papa (CIP), the Forum for Agricultural Research in Africa (FARA), the International Centre for Agricultural Research in Dry Areas (ICARDA), the International Centre for Research on Crops of the Semi-Arid Tropics (ICRISAT), the International Fertiliser Development Institute (IFDC), the International Institute for Tropical Agriculture (IITA), the International Livestock Research Institute (ILRI), the International Water Management Institute (IWMI), and the WorldFish Centre. Together, the Compacts plan interventions in collaboration with national programmes and institutes to showcase technologies and management innovations that address the agricultural development priorities of countries.

TAAT is organised around 11 "Compacts" that correspond to priorities and partnerships aimed at better tapping Africa's potential for food security and strengthening its role in global agricultural trade by deploying proven technologies. Eight of the Compacts address specific priority value chains including rice (AfricaRice), wheat (ICARDA), maize (AATF), sorghum and millet (ICRISAT), cassava (IITA), aquaculture (WorldFish), livestock (ILRI) and nutrition, which includes orange-fleshed sweet potato (CIP), biofortified common bean (Alliance Bioversity-CIAT), vegetable crops (WorldVeg) and soya bean (IITA). Three of the compacts address cross-cutting issues and, within TAAT, provide an enabling environment and include youth entrepreneurship promotion (ENABLE-TAAT, IITA, capacity building (FARA) as well as agricultural policy support (AATF).

Under the African Emergency Food Production Facility, TAAT has been commissioned by the African Development Bank to provide technical assistance to countries in the supply of seeds and fertilisers as well as the provision of proven technologies capable of boosting productivity in various priority value chains for countries.

Annex 12: Financial Management Arrangements

12.1 This annex is written as part of the evaluation of the Emergency Food Production and Security Project (PUPSAN/AEFPF), with the aim of ensuring that "the financial management system planned under the project allows for transparency, traceability and adequate financial information on the funds invested". This evaluation was carried out in virtual mode, based on the documents obtained, in particular the evaluation questionnaire for the financial management system in place at ORS, Order No. 91-049/CTSP of 21/08/1991, which created the Ségou Rice Authority (ORS). It includes the following parts: (2) Executive Summary, (3) Summary Description of the Project, (4) Use of the Country System, (5) Harmonization with Other Donors, (6) Implementing Agency, (7) Financial Management Mechanisms, (8) Financial Management Action Plan, (9) Conditionality, and (10) Supervision Plan

12.2 SUMMARY: Responsibility for the administrative, accounting and financial management of the Project will rest with the Ségou Rice Authority (ORS), which will delegate the day-to-day implementation of activities to the PMU of the Bank-financed Integrated Development and Climate Resilience Project for the Delta Plains 2 (PDIR-PD2), which is being executed by ORS. To this end, a decision will be taken by the ORS management to allow this PMU to implement the activities of this new operation.

A review of the financial management system of the ORS, the Project Executing Agency, was undertaken. It concluded that while the ORS has proven assets, particularly the human resources needed to implement the Project, improvements must be made to the various financial management components. These are detailed below. The ORS has a manual of administrative, financial and accounting procedures that was drafted several years ago. This document is no longer adapted to the structure and activities of the Office or to the implementation of development projects carried out within it. As for the integrated accounting and financial management system in place, it is better suited to commercial management than to the management of a development project. The PDIR-PD2 has an administrative accounting and financial procedures manual that is currently being approved by the Bank and integrated software adapted to the accounting and financial management of single-project and single-site development projects, and consequently does not allow the opening of accounts for another project. In view of the above:

Since the accounting manager of PDIR-PD2 is at the same time the ORS's accounting officer, there are still risks as to his availability to take charge of PUPSAN activities. Consequently, the ORS will submit to the Bank three CVs of three qualified experts for the appointment of the accounting and financial manager. The PDIR-PD2 accountant will be retained as the PUPSAN accountant. All selected project staff will sign annual performance contracts at the beginning of each year with clear key performance indicators approved by the Bank.

The Project will produce an annual work program and budget (AWPB), as well as quarterly financial monitoring reports based on the implementation of the annual work program and budget, annexed to the quarterly activity reports transmitted to the Bank no later than forty-five (45) days after the end of the quarter concerned.

The PDIR-PD2 administrative, accounting and financial procedures manual will have to be revised to take into account the activities and architecture of PUPSAN.

The financial controller in place at the ORS will be involved in the management of the Project and will review all disbursement requests as an internal control measure.

