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Report No: PAD5025

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON PROPOSED ADDITIONAL CREDITS IN THE AMOUNT OF  
EUR 23.7 MILLION (US\$25.0 MILLION EQUIVALENT)

TO THE REPUBLIC OF NIGER

AND

SDR 31.24 MILLION (US\$42.0 MILLION EQUIVALENT)

TO THE ISLAMIC REPUBLIC OF MAURITANIA

AND

A PROPOSED ADDITIONAL GRANT IN THE AMOUNT OF  
SDR 18.6 MILLION (US\$25.0 MILLION EQUIVALENT)

TO THE REPUBLIC OF NIGER

FOR THE

REGIONAL SAHEL PASTORALISM SUPPORT PROJECT (PRAPS-II)

June 6, 2022

Agriculture and Food Global Practice  
Western and Central Africa Region

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## CURRENCY EQUIVALENTS

Exchange Rate Effective April 30, 2022

Currency Unit = United States dollars (US\$)

US\$ 1= SDR 0.744

US\$ 1= EUR 0.947

### Currency Units:

Mauritanian Ouguiya (MRU)	Mauritania
CFA BCEAO Francs (XOF)	Niger

### FISCAL YEAR

January 1 - December 31

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## ABBREVIATIONS AND ACRONYMS

3N	Nigeriens Nourish the Nigeriens Initiative
AF	Additional Financing
AFOLU	Agriculture, Forestry and Other Land Use
BAU	Business as Usual
BFP	Bank Facilitated Procurement
CAAM	Central Procurement and Market Supply Unit ( <i>Centrale des Achats et d'Approvisionnement du Marché</i> )
CFAF	West African CFA franc
CPF	Country Partnership Framework
CRW-ERF	Crisis Response Window Early Response Financing
CSA	Food Security Commission ( <i>Commissariat à Sécurité Alimentaire</i> )
DFIL	Disbursement and Financial Information Letter
DNPGCA	National Food Crisis Prevention and Management System ( <i>Dispositif National de Prévention et de Crises Alimentaires</i> ) (Niger)
DVS	Directorate of Veterinary Services ( <i>Direction des Services vétérinaires</i> )
EIRR	Economic Internal Rate of Return
ENPV	Economic Net Present Value
ESCP	Environment and Social Commitment Plan
ESMF	Environmental and Social Management Framework
ESRC	Environmental and Social Risk Classification
ESS	Environmental and Social Standards
EX-ACT	Ex-Ante Carbon-balance Tool
FAO	Food and Agriculture Organization
FCV	Fragility, Conflict and Violence
FSCPP	Food Security Crisis Preparedness Plan
FM	Financial Management
FY	Fiscal Year
GBV	Gender Based Violence
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GM	Grievance Mechanism
GON	Government of Niger
HWPMP	Hazardous Waste and Pest Management Plan
IDA	International Development Association
IGA	Income Generating Activity
IFAD	International Fund for Agriculture Development
IFR	Interim Financial Report
IP	Implementation Performance
IPC	Integrated Food Security Phase Classification
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
ISR	Implementation Support and Reporting
LMP	Labor Management Procedures
MR	Mauritania

M&E	Monitoring and Evaluation
NE	Niger
NPCU	National Project Coordination Unit
NPV	Net Present Value
OPCS	Operations Policy and Country Services
PCU	Project Coordination Unit
PDES	Social and Economic Development Plan ( <i>Plan de Développement Economique et Social</i> ) (Niger)
PDO	Project Development Objective
PIM	Project Implementation Manual
PMP	Pest Management Plan
PNR	National Response Plan ( <i>Plan National de Réponse</i> ) (Mauritania)
PP	Procurement Plan
PPSD	Project Procurement Strategy for Development
PRAPS	Regional Sahel Pastoralism Support Project
RFQ	Request for Quotation
RPF	Resettlement Policy Framework
RVP	Regional Vice President
SDDEL	Sustainable Development Strategy for Livestock ( <i>Stratégie de Développement Durable de l'Élevage</i> ) (Niger)
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SMP	Safety Management Plan
SOE	Statement of Expenditures
UN	United Nations
US\$	United States Dollar
WB	World Bank
WBG	World Bank Group
WFP	World Food Programme

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**BASIC INFORMATION – PARENT (Regional Sahel Pastoralism Support Project II - P173197)**

Country	Product Line	Team Leader(s)		
Western and Central Africa	IBRD/IDA	Caroline Aurelie Plante		
Project ID	Financing Instrument	Resp CC	Req CC	Practice Area (Lead)
P173197	Investment Project Financing	SAWA4 (10130)	AFWRI (7960)	Agriculture and Food

Implementing Agency: Burkina Faso, Ministry of Animal Resources and Fisheries, CILSS Permanent Interstate Committee for Drought Control in the Sahel, Islamic Republic of Mauritania, Ministry in charge of Livestock, Republic of Chad, Ministry of Livestock and Animal Production, Republic of Mali, Ministry in charge of Livestock, Republic of Niger, Ministry in charge of Livestock, Republic of Senegal, Ministry of Livestock and Animal Production

Is this a regionally tagged project?	Country (ies)
Yes	Burkina Faso, Mali, Mauritania, Niger, Senegal, Chad

Bank/IFC Collaboration  
No

Approval Date	Closing Date	Expected Guarantee Expiration Date	Environmental and Social Risk Classification
30-Mar-2021	31-Dec-2027		Substantial

**Financing & Implementation Modalities**

<input type="checkbox"/> Multiphase Programmatic Approach [MPA]	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input checked="" type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a Non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input checked="" type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made disaster



Alternate Procurement Arrangements (APA)

Hands-on Expanded Implementation Support (HEIS)

**Development Objective(s)**

To improve the resilience of pastoralists and agro-pastoralists in selected areas in the Sahel region.

**Ratings (from Parent ISR)**

	Implementation		Latest ISR
	23-Jun-2021	21-Dec-2021	17-Mar-2022
Progress towards achievement of PDO	S	S	S
Overall Implementation Progress (IP)	S	S	S
Overall ESS Performance	S	S	S
Overall Risk	S	S	S
Financial Management	S	S	S
Project Management	S	S	S
Procurement	S	S	MS
Monitoring and Evaluation	S	S	S

**BASIC INFORMATION – ADDITIONAL FINANCING (Niger and Mauritania Additional Financing to PRAPS-2 - P178791)**

Project ID	Project Name	Additional Financing Type	Urgent Need or Capacity Constraints
P178791	Niger and Mauritania Additional Financing to PRAPS-2	Scale Up	Yes
Financing instrument	Product line	Approval Date	
Investment Project Financing	IBRD/IDA	17-Jun-2022	



Projected Date of Full Disbursement 31-Dec-2027	Bank/IFC Collaboration No		
Is this a regionally tagged project? Yes		Country (ies) Mauritania, Niger	

**Financing & Implementation Modalities**

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

**Disbursement Summary (from Parent ISR)**

Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed
IBRD				%
IDA	375.00	15.89	340.76	4.5 %
Grants				%

**PROJECT FINANCING DATA – ADDITIONAL FINANCING (Niger and Mauritania Additional Financing to PRAPS-2 - P178791)****FINANCING DATA (US\$, Millions)****SUMMARY (Total Financing)**

	Current Financing	Proposed Additional Financing	Total Proposed Financing
<b>Total Project Cost</b>	460.20	92.00	552.20





<b>Total Financing</b>	460.20	92.00	552.20
<b>of which IBRD/IDA</b>	375.00	92.00	467.00
<b>Financing Gap</b>	0.00	0.00	0.00

**DETAILS - Additional Financing**

**World Bank Group Financing**

International Development Association (IDA)	92.00
IDA Credit	67.00
IDA Grant	25.00

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

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
<b>Mauritania</b>	42.00	0.00	0.00	42.00
National PBA	42.00	0.00	0.00	42.00
<b>Niger</b>	25.00	25.00	0.00	50.00
Crisis Response Window (CRW)	25.00	25.00	0.00	50.00
<b>Total</b>	<b>67.00</b>	<b>25.00</b>	<b>0.00</b>	<b>92.00</b>

**COMPLIANCE**

**Policy**

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

Yes  No

Does the project require any other Policy waiver(s)?

Yes  No



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

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

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

**INSTITUTIONAL DATA**

**Practice Area (Lead)**

Agriculture and Food

**Contributing Practice Areas**

Social Protection & Jobs

**Climate Change and Disaster Screening**

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

**PROJECT TEAM****Bank Staff**

<b>Name</b>	<b>Role</b>	<b>Specialization</b>	<b>Unit</b>
Caroline Aurelie Plante	Team Leader (ADM Responsible)	TTL regional	SAWA4
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Mohamed Fadel Hammady	Team Member	co-TTL MR	SAWA4
Nora Kaoues	Peer Reviewer	Program manager	SAGGL
Patricia Oonagh Van de Velde	Team Member	Gender Specialist	SAGGL
Salam Hailou	Team Member	Program assistant HQ	SAWA4
Sophie Martine Olivia Wernert	Counsel	Leg. Reg. Operations	LEGAM
<b>Extended Team</b>			
<b>Name</b>	<b>Title</b>	<b>Organization</b>	<b>Location</b>



## I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

### Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide additional financing (AF) to the Islamic Republic of Mauritania and the Republic of Niger for the Regional Sahel Pastoralism Support Project II (PRAPS-II, P173197). For Mauritania, the AF will consist of a US\$42 million equivalent IDA credit, and for Niger, a US\$25 million equivalent credit and a US\$25 million equivalent grant from the Crisis Response Window Early Response Financing (CRW-ERF). This AF aims to scale up emergency investments in food security and resilience interventions in response to food security crises facing pastoralists and agro-pastoralists in several regions of both countries. The AF applies Paragraph 12 of Section III of the Bank Policy: Investment Project Financing (IPF) (Situations in Urgent Need of Assistance or Capacity Constraints) and is processed under condensed procedures, pursuant to the Bank's procedure "Preparation of Investment Project Financing – Situations of Urgent Needs of Assistance or Capacity Constraints".
2. Building on the achievements of the first phase of PRAPS (PRAPS-I, 2015–2021, P147674), PRAPS-II is one of the core regional operations addressing the drivers of fragility and conflict in the Sahel while bolstering the livelihoods of a vulnerable population. PRAPS-II consolidates PRAPS-I achievements and further supports countries and the region in translating continental and regional livestock strategies into tangible results. The PRAPS-II is financed by IDA credits and grants in the total amount of US\$375 million equivalent, with US\$45 million equivalent committed to Mauritania and US\$60 million equivalent committed to Niger.
3. Across the Sahel chronic poverty and vulnerability, low and erratic rainfall, uneven access to feed in depleted rangelands, hindered mobility of livestock, along with domestic food price inflation, are combining to generate severe and widespread food and nutrition insecurity. Conflict and forced displacement are worsening these impacts and further increasing pressure and tensions in areas that were already under stress. As a result, increasing numbers of people including pastoralists and agro-pastoralists are facing severe food and nutrition insecurity and growing vulnerability. Rising global fuel, food, and fertilizer prices due to the war in Ukraine are reinforcing these challenges. PRAPS-II offers a strong platform to address these challenges with the required urgency and scale, while supporting interventions to strengthen resilience at several levels, reducing the negative effects of seasonality and unpredictable shocks in the future.
4. The multi-dimensional food security crisis facing the Sahel is impacting Mauritania and Niger. In Mauritania, the most recent Cadre Harmonisé survey showed 678,000 people facing IPC3+ (crisis and emergency level) food insecurity conditions in March-May 2022, with the total projected to rise to 880,000 people (20 percent of the population) in the June-August 2022 lean season, an increase of 64 percent compared to 2021. In Niger, the estimated IPC3+ impacted population for March-May 2022 stands at 3.35 million people and is projected to top 4.4 million people (17.7 percent of the population) in June-August 2022. The multiple drivers of food insecurity in both countries are expected to persist in 2022 and extend into 2023.
5. In each country the activities supported by the AF will complement the parent project as well as other World Bank (WB) and partner interventions that meet immediate needs of crisis-affected food insecure pastoral and agropastoral populations. Activities under the AF will address underlying drivers of vulnerability and food insecurity, especially those linked to climate variability and change.
6. The parent project's National Project Coordination Units (NPCUs) will be tasked with overall coordination



and management of the proposed AF resources. In Mauritania, additional partners working in close cooperation and including: the World Food Programme (WFP), Central Procurement and Market Supply Unit (*Centrale des Achats et d'Approvisionnement du Marché*<sup>1</sup>, CAAM), and Food Security Commission (*Commissariat à la Sécurité Alimentaire*<sup>2</sup>, CSA) will be involved in the implementation of selected activities, promoting agility and leveraging their operational capacity for timely delivery. Partnerships between NPCUs and government agencies in charge of agriculture production will also be strengthened.

### Consistency with the Country Partnership Strategies

7. **The proposed AF is well aligned with the World Bank Group Country Partnership Frameworks (CPFs) in both Mauritania (FY18-23, Report No. 125012-MR) and Niger (FY18-22, Report No. 123736-NE).** Both countries have several ongoing and planned projects with investments targeting livelihood protection and support for food and nutrition security of vulnerable pastoral and agropastoral populations.<sup>3</sup> The AF will complement these projects, leverage their implementation modalities, and fill the gaps in coverage emerging under the unfolding food security crisis. The AF is also aligned with the Niger Prevention and Resilience Allocations (PRA, Report No. 156266-NE), which aims to prevent and manage conflicts related to natural resources management.
8. **The AF is also aligned with the World Bank FCV Strategy.** Specifically, it supports the fourth pillar on “mitigating the spillovers of FCV to support countries and the most vulnerable and marginalized communities that are impacted by cross-border crises, such as forced displacement or shocks resulting from famines, pandemics, and climate and environmental challenges.” The AF focuses on two of the six priority issues : (i) creating jobs and economic opportunities; and (ii) building the resilience and preparedness of communities, including the ability to manage climate change and environmental degradation.
9. **The AF is also consistent with key Government policies and strategies.** In Mauritania, the AF is aligned with the National Strategy for Accelerated Growth and Shared Prosperity (2015-2030) and specifically with the national food security and social protection strategies. In Niger, the AF supports the Government’s vision to strengthen the resilience of pastoralists and agro-pastoralists, as captured in the Nigeriens Nourish the Nigeriens Initiative (3N Initiative) 2021-2026 action plan, the Sustainable Development Strategy for Livestock (*Stratégie de Développement Durable de l’Elevage*, SDDEL) 2013-2035, and the Social and Economic

<sup>1</sup> CAAM is a structure attached to the Ministry in charge of Trade, with administrative and financial autonomy, and created by Decree No. 156-2021 bis/P.R/ of October 20, 2021. Its mandate is to: (i) monitor the national and international market in conjunction with the competent authorities, (ii) prospect the market, monitor stocks and alert the competent authorities, (iii) acquire on the international market and, if necessary, on the local market, essential foodstuffs for the supply of social programs, the Government and for the regulation of the market, (iv) administer, in collaboration with the structures concerned, the stocks acquired, and (v) carry out any mission entrusted to it by the Government, in relation to its main objective.

<sup>2</sup> CSA is a public institution with administrative and financial autonomy. It is placed under the supervision of the Prime Minister and is administered by a supervisory Board (Decree 138-2021 of August 25, 2021). Its mandate is to: (i) monitor the food and nutritional situation of the population and the implementation of responses to food insecurity-related crises; (ii) organize free distribution of food for the benefit of vulnerable populations; (iii) support the purchasing power of the poor; and (iv) support the improvement of production and productivity of vulnerable populations to strengthen their resilience to exogenous shocks.

<sup>3</sup> **In Mauritania:** Mauritania Agriculture Development and Innovation Project (P186847) in preparation; Sahel Irrigation Initiative Support Project (PARIIS, P154482); Mauritania Adaptive Social Protection Phase II (P173770); Social Safety Net System Project II (P171125). **In Niger:** Niger Adaptive Safety Net Project 2 (FSA2, P166602); Climate Smart Agriculture Support Project (PASEC, P153420); Agricultural and Livestock Transformation Project (PIMELAN, P164509); Niger Refugees and Host Communities Support Project (PARCA, P164563); PARIIS; Lake Chad Region Recovery and Development Project (PROLAC, P161706); Community-Based Recovery and Stabilization Project for the Sahel (PRCSS, P173830); and Population and Health Support Project (PAPS, P147638).



Development Plan (*Plan de Développement Economique et Social*, PDES) 2022-2026.

## Country Contexts

10. **Mauritania is facing multiple challenges to growth and poverty reduction, and the Ukraine war and global food price crisis threaten future economic growth.** The COVID-19 outbreak severely impacted the economy and reversed years of progress. Gross Domestic Product (GDP) growth declined from 5.9 percent in 2019 to -1.8 percent in 2020, causing widespread job and income losses. As a result, it is estimated that an additional 142,000 people were pushed into poverty (US\$3.2/day PPP 2011).<sup>4</sup> Growth rebounded in 2021 to 2.3 percent and is projected at 4.5 percent in 2022.<sup>5</sup> Mauritania ranks 157th (out of 189) on the Human Development Index with major intra-regional disparities in terms of gender, age and occupational status; 74 percent of the poor – largely farmers, pastoralists and landless or unpaid women and young people – live in rural areas. Mauritania is affected by regional volatility through the influx of refugees fleeing violence in Mali. Mauritania is also experiencing a significant disruption to food supply given its high dependence on wheat imports from Russia and Ukraine (almost 50 percent of its imports, of which 42 percent from Ukraine and 8 percent from Russia), and fertilizer imports from Russia and Belarus (almost 30 percent). The economic impacts of the war in Ukraine could therefore be significant and require mitigation actions.
11. **Niger is among the poorest and least developed countries in the world.** Per capita GDP was estimated at just over US\$570 in 2021 and though Niger avoided recession in 2020, growth in 2021 fell to 1.4 percent and extreme poverty increased to 41.8 percent.<sup>6</sup> The COVID-19 pandemic has had a significant impact on Niger's fragile economy, forcing an additional 685,000 people into extreme poverty.<sup>7</sup> With an annual population growth rate of 3.8 percent (the world's highest) and a fertility rate of 6.9 percent, Niger's population is expected to exceed 63 million by 2050.<sup>8</sup> However, low levels of education, limited opportunities for youth, and deeply rooted gender-related inequalities prevent Niger from reaping the demographic dividend. Malnutrition is widespread, especially among children, with global acute malnutrition estimated at 12.7 percent, and 42 percent of children under 5 years are stunted.<sup>9</sup> Niger ranks last (189th) in the United Nations Human Development Index. There is continued conflict along Niger's border. A State of Emergency is in force in Diffa, Tillaberi and parts of Dosso and Tahoua regions, which have been under repeated attacks and kidnappings for ransom in recent years by terrorist groups from Nigeria and Mali.

## Agriculture and Food Security

12. **Most of Mauritania's population relies on an agricultural sector that is dominated by subsistence-oriented smallholder (agro)pastoralists facing multiple challenges, especially those linked to climate change.** Sixty percent of the rural population lives on agriculture (crops and livestock), which contribute to around 15

<sup>4</sup> World Bank Macro Poverty Outlook for Mauritania, April 2022:

<https://thedocs.worldbank.org/en/doc/bae48ff2fefc5a869546775b3f010735-0500062021/related/mpo-mrt.pdf>

<sup>5</sup> World Bank Macro Poverty Outlook for Mauritania, April 2022:

<https://thedocs.worldbank.org/en/doc/bae48ff2fefc5a869546775b3f010735-0500062021/related/mpo-mrt.pdf>

<sup>6</sup> World Bank Macro Poverty outlook for Niger, April 2022:

<https://thedocs.worldbank.org/en/doc/bae48ff2fefc5a869546775b3f010735-0500062021/related/mpo-ner.pdf>

<sup>7</sup> World Bank Macro Poverty Outlook for Mauritania, April 2022:

<https://thedocs.worldbank.org/en/doc/bae48ff2fefc5a869546775b3f010735-0500062021/related/mpo-mrt.pdf>

<sup>8</sup> World Bank. <https://data.worldbank.org>

<sup>9</sup> <https://www.who.int/news/item/06-05-2021-the-unicef-who-wb-joint-child-malnutrition-estimates-group-released-new-data-for-2021>



percent of the country's GDP,<sup>10</sup> with livestock accounting for up to 80 percent of the agriculture GDP. Mauritania is prone to frequent droughts, floods, and locust invasions, compounded by rapid soil erosion and desertification due to climate change, inadequate agropastoral practices, and increased human and livestock pressure. Cereal production meets only 30 percent of national demand rendering Mauritania highly dependent on imports.<sup>11</sup> Food markets are therefore highly vulnerable to global food price fluctuations. The upward trend in global prices and hindrance to movements of people, animals, and goods between Mali and Mauritania are combining with domestic shortages to push up prices sharply (7.7 percent year-over-year, 6-month average).<sup>12</sup> Food insecurity is widespread, especially during the lean season, and particularly among smallholder pastoralists and agropastoralists, seasonal laborers and unpaid workers, who are mostly women. Five regions (Wilayas) – Assaba, Gorgol, Guidimakha, Hodh el Gharbi and Tagant – are the most prone to frequent natural shocks and food insecurity and a sixth – Hodh El Chargui – is affected by recurrent food insecurity and the influx of refugees and returnees from Mali.