An integrated accounting and financial management software adapted to development projects will be deployed within the PMU. It will be multi-project, multi-donor, multi-site and multi-currency. The

capacities of the financial management staff will have to be reinforced in the use of the software and the procedures manual.

Project accounts will be kept on the basis of commitment accounting and on an integrated software adapted to the management of development projects. The chart of accounts will be prepared on the basis of the standards of the Uniform Act on Accounting and Financial Reporting (AUDCIF) and the revised SYSCOHADA, in force in Mali.

The Bank's resources will be disbursed in accordance with its rules and procedures, in particular the disbursement manual. Disbursements will be made using the following three (3) methods: (i) the direct payment method, (ii) the special account method, and (iii) the reimbursement method.

The external audit will be carried out by an independent firm recruited on the basis of the terms of reference in force at the Bank and in accordance with its rules and procedures. Only one audit will be carried out if the duration of the Project does not exceed 18 months and two audits will be carried out if the duration of the Project exceeds 18 months but does not exceed 36 months. The audit report must be received by the Bank no later than six months after the end of the financial year to which the assignment relates. The overall fiduciary risk has been assessed as substantial.

12.3 SUMMARY PROJECT DESCRIPTION: The objective of the Project is to contribute to increasing agricultural production and reducing the effects on the Malian population of the increase in food and agricultural input prices following the global surge in cereal prices. It will be based on three components, namely: (i) improving access to improved seeds and adapted technologies, (ii) facilitating producers' access to quality fertilizers, (iii) improving governance, supporting the implementation of reforms in the seed and fertilizer sectors, and project coordination and management.

12.4 USE OF THE COUNTRY SYSTEM: The latest country fiduciary risk assessment carried out as part of the preparation of the 2021 - 2025 Country Strategy Paper (CSP), based on the latest diagnostic studies, reveals that progress continues to be made in public finance management in Mali, in particular thanks to the implementation of certain WAEMU directives and the strengthening of the legal texts on the external control bodies: the Office of the Auditor General (OAG) and the Accounts Section of the Supreme Court (SCCS). Some weaknesses persist, however, at the level of internal control, particularly with regard to non-salary expenditures. In addition, gaps between existing legal texts and their effective application are frequent due to the slowness of change management. The continuation of the reforms underway, centered around the four pillars contained in the PREM, namely: (i) the modernization of the administration and fiscal policies; (ii) the implementation of the new budget programming, execution and monitoring framework; (iii) the move towards an internal and external control system aligned with best practices; and (iv) the establishment of a contractualized and transparent system of local financial governance, keeps the national public finance system on a good trajectory. The overall fiduciary risk remains substantial, despite the progress noted and indicated above. Therefore, the country system will not be used. The parallel system put in place as part of the implementation of the PDIR-PD2 will be maintained.

12.5 HARMONIZATION WITH OTHER DONORS: The Bank is the Government's main partner in the implementation of this Project. The partnership between the donors and the Government of Mali is governed by the principle of the Paris Declaration and aid coordination is carried out through an executive cooperation group, an ambassadors' group, thematic groups and dialogue groups.

In the framework of the present operation, no partner has expressed interest in participating financially. Therefore, the implementation of this operation will be based exclusively on the Bank's rules and procedures.

12.6 IMPLEMENTING AGENCY: The Ségou Rice Authority (ORS) is responsible for the technical and financial execution of the Project. The department within this Office that is responsible for accounting, administrative and financial management is the Accounting Agency. It is headed by an Accounting Officer responsible for conducting the Office's accounting and financial activities in accordance with public accounting rules. The Accounting Officer, in addition to his duties within the Office, is currently the Accounting Manager of PDIR-PD2, a project financed by the Bank. Consequently, it is not impossible that he may not be able to fully and properly assume the role of accounting manager for PUPSAN. Therefore, the ORS will submit to the Bank three CVs of three qualified experts for the appointment of the accounting and financial manager. The PDIR-PD2 accountant will be retained as PUPSAN accountant. All selected project staff will sign annual performance contracts at the beginning of each year with clear key performance indicators approved by the Bank. The ORS has an administrative, financial and accounting procedures manual that was written several years ago. This document is no longer adapted to the Office's structure and activities, nor to the implementation of the development projects carried out by the Office. As for the integrated accounting and financial management system in place, it is better suited to commercial management than to the management of a development project. As a result, the implementation of project activities will be delegated to the PMU of PDIR-PD2, a Bank-funded project implemented by ORS. A decision will be made by the ORS Management to allow this PMU to implement PUPSAN activities.

12.7 FINANCIAL MANAGEMENT MECHANISMS:

12.7.1 BUDGET MANAGEMENT: The budgetary approach currently in place within the ORS is generally satisfactory. The various divisions are involved in this procedure, which is managed by the Administrative and Financial Department. It also involves the Board of Directors, chaired by the Minister of Agriculture, for validation and the Ministry of Finance for the approval order. In addition, the budget process in place at the PMU is described and formalized in the procedure's manual. Budgets are prepared and submitted to the Steering Committee for approval, before being submitted to the Bank for a no-objection opinion. Comparisons are made between forecasts and actuals in the quarterly financial monitoring reports. A budget control sheet has been put in place following the recommendations of the various financial supervision missions. These practices should be applied to PUPSAN. An annual work program accompanied by the related activity budget will be developed each year to ensure the budgetary management of the project's resources; it will serve as a framework for annual expenditure forecasts by component and by category. The budget must be based on realistic assumptions and entered into the integrated accounting and financial management software as soon as it is approved. Thereafter, the achievements will be entered into the software and a periodic review will be made every three months. During this periodic review, the achievements will be compared to the forecasts and the differences will be explained for corrective measures if necessary. Fiduciary risk has been assessed as moderate for this component.

12.7.2 ACCOUNTING SYSTEM: The accounting system in place at ORS is based on SYSCOHADA standards. The associated chart of accounts is also based on these documents. It is a private type of commitment accounting system that corresponds overall to the Bank's expectations in terms of reporting and accountability. However, it is kept using commercial management software that is not adapted to development projects. In order to avoid extra-accounting adjustments, sources of manipulation risks, for the production of financial statements such as the Use of Resources Table by component, by category and by source of financing, this system will not be used. The accounting of the PDIR-PD2 is kept in accordance with the standards of the Uniform Act on Accounting Law and Financial Information (AUDCIF) and the revised SYSCOHADA. The accounting software used by the PMU is adapted to development projects. It is mastered by the accounting and financial management team whose capacities should however be reinforced in terms of SYSCOHADA standards. The accounting software used by the PMU is adapted to development projects. It is mastered by the accounting and financial management

team whose capacities should however be reinforced in terms of SYSCOHADA standards. The software is a single project and the operating license held by the PMU will expire at the end of the project. Consequently, it cannot be used for PUPSAN. The recommendations of the financial supervision missions have been taken into account in a general way. Consequently, an accounting and financial management software adapted to development projects will be acquired from the Project resources. It must be multi-project, multi-department, multi-currency, multi-donor, allowing the production of general, analytical and budgetary information necessary for financial and accounting monitoring, i.e. allowing the production of financial statements by component, by category and by activity for expenditures; by source of funding for resources. The software should enable the production of annual summary financial statements at the end of the year in accordance with the Bank's expectations. It will also allow for the monitoring of budget execution.

Generally speaking, the accounts will be kept on the basis of commitment accounting and integrated software adapted to the management of development projects. The chart of accounts will be prepared on the basis of the standards of the Uniform Act on Accounting and Financial Reporting (AUDCIF) and the revised SYSCOHADA, in force in Mali. Fiduciary risk was considered substantial at this level.

12.7.3 INTERNAL CONTROL SYSTEM / INTERNAL AUDIT: The ORS's internal control system is based on Ordinance No. 91.049/-CTSP of August 21, 1991; Law No. 90-110/AN-RM of July 27, 1990, on the basic principles of the creation, organization and operation of public administrative establishments (EPAs); a manual of administrative, financial and accounting procedures drafted several years earlier, as well as a computerized management tool adapted to business management. Given, on the one hand, the obsolescence of these various texts, which are no longer adapted to the Office's structure and activities, and on the other hand, the unsuitability of the computerized management tool for managing a development project, the internal control system assessed within the ORS is not reliable. The PMU's internal control system is based specifically on an administrative, accounting and financial procedures manual that does not take into account the multi-project management aspects. Consequently, and in order to put in place an efficient internal control system, the administrative, accounting and financial procedures manual will have to be reviewed to take into account the evolution of OHADA accounting law (revised SYSCOHADA), the institutional framework, as well as the new activities carried out by PUPSAN. It will contain, but not be limited to, institutional aspects, administrative procedures, procurement procedures, financial and accounting procedures as well as reporting, control and supervision procedures. It will contain, in addition to all the useful management tools (charts, tables, function sheets, models of the various registers, etc.), the general, analytical and budgetary chart of accounts, according to the components, categories and activities, as well as the writing diagrams. A workshop to disseminate the manual will be organized for all actors.