13. **Niger's agricultural sector is critical to reducing poverty, enhancing food security, and tackling the country's nutritional challenges, but it is stagnant and highly vulnerable to climate shocks.** Crop and livestock contributed about 38 percent of Niger's GDP in 2019 and about 80 percent of the country's population are directly or indirectly dependent on the sector.<sup>13</sup> Cereal production in 2021 was 38 percent below the 2020 level due to low and poorly distributed rainfall and long dry spells under climate change.<sup>14</sup> With low production and depleted household and trader stocks, food prices have increased sharply (8.7 percent year-over-year, 6-month average)<sup>15</sup> and are well above seasonal and five-year averages nationally. A similarly poor 2021-2022 pastoral season yielded a large fodder deficit that may lead to displacement, loss of livestock, and higher debt burdens in pastoral communities. These challenges and shocks are impacting the whole country, but are especially acute in Niger's Maradi, Tahoua, Tillaberi, and Zinder regions. While conflict is a major challenge in Niger, it is not the primary driver of the unfolding acute food insecurity crisis. The proximate drivers of food insecurity are climatic, extending across the entire Sahel region. However, increases in security-related incidents and fatalities could further disrupt market operations, agricultural activities, and assistance, leading to higher food prices and lower national production levels.

### Parent Project Implementation

14. **Implementation of the various components of the Mauritania and Niger PRAPS-II projects is progressing according to schedule.** PRAPS-II was approved on March 30, 2021 and became effective on September 24, 2021 in Mauritania and on October 22, 2021 in Niger. The project's development objective (PDO) is to *improve the resilience of pastoralists and agro-pastoralists in selected areas in the Sahel Region*. To date the parent project has disbursed US\$15 million (4.2 percent) overall. As of May 6, 2022, disbursements for Mauritania amounted to 7.1 percent of its US\$45 million financing. For Niger disbursements stood at 8.7 percent of US\$60 million financing. Progress toward achieving the parent project's PDO and the overall Implementation Progress (IP) ratings are Satisfactory. Similarly, in the same period, progress towards achieving the PDO and IP in Mauritania and Niger are also Satisfactory. The PCUs for Mauritania PRAPS-II and

<sup>10</sup> <https://www.wfp.org/operations/mr02-mauritania-country-strategic-plan-2019-2023>

<sup>11</sup> *ibid*

<sup>12</sup> IMF, Haven, and Trading Economics data. Food inflation is calculated from the food and non-alcoholic beverages component of the Consumer Price Index for each country.

<sup>13</sup> FAOSTAT

<sup>14</sup> <https://fews.net/west-africa/niger/food-security-outlook-update/december-2021>

<sup>15</sup> IMF and Trading Economics data, October 2021 – March 2022.





Niger PRAPS-II have been recruited in full, including maintaining several key personnel from the PRAPS-I PCUs.

### Justification to Process the Additional Financing

#### *Mauritania*

15. **Mauritania is facing its most severe food security crisis of the last decade.** Needs assessments indicate a significant increase in the number of food insecure people during the upcoming lean season. It is projected that there will be up to 880,000 people facing IPC3+ food insecurity conditions (20 percent of the population), compared to 410,000 people recorded the previous year. This is not only the highest rate ever recorded by the Cadre Harmonisé in Mauritania but also the highest expected this year among Sahel countries. In addition, it is also projected that there will be 136,254 malnourished children, including 103,514 with moderate acute malnutrition and 32,740 with severe acute malnutrition, compared with a total of 116,000 malnourished children in 2020. Around 1.4 million people facing moderate food insecurity could fall into severe food insecurity if rapid preventive measures are not taken.
16. **In order to coordinate the response to the crisis, the Government led the development of the National Response Plan 2022 (*Plan National de Réponse 2022, PNR*), through its National Mechanism for Prevention and Response to Food and Nutritional Crises.** This response plan provides a reference framework for all interventions from the Government and its partners to alleviate the crisis. The Government requested support from the WB on March 28, 2022, highlighting the need to address the rising cost of staple food. The PNR encompasses three main components: lean season food assistance (food distribution and cash transfers); malnutrition prevention and treatment; and livelihood support and resilience enhancement for vulnerable populations. The emergency and resilience-oriented interventions of the AF are fully aligned with the PNR.

#### *Niger*

17. **Food insecurity is surging in Niger.** The recent Cadre Harmonisé estimates that the IPC3+ impacted population will grow to over 4.4 million people (17.7 percent of the population) in June-August 2022. In addition to Niger's meeting the CRW-ERF trigger and Local Activation requirements,<sup>16</sup> on February 15, 2022, the Government launched its Niger Support Plan for Vulnerable Populations for 2022 (*Plan de Soutien aux Populations Vulnérables du Niger, 2022*), complementing the National Food Security Preparation Framework. The launch marked an official request for support from the international community to respond to Niger's looming food security crisis.
18. **The AF will help bridge a food security crisis response funding gap of over US\$322 million facing Niger.** The AF responds to the Government request to support crisis-affected food insecure populations. Especially lacking are resources to effectively target recovery and strengthen the resilience of most affected

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<sup>16</sup> The CRW-ERF local activation requirement necessitates demonstrating a significant level of severity (defined as approximately 20 percent of the country's population or five million people living in districts categorized as crisis or worse, IPC3+, conditions) and that these conditions are worsening (defined as approximately a five percent arithmetic increase in the country's population living in or expected to be in districts categorized as IPC3+). While Niger didn't meet the criteria fully, the current levels of insecurity and significant projected increases by June to August 2022 were deemed sufficient to trigger local activation.



agropastoral populations in the crisis zones.<sup>17</sup> Given the rapid onset of the food security crisis and the unprecedented surge in acute needs in these regions, neither the parent project nor other World Bank projects include funding and activities with the required scale, targeting, and content. The AF will fill this gap and cover the people facing IPC3+ food insecurity conditions.

## II. DESCRIPTION OF ADDITIONAL FINANCING

### Parent Project's Development Objectives

19. The PDO of PRAPS-II will remain unchanged as follows: *To improve the resilience of pastoralists and agropastoralists in selected areas in the Sahel Region*. All activities planned for implementation under the AF are fully consistent with this PDO.

### Changes in Target Areas and Beneficiaries

20. **In Mauritania, targeting under the AF will focus on scaling-up immediate and medium-term activities falling within the PRAPS-II objectives, components, and geographical areas.** Activities would prioritize southern areas of the four regions (Wilayas) bordering Mali: Guidimakha, Assaba, Hodh el Gharbi and Hodh el Chargui. Selection of beneficiaries would follow the criteria defined under the parent project, based on technical and socio-economic considerations, as defined in the Project Implementation Manual (PIM).

21. **In Niger, AF activities will be implemented in all six regions targeted by the parent project with priority given to 17 agro-pastoral departments within the Tillabéri, Tahoua, Zinder, and Maradi regions.** According to the Niger Support Plan for Vulnerable Populations (2022), these regions face the greatest food deficit. Recent data from the Cadre Harmonisé also show that most of the population in Tahoua, Tillabéri, and Zinder is facing IPC3+ conditions. Activities will mainly be implemented in areas and villages classified as extremely vulnerable by the National Food Crisis Prevention and Management System (*Dispositif National de Prevention et de Crises Alimentaires*, DNP-GCA) while agro-ecological conditions will be taken into consideration to select sites for project planned agriculture production activities.

### Changes in Results Framework

22. PRAPS-II Results Frameworks will be amended to take into account scaled-up activities under components 2 and 4, and reflect the results expected from the emergency and recovery support under component 5.2. All PRAPS-II baselines in the six beneficiary countries reflecting PRAPS-I achievements and increments will also be adjusted to reflect results of PRAPS I as of December 31, 2021, corresponding to the closing date of the project. The tables below summarize changes specific to the two countries.

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<sup>17</sup> WFP in particular has announced fundraising efforts to cover US\$223 million focusing on emergency needs. The GoN has committed US\$89 million for cereal distribution and cereals subsidized sales, and cash for work activities from the national budget and a donor common fund to support food security and nutrition. Other WB financed operations contribute to immediate/short term response needs: nine projects of US\$58.87 million of which US\$17.36 million from the Niger Adaptive Safety Net Project 2 (PFSA2, P166602), and US\$16.67 million from the Niger Refugees and Host Communities Support Project (PARCA, P164563).



*Mauritania*

Indicator	Original baseline	Revised/New baseline	Original Final Target	Revised/New Final Target
<b>Intermediate result indicator</b>				
<b>Component 2</b>				
Functional water points accessible to (agro)pastoralists on livestock mobility routes and on new transhumance routes supported by the Project (number)	56	118	121	333
Cultivated fodder produced and available to pastoralists and agro-pastoralists thanks to the Project (metric tons)	0	0	2,400	5,576
<b>Component 5</b>				
NEW- Beneficiaries of emergency and recovery activities*	-	0	-	326,000

\* Beneficiaries of free food distribution and community-based works

*Niger*

Indicator	Original baseline	Revised/New baseline	Original Final Target	Revised/New Final Target
<b>Intermediate result indicator</b>				
<b>Component 2</b>				
Functional water points accessible to (agro)pastoralists on livestock mobility routes and on new transhumance routes supported by the Project (number)	38	52	117	236
Cultivated fodder produced and available to pastoralists and agro-pastoralists thanks to the Project (metric tons)	0	0	2,400	5,900
<b>Component 4</b>				
Direct beneficiaries of income-generating activities promoted by the Project (Number)	180	626	4,400	8,012
Of which young people 18-24	0**	0	2,954	5,170
Of which young people 25 - 40	0**	0	1,266	2,214
Of which female	83	561	3,459	6,469
<b>Component 5</b>				
NEW- Beneficiaries of emergency and recovery activities***	-		-	324,000

\*\*These categories of beneficiaries had not been accounted for during PRAPS I

\*\*\* Beneficiaries of community-based works and feed distribution

**Changes in Components and Costs**

23. The AF will scale-up and add new activities within existing components of the parent project. For both Mauritania and Niger, the proposal is to scale-up activities to sub-components 2.1, 2.2 and 5.1, and scale-up and add new ones under sub-components 2.3 and 5.2; in Niger, activities will also be scaled-up under sub-component 4.3. These changes are described below and will be further detailed in the PIM.



24. In Mauritania, recognizing gaps both in emergency action and short to medium term resilience interventions including stabilizing the prices of basic food commodities, namely wheat, the AF will focus on filling resource gaps in the emergency response, scaling-up investments to boost resilience of (agro)pastoralists in areas most affected by the crisis, and maintaining access of most vulnerable households to staple food (wheat). In Niger, the focus of the AF will be on short-term livelihood protection and resilience building in most impacted areas.
25. In both Mauritania and Niger, all scaled-up and new activities will build directly on relevant methods and structures put in place under the parent project. Implementation arrangements, responsible agencies, and partner institutions from the parent project will be retained in full, led by the PCU within the Ministry in charge of livestock. In addition, parent project implementation arrangements will be supplemented by a partnership with the Ministry of Agriculture to clarify responsibilities with respect to implementation of scaled-up activities under sub-component 2.3. In Mauritania specifically, a new partnership will be established with WFP, CAAM, and CSA to implement selected activities under sub-component 5.2.

**Component 2: Sustainable landscape management and governance enhancement (original project US\$74.3 million equivalent IDA of which US\$7.7 million for Mauritania and US\$13.2 million for Niger; AF US\$9.7 million equivalent for Mauritania and US\$32.9 million equivalent for Niger)**

26. This component seeks to secure livestock mobility and access to better managed pastoral and water resources and increase cultivated forage production, aiming to enhance the resilience of (agro)pastoralists to climate risks while strengthening peace and social cohesion over use of shrinking pastoral areas with climatic imbalance. Under the AF, the component will be expanded to also support food crop production under sub-component 2.3.

*Sub-component 2.1: Access to natural resources and sustainable landscape management (AF US\$1.1 million in Mauritania; US\$9.8 million in Niger)*

27. Under this sub-component, in both countries, the AF proposes to scale-up the following activities of the parent project: support to sustainable landscape management and restoration activities designed to restore the quality of pastures, rehabilitate degraded rangelands, maintain and improve soil fertility, increase biodiversity and enhance sequestration of soil organic carbon. This will be achieved through community-based interventions, that will generate revenues for (agro)pastoral people, while protecting natural pastoral areas. Implementation arrangements will be identical to the parent project. The process for community planning and facilitator selection used in the parent project is already being scaled up with local committees to include new sites to be covered by the AF.
28. Specifically, in Mauritania, the AF will be used to : (i) establish 1,000 km of fire strips to protect against wildfires; (ii) realize stone cordons to promote water infiltration (350 km); (iii) establish pastoral reserves (15 reserves of 50 ha each); and (iv) assist natural regeneration (20 sites of 50 ha each). In Niger, the AF will be used to: (i) restore degraded pastoral land over 10,000 ha; (ii) carry out dunes fixation over 3,050 ha; (iii) establish fire strips (4,000 km); (iv) improve pastoral rangelands with seeding over 6,000 ha; and (v) control the spread of invasive species over 800 ha.



*Sub-component 2.2: Sustainable management of infrastructure for access to water (AF US\$3.1 million in Mauritania; US\$6.8 million in Niger)*

29. Under this sub-component, in both countries the AF will support scale-up of the following parent project activities for sustainable management of water infrastructure: (i) design and construction or rehabilitation of pastoral water points in rangelands as well as surface water structures; and (ii) establishment and operationalization of water-user management committees. Implementation arrangements will be the same as in the parent project.
30. Specifically, in Mauritania, the AF proposes to support the construction of 150 additional climate resilient water points (30 boreholes, 40 pastoral wells and 80 watering pounds). Further, the AF will support the establishment and/or strengthening of executive committees to manage, monitor and maintain the water points, as well as refine existing social agreements to increase the sustainability of these structures. In Niger, the AF proposes to support the rehabilitation of 105 additional climate-resilient pastoral water infrastructure including 65 cemented wells, 30 boreholes, 10 watering ponds, and the establishment of effective management structures. The shallow wells and boreholes, as well as the watering ponds are rainwater fed.

*Sub-component 2.3: Fodder production (AF US\$5.5 million in Mauritania; US\$16.3 million in Niger)*

31. Under this sub-component, in both countries, the AF will scale up the following activities: (i) development of fodder production sites and equipment for the purpose (such as small machinery, irrigation equipment, and inputs including seeds and fertilizers); (ii) construction and operationalization of fodder storage warehouses; and (iii) provision of experiential and participatory training on fodder production to farmers. Under this sub-component the AF will also finance the following new activity: improvement of small community irrigation sites for climate smart food production, contributing to reduced food insecurity of vulnerable agropastoral households in targeted areas. Households and farmers in the targeted areas rely on rain and rainfed irrigation for fodder and food production. Increasing fodder and food production capacity will support agro-pastoralists to weather future climate related shocks and offset reduction of cross-border transhumance in neighboring countries such as Mali. Implementation arrangements will be the same as in the parent project. A partnership agreement with the Ministry of Agriculture will be established with the PCU to clarify roles and responsibilities with respect to implementation of new activities supported by the AF.
32. Specifically, in Mauritania scaled-up activities under the AF will include: support for additional cultivated fodder crop sites (80 ha irrigated and 394 ha rainfed) through the provision of drought-tolerant seeds adapted to the agro-ecological conditions, acquisition of small equipment (e.g., seeding and cutting machines), and irrigation infrastructure and equipment; addition of 20 fodder storage units; and provision of technical assistance to support the swift adoption of climate-smart production techniques and technologies. In Niger, scaled up activities will support additional production and access to fodder for livestock (600 ha). This will be achieved through provision of drought-tolerant seeds, fertilizer, and technical assistance.
33. In Mauritania, new activities will include the rehabilitation of food crop perimeters and provision of equipment for the purpose, as well as construction of food crops storage warehouses to reduce food waste and losses. More specifically, in Mauritania, the AF will support the rehabilitation of 10,000 ha, including rehabilitation and construction of small rainwater retention infrastructure; provision of equipment, including fencing, as well as the provision of quality seeds and fertilizers, and small agriculture equipment; and construction of 22 food crop storage units. In Niger, new activities will include : (i) the development of small irrigation infrastructure and provision of related equipment to improve 1,050 ha in approximately 230



existing collectively managed small rainfed irrigation perimeters; (ii) provision of fertilizers, drought-tolerant seeds (e.g. dual-purpose alfalfa, bourgou, cowpea, sorghum, and maize among other crops) and grinders; and (iii) provision of technical assistance<sup>18</sup> thereby also increasing climate resilience.

**Component 4: Social and economic inclusion improvement, women, and youth (original project US\$47.1 million equivalent IDA, of which US\$6.3 million for Mauritania and US\$8 million for Niger; AF US\$1.9 million equivalent for Niger)**

34. This component contributes to a greater socio-economic inclusion of pastoral populations, in particular youth and women, through increased access to vocational training, inclusion in social and civil registries, and direct support to develop income generating activities.

*Sub-component 4.3: Income-generating activities (AF US\$1.9 million in Niger)*

35. Under this sub-component, in Niger, the AF proposes to scale up the following activities of the parent project: (i) provision of subgrants to beneficiaries for income generating subprojects; and (ii) provision of goods, consulting services, non-consulting services and training for the purpose.

36. This will consist of providing cash grants (up to \$450 per person) to highly vulnerable pastoralists and agropastoralists for resilience-enhancing and income-generating opportunities. These activities will follow selection criteria and mechanisms established under the parent project. They may include, e.g., small processing units, sheltered mills, small warehouses, storage facilities to support agro-pastoral value chains. In addition to enhancing resilience to climate shocks, reducing environmental degradation by limiting such-activities as tree-cutting for income, and expanding medium- to long-term income-earning opportunities, the grants will boost food and nutrition security by allowing beneficiaries to purchase food in local markets or through alternate provisions. Implementation arrangements will be the same as in the parent project, with an adjustment in the targeting of beneficiaries to align with the Support Plan.

**Component 5: Project coordination, institutional strengthening, crisis prevention and response (original project US\$73.3 million equivalent IDA of which US\$7.9 million for Mauritania and US\$8.4 million for Niger; AF US\$32.3 million equivalent for Mauritania and US\$15.2 million equivalent for Niger)**

*Sub-component 5.1: Project coordination (AF US\$2.3 million in Mauritania; US\$0.8 million in Niger)*

37. Given the scale-up and new activities under the AF, this sub-component will be boosted to enhance the technical and organizational capacity of implementing agencies.

38. In Mauritania, the PCU staffing will be strengthened with the competitive recruitment of two additional M&E assistants, one additional accounting assistant, one additional procurement specialist, and two technical specialists (hydraulics and rural engineering) over three years. Consultants would also be recruited on a need-basis to support the PCU staff, including a part-time gender-based violence (GBV) specialist.

39. In Niger, one animal/ plant production specialist will be recruited to support activities under component 2 and one social/rural development specialist will be added to the PCU to support component 4. An additional

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<sup>18</sup> Technical assistance includes promotion of improved livestock feeding practices, and climate smart fodder/food crop production, including regenerating degraded agro-pastoral lands; promoting food and fodder crops in multiplication centers; management of perimeters).





procurement assistant and a gender/gender-based violence (GBV) specialist will also be recruited to reinforce the PCU team. In addition to these experts, the project will recruit consultants and short-term technical assistants on a need-basis. Communication capacity and knowledge management will also be enhanced through development of a communication service with strong community-level linkages.

*Sub-component 5.2: Institutional Strengthening (AF US\$30.0 million in Mauritania; US\$14.4 million in Niger)*

40. Investments under this sub-component will be significantly expanded and increased under the AF with new activities added contributing to pastoral crisis prevention and response capacities.
41. In Mauritania, the AF will contribute to the national food security emergency relief program through allocation of US\$25 million allocated for the purchase of wheat to support the following social programs: (i) in-kind distribution to the poorest households in targeted regions; and (ii) supply of subsidized wheat through the existing network of shops managed by CSA, benefiting vulnerable households in priority areas, to mitigate the effects of rising food commodity prices in these areas. Wheat purchase will be carried out by WFP under a contractual arrangement with the PCU, CAAM will ensure its reception on behalf of the Government, in accordance with its mandate, and will deliver it to the CSA. CSA will manage the storage and distribution of food to eligible households, as well as supply of shops. These activities will follow established standard mechanisms, based on a well-developed relationship between the World Bank, WFP, and the Government.<sup>19</sup> Food distribution and supply of shops by CSA will also follow established mechanisms detailed in the PNR allowing to target most vulnerable households and communes.
42. In Niger, the AF will aim to leverage the framework and coordination mechanisms developed under DNP-GCA for rapid delivery of short-term assistance for recovery. Targeting highly vulnerable (agro)pastoral households identified by the DNP-GCA-led process, activities will include a package comprising: (i) vaccination against telluric diseases (pasteurellosis, anthrax, blackleg) jointly with acquisition and distribution of antiparasitic and mineral and vitamin complexes; and (ii) the acquisition and distribution of 22,000 tons of livestock feed at the end of the lean season. These investments will provide vital support to maintain critical pastoral households' assets by avoiding livestock losses, and thereby increase their resilience. This will also help avoid negative coping strategies, including environmental degradation through over-grazing of rangelands and tree-cutting for income. Implementation arrangements will be the same as in the parent project.

**Institutional arrangements**

43. In both Mauritania and Niger, the implementation responsibilities in the parent project will be retained. The PCUs of the parent project will retain the overall responsibility over the coordination, supervision, fiduciary, and environmental and social safeguards compliance, as well as monitoring and evaluation (M&E) of AF supported activities. The respective Ministries of Agriculture will implement part of sub-component 2.3 through a partnership agreement to be signed with the PCU to clarify roles and responsibilities. In Mauritania specifically, a new partnership with WFP (through a standard contract) will be established under sub-component 5.2. See also Annex 4. The PIM will be updated no later than one (1) month after AF effectiveness in both countries to reflect specific adjustments brought by the AF.

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<sup>19</sup> The World Bank and WFP have a corporate partnership that covers a range of areas including procurement of commodities and service provision to host Governments. Standard contractual arrangements will be used for the purchase of wheat.



Summary of component changes and costs (IDA amount only)

Component	Mauritania		Niger		Regional	Regional
	Parent Project (US\$ m)	AF (US\$ m)	Parent Project (US\$ m)	AF (US\$ m)	Total Parent Project (US\$ m)	Total with AF (US\$ m)
Component 1: Animal health improvement and veterinary medicine control	17.4	-	17.1	-	125.3	125.3
Component 2: Sustainable landscape management and governance enhancement	7.7	9.7	13.2	32.9	74.3	116.9
<i>Sub-component 2.1</i>	2.7	1.1	5.6	9.8		
<i>Sub-component 2.2</i>	3.2	3.1	5.8	6.8		
<i>Sub-component 2.3</i>	1.8	5.5	1.8	16.3		
Component 3: Livestock value chain improvement	5.8	-	13.2	-	54.9	54.9
<b>Component 4: Social and economic inclusion improvement, women and youth</b>	6.3	-	8.0	1.9	47.1	49.0
<i>Sub-component 4.1</i>	2.6	-	3.6	-		
<i>Sub-component 4.2</i>	0.8	-	1.1	-		
<i>Sub-component 4.3</i>	2.8	-	3.3	1.9		
<b>Component 5: Project coordination, institutional strengthening, crisis prevention and response</b>	7.9	32.3	8.5	15.2	73.3	120.8
<i>Sub-component 5.1</i>	6.2	2.3	6.0	0.8		
<i>Sub-component 5.2</i>	1.7	30.0	2.4	14.4		
<i>Sub-component 5.3</i>	0	-	0	-		
<b>TOTAL</b>	<b>45.0</b>	<b>42.0</b>	<b>60.0</b>	<b>50.0</b>	<b>375.0</b>	<b>467.0</b>

III. KEY RISKS

44. **No additional risks are expected.** The overall risk rating of the proposed AF is commensurate with the risk rating of the parent project and is assessed as “Substantial,” owing to the potential for political uncertainty, fragility, and instability that may delay implementation. The risk mitigation measures specified in the parent project remain relevant. The risks related to new activities, namely the purchase and distribution of wheat, are mitigated by the Government and CSA's experience with this type of activity and the experience of WFP, for whom food purchase is part of its core business. Risks related to the involvement of the recently created CAAM will be mitigated by the establishment of institutional agreements between the PCU, CAAM and CSA, clearly defining roles and responsibilities, and related procedures detailed in the PIM; and the existence of an institutional framework established in the PNR that will ensure adequate monitoring and coordination.





#### IV. APPRAISAL SUMMARY

##### A. Technical

45. **The technical appraisal confirmed that the extreme food and nutrition insecurity situations facing Mauritania and Niger requires urgent and scaled responses, and that the AF is an appropriate vehicle for such a response.** The latest implementation performance is satisfactory in both countries. The parent project provides a firm foundation for the scale-up and new activities envisioned under the AF. All proposed scaled-up and new activities are wholly aligned with the parent project's PDO, which has not changed but accommodates the urgency of needs in the food security crisis affecting Mauritania and Niger. Given the prominent role of climate shocks in the food security crisis, climate-related vulnerabilities are appropriately prioritized in sub-components with a range of resilience and adaptation enhancing interventions embedded within planned activities. A summary of Climate Co-Benefits (CCB) is included in Annex 3.
46. **The PCUs are functioning smoothly in both countries, with strong collaboration between the host Governments and their partners.** Prospects to expand and deepen the PCUs' implementation support structures as needed are therefore positive. The existing activities in the parent project for sustainable management of water infrastructure, fodder production, and income-generating activities in pastoral and agropastoral areas will promote rapid and well-targeted scaling up of sub-components. The targeted scale-up will be based on existing partnerships within the parent project, new partnerships under the AF, and enhanced engagement with related projects in the targeted areas.

##### B. Economic and Financial Analysis

47. **For Mauritania, the AF economic internal rate of return (EIRR) is 24.9 percent and the economic net present value (ENPV) US\$18.9 million at the opportunity cost of capital of 6 percent.** The financial analysis finds that all project activities are profitable, with an internal rate of return (IRR) that varies between 18.9 percent and 38.3 percent, and net present value (NPVs) between US\$162 (MRU 5,935) and US\$30,004 (MRU 1,098,155).
48. **For Niger, the AF has an EIRR of 15.4 percent and an ENPV of US\$25.3 million at the opportunity cost of capital of 6 percent.** The financial analysis finds that all project activities are profitable, with an IRR from 15.4 percent to 32.8 percent, and NPVs that vary between US\$31 (CFAF 18,211) and US\$25,574 (CFAF 15,222,654).
49. **Sensitivity analysis shows that the IRRs for both countries are sufficiently robust.** The IRR levels confirm the robustness of the positive economic effects and impacts of the AF on the areas of intervention in the face of the risk of increased costs, reduced income from the activities carried out or/and delay in the generation of benefits. The financial and economic analysis is presented in Annex 1.

##### C. Green House Gas Analysis

50. To calculate the carbon balance of the AF, two EX-ACT appraisals were performed. The aggregate carbon balance of both projects over 20 years is equal to -237,487 tCO<sub>2</sub>-e. See details in Annex 2. A summary of CCBs is also included in Annex 3.
- *Mauritania.* Using the detailed EX-ACT computation of data, the total carbon balance over 20 years of the activities implemented under the AF of this project is equal to -157,319 tCO<sub>2</sub>-e. This result is the net difference between the carbon balance from the baseline scenario 389,137 tCO<sub>2</sub>-e and the carbon



balance of the with-project scenario 231,818 tCO<sub>2</sub>-e. Knowing the total area under focus, this would amount to a carbon balance of -0.3 tCO<sub>2</sub>-e per hectare and per year.

- *Niger*. Given the computation of data (detailed in Computation of data in EX-ACT), the total carbon balance over 20 years of the activities implemented under the AF of this project is equal to -80,168 tCO<sub>2</sub>-e. This result is the net difference between the carbon balance from the baseline scenario 16,005 tCO<sub>2</sub>-e and the carbon balance of the with-project scenario -64,163 tCO<sub>2</sub>-e. Knowing the total area under focus, this would amount to a carbon balance of -0.2 tCO<sub>2</sub>-e per hectare and per year.

#### D. Gender

51. The parent project acknowledged that there is profound inequality between women and men in both Mauritania and Niger. Mauritania ranks 147<sup>th</sup> out of 162 countries on the inequality index between the sexes; Niger ranks 154<sup>th</sup> (United Nations Development Program, UNDP, 2019). In both Niger and Mauritania, women rely heavily on agriculture for employment and income, and they have been greatly affected by the current food insecurity crisis. As in the parent project, the AF will continue to act on gender gaps in participation and dedicate specific access to productive resources for women. The AF will ensure that women have better access to economic recovery support to increase their incomes and improve their food security and income-earning opportunities. As in the parent project, the monitoring and evaluation will collect sex-disaggregated data, and measure increased participation of women over community resources and improved access to income generation opportunities. The overall objectives with respect to gender gap reduction continue to be a priority and the AF will additionally be investing in training and capacity building activities that will mostly be targeting women.

#### E. Citizen engagement

52. The AF will systematically apply the well-established mechanisms already implemented under PRAPS I and PRAPS II, that ensure an inclusive and participatory decision-making approach throughout processes, from selecting specific sites and ensuring the adequate targeting of vulnerable people and communities, to establishing solid management mechanisms that contribute to sustainability of investments and prevent future possible conflicts.<sup>20</sup>

#### F. Financial Management

53. In both Mauritania and Niger, the PCUs will remain responsible for the Financial Management (FM) aspects of the proposed AF. The FM arrangements of the AF will follow the same approach as the implementation arrangements for the parent project. The FM assessment was carried out in accordance with the Financial Management Manual for World Bank-Financed Investment Operations effective on March 1, 2010 and reissued on September 7, 2021. Both PCUs are familiar with the World Bank's FM requirements through the implementation of the parent project.

54. In **Niger**, the AF project risk before mitigation measures is **High** because of the following key risks: (i) the high insecurity of the areas in which project activities will be conducted ; (ii) an insufficient capacity of the PCU staff to handle simultaneously three WBG financings (two projects already implemented and this AF); (iii) an internal auditor has been appointed under the parent project but the internal control function will need to

<sup>20</sup> PRAPS-II will continue to use the 'social engineering' approach that was highlighted as a success under PRAPS-1 (P147674) to mitigate conflicts around the use and management of common resources or infrastructures ; this approach includes consultations upstream (before an investment), during an investment, and downstream (after investment) to ensure fully inclusive and participatory decision making.



- be strengthened to include the AF; (iv) the misappropriation of project funds and ineligible expenditures, given the current security and COVID-19 context; and (v) delays in disbursements. The residual FM risk after implemented mitigation measures is **Substantial**.
55. In **Mauritania**, the conclusion of the assessment is that the FM arrangements are adequate and satisfy the World Bank's minimum requirements under World Bank Policy and Directive on Investment Project Financing (IPF). The overall risk for the project is rated **Moderate**.
56. For **both Niger and Mauritania**, the main mitigating measure will include (i) updating the PIM for the parent project no later than one month after effectiveness and (ii) migrating the existing accounting software's parameters to fit the needs of the AF no later than three months after effectiveness. In addition, no later than one month after effectiveness, and not later than November 30 of each fiscal year during the implementation of the Project, a draft work plan and budget for project implementation should be prepared and furnished to the World Bank, containing all activities proposed to be included in the Project (including environmental and social instruments applicable to said activities in accordance with the provisions of ESCP), and a proposed financing plan for expenditures required for such activities, setting forth the proposed amounts and sources of financing. The work plan and budget shall specify any training activities that may be required under the Project, including: (i) the type of training; (ii) the purpose of the training; (iii) the personnel to be trained; (iv) the institution or individual who will conduct the training; (v) the location and duration of the training; and (vi) the cost of the training. The PCU in Mauritania shall recruit an additional accounting assistant within three (3) months after effectiveness date, based on terms of reference satisfactory to the World Bank. There is no need to recruit additional FM staff for Niger.
57. Resources from the AF shall be disbursed through a segregated Designated Account (DA) in Niger and in Mauritania, opened at a commercial bank denominated in XOF in Niger, and at the Central Bank of Mauritania (Banque Centrale de Mauritanie) denominated in US\$ in Mauritania, both managed by the respective PCU. In addition to the DA in Mauritania, a new Project Operational Account denominated in MRU (the local currency) will be opened in reputable commercial bank acceptable for the World Bank. Statement of Expenditures (SOEs)-based disbursements shall continue to serve as the basis for the withdrawal of funds from the AF. Other methods of disbursing the funds (reimbursement, direct payment, and special commitment) will also be available to the project. The minimum value of applications for these methods will be stated in the Disbursement and Financial Information Letter (DFIL). If justified and needed, report-based disbursements, using an agreed format of unaudited Interim Financial Reports (IFRs) would be used at any time during the AF implementation.
58. **Fiduciary compliance for the Parent Project is deemed Satisfactory.** In general, the first unaudited IFR for Mauritania and Niger under the Parent Project will be due on August 14, 2022. The PCUs will continue to submit the semi-annual IFRs to the World Bank no later than 45 days after the end of the calendar semester. No separate IFRs would be submitted under the AF. Hence, the IFRs will combine both the Parent and AF activities. First audited financial statements under the Parent Project for Mauritania and Niger will be due on June 30<sup>th</sup>, 2023 for the period ending December 31, 2022. Hence, at the time of the FM assessment of the PCUs, there were no overdue audits and IFRs under the responsibility of the PCUs.
59. **The internal auditors in place in Mauritania and Niger for the parent project will be responsible for the internal audit functions for the AF.** The World Bank will work closely with respective PCUs to ensure that the internal auditor develops a risk-based approach, considering the specificity inherent to each country.



60. **The parent project's financial statements will be audited by private audit firms in accordance with the International Standard on Auditing.** These agreements will continue under the AF and submission of the project's audited financial statements will also satisfy World Bank requirements for the AF. The existing external auditor's terms of reference and contract will be amended to include the AF.
61. **Support to the implementation plan: FM supervisions will be conducted over the lifetime of the project.** The project will be supervised on a risk-based approach, considering the alternative options developed in the Operations Policy and Country Services (OPCS) Guidance issued on March 24, 2020 (Streamlined Fiduciary Implementation Support Measures for Active World Bank-financed Operations given Travel Limitations due to the COVID-19 Pandemic).
62. **In Mauritania, the AF will contract with United Nations (UN) Agencies, such as World Food Programme (WFP), aiming to leverage their experience and expertise under sub-component 5.2.** In the case of contracting WFP, a Standard Agreement shall be signed between the Government (through the PCU, on behalf of the Ministry in charge of livestock) and WFP that will clearly indicate the level of involvement and the specific role of WFP under the AF. The agreement shall contain specific Annexes on the payment schedule and reporting requirements by WFP. The fiduciary arrangements pertaining to the contracting of WFP will follow the agreed upon arrangements that will be included as part of the Standard Agreement to be signed between the Government and WFP. In cases where Bank-Facilitated Procurement (BFP) is requested and utilized by the Government, all related payments to suppliers under the BFP will be through direct payment method regardless of the payment amount.
63. **WFP is envisaged to play an integral role under sub-component 5.2 in Mauritania working closely with CAAM.** Through its fully established Country Office, skilled manpower, and longstanding relations with the Government, WFP is in a unique position to provide this support. In terms of fiduciary requirements, the World Bank's traditional reporting format will apply to the Borrower with the Borrower having ultimate responsibility for ensuring that WFP provides technical and financial reports with sufficient information and on a timely basis. The agreement between the Borrower and WFP should provide for an agreed format, content, and periodicity of the financial reports to support effective supervision of the proposed project. The financial reports should be generated from WFP's financial management system, which is covered by the internal control and fiduciary oversight arrangements of WFP. This will help mitigate the risk of errors and irregularities in the process of submission of such reports to the World Bank and provide reasonable assurance on the accuracy and validity of those reports. Furthermore, the World Bank's audit requirement continues to apply to the Borrower; therefore, the contracts between the Borrower and WFP should ensure that all required information is provided on a timely basis for audit purposes. The World Bank relies on the annual audit of WFP conducted by WFP's Board of Auditors. The audit report is reviewed at the corporate level and published on the World Bank website. Potential risks linked to the engagement of CAAM and CSA will be carefully identified and managed within the overall risk mitigation framework.

## G. Procurement

64. All works, goods, and services will be procured according to the procurement arrangements of the parent project. The changes to the existing procurement arrangements in the parent project are detailed in the following paragraphs:
- (a) *Procurement risk at the project level:* The AF will be managed by the parent project's PCUs, both of which include competitively recruited procurement specialists. To guard against overload, it is proposed to competitively recruit an additional procurement specialist in Mauritania, and an



additional procurement specialist assistant in Niger. In Mauritania, after the implementation of the proposed mitigation measures in the parent project, the risk is Moderate. This rating is based on the capacity of the existing procurement team including: (i) a procurement specialist who is experienced and familiar with World Bank procurement procedures and policies, has been hired; and (ii) an assistant procurement specialist has been hired too. The other proposed mitigation measures include: (i) training of the Coordinator, procurement staff, and members of the Commission on the New Procurement Policy for Investment Projects; and (ii) updating the project’s administrative, financial and procurement procedures manual. In Niger, the performance of this agency is Moderately Satisfactory. The proposed mitigation measures proposed in the parent project have been addressed, except availing a dedicated room for physical archiving of procurement documents. The project risk remains Substantial. Implementation of the mitigation measures will continue under the AF.

- (b) *Special Considerations:* For Mauritania, as an emergency project, the proposed procurement approach prioritizes fast track emergency procurement for the required emergency goods, works and services, as recognized through emergency declared by the Government. The procurement approaches will utilize the flexibility provided by the World Bank’s Procurement Framework for fast-track emergency procurement. Key measures to fast-track procurement include: (i) use of UN agencies, NGOs, Direct Contracting and/or Limited Competition and Request for Quotations with identified manufacturers and suppliers for other urgent items; and (ii) increased threshold for Requests for Quotations (RFQ) to US\$0.5 million for goods and US\$1 million for works. Bid Securing Declarations may be used instead of the bid security. Advance payments may be increased to 40 percent, secured by advance payment guarantees. The time for submission of bids/proposals may be shortened to 15 days in competitive national and international procedures, and to three days for RFQs. If bidders request extensions, these may be granted. Other measures include the use of Borrower’s national procurement procedures provided the arrangements are consistent with the Bank’s Core Procurement Principles. The simplified procurement arrangements will be detailed in the procurement section of the PIM. For Niger, given the fragile context, flexibilities are already granted under the parent project as described in the World Bank Guidance on Procurement Procedures in Situations of Urgent Need of Assistance or Capacity Constraints (March 7, 2019). These will also apply to the AF.
- (c) *Project Procurement Strategy for Development (PPSD) and Procurement Plan (PP):* The PCUs (with assistance from the World Bank) have prepared PPSDs that describe how procurement activities will support project operations for the achievement of PDOs and deliver value for money. The respective Procurement Plans for the activities financed under the AF have been finalized based on the PPSDs.