The financial controller in place at the ORS will be involved in the management of the Project and will review all disbursement requests as an internal control measure. Fiduciary risk has been assessed as substantial.

12.7.4 CASH FLOWS AND DISBURSEMENTS: The current cash management rules at ORS follow public rules and Law No. 90-110/AN-RM of July 27, 1990, on the fundamental principles of the creation, organization and operation of public administrative establishments (EPA), under the authority of public accountants who are personally and financially responsible for their management. In fact, bank accounts are managed under the joint signature of the ORS's Director General and the accounting officer. The commitment of the expenditure is drawn up by the Chief Accountant, signed by the Authorizing Officer (the ORS's Director General) and endorsed by the Financial Controller (representative of the Ministry of Finance). These rules are in substance acceptable to the Bank. The initiative and timeliness of expenditure, as well as the preparation of supporting documents to be submitted to the Bank, will be in accordance with the RSA rules and procedures defined in Law No. 90-110/AN-RM of July 27, 1990, as set out above, as well as in the revised procedures manual

previously submitted to the Bank. Disbursements from Bank funds for the implementation of this operation will be made through the following three methods: (i) the special account method; (ii) the direct payment method; and (iii) the reimbursement method. Under the special account method, a special account will be opened in the books of a local commercial bank acceptable to the Bank, which will receive the Bank's resources as working capital to finance activities related to operations, overheads and training activities or short-term workshops. The direct payment method will be used for expenses related to capacity building activities, as well as other consultancy services, such as the review of the administrative, accounting and financial procedures manual, or the implementation of the computerized management system and subsequent assistance, audit of accounts, etc. The reimbursement method will only be used in the event of a need to reimburse the Office for eligible expenses that have been prefinanced from the Bank's own funds after prior approval by the Bank. The fiduciary risk was considered substantial.

12.7.5 FINANCIAL INFORMATION: The ORS does not prepare financial monitoring reports. As for the PDIR-PD2 PMU, it produces financial monitoring reports that generally comply with the template provided by the Bank. Nevertheless, some improvements need to be made in the framework of PUPSAN. The RAF will thus be responsible for drafting quarterly financial monitoring reports based on the execution of the work program and the annual budget. These reports will be annexed to the quarterly activity reports and will be transmitted to the Bank no later than forty-five (45) days after the end of the quarter. In the financial monitoring reports, there must be a clear analysis between the budget forecasts and the achievements of the quarter. Any variance shall be analyzed and explained. In addition, third party accounts should be analyzed monthly, balancing of various balances and other relevant statements, bank reconciliation statement, if applicable, etc. Fiduciary risk has been assessed as moderate.

12.7.6 EXTERNAL AUDIT: External audit remains a major challenge for Mali according to the latest available diagnostic studies. Under the provisions of Article 82 of Law No. 96-071, on the organic law of the Supreme Court, the SCCS judges the accounts of public accountants, money and matters, and examines the financial and accounting management of organizations in which persons under public law have financial interests, in this case the ORS. In view of the broad scope of its missions, the CSAS suffers from a severe shortage of human, material and financial resources, combined with the lack of a policy to strengthen the professional capacities of the CSAS financial judges (absence of a procedures manual along the lines of the WAEMU provisions, absence of an audit methodology guide and thematic guides relating to local authorities, public establishments, etc.), in spite of the significant efforts made in recent years. The PDIR-PD2 is audited by an external auditor recruited on the basis of terms of reference previously agreed with the Bank. The mid-term audit report was submitted to the Bank on November 24, 2021, which approved it. The auditor noted a number of shortcomings that the Project must rectify, in particular (i) the absence of an extra-accounting reconciliation of staff costs; (ii) the failure to finalize the administrative, accounting and financial procedures manual, which since the audit has been sent to the Bank for its opinion. The audit of the accounts of the present operation will be carried out by an independent auditing firm, recruited on the basis of terms of reference previously agreed with the Bank and in accordance with its rules and procedures. Only one audit will be carried out if the duration of the Project does not exceed 18 months and two audits will be carried out if the duration of the Project exceeds 18 months but does not exceed 36 months. The audit report must be received by the Bank no later than six months after the end of the financial year to which the assignment relates. Fiduciary risk has been assessed as substantial.

12.8 FINANCIAL MANAGEMENT ACTION PLAN: The following action plan will enhance the quality of the financial management system in place:

Action	Person in charge of the action	Deadline for completion
Take a decision to extend the PDIR-PD2 PMU to PUPSAN.	ORS	Before the presentation of the project to the ADB Board of Directors
Review the administrative, accounting and financial procedures manual of the PMU and organize a dissemination workshop for all actors.	PMU	No later than 3 months after the first disbursement
Acquire an accounting and financial management software adapted to development projects, configure it according to the expectations of the PMU and put it into production.	PMU	No later than 3 months after the first disbursement
To elaborate each year a work program accompanied by the annual budget of activities and to have the budgetary forecasts included in the budget of the Ministry.	PMU	Annually before December 31
Recruit an external audit firm in accordance with the Bank's rules and procedures.	PMU	No later than three months after the effective date

12.9 CONDITIONALITY: Decide to extend the PDIR-PD2 PMU to PUPSAN.

12.10 SUPERVISION PLAN: Supervision will be organized and will include (i) an off-site review of the audit and financial monitoring reports and (ii) an on-site review with a frequency of at least one visit per year. Financial management mechanisms will be verified to ensure that those recommended in the evaluation are in place and operational.

12.11. Summary of Fiduciary Risk Assessment

Élemen ts	- Inefficient and ineffective use of public resources.	Type of risk IN	Probability of occurrence HERENT R Substantial	Impact if materialized ISK Substantial	Initial risk rating Substanti al	Planned management measures Reforms in public financial management	Conditi onality Y/N
	- Delay in the implementation of the various PFM reforms, which will further delay the modernization of the PS.						
Entity	Delay in the establishment of project steering and implementation bodies.	IR	Substantial	Substantial	Substanti al	Make a decision to extend the PDIR-PD2 PMU to PUPSAN.	Y
Project	- Appointment of actors unfamiliar with the PF of Bank-financed operations; - Delays in setting up management tools: procedures manual and integrated management software for the production of reliable financial information, etc.	IR	Substantial	Substantial	Substanti	- Appointment of an accounting and financial manager based on the transmission of three CVs to the Bank and confirmation of the accountant already in place at the PDIR-PD2 PMU, all with performance contracts; - Acquisition, parameterization and putting into production of the integrated accounting and financial management software; - Revision of the procedures manual, - Capacity building on the Bank's financial management rules and policies, etc.	N
INHERENT RISK RATING		Substantial	Substantial	Substanti al	Substantial	Substant ial	

Élemen ts	Weaknesses	Type of risk	Probability of occurrence	Impact if materialized	Initial risk rating	Planned management measures	Conditi onality Y/N
			RISK OF	NON-CONTRO	L		
Budgeti ng	 Weaknesses in the planning of activities and the preparation of the PTBA. Weaknesses in budget monitoring and in the implementation of an action plan following the analysis of budget variations. 	RNC	Medium	Substantial	Medium	Maintain a computerized budgetary accounting system, elaborate each year a work program accompanied by the annual budget of activities related to it.	N
Account	- Inability to ensure bookkeeping and therefore to produce accurate and reliable financial statements in accordance with the revised SYSCOHADA accounting standards.	RNC	Low	High	Medium	- Acquire software adapted to the management of development projects, configure it and put it into production - Develop the chart of accounts based on the standards of the Uniform Act on Accounting and Financial Information (AUDCIF) and the revised SYSCOHADA.	N
Internal control and internal audit	 - Lack of transparency and traceability; - Lack of management procedures described in a manual; - Lack of segregation of duties, thus accumulation of incompatible functions; - Steering by sight; - Lack of a control system. 	RNC	Substantial	High	Substanti	Review the administrative, accounting and financial procedures manual of the PMU; Organize a workshop to disseminate the manual to all actors; Submit all payment requests to the financial controller for approval.	N
Financia l reportin g	 Non-reliability and delay in the preparation and monitoring of financial information; Insufficient analysis of journals and accounts; Late detection of errors and other management problems, thus not allowing timely corrective action. 	RNC	Medium	Substantial	Medium	Quarterly financial monitoring reports to be prepared in accordance with the Bank's expectations and submitted no later than 45 days after the end of each quarter.	N
Gestion de la trésoreri e	- Unavailability of counterpart funds according to annual planning and failure to follow the principle of paripassu disbursement; - Use of funds for other purposes; - Unfamiliarity with the Bank's disbursement procedures; - Existence of special accounts not justified at the end of the project.	RNC	High		High	- Take steps to eliminate the occurrence of ineligible expenditures; - Provide regular justification for advances to the special account, even in the absence of a request for replenishment.	N
Audit externe	- Delays in the recruitment of the external auditor and the transmission of audit reports; - Reporting not in accordance with Bank requirements; - Recruitment of auditors who do not meet minimum requirements.	RNC	High	High	High	Recruiting an independent firm according to the Bank's rules and procedures and no later than three months after the financing agreements become effective.	N
NON-CO	NTROL RISK RATING		Substantial	High	Substanti		
OVERAL	L RISK RATING		Substantial	Substantial	Substanti al		