H. Legal Operational Policies

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



## I. Environmental and Social

65. **The Environmental and Social Risk Classification (ESRC) for both the parent project and the AF is Substantial.** The AF will scale up and add new activities within existing components of the parent project. No new environmental and social standards (ESS) will be relevant because of AF activities. Therefore, the environmental and social risk management instruments such as the Environmental and Social Framework (ESMF) (inclusive of measures to manage security and risks of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), Resettlement Policy Framework (RPF), Labor Management Procedures (LMP), Stakeholder Engagement Plan (SEP), and Hazardous Waste and Pest Management Plan (HWPMP) which were prepared for the parent project provide sufficient guidance for the AF project. The ESMF, RPF, LMP, HWPMP, and SEP will be updated as needed and disclosed, not later than one month after project effectiveness. Any proposed changes are reflected in Niger and Mauritania respective Environment and Social Commitment Plan (ESCP), accordingly. Particularly for Niger, given the security situation in the areas of the parent project and the FA, a security risk assessment must be conducted no later than one month after project effectiveness and if necessary, a Safety Management Plan (SMP) must be prepared and the summary disclosed no later than three months after the effective date of the project.
66. Public consultations and inclusive stakeholder engagement as per the SEP will be conducted to consider and integrate the needs and perspectives of the communities, including vulnerable and disadvantaged individuals and communities, as they relate to the food crisis, and will be included in the updated SEP. In terms of implementation capacity, the PRAPS II PCUs include an environmental safeguard specialist, a social safeguard specialist. Mauritania PCU already includes a gender/GBV specialist while the Niger PCU Gender/GBV aspects were handled by the social safeguard specialist in Niger. Niger PCU will recruit a full time Gender/GBV specialist no later than one month after project effectiveness to strengthen the team's capacity to adequately implement strategies and measures to reduce, prevent and respond to the risks SEA/SH. Mauritania PCU will strengthen its capacity on GBV aspects by the recruitment of a part-time expert (consultant). The current team that is in place has the capacity to manage the environmental and social risks and impacts associated with these AF activities, however, as per the ESCP and given the lack of familiarity of clients with the new ESF, capacity building and training will be necessary throughout the life of the project.
67. **Grievance Mechanism (GM).** A project-specific GM was set up in the SEP of the parent project, to handle complaints and issues. The GM is specially designed to collect, collate, review and redress stakeholders' concerns, complaints, and grievances. This process will be carried out using dedicated communication materials, which will be developed to help stakeholders become familiar with the grievance redress channels and procedures. The GM will be accessible and understandable for all stakeholders in the project and for the entire project life. The GM will be communicated to all relevant stakeholders and will also be applicable for any contractor that will provide service for the project during the construction and operations phase. This GM remains relevant for the AF and includes measures for the management of SEA/SH incidents, detailing the procedures, entry points, GBV service referrals and accountability mechanisms for complainants.

## V. WORLD BANK GRIEVANCE REDRESS

68. Communities and individuals who believe that they are adversely affected by a WB supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-



related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org)





**VI SUMMARY TABLE OF CHANGES**

	Changed	Not Changed
Results Framework	✓	
Components and Cost	✓	
Legal Covenants	✓	
Implementing Agency		✓
Project's Development Objectives		✓
Loan Closing Date(s)		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Disbursements Arrangements		✓
Financial Management		✓
Procurement		✓
Other Change(s)		✓

**VII DETAILED CHANGE(S)**

**COMPONENTS**

Current Component Name	Current Cost (US\$, millions)	Action	Proposed Component Name	Proposed Cost (US\$, millions)
Animal health improvement and veterinary medicine control	196.00	No Change	Animal health improvement and veterinary medicine control	196.00
Sustainable landscape management and governance enhancement	74.30	Revised	Sustainable landscape management and governance enhancement	116.90
Livestock value chain improvement	58.20	No Change	Livestock value chain improvement	58.20
Social and economic	48.30	Revised	Social and economic	50.25





inclusion improvement, women and youth			inclusion improvement, women and youth	
Project coordination, institutional strengthening, crisis prevention and response	83.40	Revised	Project coordination, institutional strengthening, crisis prevention and response	130.85
<b>TOTAL</b>	<b>460.20</b>			<b>552.20</b>

**Expected Disbursements (in US\$)**

Fiscal Year	Annual	Cumulative
2021	0.00	0.00
2022	20,000,000.00	20,000,000.00
2023	90,000,000.00	110,000,000.00
2024	100,000,000.00	210,000,000.00
2025	100,000,000.00	310,000,000.00
2026	95,000,000.00	405,000,000.00
2027	52,000,000.00	457,000,000.00
2028	10,000,000.00	467,000,000.00

**SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)**

Risk Category	Latest ISR Rating	Current Rating
Political and Governance	● Substantial	● Substantial
Macroeconomic	● Substantial	● Substantial
Sector Strategies and Policies	● Substantial	● Substantial
Technical Design of Project or Program	● Substantial	● Substantial
Institutional Capacity for Implementation and Sustainability	● Substantial	● Substantial
Fiduciary	● Substantial	● Substantial
Environment and Social	● Substantial	● Substantial
Stakeholders	● Substantial	● Substantial
Other	● High	● High



Overall		● Substantial	● Substantial
<b>LEGAL COVENANTS – Regional Sahel Pastoralism Support Project II (P173197)</b>			
Loan/Credit/TF	Description	Status	Action
IDA-D7950	CILSS: Section I.A.1(b)(ii)(A) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than three (3) months after the Effective Date, maintain at all times during the implementation of the Project and recruit when applicable, key staff including, a coordinator, a procurement specialist, a financial management specialist, a gender-based violence expert, a monitoring and evaluation specialist, a communication specialist and technical experts, all with qualifications, experience and under terms of reference satisfactory to the Association.	After delay complied with	No Change
IDA-D7950	CILSS: Section I.A.1(b)(ii)(B) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than six (6) months after the Effective Date, appoint an external auditor for the Project, in accordance with the provisions of the Procurement Regulations.	Expected soon	No Change
IDA-D7950	CILSS: Section I.A.1(b)(ii)(C) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than two (2) months after the Effective Date, update the terms of reference of its internal auditor to include the audit of activities under the Project, all in accordance with the provisions of the PIM.	Complied with	No Change
IDA-D7950	CILSS: Section I.A.1(b)(ii)(D) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than five (5) months after the Effective Date, acquire and install a computerized accounting system with technical specifications	Expected soon	No Change



	satisfactory to the Association.		
IDA-68610	Mali: Section I.A.1(b)(ii)(B) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than three (3) months after the Effective Date, appoint and recruit a procurement assistant and two monitoring and evaluation assistants.	Not yet due	No Change
IDA-68610	Mali: Section I.A.1(b)(ii)(C) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than six (6) months after the Effective Date, appoint an external auditor for the Project, in accordance with the provisions of the Procurement Regulations.	Not yet due	No Change
IDA-68610	Mali: Section I.A.1(b)(ii)(D) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than five (5) months after the Effective Date, acquire and install a computerized accounting system with technical specifications satisfactory to the Association.	Not yet due	No Change
IDA-D7960	Mauritania: Section I.A.1(b)(ii)(A) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than three (3) months after the Effective Date, appoint and thereafter maintain, at all times during the implementation of the Project, NPCU staff with qualifications and under terms of reference satisfactory to the Association, including: a Project coordinator, a technical director, a procurement specialist, financial management specialist, environmental safeguards specialist, social development specialist, a gender and gender-based-violence specialist, a communications specialist, and technical experts for Parts 1, 2, 3, and 4.	Complied with	No Change
IDA-D7960	Mauritania: Section I.A.1(b)(ii)(B) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than six (6) months after the Effective Date, appoint	Not yet due	No Change



	an external auditor for the Project, in accordance with the provisions of the Procurement Regulations.		
IDA-D7960	Mauritania: Section I.A.1(b)(ii)(C) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than five (5) months after the Effective Date, acquire and install a computerized accounting system with technical specifications satisfactory to the Association.	Expected soon	No Change
IDA-68620	Burkina Faso: Section I.A.1(b)(ii)(C) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than five (5) months after the Effective Date, reconfigure its computerized accounting system with technical specifications satisfactory to the Association.	Expected soon	No Change
IDA-68620	Senegal: Section I.A.1(b)(ii)(A) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than six (6) months after the Effective Date, appoint an external auditor for the Project, in accordance with the provisions of the Procurement Regulations.	Not yet due	No Change
IDA-68630	Senegal: Section I.A.1(b)(ii)(B) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than five (5) months after the Effective Date, acquire and install a computerized accounting system with technical specifications satisfactory to the Association.	Not yet due	No Change
IDA-68620	Burkina Faso: Section I.B.2(a) of Schedule 2 of the Financing Agreement: The Recipient shall prepare and furnish to the Association not later than November 30, of each Fiscal Year during the implementation of the Project, a work plan and budget containing all activities proposed to be included in the Project during the following Fiscal Year.	Complied with	Marked for Deletion
IDA-D7970	Chad: Section I.A.1(b)(ii)(C) of Schedule 2	Not yet due	No Change



	of the Financing Agreement: The Recipient shall, not later than five (5) months after the Effective Date, acquire and install a computerized accounting system with technical specifications satisfactory to the Association.		
IDA-68600	Niger: Section I.A.1(b)(ii)(B) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than six (6) months after the Effective Date, appoint an external auditor and an internal auditor for the Project, in accordance with the provisions of the Procurement Regulations.	Not yet due	No Change
IDA-68620	Burkina Faso: Section I.A.1(b)(ii)(A) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than two (2) months after the Effective Date, appoint and thereafter maintain, at all times during the implementation of the Project, NPCU with adequate staff, including, inter alia: a project manager, an administrative and financial specialist, a procurement specialist, an internal auditor, a monitoring and evaluation specialists, a communication specialist, an environmental specialist, a social development and gender based violence specialist, and technical specialists for the oversight of Parts 1, 2, 3 and 4 of the Project, all recruited on the basis of terms of reference, qualifications, integrity and experience acceptable to the Association.	After delay complied with	No Change
IDA-68620	Burkina Faso: Section I.A.1(b)(ii)(B) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than six (6) months after the Effective Date, appoint an external auditor for the Project, in accordance with the provisions of the Procurement Regulations.	Not yet due	No Change
IDA-D7970	Chad: Section I.A.1(b)(ii)(B) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than six (6)	Not yet due	No Change



	months after the Effective Date, appoint an external auditor for the Project, in accordance with the provisions of the Procurement Regulations.		
IDA-68600	Niger: Section I.A.1(b)(ii)(C) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than five (5) months after the Effective Date, acquire and install a computerized accounting system with technical specifications satisfactory to the Association.	Not yet due	No Change
IDA-68600	Niger: Section I.A.1(b)(ii)(A) of Schedule 2 of the Financing Agreement: The Recipient shall, not later than three (3) months after the Effective Date, appoint and thereafter maintain, at all times during the implementation of the Project, additional NPCU staff as required with qualifications and under terms of reference satisfactory to the Association.	Complied with	No Change

**LEGAL COVENANTS – Niger and Mauritania Additional Financing to PRAPS-2 (P178791)**

**Sections and Description**

Niger, Financing Agreement, Section I.A.(1)(b)(ii)(A), Schedule 2: The Recipient shall, not later than three (3) months after the Effective Date, acquire and install an accounting software to fit the needs of the additional financing.

Mauritania, Financing Agreement, Section I.A.(1)(b)(ii)(A), Schedule 2: The Recipient shall, not later than three (3) months after the Effective Date, update the existing accounting software’s parameters to fit the needs of the additional financing.

Mauritania, Financing Agreement, Section I.A.(1)(b)(ii)(B), Schedule 2: The Recipient shall, not later than three (3) months after effectiveness date, recruit an additional accounting assistant and an additional procurement specialist, with terms of reference, qualifications and experience satisfactory to the Association.

Niger, Financing Agreement, Section I.A.(1)(b)(ii)(B), Schedule 2: The Recipient shall, not later than three (3) months after effectiveness date, recruit an additional procurement assistant, with terms of reference, qualifications and experience satisfactory to the Association.

Mauritania, Financing Agreement, Section I.B.(1)(a), Schedule 2: The Recipient shall, not later than one (1) month after effectiveness date, update as needed and disclose the PIM.

Niger, Financing Agreement, Section I.B.1.(a), Schedule 2: The Recipient shall, not later than one (1) month after effectiveness date, update as needed and disclose the PIM.

Niger, Financing Agreement, Section I.E. Schedule 2: The Recipient shall, not later than six (6) month after effectiveness date, prepare and submit the Food Security Crisis Preparedness Plan (FSCPP).



Mauritania ESCP, 10.2: The Recipient shall operationalize the Project’s grievance mechanism no later than six (6) months after the Effective Date.
Mauritania, ESCP 1.1: The Recipient shall, no later than one (1) month after the Effective Date, recruit an additional part-time GBV specialist, with terms of reference, qualifications and experience satisfactory to the Association.
Mauritania, ESCP 10.2: The Recipient shall, no later than one (1) month after the Effective Date, publish the communication plan for the Project’s grievance mechanism.
Niger, ESCP 4.4: The Recipient shall, no later than one (1) month after the Effective Date, conduct a security risk assessment.
Niger, ESCP 1.1: The Recipient shall, no later than one (1) month after the Effective Date, recruit an additional gender/GBV specialist, with terms of reference, qualifications and experience satisfactory to the Association.
Niger ESCP, 10.2: The Recipient shall operationalize the Project’s grievance mechanism no later than six (6) months after the Effective Date.
Niger, ESCP 10.2: The Recipient shall, no later than one (1) month after the Effective Date, publish the communication plan for the Project’s grievance mechanism.

**Conditions**

Type	Financing source	Description
Disbursement	IBRD/IDA	Mauritania, Financing Agreement, Section III.B.(1)(b), Schedule 2: No withdrawal shall be made under Category (3), until and unless the Recipient has entered into (i) the WFP Supply Agreement and (ii) the CSA Agreement; both in form and substance satisfactory to the Association.



VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Western and Central Africa

Niger and Mauritania Additional Financing to PRAPS-2

Project Development Objective(s)

To improve the resilience of pastoralists and agro-pastoralists in selected areas in the Sahel region.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<b>Sustained and maintained assets (livestock)</b>								
Vaccination coverage rate for CBPP - Regional level (Percentage)		31.00	35.00	45.00	55.00	70.00	80.00	90.00
<i>Action: This indicator has been Revised</i>	<i>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Burkina Faso (Percentage)		25.00	40.00	50.00	60.00	70.00	80.00	90.00
<i>Action: This indicator has been Revised</i>	<i>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Chad (Percentage)		3.00	5.00	10.00	20.00	55.00	70.00	85.00





Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Mali (Percentage)		40.00	55.00	70.00	75.00	80.00	85.00	95.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Mauritania (Percentage)		67.00	85.00	90.00	90.00	95.00	95.00	95.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Niger (Percentage)		65.00	70.00	75.00	80.00	90.00	90.00	95.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Senegal (Percentage)		51.00	55.00	70.00	85.00	90.00	95.00	95.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Small ruminants vaccinated and marked against PPR - Regional level (Number)		16,000,000.00	31,500,000.00	65,300,000.00	131,600,000.00	225,300,000.00	320,000,000.00	396,400,000.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b>							



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>								
Burkina Faso (Number)		4,900,000.00	9,200,000.00	14,600,000.00	21,700,000.00	29,800,000.00	39,300,000.00	48,800,000.00
<i>Action: This indicator has been Revised</i>	<i>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Chad (Number)		0.00	900,000.00	5,900,000.00	20,900,000.00	54,200,000.00	89,400,000.00	118,800,000.00
<i>Action: This indicator has been Revised</i>	<i>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Mali (Number)		0.00	0.00	3,000,000.00	18,600,000.00	39,500,000.00	60,400,000.00	81,300,000.00
<i>Action: This indicator has been Revised</i>	<i>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Mauritania (Number)		1,400,000.00	2,200,000.00	5,700,000.00	14,000,000.00	23,900,000.00	31,900,000.00	36,800,000.00
<i>Action: This indicator has been Revised</i>	<i>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Niger (Number)		3,400,000.00	11,400,000.00	23,400,000.00	37,000,000.00	51,400,000.00	65,800,000.00	73,600,000.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
Senegal (Number)		6,300,000.00	7,800,000.00	12,700,000.00	19,400,000.00	26,500,000.00	33,200,000.00	37,100,000.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
<b>Sustained and maintained ecosystems (Action: This Objective has been Revised)</b>								
Land area under sustainable landscape management practices (CRI, Hectare(Ha))		6,598,000.00	7,420,000.00	9,511,000.00	11,568,000.00	12,888,000.00	13,638,000.00	13,738,000.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Baselines revised to reflect final results of PRAPS-1</b>							
Burkina Faso (Hectare(Ha))		416,000.00	416,000.00	616,000.00	716,000.00	816,000.00	916,000.00	916,000.00
<b>Action: This indicator has been Revised</b>								
Chad (Hectare(Ha))		1,734,000.00	2,434,000.00	3,134,000.00	3,934,000.00	4,134,000.00	4,134,000.00	4,134,000.00
<b>Action: This indicator has been Revised</b>								
Mali (Hectare(Ha))		934,000.00	976,000.00	1,397,000.00	1,814,000.00	2,234,000.00	2,334,000.00	2,434,000.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>								
Mauritania (Hectare(Ha))		1,935,000.00	1,935,000.00	2,435,000.00	2,935,000.00	3,435,000.00	3,935,000.00	3,935,000.00
<i>Action: This indicator has been Revised</i>								
Niger (Hectare(Ha))		737,430.00	817,000.00	937,000.00	1,087,000.00	1,187,000.00	1,237,000.00	1,237,000.00
<i>Action: This indicator has been Revised</i>		<b>Rationale:</b> <i>Adjustment of baseline and addition of new areas targeted under the additional financing</i>						
Senegal (Hectare(Ha))		842,000.00	842,000.00	992,000.00	1,082,000.00	1,082,000.00	1,082,000.00	1,082,000.00
<i>Action: This indicator has been Revised</i>								
<b>Sustained and maintained means of making a living and generating income</b>								
Income increase of pastoral households generated with the support of the Project - Regional level (Percentage)		0.00						25.00
Burkina Faso (Percentage)		0.00			10.00			25.00
Chad (Percentage)		0.00			10.00			25.00
Mali (Percentage)		0.00			10.00			25.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Mauritania (Percentage)		0.00			10.00			25.00
Niger (Percentage)		0.00			10.00			25.00
Senegal (Percentage)		0.00			10.00			25.00

**Intermediate Results Indicators by Components**

Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<b>Component 1. Animal health improvement and veterinary medicine control (Action: This Component has been Revised)</b>								
Level of implementation of the National Strategic Plans (NSPs) for PPR and CBPP (Percentage)		35.00						90.00
Burkina Faso (Percentage)		35.00	60.00	70.00	75.00	80.00	85.00	90.00
Chad (Percentage)		30.00	60.00	70.00	75.00	80.00	85.00	90.00
Mali (Percentage)		35.00	60.00	70.00	75.00	80.00	85.00	90.00
Mauritania (Percentage)		40.00	60.00	70.00	75.00	80.00	85.00	90.00
Niger (Percentage)		40.00	60.00	70.00	75.00	80.00	85.00	90.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Senegal (Percentage)		25.00	60.00	70.00	75.00	80.00	85.00	90.00
Veterinary units built or rehabilitated by the Project and functional in the targeted areas - Regional level (Number)		183.00	188.00	278.00	361.00	391.00	402.00	402.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Update of baselines taking into account final results of PRAPS-1</b>							
Burkina Faso (Number)		34.00	34.00	49.00	69.00	69.00	69.00	69.00
<b>Action: This indicator has been Revised</b>								
Chad (Number)		21.00	21.00	47.00	67.00	77.00	77.00	77.00
<b>Action: This indicator has been Revised</b>								
Mali (Number)		51.00	51.00	70.00	88.00	95.00	101.00	101.00
<b>Action: This indicator has been Revised</b>								
Mauritania (Number)		25.00	25.00	35.00	40.00	45.00	45.00	45.00
<b>Action: This indicator has been Revised</b>								
Niger (Number)		35.00	35.00	55.00	65.00	73.00	73.00	73.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>								
Senegal (Number)		17.00	22.00	32.00	37.00	37.00	37.00	37.00
<i>Action: This indicator has been Revised</i>								
Vaccination pens built or rehabilitated by the Project in the targeted areas - Regional level (Number)		365.00	425.00	613.00	792.00	860.00	900.00	900.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Update of baselines taking into account final results of PRAPS-1</i>							
Burkina Faso (Number)		32.00	32.00	72.00	107.00	107.00	107.00	107.00
<i>Action: This indicator has been Revised</i>								
Chad (Number)		100.00	100.00	150.00	190.00	190.00	190.00	190.00
<i>Action: This indicator has been Revised</i>								
Mali (Number)		60.00	120.00	128.00	162.00	170.00	170.00	170.00
<i>Action: This indicator has been Revised</i>								
Mauritania (Number)		133.00	133.00	163.00	193.00	223.00	223.00	223.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>								
Niger (Number)		10.00	10.00	50.00	70.00	90.00	130.00	130.00
<i>Action: This indicator has been Revised</i>								
Senegal (Number)		30.00	30.00	50.00	70.00	80.00	80.00	80.00
<i>Action: This indicator has been Revised</i>								
Inspections dedicated to the control of veterinary medicines implemented through the Project (Number)		0.00	146.00	819.00	1,918.00	3,448.00	5,404.00	7,370.00
Burkina Faso (Number)		0.00	0.00	80.00	160.00	240.00	320.00	320.00
Chad (Number)		0.00	50.00	100.00	150.00	200.00	250.00	300.00
Mali (Number)		0.00	0.00	366.00	1,098.00	2,196.00	3,660.00	5,124.00
Mauritania (Number)		0.00	10.00	30.00	60.00	100.00	140.00	190.00
Niger (Number)		0.00	0.00	42.00	114.00	226.00	378.00	580.00
Senegal (Number)		0.00	86.00	201.00	336.00	486.00	656.00	856.00
Regional Veterinary Committee operational		0.00	2.00	4.00	4.00	4.00	4.00	4.00





Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
(Number)								
<b>Component 2. Sustainable landscape management and governance enhancement (Action: This Component has been Revised)</b>								
Functional committees for the sustainable management of landscapes facilitating mobility established or supported by the Project - Regional level (Number)		145.00	156.00	241.00	339.00	417.00	440.00	443.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment to correct baselines and some targets based on correct application of methodology (not accounting for natural resources management sub-committees)</b>							
Burkina Faso (Number)		73.00	82.00	120.00	178.00	224.00	224.00	224.00
<b>Action: This indicator has been Revised</b>								
Chad (Number)		10.00	10.00	22.00	24.00	26.00	29.00	29.00
<b>Action: This indicator has been Revised</b>								
Mali (Number)		14.00	14.00	37.00	67.00	91.00	111.00	114.00
<b>Action: This indicator has been Revised</b>								
Mauritania (Number)		7.00	7.00	10.00	13.00	15.00	15.00	15.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>								
Niger (Number)		13.00	15.00	17.00	19.00	21.00	21.00	21.00
<i>Action: This indicator has been Revised</i>								
<b>Rationale:</b> <i>Adjustment of baseline and addition of new water points supported by the additional financing</i>								
Senegal (Number)		28.00	28.00	35.00	38.00	40.00	40.00	40.00
<i>Action: This indicator has been Revised</i>								
Functional water points accessible to (agro)pastoralists on livestock mobility routes and on new transhumance routes supported by the Project - Regional level (Number)		398.00	506.00	792.00	922.00	992.00	1,021.00	1,036.00
<i>Action: This indicator has been Revised</i>								
<b>Rationale:</b> <i>Adjustment of baseline and addition of new water points supported by the additional financing</i>								
Burkina Faso (Number)		76.00	76.00	101.00	128.00	148.00	148.00	148.00
<i>Action: This indicator has been Revised</i>								
Chad (Number)		113.00	136.00	166.00	196.00	211.00	211.00	211.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>								
Mali (Number)		24.00	24.00	48.00	73.00	73.00	73.00	73.00
<i>Action: This indicator has been Revised</i>								
Mauritania (Number)		118.00	168.00	268.00	283.00	303.00	318.00	333.00
<i>Action: This indicator has been Revised</i>								
<b>Rationale:</b> <i>Adjustment of baseline and addition of new water points supported by the additional financing</i>								
Niger (Number)		52.00	87.00	191.00	217.00	227.00	236.00	236.00
<i>Action: This indicator has been Revised</i>								
<b>Rationale:</b> <i>Adjustment of baseline and addition of new water points supported by the additional financing</i>								
Senegal (Number)		15.00	15.00	18.00	25.00	30.00	35.00	35.00
<i>Action: This indicator has been Revised</i>								
Cultivated fodder produced and available to pastoralists and agro-pastoralists thanks to the Project - Regional level (Metric ton)		0.00	3,316.00	11,520.00	20,236.00	26,215.00	28,456.00	28,956.00
<i>Action: This indicator has been Revised</i>								
<b>Rationale:</b> <i>Adjustment to take into account new activities in Niger and Mauritania resulting from the Additional Financing.</i>								



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Burkina Faso (Metric ton)		0.00	0.00	400.00	600.00	800.00	1,000.00	1,000.00
Chad (Metric ton)		0.00	300.00	500.00	1,000.00	1,500.00	2,000.00	2,500.00
Mali (Metric ton)		0.00	0.00	300.00	600.00	900.00	1,200.00	1,200.00
Mauritania (Metric ton)		0.00	400.00	2,656.00	4,616.00	5,576.00	5,576.00	5,576.00
<b>Action: This indicator has been Revised</b>								
Niger (Metric ton)		0.00	1,000.00	2,400.00	4,100.00	5,400.00	5,900.00	5,900.00
<b>Action: This indicator has been Revised</b>								
Senegal (Metric ton)		0.00	16.00	190.00	604.00	1,063.00	1,304.00	1,304.00
Bilateral and multilateral agreements facilitating a peaceful transhumance established thanks to the Project (Number)		0.00	1.00	2.00	4.00	6.00	6.00	6.00
Reduction rate of conflicts linked to mobile livestock systems in three transhumance and trade axes (West, Center, and East) in the Sahel and West Africa (Percentage)		0.00	5.00	10.00	15.00	20.00	25.00	30.00
<b>Component 3. Livestock value chain improvement</b>								



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Operational markets according to defined criteria rehabilitated and built on regional routes thanks to the Project - Regional level (Number)		89.00	89.00	117.00	148.00	169.00	173.00	173.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Update of baselines taking into account final results of PRAPS-1</b>							
Burkina Faso (Number)		9.00	9.00	9.00	13.00	21.00	21.00	21.00
<b>Action: This indicator has been Revised</b>								
Chad (Number)		12.00	12.00	17.00	24.00	24.00	24.00	24.00
<b>Action: This indicator has been Revised</b>								
Mali (Number)		23.00	23.00	28.00	33.00	33.00	33.00	33.00
<b>Action: This indicator has been Revised</b>								
Mauritania (Number)		9.00	9.00	9.00	12.00	17.00	21.00	21.00
<b>Action: This indicator has been Revised</b>								
Niger (Number)		28.00	28.00	45.00	55.00	62.00	62.00	62.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>								
Senegal (Number)		8.00	8.00	9.00	9.00	12.00	12.00	12.00
<i>Action: This indicator has been Revised</i>								
Implementation rate of action plans developed by umbrella pastoral organizations (part supported by the Project) - Regional level (Percentage)		0.00						80.00
Burkina Faso (Percentage)		0.00	0.00	25.00	50.00	75.00	80.00	80.00
Chad (Percentage)		0.00	0.00	80.00	80.00	80.00	80.00	80.00
Mali (Percentage)		0.00	0.00	70.00	80.00	90.00	90.00	90.00
Mauritania (Percentage)		0.00	0.00	80.00	80.00	90.00	90.00	90.00
Niger (Percentage)		0.00	0.00	80.00	80.00	80.00	80.00	80.00
Senegal (Percentage)		0.00	0.00	80.00	80.00	80.00	80.00	80.00
Direct beneficiaries of innovative sub-projects to valorize pastoral value chains promoted by the Project (Number)		0.00	650.00	2,750.00	5,150.00	7,200.00	8,100.00	8,700.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Burkina Faso (Number)		0.00	50.00	250.00	300.00	300.00	300.00	300.00
Chad (Number)		0.00	0.00	900.00	1,800.00	2,400.00	2,400.00	2,400.00
Mali (Number)		0.00	0.00	250.00	750.00	1,000.00	1,000.00	1,000.00
Mauritania (Number)		0.00	0.00	150.00	300.00	600.00	900.00	900.00
Niger (Number)		0.00	600.00	1,200.00	1,800.00	2,300.00	2,300.00	2,300.00
Senegal (Number)		0.00	0.00	0.00	200.00	600.00	1,200.00	1,800.00
Of which young people 18 - 24 (regional) (Number)		0.00	195.00	842.00	1,617.00	2,425.00	2,734.00	2,794.00
Burkina Faso (Number)		0.00	15.00	75.00	90.00	90.00	90.00	90.00
Chad (Number)		0.00	0.00	172.00	322.00	645.00	774.00	774.00
Mali (Number)		0.00	0.00	175.00	525.00	700.00	700.00	700.00
Mauritania (Number)		0.00	0.00	60.00	120.00	240.00	360.00	360.00
Niger (Number)		0.00	180.00	360.00	540.00	690.00	690.00	690.00
Senegal (Number)		0.00	0.00	0.00	20.00	60.00	120.00	180.00
Of which young people 25 - 40 (regional)		0.00	455.00	1,255.00	2,050.00	2,870.00	3,170.00	3,290.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
(Number)								
Burkina Faso (Number)	0.00	35.00	175.00	210.00	210.00	210.00	210.00	210.00
Chad (Number)	0.00	0.00	120.00	225.00	450.00	540.00	540.00	540.00
Mali (Number)	0.00	0.00	75.00	225.00	300.00	300.00	300.00	300.00
Mauritania (Number)	0.00	0.00	45.00	90.00	180.00	270.00	270.00	270.00
Niger (Number)	0.00	420.00	840.00	1,260.00	1,610.00	1,610.00	1,610.00	1,610.00
Senegal (Number)	0.00	0.00	0.00	40.00	120.00	240.00	360.00	360.00
Of which Female (regional) (Number)	0.00	255.00	1,095.00	2,220.00	3,207.00	3,747.00	4,137.00	4,137.00
Burkina Faso (Number)	0.00	15.00	75.00	90.00	90.00	90.00	90.00	90.00
Chad (Number)	0.00	0.00	265.00	530.00	707.00	707.00	707.00	707.00
Mali (Number)	0.00	0.00	200.00	600.00	800.00	800.00	800.00	800.00
Mauritania (Number)	0.00	0.00	75.00	150.00	300.00	450.00	450.00	450.00
Niger (Number)	0.00	240.00	480.00	720.00	920.00	920.00	920.00	920.00
Senegal (Number)	0.00	0.00	0.00	130.00	390.00	780.00	1,170.00	1,170.00





Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Trade barriers monitored on selected cross-border marketing areas and disseminated by the Project (Number)		0.00	1.00	2.00	3.00	3.00	3.00	3.00
<b>Component 4. Social and economic inclusion improvement, women and youth (Action: This Component has been Revised)</b>								
Women and youth in the pastoral sector who have benefited from technical and vocational training programs or skills training programs (Number)		0.00	850.00	3,110.00	5,220.00	7,440.00	8,690.00	8,740.00
Burkina Faso (Number)		0.00	240.00	640.00	1,040.00	1,200.00	1,200.00	1,200.00
Chad (Number)		0.00	0.00	750.00	1,500.00	2,250.00	3,000.00	3,000.00
Mali (Number)		0.00	110.00	270.00	430.00	540.00	540.00	540.00
Mauritania (Number)		0.00	0.00	300.00	400.00	800.00	1,000.00	1,000.00
Niger (Number)		0.00	500.00	1,000.00	1,500.00	2,000.00	2,000.00	2,000.00
Senegal (Number)		0.00	0.00	150.00	350.00	650.00	950.00	1,000.00
Of which young people 18 - 24 (regional) (Number)		0.00	595.00	1,975.00	3,249.00	4,601.00	5,273.00	5,308.00
Burkina Faso (Number)		0.00	168.00	448.00	728.00	840.00	840.00	840.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Chad (Number)		0.00	0.00	323.00	645.00	968.00	1,290.00	1,290.00
Mali (Number)		0.00	77.00	189.00	301.00	378.00	378.00	378.00
Mauritania (Number)		0.00	0.00	210.00	280.00	560.00	700.00	700.00
Niger (Number)		0.00	350.00	700.00	1,050.00	1,400.00	1,400.00	1,400.00
Senegal (Number)		0.00	0.00	105.00	245.00	455.00	665.00	700.00
Of which young people 25 - 40 (regional) (Number)		0.00	255.00	933.00	1,566.00	2,232.00	2,607.00	2,622.00
Burkina Faso (Number)		0.00	72.00	192.00	312.00	360.00	360.00	360.00
Chad (Number)		0.00	0.00	225.00	450.00	675.00	900.00	900.00
Mali (Number)		0.00	33.00	81.00	129.00	162.00	162.00	162.00
Mauritania (Number)		0.00	0.00	90.00	120.00	240.00	300.00	300.00
Niger (Number)		0.00	150.00	300.00	450.00	600.00	600.00	600.00
Senegal (Number)		0.00	0.00	45.00	105.00	195.00	285.00	300.00
Of which Female (regional) (Number)		0.00	438.00	1,644.00	2,780.00	4,024.00	4,430.00	4,784.00
Burkina Faso (Number)		0.00	72.00	192.00	312.00	360.00	360.00	360.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Chad (Number)		0.00	0.00	450.00	900.00	1,350.00	1,800.00	1,800.00
Mali (Number)		0.00	66.00	162.00	258.00	324.00	0.00	324.00
Mauritania (Number)		0.00	0.00	150.00	200.00	400.00	500.00	500.00
Niger (Number)		0.00	300.00	600.00	900.00	1,200.00	1,200.00	1,200.00
Senegal (Number)		0.00	0.00	90.00	210.00	390.00	570.00	600.00
Pastoralists and agropastoralists having obtained a civil status document or a registration in the social registry thanks to the Project (Number)		0.00	6,675.00	21,700.00	61,200.00	84,675.00	107,350.00	109,000.00
Burkina Faso (Number)		0.00	3,125.00	12,250.00	47,250.00	65,925.00	85,000.00	85,000.00
Chad (Number)		0.00	0.00	1,000.00	1,500.00	2,500.00	3,500.00	4,500.00
Mali (Number)		0.00	2,550.00	5,250.00	5,750.00	6,250.00	6,350.00	6,500.00
Mauritania (Number)		0.00	0.00	500.00	1,500.00	2,000.00	2,500.00	3,000.00
Niger (Number)		0.00	1,000.00	2,200.00	3,700.00	5,000.00	5,000.00	5,000.00
Senegal (Number)		0.00	0.00	500.00	1,500.00	3,000.00	5,000.00	5,000.00
Direct beneficiaries of income-generating		35,376.00	38,014.00	44,002.00	49,307.00	54,912.00	59,762.00	59,762.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
activities promoted by the Project (Number)								
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baseline and addition of new beneficiaries supported in Niger by the additional financing</b>							
Burkina Faso (Number)		1,240.00	1,240.00	1,440.00	2,040.00	2,640.00	3,240.00	3,240.00
<b>Action: This indicator has been Revised</b>								
Chad (Number)		864.00	864.00	2,114.00	3,364.00	4,614.00	5,864.00	5,864.00
<b>Action: This indicator has been Revised</b>								
Mali (Number)		13,574.00	13,574.00	14,074.00	14,674.00	15,174.00	15,574.00	15,574.00
<b>Action: This indicator has been Revised</b>								
Mauritania (Number)		16,467.00	16,467.00	17,467.00	18,467.00	19,467.00	20,467.00	20,467.00
<b>Action: This indicator has been Revised</b>								
Niger (Number)		626.00	3,264.00	5,902.00	6,957.00	8,012.00	8,012.00	8,012.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baseline and addition of new beneficiaries supported by the additional financing</b>							
Senegal (Number)		2,605.00	2,605.00	3,005.00	3,805.00	5,005.00	6,605.00	6,605.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<b>Action: This indicator has been Revised</b>								
Of which young people 18-24 (regional) (Number)		0.00	1,847.00	5,858.00	9,112.00	12,495.00	15,270.00	15,270.00
<b>Action: This indicator has been Revised</b>								
Burkina Faso (Number)		0.00	0.00	40.00	160.00	280.00	400.00	400.00
Chad (Number)		0.00	0.00	875.00	1,750.00	2,625.00	3,500.00	3,500.00
Mali (Number)		0.00	0.00	350.00	770.00	1,120.00	1,400.00	1,400.00
Mauritania (Number)		0.00	0.00	700.00	1,400.00	2,100.00	2,800.00	2,800.00
Niger (Number)		0.00	1,847.00	3,693.00	4,432.00	5,170.00	5,170.00	5,170.00
<b>Action: This indicator has been Revised</b>								
<b>Rationale: addition of new beneficiaries supported by the additional financing</b>								
Senegal (Number)		0.00	0.00	200.00	600.00	1,200.00	2,000.00	2,000.00
Of which young people 25-40 (regional) (Number)		0.00	317.00	1,678.00	3,630.00	5,611.00	7,366.00	7,366.00
Burkina Faso (Number)		0.00	0.00	100.00	640.00	1,120.00	1,600.00	1,600.00
Chad (Number)		0.00	0.00	375.00	750.00	1,125.00	1,500.00	1,500.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Mali (Number)		0.00	0.00	150.00	330.00	480.00	600.00	600.00
Mauritania (Number)		0.00	0.00	300.00	600.00	900.00	1,200.00	1,200.00
Niger (Number)		0.00	791.00	1,581.00	1,898.00	2,214.00	2,214.00	2,214.00
<b>Action: This indicator has been Revised</b>								
Senegal (Number)		0.00	0.00	120.00	360.00	720.00	1,200.00	1,200.00
Of which Female (regional) (Number)		30,538.00	32,638.00	37,328.00	41,352.00	45,536.00	49,036.00	49,036.00
<b>Action: This indicator has been Revised</b>		<b>Rationale: Adjustment to take into account revised baseline and new activities in Niger resulting from the Additional Financing</b>						
Burkina Faso (Number)		539.00	539.00	679.00	1,099.00	1,519.00	1,939.00	1,939.00
<b>Action: This indicator has been Revised</b>								
Chad (Number)		458.00	458.00	1,458.00	2,458.00	3,458.00	4,458.00	4,458.00
<b>Action: This indicator has been Revised</b>								
Mali (Number)		11,130.00	11,130.00	11,530.00	12,010.00	12,410.00	12,730.00	12,730.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>								
Mauritania (Number)		15,808.00	15,808.00	16,608.00	17,408.00	18,208.00	19,008.00	19,008.00
<i>Action: This indicator has been Revised</i>								
Niger (Number)		561.00	2,671.00	4,781.00	5,625.00	6,469.00	6,469.00	6,469.00
<i>Action: This indicator has been Revised</i>		<b>Rationale:</b> <i>Adjustment of baseline and addition of new beneficiaries supported by the additional financing</i>						
Senegal (Number)		2,032.00	2,032.00	2,272.00	2,752.00	3,458.00	4,458.00	4,458.00
<i>Action: This indicator has been Revised</i>								
<b>Component 5. Project coordination, institutional strengthening, crisis prevention and response (Action: This Component has been Revised)</b>								
Technical and scientific executives trained in pastoralism (including diploma courses) (Number)		137.00	530.00	880.00	1,067.00	1,282.00	1,409.00	1,409.00
<i>Action: This indicator has been Revised</i>		<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>						
Burkina Faso (Number)		33.00	186.00	276.00	312.00	374.00	435.00	435.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>		<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>						
Chad (Number)		25.00	109.00	185.00	221.00	256.00	289.00	289.00
<i>Action: This indicator has been Revised</i>		<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>						
Mali (Number)		16.00	56.00	92.00	116.00	152.00	176.00	176.00
<i>Action: This indicator has been Revised</i>		<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>						
Mauritania (Number)		14.00	34.00	64.00	104.00	134.00	134.00	134.00
<i>Action: This indicator has been Revised</i>		<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>						
Niger (Number)		27.00	67.00	167.00	207.00	247.00	247.00	247.00
<i>Action: This indicator has been Revised</i>		<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>						
Senegal (Number)		22.00	78.00	96.00	107.00	119.00	128.00	128.00





Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
Of which Female (regional) (Number)		30.00	185.00	338.00	422.00	515.00	564.00	564.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
Burkina Faso (Number)		8.00	54.00	81.00	92.00	110.00	129.00	129.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
Chad (Number)		3.00	45.00	83.00	101.00	119.00	135.00	135.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
Mali (Number)		2.00	22.00	40.00	52.00	70.00	82.00	82.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
Mauritania (Number)		3.00	13.00	28.00	48.00	63.00	63.00	63.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>	<i>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Niger (Number)	6.00	26.00	76.00	96.00	116.00	116.00	116.00	
<i>Action: This indicator has been Revised</i>	<i>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Senegal (Number)	8.00	25.00	30.00	34.00	37.00	40.00	40.00	
<i>Action: This indicator has been Revised</i>								
Pastoralism-specific parameters sustained in the national early warning system (Yes/No)	No						Yes	
Burkina Faso (Yes/No)	No	No	No	No	Yes	Yes	Yes	
Chad (Yes/No)	No	No	No	No	Yes	Yes	Yes	
Mali (Yes/No)	No	No	No	No	Yes	Yes	Yes	
Mauritania (Yes/No)	No	No	No	No	Yes	Yes	Yes	
Niger (Yes/No)	No	No	No	No	Yes	Yes	Yes	
Senegal (Yes/No)	No	No	No	No	Yes	Yes	Yes	



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Management committees with at least 15% of women actively participating (Percentage)		0.00						70.00
Burkina Faso (Percentage)		0.00	40.00	50.00	70.00	70.00	70.00	70.00
Chad (Percentage)		0.00	40.00	50.00	70.00	70.00	70.00	70.00
Mauritania (Percentage)		0.00	40.00	50.00	70.00	70.00	70.00	70.00
Mali (Percentage)		0.00	40.00	50.00	70.00	70.00	70.00	70.00
Niger (Percentage)		0.00	40.00	50.00	70.00	70.00	70.00	70.00
Senegal (Percentage)		0.00	40.00	50.00	70.00	70.00	70.00	70.00
Women having received financial literacy training (Percentage)		0.00						80.00
Burkina Faso (Percentage)		0.00	40.00	80.00	80.00	80.00	80.00	80.00
Chad (Percentage)		0.00	40.00	80.00	80.00	80.00	80.00	80.00
Mauritania (Percentage)		0.00	40.00	80.00	80.00	80.00	80.00	80.00
Mali (Percentage)		0.00	40.00	80.00	80.00	80.00	80.00	80.00
Niger (Percentage)		0.00	40.00	80.00	80.00	80.00	80.00	80.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Senegal (Percentage)		0.00	40.00	80.00	80.00	80.00	80.00	80.00
Senegal (Percentage)		0.00	40.00	80.00	80.00	80.00	80.00	80.00
Farmers having benefited from agricultural assets or services - Regional level (Number)		2,600,510.00	3,630,510.00	5,200,510.00	8,050,510.00	11,650,510.00	13,800,510.00	15,200,510.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Update of baselines taking into account final results of PRAPS-1</b>							
Burkina Faso (Number)		259,646.00	459,646.00	609,646.00	759,646.00	909,646.00	1,059,646.00	1,209,646.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
Chad (Number)		533,018.00	553,018.00	683,018.00	983,018.00	1,483,018.00	2,033,018.00	2,483,018.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
Mali (Number)		447,475.00	847,475.00	1,297,475.00	2,447,475.00	4,247,475.00	5,247,475.00	5,797,475.00
<b>Action: This indicator has been Revised</b>	<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>							
Mauritania (Number)		217,720.00	247,720.00	417,720.00	917,720.00	1,417,720.00	1,567,720.00	1,567,720.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<b>Action: This indicator has been Revised</b>		<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>						
Niger (Number)		789,637.00	1,139,637.00	1,589,637.00	1,989,637.00	2,389,637.00	2,589,637.00	2,839,637.00
<b>Action: This indicator has been Revised</b>		<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>						
Senegal (Number)		353,014.00	383,014.00	603,014.00	953,014.00	1,203,014.00	1,303,014.00	1,303,014.00
<b>Action: This indicator has been Revised</b>		<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>						
Of which Female - Regional (Number)		836,647.00	1,145,647.00	1,781,647.00	2,471,647.00	3,551,647.00	4,196,647.00	4,616,647.00
<b>Action: This indicator has been Revised</b>		<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>						
Burkina Faso (Number)		114,292.00	174,292.00	219,292.00	264,292.00	309,292.00	354,292.00	399,292.00
<b>Action: This indicator has been Revised</b>		<b>Rationale: Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</b>						
Chad (Number)		181,226.00	187,226.00	226,226.00	316,226.00	466,226.00	631,226.00	766,226.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Mali (Number)		146,538.00	266,538.00	401,538.00	746,538.00	1,286,538.00	1,586,538.00	1,751,538.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Mauritania (Number)		60,961.00	69,961.00	120,961.00	270,961.00	420,961.00	465,961.00	465,961.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Niger (Number)		229,280.00	334,280.00	469,280.00	589,280.00	709,280.00	769,280.00	844,280.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Senegal (Number)		104,350.00	113,350.00	284,350.00	344,350.00	359,350.00	389,350.00	389,350.00
<i>Action: This indicator has been Revised</i>	<b>Rationale:</b> <i>Adjustment of baselines taking into account values of PRAPS-1 as of December 31, 2021</i>							
Countries and regional institutional capacity built for climate-informed livestock policies and strategies (Number)		0.00	0.00	0.00	0.00	4.00	5.00	7.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Regional capacity strengthened to conduct prospective analyzes on the livestock sector (Number)		0.00	0.00	2.00	2.00	4.00	4.00	6.00
Percentage of grievances addressed in line with timelines and protocols established (Percentage)		50.00	60.00	70.00	80.00	90.00	90.00	90.00
Beneficiaries of emergency and short term recovery activities (Number)		0.00	181,700.00	515,000.00	650,000.00	650,000.00	650,000.00	650,000.00
<b>Action: This indicator is New</b>	<b>Rationale:</b> <i>This indicator will reflect the beneficiaries supported under emergency &amp; recovery support activities (cumulative), namely through the additional financing in Niger and Mauritania</i>							
Niger (Number)		0.00	31,700.00	277,000.00	324,000.00	324,000.00	324,000.00	324,000.00
<b>Action: This indicator is New</b>								
Mauritania (Number)		0.00	150,000.00	238,000.00	326,000.00	326,000.00	326,000.00	326,000.00
<b>Action: This indicator is New</b>								



**Monitoring & Evaluation Plan: PDO Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Vaccination coverage rate for CBPP - Regional level		Annual	KBT database Vaccination campaign plans Vaccination campaign reports	Vaccination coverage is determined at the end of each campaign / year, based on field reports. The data of the vaccination campaigns will preferably be entered in the KBT database. The data, which will have been verified and validated by the Directorate of Veterinary Services (DVS), will be sent via the PCU to the regional coordination of the animal health component (RAHC and OIE) for review and consolidation.	DVS, responsible staff for Component 1
Burkina Faso					
Chad					
Mali					
Mauritania					





Niger					
Senegal					
Small ruminants vaccinated and marked against PPR - Regional level		Annual	KBT database Vaccination campaign plans Vaccination campaign reports	The number of vaccinated & marked small ruminants is determined at the end of each campaign/year, based on field reports, and added to the result achieved the previous year. The data of the vaccination campaigns will preferably be entered in the KBT database. The data, which will have been verified and validated by the DVS, will be sent via the PCU to the Regional Coordination of the Animal Health Component (RAHC and OIE) for review and consolidation.	DVS, responsible staff for Component 1
Burkina Faso					
Chad					
Mali					



Mauritania					
Niger					
Senegal					
Land area under sustainable landscape management practices	The indicator measures, in hectares, the land area for which new and/or improved sustainable landscape management practices have been introduced. Land is the terrestrial biologically productive system comprising soil, vegetation, and the associated ecological and hydrological processes; Adoption refers to change of practice or change in the use of a technology promoted or introduced by the project; Sustainable landscape management (SLM) practices refers to a combination of at least two technologies and approaches to increase land quality and restore degraded lands for example, agronomic,	Biannual	Activity reports Data Collection Sheets (KBT)	The indicator is calculated on the basis of the following elements which will be counted individually so as to be able to report the results in a disaggregated manner: - Pastoral areas identified in a participatory manner and secured by tools for collaborative management of natural resources (Pastoral Areas, Pastoral Charters, Pastoral Units, Pastoral Perimeters, Pastoral Associations etc.) and which are also subject to minimum development on all or part of the pastoral area. - Restored or reclaimed grazing areas (recovery of degraded land, the <i>bourgou</i> fields) outside	Regional branches, responsible staff for component 2



	<p>vegetative, structural, and management measures that, applied as a combination, increase the connectivity between protected areas, forest land, rangeland, and agriculture land.</p>			<p>areas under collaborative management.</p> <ul style="list-style-type: none"><li>- Facilities: routes and tracks (transhumance, trade, access to markets, infrastructures, etc.) outside areas under collaborative management.</li><li>- Firewalls, deferred grazing areas, outside areas under collaborative management.</li></ul> <p>The different conventions/maps / pastoral perimeters, their GPS positioning and management methods will need to be approved and validated by the local authority to be accounted for in the results framework. The document will then have to be archived (at the Livestock Directorate, at the level of Land Management, at the level of umbrella POs,</p>	
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				Judiciary system). The Regional branches will monitor the achievements in KBT, to be validated and consolidated by the component 1 manager. The GIS and KBT bases will be used for the mapping of the areas. These areas will be reported in the results frameworks every six months and introduced in the regional webmapping platform. The baseline corresponds to PRAPS-1 achievements as of December 31, 2020, one year before closing.	
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					



Senegal					
Income increase of pastoral households generated with the support of the Project - Regional level		A0 (baseline), A3 (RMP) and A6 (completion )	Survey	<p>The data collection and monitoring of the indicator is based on a survey method already used in PRAPS-1, with the support of CIRAD. This methodology will be used again for a study to determine changes in the income of pastoral and agro-pastoral households in the PRAPS-1 intervention zone. This study will make it possible to determine for each country the reference values of the indicator for PRAPS-2.</p> <p>Given the impossibility of following the same sample throughout the duration of the project, the study methodology will ensure that for each survey (A1, A3, A6) the groups have similar demographic and socio-economic characteristics</p>	Harmonized surveys managed by the Regional Coordinating Office (PRAPS-2/CILSS), in conjunction with country PCUs



				and are representative of the target population in the project areas. Particularly at the start, the survey will focus on a characterization of the beneficiaries, and sampling will be carried out on the project's target beneficiaries (and not on the entire population).	
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					

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

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Level of implementation of the National Strategic Plans (NSPs) for PPR and CBPP		Biannual	Activity reports of the	The data will be shared with Component 1 and	DSV, responsible staff for Component 1



			agencies involved Databases (KTB)/M&E tools	M&E managers, who will complete the index calculation Excel file. Upon request, the OIE team in charge of tailored technical assistance will be able to provide methodological support on the use and rating of the various critical points.	
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Veterinary units built or rehabilitated by the Project and functional in the targeted areas - Regional level		Biannual	Receipt ticket, proof of staff assignment Identification form and data collection Registration in KBT/regional webmapping	The regional branches follow the work, reception, and functionality of the units, collect and transmit the data to the PCU, for validation and synthesis.	DVS, regional branches, responsible staff for component 1



Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Vaccination pens built or rehabilitated by the Project in the targeted areas - Regional level		Biannual	Reception report Identification form and data collection Registration in KBT/regional webmapping	The regional branches follow the work and reception of the pens, collect and transmit the data to the PCU, for validation and synthesis.	DVS, regional branches, responsible staff for component 1
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					





Inspections dedicated to the control of veterinary medicines implemented through the Project		Biannual	Inspection report Quarterly/Semi-Annual Report KBT database	The DVS sends the reports and activity reports to the responsible staff of Component 1 who checks that the accounting conditions are met.	DVS, responsible staff for Component 1
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Regional Veterinary Committee operational		Biannual	Reports from the RAHC, including the monitoring of RVC recommendations and action plans.	The reports will be shared with the R-PCU M&E specialist.	RAHC
Functional committees for the sustainable management of landscapes facilitating mobility established or supported by the		Biannual	Action Plans Activity reports	Proximity monitoring by regional branches	regional branches, responsible staff for Component 2



Project - Regional level					
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Functional water points accessible to (agro)pastoralists on livestock mobility routes and on new transhumance routes supported by the Project - Regional level		Biannual	<p>Identification sheet for each water point (including type, geolocalization, etc.)</p> <p>Acceptance of works report</p> <p>Post-Rec eption Follow-up</p> <p>Registration in KBT/regional webmapping</p>	<p>Identification sheet for each water point at the time of preparation of the dossier/technical study, at reception, and one year later (to verify functionality).</p>	<p>Regional branches, responsible staff for Component 2</p>
Burkina Faso					
Chad					



Mali					
Mauritania					
Niger					
Senegal					
Cultivated fodder produced and available to pastoralists and agro-pastoralists thanks to the Project - Regional level		Biannual	Activity report of SC.2.3 Activity reports of sub-projects (SC 3.3)/ IGA (SC 4.3) Post-financing monitoring	Each initiative or sub-project will provide a business plan indicating the estimated quantities to be produced each semester. At the end of each semester, the activity reports (indicating the volumes produced) will be sent to the assistants for validation and consolidation. Ad-hoc verifications will be carried out by the regional branches. The final figures will be sent to the PCU (responsible staff for Component 2 and M&E) for validation and consolidation.	regional branches, responsible staff for component 2
Burkina Faso					



Chad					
Mali					
Mauritania					
Niger					
Senegal					
Bilateral and multilateral agreements facilitating a peaceful transhumance established thanks to the Project		Annual	Agreements signed	CILSS and ECOWAS will compile all agreements signed as a result of their support	Data will be consolidated by the R-PCU M&E specialist
Reduction rate of conflicts linked to mobile livestock systems in three transhumance and trade axes (West, Center, and East) in the Sahel and West Africa		Annual	Registries of enforcement authorities, Technical Services (Water and Forests, Agriculture, Livestock, Fisheries), Land Commissions, Local Authorities, Professional Organizations, community leaders	The various actors responsible for collecting information at the local level will be in particular: POs ; NGOs active in the identified areas ; Local authorities / municipalities ; Technical services in charge of agriculture and livestock. Data will be collected through KBT. Collection tools will be developed by CILSS, ECOWAS and WAEMU jointly and will be co-validated with stakeholders (PREDIP,	RCUs of PRAPS-2, PREDIP and PEPISAO projects managed by CILSS and those of other projects that could be mobilized subsequently.



				<p>PCU / PRAPS-2 focal points, National pastoral projects managers, Departments in charge of security and pastoral development, POs, heads of National Transhumance Committees).</p> <p>At the regional level, a committee made up of experts from CILSS, ECOWAS, WAEMU, will consolidate, analyze, produce the report and disseminate information collected from the national level.</p>	
Operational markets according to defined criteria rehabilitated and built on regional routes thanks to the Project - Regional level		Biannual	<p>Market identification form, drawn up upon provisional reception (with minutes) and the effective start of commercial activities</p> <p>SMC activity</p>	<p>The regional branches prepare the identification sheets and collect the SMC reports and submit them to the PCU (responsible staff for Component 3 and M&amp;E) for validation and consolidation.</p>	<p>Regional branches , responsible staff for component 3</p>



			report Registration in KBT/regional webmapping		
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Implementation rate of action plans developed by umbrella pastoral organizations (part supported by the Project) - Regional level		Annual	Annual action plan for each organization Annual activity report for each organization Ad hoc audits	At the beginning of each year, organizations send their annual action plans, with the activities supported by the project clearly highlighted (physical quantities and budget). The Component 3 manager collects and validates the year's objectives (budget and quantities) in a consolidated database. These activities	Organizations, Responsible staff for Component 3



				<p>supported by the project are then included in the annual work plan and budget (AWPB) of the Project for the current year.</p> <p>At the end of each year, the organizations send their annual activity report and the Component 3 manager verifies the budgetary and physical execution of the activities supported by the project.</p> <p>The average between physical and budget executions is reported to M&amp;E.</p>	
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					



Direct beneficiaries of innovative sub-projects to valorize pastoral value chains promoted by the Project		Biannual	Business Plans Post-financing follow-up (to validate participation) (collection form)	Each selection committee provides the PCU with the plans of all approved sub-projects. Recipients will be counted twice: at the planning and funding approval stage, and after implementation of the proposed investments. The final figures will be those recorded after funding.	Accompanying operators (if applicable), responsible staff Component 3
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Of which young people 18 - 24 (regional)					
Burkina Faso					
Chad					
Mali					





Mauritania					
Niger					
Senegal					
OF which young people 25 - 40 (regional)					
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Of which Female (regional)					
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Trade barriers monitored on selected cross-border marketing areas and disseminated by the Project		Biannual	Documents published	The responsible staff will provide data/reports to the R-PCU M&E	Responsible staff for C3 in R-PCU



				specialist	
Women and youth in the pastoral sector who have benefited from technical and vocational training programs or skills training programs		Biannual	Attendance and completion records for each training course financed mainly by PRAPS-2	Each training organizer provides the Chapters, responsible staff for Component 4, and M&E PCU with final lists of participants who have completed the training. The M&E PCU consolidates the list of individuals by type of training, gender, and age group.	Training organizers, responsible staff for component 4
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Of which young people 18 - 24 (regional)					
Burkina Faso					
Chad					



Mali					
Mauritania					
Niger					
Senegal					
Of which young people 25 - 40 (regional)					
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Of which Female (regional)					
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					



<p>Pastoralists and agropastoralists having obtained a civil status document or a registration in the social registry thanks to the Project</p>		<p>Biannual</p>	<ul style="list-style-type: none"> <li>• Registry of Civil Status</li> <li>• Unified Social Registry</li> <li>• Activity reports and lists of issuance of acts</li> </ul>	<p>The civil registry provides the regional branches and PCU (responsible staff for Component 4 and M&amp;E) with the list of beneficiaries. The M&amp;E specialist consolidates the list of individuals by type of procedure, gender, and age group. The Unified Social Registry provides the list of newly registered persons in the PRAPS2 intervention zones who meet the agro-pastoralists and pastoralists criteria.</p>	<p>Regional branches, responsible staff for component 4</p>
<p>Burkina Faso</p>					
<p>Chad</p>					
<p>Mali</p>					
<p>Mauritania</p>					
<p>Niger</p>					
<p>Senegal</p>					



Direct beneficiaries of income-generating activities promoted by the Project		Biannual	Business plans/IGA proposals Post-financing follow-up (to validate participation) (collection form)	Each selection committee shall provide the PCU with plans of all approved IGAs and post-training installation kits (C4.1). Recipients will be counted twice: at the planning and funding approval stage, and after implementation of the proposed investments. The final figures will be those recorded after funding.	Operators in charge (if any), Responsible staff for component 4
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Of which young people 18-24 (regional)					
Burkina Faso					
Chad					



Mali					
Mauritania					
Niger					
Senegal					
Of which young people 25-40 (regional)					
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Of which Female (regional)					
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					



Technical and scientific executives trained in pastoralism (including diploma courses)		Biannual	Attendance and completion records for each training course financed mainly by PRAPS-2	Each training organizer provides the PCU with the final lists of participants who have completed each training. The M&E responsible consolidates the list of the trained responsible and organizes it by type of training, gender, and age group.	Training organizers, the responsible of the component
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Of which Female (regional)					
Burkina Faso					
Chad					
Mali					
Mauritania					



Niger					
Senegal					
Pastoralism-specific parameters sustained in the national early warning system		Biannual	Monthly newsletters, regular Early Warning System (SAP) reports, quarterly report	The authorized bodies will transmit the reports to the PCU. The responsible staff for M&E analyzes and counts the number of parameters each month.	Responsible for Component 5
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Management committees with at least 15% of women actively participating		Biannual	List and detailed composition of each Committee supported by the Project disaggregated by sex Action	Data collected as part of monitoring activities under Components 2 and 3 involving Management Committees.	Regional branches The Gender focal point will work jointly with staff responsible for components 2 and 3 and review, consolidate and share data with the M&E specialist.





			plans Act ivity reports		
Burkina Faso					
Chad					
Mauritania					
Mali					
Niger					
Senegal					
Women having received financial literacy training		Biannual	Operators and entities involved in the implementati on of components 3.3, 4.1. and 4.3. Action plans Activity r eports	Data collected as part of monitoring activities under Components 3 and 4	Regional branches, responsible for component 5 Gender specialist jointly with staff responsible for components 3 and 4 to review, consolidate and share data with the M&E specialist
Burkina Faso					
Chad					
Mauritania					



Mali					
Niger					
Senegal					
Senegal					
Farmers having benefited from agricultural assets or services - Regional level		Biannual	Data collection forms Activity reports (component/sub-component)	The ES team maintains databases and tracks reports for all four categories of beneficiaries, while avoiding double counting to the extent possible.	Component Leads
Burkina Faso					
Chad					
Mali					
Mauritania					
Niger					
Senegal					
Of which Female - Regional					
Burkina Faso					
Chad					



Mali					
Mauritania					
Niger					
Senegal					
Countries and regional institutional capacity built for climate-informed livestock policies and strategies		Biannual	Activity reports Attendance and completion records for each training course financed by PRAPS-2. Training material and case studies.	Each PCU will collect the list of participants having completed the trainings.	Responsible staff for component 5 and M&E
Regional capacity strengthened to conduct prospective analyzes on the livestock sector		Annual	Studies	Compilation of studies on the livestock sector led or supported by CILSS.	PCUs, and R-PCU, compiled by R-RPU M&E specialist
Percentage of grievances addressed in line with timelines and protocols established		Annual	Records from PCUs.	Responsible staff in charge of grievance mechanisms in each country at N-PCU level will collect and share	Responsible staff in charge of grievance mechanisms Responsible staff in charge of M&E



				data according to a common template. Data will be consolidated at the regional level by R-PCU.	
Beneficiaries of emergency and short term recovery activities					
Niger	This indicator will reflect the beneficiaries of community-based works, as well as livestock feed distribution	Bi-annually	Reports		
Mauritania	This indicator will measure direct beneficiaries of community based works and food distribution	Bi-annual	WFP reports on cash-transfers.		