ANNEX 13: ENVIRONMENTAL AND SOCIAL COMPLIANCE NOTE (ESCON)

A. Information de base ⁵						
Project Title: Emergency Production and Food & Nutritional Security Project 'SAP code': P-ML-AA0-041						
(PUPSANAEFPF)						
Country : Mali Lending Instrument ⁶ : DI FI CL BS GU RPA	□ EF□ RBF□					
Project Sector: Agriculture Task Team Leader: DIALLO Fatoumata Bintou						
Appraisal date: 10/10/2022 to 10/17/2022 Estimated Approval Date: 11/29/2022						
Environmental Safeguards Officer: XXXXX						
Social Safeguards Officer: LOKOSSOU Hortense / Sabas SONOU AGOSSOU						
	ion type: SO NSO POB					
Is this project processed under rapid responses to crises and emergencies?	Yes No 🗆					
Is this project processed under a waiver to the Integrated Safeguards System?	Yes No X					
B. Disclosure and Compliance Monitoring						
B.1 Mandatory disclosure						
Environmental Assessment/Audit/System/Others specify: (1 PGPP)						
Was/Were the document (s) disclosed prior to appraisal? (the development of the	7 D N M NA D					
PMP was deferred after the council in accordance with the policy on the AEFPF)	Tes No NA NA					
Date of "in-country" disclosure by the borrower/client	jj/mm/aa					
Date of receipt, by the Bank, of the authorization to disclose	jj/mm/aa					
Date of disclosure by the Bank	jj/mm/aa					
Resettlement Action Plan/Framework/Others (specify: NA)	-					
Was/Were the document (s) disclosed <i>prior to appraisal?</i>	Yes □ No □ NA ⊠					
Date of "in-country" disclosure by the borrower/client	jj/mm/aa					
Date of receipt, by the Bank, of the authorization to disclose	jj/mm/aa					
Date of disclosure by the Bank	jj/mm/aa					
Vulnerable Peoples Plan/Framework/Others (specify: NA)						
Was the document disclosed <i>prior to appraisal?</i>	Yes No NA 🖂					
Date of "in-country" disclosure by the borrower/client	jj/mm/aa					
Date of receipt, by the Bank, of the authorization to disclose	jj/mm/aa					
Date of disclosure by the Bank	jj/mm/aa					
If in-country disclosure of any of the above documents is not expected, as per the country's l	egislation, please explain why: In					
accordance with the provisions of the African Emergency Food Production Facility as approved by the Board of Directors of the Bank, the						
preparation and publication of E&S instruments are deferred after approval by the Board. They will be	e prepared and published before the					
implementation of the activities concerned						
B.2. Compliance monitoring indicators						
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the						
implementation of measures related to safeguard policies?	Yes ⊠ No □ NA □					
Have costs related to environmental and social measures, including for the running of the grievance						
redress mechanism, been included in the project cost?	Yes No NA					
Is the total amount for the full implementation for the Resettlement of affected people, as integrated in						
the project costs, <u>effectively mobilized and secured?</u>	Yes No NA					
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes 🛛 No 🗌 NA 🗍					
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes ⊠ No □ NA □					
A. Clearance						

Is the project compliant to the Bank's environmental and social safeguards requirements, and to be submitted to the Board? Yes \boxtimes No \square

⁵Note: This ESCON shall be appended to project appraisal reports/documents before Senior Management and/or Board approvals.

⁶ DI=Direct Investment; FI=Financial Intermediary; CL=Corporate Loan; BS=Budget Support; GU=Guarantee; RPA=Risk Participation Agreement; EF=Equity Financing; RBF=Results Based Financing.

Prepared by:	Name	Signature	Date
Environmental Safeguards Officer:	XXXXX		
Social Safeguards Officer:	LOKOSSOU Hortense /SONOU AGOSSOU Sabas		11/14/2022
Task Team Leader:	DIALLO Fatoumata Bintou		
Submitted by:			
Sector Director:	Martin FREGENE	MASTYIN	17/11/2022
Cleared by:			
Director SNSC:	For Maman-Sani ISSA	Auf	29/11/2022