Annex 1. Economic and Financial Analysis

1. This annex presents the economic and financial analysis (EFA) for the additional financing (AF) to the second phase of the World Bank-financed Regional Sahel Pastoralism Support Project – Phase II (PRAPS-II) both in Niger and Mauritania.

2. The objective of the analysis is to identify, calculate and compare the costs and the advantages of the Project in order to assess its viability on one hand from the point of view of the beneficiaries (financial analysis) and on the other hand from the point of view of the national economy (economic analysis).

Identification of beneficiaries and benefits

3. The beneficiaries of this AF in Niger can be grouped into two categories, namely the direct beneficiaries and the indirect beneficiaries. The direct beneficiaries of the project are pastoral and agro-pastoral households in which there are around 80 percent women and young agro-entrepreneurs, who will benefit from better animal health, better availability and management of natural resources, income-generating activities (IGA) linked to the marketing of livestock and animal husbandry, among others. Indirect beneficiaries, range from other actors in the value chains (production of meat, milk, hides and skins, transport, processing, marketing) linked to pastoral and agro-pastoral production, to the institutions that will benefit from the capacity building activities. In addition, the AF will create direct jobs and improve the living conditions of the population within the project area. Depending on the type of activities, there are also associated benefits. The table below provides a summary.

Table A1.1: Beneficiaries and related benefits of the AF in Niger

Type	Beneficiaries	Description of benefits
Direct	Pastoral and agro-pastoral households	<ul style="list-style-type: none"> <li>Better availability and management of natural resources through the community-based work activities</li> <li>Improved Income</li> <li>Kit of small, irrigated perimeters including (boreholes, submersible electric pumps, Californian network of 1000 ml, a 1000 ml chain-link fence, improved seeds, organic fertilizer, certified organic phytosanitary products, and small agricultural equipment kits.</li> </ul>
	Community members involved in community-based activities	Improvement of the living condition more precisely the income as the counterpart of their work
	Producers of fodder	Capacity building and acquisition of equipment's such as grander
Indirect	Other actors in the value chains	<ul style="list-style-type: none"> <li>Capacity building (alphabetization)</li> <li>Jobs creation and alternative source of income for the community members</li> </ul>

4. The beneficiaries of this AF in Mauritania can also be grouped into two categories, namely the direct beneficiaries and the indirect beneficiaries. The direct beneficiaries of the project are pastoral and agro-pastoral households, who will benefit from rehabilitation and regeneration of natural resources, construction of pastoral stations and wells, development of cropping sites, setting up of warehouses and



storage sheds for fodder production, among others. Indirect beneficiaries are other actors in the value chains linked to pastoral and agro-pastoral production. In addition, the AF will create direct jobs and improve the living conditions of the population living within the project area. The table below provides a summary.

Table A1.2: Beneficiaries and related benefits of AF in Mauritania

Type	Beneficiaries	Description of benefits
Direct	Pastoral and agro-pastoral households	<ul style="list-style-type: none"> <li>• Rehabilitation and regeneration of natural resources (reforestation, sowing, etc.)</li> <li>• Pastoral stations and wells =</li> <li>• Development of ponds</li> <li>• Firewall</li> </ul>
	Community members involved in community-based activities	<ul style="list-style-type: none"> <li>• Improvement of the living condition</li> </ul>
	Producers of fodder	<ul style="list-style-type: none"> <li>• Setting up of warehouses and storage sheds for fodder production</li> <li>• Development of cropping sites</li> <li>• Irrigated perimeters</li> </ul>
Indirect	Other actors in the value chains	<ul style="list-style-type: none"> <li>• Capacity building (support for the development of the breeding plan)</li> <li>• Jobs creation and alternative source of income for the community members</li> </ul>

**A-FINANCIAL ANALYSIS**

**A1-Methodology and assumptions**

**5. The methodology used is a cost-benefit analysis based on the estimation in monetary terms of the costs and benefits of the AF.** This analysis is mainly based on (i) technical and financial data collected in the field; (ii) reference documents for each sector or drawn from the experience of other project for certain targeted value chains; and (iii) data collected from partner institutions such as IFAD.

**6. The financial analysis is based on the benefits obtained by the beneficiaries in the situation with the project, compared with those which would be obtained in the situation without the project.** It aims to assess the impact of the adoption of new activities and practices proposed by each Project on the financial situation of the beneficiaries. This analysis makes it possible to estimate the profit margin of the people targeted by each Project by their participation in the activities of the Project.

**7. The financial analysis is conducted from the point of view of the direct actors of the various value chains in the areas covered by each project.**

**8. For the AF in Niger,** it covers the operating results of the main activities of the livestock, local and hybrid chicken farm, agricultural and other services providers products, support for fodder production, better availability, and management of natural resources. In addition, the project’s interventions also aim to ensure the capacity building of the direct actors of each of the sectors, improves the living condition of



workers and their families and finally provide funding to more vulnerable people for IGAs in the targeted areas.

**9. For the AF in Mauritania**, it covers the operating results of the main activities of food crops (sorghum, onions, eggplant and tomatoes), support for fodder production, construction of pastoral water stations. In addition, the project’s intervention aims to support the living condition of community members involved in community-based works in the targeted areas.

**10. The financial analysis estimates the operating results of targeted activities and assesses the capacity of recipients to finance the additional operating costs solely through income from production.** Thus, the assumptions made are as follows: (i) all investment, maintenance and operating costs were taken into account for the evaluation of project profitability; (ii) the costs and benefits of the project have been assessed over a period of 10 years ; and (iii) the advantages considered include the values of the additional goods and services marketed at the level of the various links in the Value Chains (weight gains following quality food, weight gain following fattening, and reduction in the mortality rate following local health monitoring in Niger, increased yield per hectare for the AF in Mauritania).

**11. The models represented in the analysis are the different activity models of the typical beneficiaries of each AF, representing the “with project” situation, against a reference situation which corresponds to the “without project” situation.** For the AF in Niger, 15 standard models have been developed to represent the main activities. These models can be grouped into three categories according to the nature of the activities, namely Category 1: Income Generative Activities (IGA), Category 2: Support for the development of irrigated crops, and Category 3: Support for the production of fodder. The table below presents these different models.

**Table A1.3: Description of models for the AF in Niger**

Sectors	Models	Situation without project	Situation with project
<b>Category 1: Income Generative Activities (IGA)</b>			
	Cattle fattening	Reduced number of fattening animals, longer fattening period, construction with temporary materials, family labor, no health follow-up, 4 sheep and 2 cycles per year (4 months) for 300 kg (weight)	Larger number of fattening animals, longer fattening period, construction in permanent materials, paid labor and better health follow up, 10 Cattle and 2 cycles per year (4 months) for 400 Kg
	Sheep fattening	Reduced number of fattening animals, longer fattening period, construction with temporary materials, family labor, no health follow-up, 5 Sheep and 2 cycles per year (150 days) for 35 Kg	Larger number of fattening animals, longer fattening period, construction in permanent materials, paid labor and better health follow up, 10 Sheep and 3 cycles per year (120 days) for 35 Kg
	Breeding of small ruminants	Traditional breeding, very low number of head, no health monitoring, no vaccination, no deworming, 1 ram and 3 ewes	Improved traditional breeding with an increased herd with health monitoring, vaccination, and deworming, 1 ram and 10 ewes
	Cattle breeding	Traditional breeding, very low number of head, no health monitoring, no vaccination, no deworming, 1 bull and 3 cows	Improved traditional breeding with an increased herd with health monitoring, vaccination, and deworming, 2 bull and 10 cows



	Local breed chicken farm	Small-scale production, family labor, 10 hens and 1 rooster	Large-scale production, hired labor and better health follow up, 10 hens and 1 rooster
	Broiler farm	Small-scale production, family labor, band of 1000 heads 4 cycles per year	Large-scale production, hired labor and better health follow up, band of 5000 heads 4 cycles per year
	Production of milk	traditional cowshed and local breed milk, 630 liters of milk per year	Improved barn and improved breed milk, 840 liters of milk in the first year with an increase over the years
	Sorghum cultivation	artisanal production with non-improved local inputs, on 1 ha	artisanal production with improved seeds and uses of fertilizers, on 1 ha
	Millet cultivation		
	Niébé cultivation		
<b>Category 2: Support for the development of irrigated crops</b>			
	Oignon production	Cultivation of millet with local seeds and low fertilizers	Modern production with introduction of improved seeds, boreholes, submersible electric pumps, 99alifornian network, chain-link fence, organic fertilizer, certified organic phytosanitary products, and small agricultural equipment kits, on 1 ha
	Tomatoes production	Cultivation of millet with local seeds and low fertilizers, on 1 ha	
	Cabbage production	Cultivation of maize with local seeds and low fertilizers, on 1 ha	
	Sweet potatoes production	Cultivation of maize with local seeds and low fertilizers, on 1 ha	
<b>Category 3: Support the production of fodder</b>			
	Fodder production	Fairly small area, artisanal plowing (2.5ha)	Larger area, mechanized plowing (2.5ha)

12. For the AF in Mauritania, six standard models have been developed to represent the main activities of the Project. These models can be grouped into three categories according to the nature of the activities, namely Category 1: Support for the development of irrigated crops, Category 2: sustainable water management and Category 3: Support the production of fodder. The table below presents these different models.

**Table A1.4: Description of models for AF in Mauritania**

Sectors	Models	Situation Without project	Situation with project
<b>Category 1: Support for the development of irrigated crops</b>			
	Onion and eggplant cultivation	Cultivation on one ha of different crops with local seeds from previous harvests, no fertilizers and no organic product	Better quality seeds, no fertilizers, no organic products, better yield per hectare, early start and continuous manual weeding on one ha
	Tomatoes cultivation		
<b>Category 2: Sustainable water management</b>			
	Pastoral station		Equipped with more energy-efficient pumping system
<b>Category 3: Support the production of fodder</b>			
	Fodder production	Natural production of fodder, local seeds, no fertilizer and no treatment on one ha	Development and equipment of sites, uses of food crops dry matter for fodder production on one ha





	Rainfed Sorghum cultivation	Cultivation on one ha of different crops with local seeds from previous harvests, no fertilizers and no organic product	Better quality seeds, no fertilizers, no organic products, better yield per hectare, early start and continuous manual weeding, on one ha
	Sorghum cultivation in recession period		

**13. Prices.** In both countries, Niger and Mauritania, just as in all the countries of sub-Saharan Africa, the prices of livestock and crops products, for the most part, are freely determined by the market according to the law of supply and demand. The prices used for products from livestock, chicken farm, agricultural and other services providers are market prices which correspond to those negotiated between a trader (wholesaler or retailer)/breeder and the producer/collector. The transaction generally takes place at the points of sale, in the village or at the market.

**14. Financial discount rate.** The financial analysis is carried out over a period of ten years. For the AF in Niger, the discount rate is 8.5 percent. This rate is obtained by taking into consideration for the country, the average deposit interest rate (6.9 percent the average inflation, consumer prices per year (0.6 percent) and the average loan interest rate applied by financial institutions (11 percent). For the AF in Mauritania, the discount rate of 5.9 percent. This rate is obtained by taking into consideration for the country, the average deposit interest rate (5.03 percent), the average inflation, consumer prices per year (2.6 percent) and the average loan interest rate applied by financial institutions (12 percent).

**A2-Results of financial analysis**

15. The financial profitability indicators used are the IRR, the NPV and the benefit/cost ratio. In general, this financial analysis shows that each project’s activities are profitable. For the AF in Niger, the internal rate of return (IRR) varies between 15.4 percent and 32.8 percent and the net present values (NPV) varies between US\$31 (CFAF 18,211) and US\$25,574 (CFAF 15,222,654). For the AF in Mauritania, the internal rate of return (IRR) varies between 18.9 percent and 38.3 percent and the net present values (NPV) varies between US\$162 (MRU 5,935) and US\$30,004 (MRU 1,098,155). In detail, by project, per category and by activity, the main results of this analysis are summarized as follows:

**A2.1-AF in Niger**

**Category 1: Income Generative Activities (IGA)**

**16. Cattle fattening:** The objective is to set up fattening centers. The model is supported by breeders’ farmers and concerns 317 farmers (individual or cooperatives) with two cycles per year. The investments required for this activity consist of building materials, a set of tools and a start-up fund. The financial indicators for this activity are: (i) IRR: 32.8 percent; (ii) NPV: US\$3,154 (CFAF 1,887,929); and (iii) Benefit/Cost ratio: 1.07.

**17. Sheep fattening:** The objective is to set up sheep 317 fattening units. The model is supported by breeder farmers and involves the fattening of sheep with two cycles per year. The investments required for this activity consist of building materials, a set of tools and a start-up fund. The financial indicators for this activity are: (i) IRR: 22.5 percent; (ii) NPV: US\$840 (CFAF 500,557); and (iii) Benefit/Cost ratio: 1.84.

**18. Breeding of small ruminants:** The objective is to improve traditional sheep breeding conditions. The



model is worn by individual breeders or cooperatives around 317, with at least 11 heads of sheep. The investments required for this activity consist of building materials, a set of tools and a start-up fund. The financial indicators for this activity are: (i) IRR: 29.9 percent; (ii) NPV: US\$2,396 (CFAF 1,425,913); and (iii) Benefit/Cost ratio: 1.33.

**19. Cattle breeding:** The objective is to improve the traditional cattle breeding conditions. The model is worn by individual breeders or cooperatives, around 317, with at least 12 head of cattle. The investments required for this activity consist of building materials, a set of tools and a start-up fund. The financial indicators for this activity are: (i) IRR: 28.6 percent; (ii) NPV: US\$7,669 (CFAF 4,564,976); and (iii) Benefit/Cost ratio: 1.69.

**20. Local chicken farm:** The goal is to set up around 317 farms. The model is supported by farmers and involves raising more than 11 breeders with two cycles per year. The investments required for this activity consist of building materials, a set of tools and a start-up fund. The financial indicators for this activity are: (i) IRR: 25.2 percent; (ii) NPV: US\$677 (CFAF 402,749 ); and (iii) Benefit/Cost ratio: 1.92.

**21. Broiler farm:** Poultry farm (broiler). The goal is to set up 317 farms. The model is supported by farmer cooperatives or private holder and involves the fattening of 1000 day-old chicks with four cycles per year. The investments required for this activity consist of building materials, a set of tools and a start-up fund. The financial indicators for this activity are: (i) IRR: 29.9 percent; (ii) NPV: US\$25,574 (CFAF 15,222,654); and (iii) Benefit/Cost ratio: 1.01.

**22. Sorghum cultivation:** The goal is to produce Sorghum. The model is supported by farmer cooperatives or private holder and involves the growing of sorghum in raining season. The investments required for this activity consist of small farming materials and some intrants and seeds. The financial indicators for this activity are: (i) IRR: 23.9 percent; (ii) NPV: US\$31 (CFAF 18,211); and (iii) Benefit/Cost ratio: 1.28.

**23. Millet cultivation:** The goal is to produce millet. The model is supported by farmer cooperatives or private holder and involves the growing of millet in raining season. The investments required for this activity consist of small farming materials and some intrants and seeds. The financial indicators for this activity are: (i) IRR: 22.8 percent; (ii) NPV: US\$34 (CFAF 20,455); (iii) Benefit/Cost ratio: 1.68

**24. Niébé cultivation:** The goal is to produce niébé. The model is supported by farmer cooperatives or private holder and involves the growing of niébé in raining season. The investments required for this activity consist of small farming materials and some intrants and seeds. The financial indicators for this activity are: (i) IRR: 21.5 percent; (ii) NPV: US\$39 (CFAF 23,339); and (iii) Benefit/Cost ratio: 1.82

**25. Production of milk:** The objective is to improve the quality of the milk produced through the acquisition of improved barns and breed dairy. The investment required for this activity consist of equipment and intrants. The financial indicators for this activity are: (i) IRR: 20.4 percent; (ii) NPV: US\$3,576 (CFAF 2,128,668); and (iii) Benefit/Cost ratio: 1.52.

## **Category 2: Support for the development of irrigated crops**

**26. Onion production:** The goal is to produce onion. This model is supported by farmers. The investments required for this activity consist of boreholes, submersible electric pumps, California network, chain-link



fence, organic fertilizer, certified organic phytosanitary products, and small agricultural equipment kits. The financial indicators are: (i) IRR: 21.9 percent; (ii) NPV: US\$16,459 (CFAF 9,796,976); and (iii) Benefit/Cost ratio: 1.46.

**27. Tomatoes production:** The goal is to produce tomatoes. This model is supported by farmers. The investments required for this activity consist of boreholes, submersible electric pumps, California network, chain-link fence, organic fertilizer, certified organic phytosanitary products, and small agricultural equipment kits. The financial indicators are: (i) IRR: 17.6 percent; (ii) NPV: US\$10,841 (CFAF 6,453,322 ); and (iii) Benefit/Cost ratio: 1.36.

**28. Cabbage production:** The goal is to produce cabbage. This model is supported by farmers. The investments required for this activity consist of boreholes, submersible electric pumps, California network, chain-link fence, organic fertilizer, certified organic phytosanitary products, and small agricultural equipment kits. The financial indicators are: (i) IRR: 15.4 percent; (ii) NPV: US\$8,105 (CFAF 4,824,767 ); and (iii) Benefit/Cost ratio: 1.30.

**29. Sweet potatoes production:** The goal is to produce sweet potatoes. This model is supported by farmers. The investments required for this activity consist of boreholes, submersible electric pumps, California network, chain-link fence, organic fertilizer, certified organic phytosanitary products, and small agricultural equipment kits. The financial indicators are: (i) IRR: 19.8 percent; (ii) NPV: US\$11,827 (CFAF 7,040,412); (iii) Benefit/Cost ratio: 1.44

**Category 3: Support the production of fodder**

**30. Fodder production:** to promote the production and conservation of 1150 hectares of natural fodder in livestock feed, the program plans to provide support to associations of breeders of improved local breeds. The investments required for this activity consist of a set of equipment, seeds, fertilizers. The financial indicators for this activity are: (i) IRR: 20.1 percent; (ii) NPV: US\$13,340 (CFAF 7,941,016); and (iii) Benefit/Cost ratio: 1.68.

**Table A1.5: Summary of financial analysis results-Niger**

Financial Models	IRR	NPV (CFAF)	NPV (US\$)	B/C ratio
<b>Category 1: Income Generative Activities (IGA)</b>				
Cattle fattening	32.8%	1,887,929	3,171	1.07
Sheep fattening	22.5%	500,557	9,010	1.84
Breeding of small ruminants	29.9%	1,425,913	2,396	1.33
Cattle breeding	28.6%	4,564,976	7,669	1.69
Local breed chicken farm	25.2%	402,749	677	1.92
Broiler farm	29.9%	15,222,654	25,574	1.01
Production of milk	27.1%	3,527,588	5,926	1.83
Sorghum cultivation	23.9%	18,211	31	1.28
Millet cultivation	22.8%	20,455	34	1.68
Niébé cultivation	21.5%	23,339	39	1.82
<b>Category 2: Support for the development of irrigated crops</b>				
Onion	21.9%	9,796,976	16,459	1.46
Tomatoes	17.6%	6,453,322	10,841	1.36
Cabbage	15.4%	4,824,767	8,105	1.30



Sweet potatoes	19.8%	7,040,412	11,827	1.44
<b>Category 3: Promotion of fodder cultivation</b>				
Fodder production	20.1%	7,941,016	13,340	1.68

**A2.2-AF in Mauritania**

**Category 1: Support for the development of irrigated crops**

**31. Irrigated Tomatoes cultivation:** The goal is to produce tomatoes on one hectare. The model is supported by group of farmers who will partially use the land for fodder production (3/4) and the rest for gardening (1/4). The investments required for this activity consist of irrigation system, small farming materials and some intrants and seeds. The financial indicators for this activity are: (i) IRR: 22.1 percent; (ii) NPV: US\$8,503 (MRU 311,232); and (iii) Benefit/Cost ratio: 1.12.

**32. Irrigated onion and eggplant cultivation:** The goal is to produce alternately onion (one harvest) and eggplant (two harvests) on one hectare. The model is supported by group of farmers who will partially use the land for fodder production (3/4) and the rest for gardening (1/4). The investments required for this activity consist of irrigation system, small farming materials and some intrants and seeds. The financial indicators for this activity are: (i) IRR: 25.1 percent; (ii) NPV: US\$10,098 (MRU 369,580); and (iii) Benefit/Cost ratio: 1.47.

**Category 2: Sustainable water management**

**33. Pastoral station:** The goal is to build 30 pastoral stations that will provide water mainly for animals (cattle, small ruminants and camels) and a little quantity for domestic use. It will be a paid service managed by the national office in charge of water management in rural areas. The investments required for this activity consist of boreholes and equipment for the pastoral station. The financial indicators are: (i) IRR: 19.6 percent; (ii) NPV: US\$30,004 (MRU 1,098,155); and (iii) Benefit/Cost ratio: 1.37.

**Category 3: Support the production of fodder**

**34. Fodder production:** the goal is to promote the production of 394 hectares of maize fodder in livestock feed. The investments required for this activity consist of a set of equipment for the irrigation system, seeds, fertilizers. The financial indicators for this activity are: (i) IRR: 18.9 percent; (ii) NPV: US\$6,809 (MRU 249,232); and (iii) Benefit/Cost ratio: 1.91.

**35. Rainfed Sorghum cultivation:** The goal is to produce Sorghum. The model is supported by groups of farmers and involves the growing of sorghum in raining season. The investments required for this activity consist of small farming materials and some intrants and seeds. The financial indicators for this activity are: (i) IRR: 38.3 percent; (ii) NPV: US\$162 (MRU 5,935); and (iii) Benefit/Cost ratio: 1.45.

**36. Sorghum cultivation in recession period:** The goal is to produce Sorghum. The model is developed for groups of farmers and involves the growing of sorghum during the recession period. The investments required for this activity consist of small farming materials and some inputs and seeds. The financial indicators for this activity are: (i) IRR: 33.8 percent; (ii) NPV: US\$281 (MRU 10,298); and (iii) Benefit/Cost ratio: 1.60.



**Table A1.6: Summary of financial analysis results-Mauritania**

Financial Models	IRR	NPV (MRU)	NPV (US\$)	B/C ratio
<b>Category 1: Support for the development of irrigated crops</b>				
Onion and eggplant cultivation	25.1%	369,580	10,098	1.47
Tomatoes cultivation	22.1%	311,232	8,503	1.12
<b>Category 2: Sustainable water management</b>				
Pastoral station	19.6%	1,098,155	30,004	1.37
<b>Category 3: Promotion of fodder cultivation</b>				
Fodder production	18.9%	249,232	6,809	1.91
Rainfed Sorghum cultivation	38.3%	5,935	162	1.45
Sorghum cultivation in recession period	33.8%	10,298	281	1.60

**B-ECONOMIC ANALYSIS**

**B1-Methodology and assumptions**

37. As per the financial analysis, the economic analysis was carried out based on the comparison between the “situation without project” and the “situation with project”. This analysis assesses the profitability of each project from the point of view of the community. The discount rate used for this economic analysis is 6 percent (social discount rate as recommended by the World Bank guidance note) and the analysis was conducted over a period of 20 years, since most of the infrastructures investment’s economic life is around 20 years and even more.

38. The economic analysis carried out is based on the comparison between benefits and costs, considering only the quantifiable objectives. Economic costs have been calculated by avoiding double-counting and eliminating costs already included in the individual models (boreholes, submersible electric pumps, irrigations costs, grants related to inputs).

39. Conversion factors have been calculated for the main outputs and inputs to account for taxation and price distortions. For the AF in Niger, Conversion factors are 1.0 for non-exchangeable local products; 1.0 for non-tradable domestic inputs; 0.85 for tradable local goods and services; 0.71 for imported fertilizers and treatment products; 0.68 for imported of equipment and other goods; 0.92 for labor costs. For the AF in Mauritania, Conversion factors are 1.0 for non-exchangeable local products; 1.0 for non-tradable domestic inputs; 0.85 for tradable local goods and services; 0.78 for imported fertilizers and treatment products; 0.70 for imported of equipment and other goods; 0.89 for labor costs. Economic costs have been calculated by avoiding double-counting and eliminating costs already included in the individual models.

40. After converting the financial prices into economic prices, the additional benefits of the modeled activities were aggregated by considering the number of beneficiaries targeted by activity, which we staggered over the duration of the project.

41. In addition, an adoption rate of 80 percent have been used for all the models. This high rate is justified by the fact that the actors involved in this project are already present in the field and have been carrying out the same type of activity for years. In addition, it is an emergency project with a very short period of implementation.



42. The externalities related to the community-based work activities and fodder recovery for the AF in Niger; rehabilitation of pastores reserves, firewall, stone cords, assisted natural regeneration, development of ponds, money transfer for the AF in Mauritania are only considered in the economic analysis, but not in the financial analysis. They were estimated as about 25 percent of the total additional net benefits without environmental benefits.

## **B2-Economic analysis results**

### **B2.1- AF in Niger**

43. Overall profitability. the project shows a satisfactory economic internal rate of return (EIRR) of 15.4 percent and a net present value (NPV) of US\$25.3 million at the opportunity cost of capital of 6 percent. This is deemed satisfactory given the nature of the activities retained by the project.

44. Sensitivity analysis. The sensitivity analysis shows that the IRR is sufficiently robust. In addition, the IRR levels confirm the robustness of the positive economic effects and impacts of the Project on the area of intervention in the face of the risk of increased costs, reduced income from the activities carried out or/and delay in the generation of benefits. The sensitivity analysis showed that (i) an increase in costs from 10 percent to 30 percent presents respectively lower IRRs of 14.1 percent and 11.6 percent, a decrease from the base IRR of 15.4 percent; (ii) a decrease in income (revenue) benefits of 10 percent and 30 percent presents respective IRRs of 13.9 percent and 8.4 percent ; and (iii) a delay of 1- and 3-years during implementation presents respective EIRRs of 10.8 percent and 13.6 percent, at the opportunity cost of capital of 6 percent. The table below presents the summary of this analysis.

### **B2.2- AF in Mauritania**

46. Overall profitability. The project shows a satisfactory economic internal rate of return (EIRR) of 24.9 percent and a net present value (NPV) of US\$18.93 million at the opportunity cost of capital of 6 percent. This is deemed satisfactory given the nature of the activities retained by the project.

47. Sensitivity Analysis. The economic results of alternative scenarios have also been calculated, in particular (i) an increase in costs from 10 percent to 20 percent presents respectively lower IRRs to 20.5 percent and 11.7 percent, a decrease from the base IRR of 24.9 percent; (ii) a decrease in income benefits of 10 percent and 20 percent presents respectively lower IRRs of 20.0 percent and 14.0. If the income (revenue) benefits decrease by 30 percent and above the IRR will be negative, and not advisable; (iii) a delay of 1- and 3-years during implementation presents respective EIRRs of 10.0 and 17.4 percent. Overall, the results are positive in all scenarios as long as the benefit stream does not decrease by more than 20 percent, at the opportunity cost of capital of 6 percent.



**Table A1.7: Summary of sensitivity analysis-Niger and Mauritania**

SENSITIVITY ANALYSIS		IERR		VAN (@6%, 20 years) -Niger		VAN (@6%, 20 years) - Mauritania	
		NIGER	MAURITANIA	Billion of XOF	Million of US\$	Billion of MRU	Million of US\$
Base Case		15.4%	24.9%	15.1	25.4	692.3	18.9
Increase in costs	10%	14.1%	20.5%	13.2	22.2	513.1	14.0
Increase in costs	20%	12.8%	16.2	11.2	18.8	333.8	9.1
Increase in costs	30%	11.6%	11.7%	9.8	16.5	154.5	4.22
Income - (decrease in benefits)	10%	13.9%	20.0%	11.7	19.58	443.8	12.14
Income - (decrease in benefits)	20%	12.2%	14.0%	8.2	13.77	195.3	5.34
Income - (decrease in benefits)	30%	8.4%	negative	2.8	4.69	- 232.4	- 6.36
Income delay by 1 year		13.6%	17.4%	13.2	22.10	551.7	15.09
Income delay by 2 years		12.1%	12.9%	11.3	19.00	419.0	11.46
Income delay by 3 years		10.8%	10.0%	9.6	16.07	293.8	8.03

48. The EX-ACT tool was used to evaluate the impact of the project’s implementation on greenhouse gas (GHG emissions. The analysis uses the same assumptions and project boundaries as the economic analysis. The evaluation assesses the impacts of an intervention compared to the business as usual (BAU) scenario. The calculator requires data for three specific points in time: initial situation, with project scenario, and without project.

49. The valuation of environmental externalities further enhances the economic justification of the AF. The aggregate carbon balance over 20 years of both projects is equal to -237,487 tCO<sub>2</sub>-e. Knowing the total area under focus, this would amount to a carbon balance of -8.8 tCO<sub>2</sub>-e per hectare, -0.4 tCO<sub>2</sub>-e per hectare and year. These come from fuel use to power the coarse fodder grinders, and construction of fodder storage. The emissions of these activities are mitigated by the overall benefits in land-based practices of the Project.

50. According to the World Bank Guidance note on Shadow Carbon Price in Economic Analysis of Development Projects, it is recommended that economic analysis use a carbon price estimate range with low values (US\$49 per ton) and high (US\$98 per ton) and for a current social market price of (US\$28 per ton).

51. As such, when evaluating these environmental benefits using the social price of carbon estimates,<sup>21</sup> the overall economic results of the AF in Niger increase to an NPV of US\$78.9 million and an IRR of 28.2 percent (assuming the low range pricing) and to an NPV of US\$132.6 million and an IRR of 40.9 percent (assuming the high range pricing). The overall economic results of the Emergency Agro-Pastoralist Food Crisis Support Project in Mauritania increase to an NPV of US\$64.5 million and an IRR of 47.8 percent (assuming the low range pricing) and to an NPV of US\$110.0 million and an IRR of 74.6 percent (assuming the high range pricing). The table below summarizes the analysis.

<sup>21</sup> Based on the World Bank *Guidance note on shadow price of carbon in economic analysis* (Nov 2021).





**Table A1.8: Summary of the Economic Analysis including environmental benefits  
Niger and Mauritania**

NIGER			
Indicators (20 years)	Without ENV. Benefits	With ENV. Benefits @low estimate range	With ENV. Benefits @high estimate range
IERR	15.4%	28.2%	40.9%
NPV BNA (XOF, billion @6%)	15.1	47.0	79.0
NPV BNA (US\$, million @6%)	25.3	78.9	132.6
MAURITANIA			
IERR	24.9%	47.8%	74.6%
NPV BNA (MRU, billion @6%)	692.3	2,361.4	4,026.2
NPV BNA (US\$, million @6%)	18.9	64.5	110.0





## Annex 2. Green House Gas Analysis

### Methodology for GHG Accounting

1. The Ex-Ante Carbon Balance Tool (EX-ACT) has been developed by the Food and Agriculture Organization of the United Nations (FAO) to evaluate impacts of the interventions in the Agriculture, Forestry and Other Land Use (AFOLU) sector on greenhouse gas (GHG) emissions. EX-ACT provides estimates of the mitigation potential of public or private investment projects, policies and national level programs. It helps the decision makers to understand whether the planned agricultural interventions contribute to meeting climate change mitigation objectives. EX-ACT calculations are based on land use data. To see more details on the tool, please review the guidelines.<sup>22</sup>

2. The evaluation assesses the impacts of an intervention compared to the business as usual (BAU) scenario. The calculator requires data for three specific points in time: initial situation, with project scenario, and without project or BAU. In preparing this data a lot of work is required up front to determine the adequate modeling of activities/interventions in the tool.

### Project Boundaries and Data Sources

3. The estimation of emissions for this project considers the sequestration, reduction and or avoidance that result from the implementation of the activities summarized in Table 1 for Niger and Table A2.1 for Mauritania. EX-ACT differentiates between two time periods: project implementation phase and capitalization phase. The implementation phase is the period during which the project activities are carried out. Yet, the period covered by the analysis does not necessarily end with the termination of the active project intervention. Further changes may occur as the result of the interventions (project activities) such as changes soil carbon content or biomass. This period defines the capitalization phase. In this analysis, following recommendations of the IPCC<sup>23</sup>, we consider an overall 20-year period for implementation and capitalization phase. As in the current analysis the physical implementation of the project consists of 6 years, the benefits generated by the project will continue to capitalize for 14 more years to reach the 20-year period. The analysis further assumes the dynamics of change (from without (BAU) to “with project”) to be linear over the duration of the project.

### Results of the EX-ACT Analysis - Niger

4. The project activities will contribute to climate change mitigation through the promotion of sustainable landscape management and sustainable fodder production. The detailed results obtained with EX-ACT can be disaggregated by module each reflecting a different activity. The activities proposed by the project are reflected though out the different modules of the tool. The Table 1 shows on which EX-ACT module the activities have been allocated. For example, *Cropland* reflects the activities that influence fodder crop management activities. Given the computation of data (detailed in *Computation of data in EX-ACT*), the total carbon balance over 20 years of this project is equal to -80,168 tCO<sub>2</sub>-e. This result is the net difference between the carbon balance from the baseline scenario 16,005 tCO<sub>2</sub>-e and the carbon balance of the *with-*

<sup>22</sup> EX -ACT website: <https://www.fao.org/in-action/epic/ex-act-tool/suite-of-tools/ex-act/en/>

<sup>23</sup> IPCC recommends considering the timeframe between transitions states of natural systems and the period necessary to reach a new equilibrium for carbon stocks and suggest applying a 20-year long time frame (IPCC, 2006).



project scenario -64,163 tCO<sub>2</sub>-e. Knowing the total area under focus, this would amount to a carbon balance of -0.2 tCO<sub>2</sub>-e per hectare and per year.

Table A2.1: EX-ACT Results

DETAILED RESULTS												
Project name		AF- PRAPS II		Project duration (in years)		Total area (ha)		20,927		Global warming potential		
Continent		Western Africa		Implementation		Mineral soil		20,927		CO <sub>2</sub>		1
Country		Niger		Capitalization		Organic soil		0		CH <sub>4</sub>		34
Climate		Tropical		Period analysis		Waterbodies		0		N <sub>2</sub> O		298
Moisture		Dry										
GROSS FLUXES				SHARE PER GHG OF THE BALANCE					AVERAGE ANNUAL EMISSIONS			Tier 2 Annual emissions
In tCO <sub>2</sub> -e over the whole period analysis				In tCO <sub>2</sub> -e over the whole period analysis					In tCO <sub>2</sub> -e/yr			
PROJECT COMPONENTS		WITHOUT	WITH	BALANCE	CO <sub>2</sub> BIOMASS	CO <sub>2</sub> SOIL	N <sub>2</sub> O	CH <sub>4</sub>	ALL NON-AFOLU EMISSIONS*	WITHOUT	WITH	BALANCE
Land use changes	Deforestation	0	0	0	0	0	0	0	0	0	0	0
	Afforestation	0	0	0	0	0	0	0	0	0	0	0
	Other land-use	0	-36	-36	362	-398	0	0	0	0	-2	-2
	Annual	16,005	6,971	-9,034	0	-5,282	-813	-2,939	0	800	349	-452
Cropland	Perennial	0	0	0	0	0	0	0	0	0	0	0
	Flooded rice	0	0	0	0	0	0	0	0	0	0	0
Grasslands & Livestock	Grasslands	0	-72,441	-72,441	0	-72,441	0	0	0	0	-3,622	-3,622
	Livestock	0	0	0	0	0	0	0	0	0	0	0
	Forest mgmt.	0	0	0	0	0	0	0	0	0	0	0
	Inland wetlands	0	0	0	0	0	0	0	0	0	0	0
	Coastal wetlands	0	0	0	0	0	0	0	0	0	0	0
	Fisheries and aquaculture	0	0	0	0	0	0	0	0	0	0	0
	Inputs & Invest.	0	1,344	1,344	0	0	0	0	1,344	0	67	67
<b>Total emissions, tCO<sub>2</sub>-e</b>		<b>16,005</b>	<b>-64,163</b>	<b>-80,168</b>	<b>362</b>	<b>-78,122</b>	<b>-813</b>	<b>-2,939</b>	<b>1,344</b>	<b>800</b>	<b>-3,208</b>	<b>-4,008</b>
<b>Total emissions, tCO<sub>2</sub>-e/ha</b>		<b>0.8</b>	<b>-3.1</b>	<b>-3.8</b>	<b>0.0</b>	<b>-3.7</b>	<b>0.0</b>	<b>-0.1</b>	<b>0.1</b>			
<b>Total emissions, tCO<sub>2</sub>-e/ha/yr</b>		<b>0.0</b>	<b>-0.2</b>	<b>-0.2</b>	<b>0.0</b>	<b>-0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>			
<small>* = Source: F = Sink            Results presented here include GHG fluxes on mineral and organic soils            See further down for detailed results on organic soils            * Includes fisheries, aquaculture and inputs &amp; investments that are not included in the AFOLU definition.</small>												
										<small>Uncertainty level</small> <small>Without</small> 800 45% <small>With</small> -3,208 50% <small>Balance</small> -4,008 49%		

5. The current project shows a sequestration potential. In particular, the activities that will support landscape management. The improvement of grassland through sustainable landscape management activities as treatment of degraded pastoral land, sow of grasses, and dune fixation, accumulate a benefit of -72,441 tCO<sub>2</sub>-e over 20 years. The project has source of emissions, but these are marginal accounting only for 1,344 tCO<sub>2</sub>-e, these come from fuel use to power the coarse fodder grinders, and construction of fodder seedbanks. The emissions of these activities are mitigated by the overall benefits in land-based practices of the project. More details of the computation of data in EX-ACT and detailed Table 3 summarizing those activities, the EX-ACT module, and the data used are available upon request with references from where the data is retrieved.

**Results of the EX-ACT Analysis – Mauritania**

6. The project activities will contribute to climate change mitigation through the promotion of sustainable landscape management and sustainable fodder production. The detailed results obtained with EX-ACT can be disaggregated by module each reflecting a different activity. The activities proposed by the project are reflected throughout the different modules of the tool. The Table A2.2 shows on which EX-ACT module the activities have been allocated. For example, *Cropland* reflects the activities that influence fodder crop management activities. Given the computation of data (detailed in *Computation of data in EX-ACT*), the total carbon balance over 20 years of this project is equal to -157,319 tCO<sub>2</sub>-e. This result is the net difference between the carbon balance from the baseline scenario 389,137 tCO<sub>2</sub>-e and the carbon balance of the *with-project* scenario 231,818 tCO<sub>2</sub>-e. Knowing the total area under focus, this would amount to a carbon balance of -0.3 tCO<sub>2</sub>-e per hectare and per year.



**Table A2.2: EX-ACT Results**

<b>Project name</b>	PRAP II - AF-Mauritania			<b>Project duration (in years)</b>	31,450		<b>Global warming potential</b>	
<b>Continent</b>	Western Africa			<b>Implementation</b>	31,450		CO <sub>2</sub>	1
<b>Country</b>	Mauritania			<b>Capitalization</b>	0		CH <sub>4</sub>	34
<b>Climate</b>	Tropical			<b>Period analysis</b>	20		N <sub>2</sub> O	298
<b>Moisture</b>	Dry							

  

GROSS FLUXES <small>In tCO<sub>2</sub>e over the whole period analysis</small>				SHARE PER GHG OF THE BALANCE <small>In tCO<sub>2</sub>e over the whole period analysis</small>					AVERAGE ANNUAL EMISSIONS <small>In tCO<sub>2</sub>e/yr</small>		
PROJECT COMPONENTS	WITHOUT	WITH	BALANCE	CO <sub>2</sub> BIOMASS	CO <sub>2</sub> SOIL	N <sub>2</sub> O	CH <sub>4</sub>	ALL NON-AFOU EMISSIONS*	WITHOUT	WITH	BALANCE
Land use changes											
Deforestation	0	0	0	0	0	0	0	0	0	0	0
Afforestation	0	0	0	0	0	0	0	0	0	0	0
Other land-use	0	-4,995	-4,995	-1,008	-3,986	0	0	0	0	-250	-250
Annual	389,137	244,866	-144,271	0	-72,090	-17,125	-55,056	0	19,457	12,243	-7,214
Cropland											
Perennial	0	0	0	0	0	0	0	0	0	0	0
Flooded rice	0	0	0	0	0	0	0	0	0	0	0
Grasslands & Livestock											
Grasslands	0	-8,053	-8,053	0	-8,053	0	0	0	0	-403	-403
Livestock	0	0	0	0	0	0	0	0	0	0	0
Forest mgmt.	0	0	0	0	0	0	0	0	0	0	0
Inland wetlands	0	0	0	0	0	0	0	0	0	0	0
Coastal wetlands	0	0	0	0	0	0	0	0	0	0	0
Fisheries and aquaculture	0	0	0	0	0	0	0	0	0	0	0
Inputs & Invest.	0	0	0	0	0	0	0	0	0	0	0
<b>Total emissions, tCO<sub>2</sub>-e</b>	<b>389,137</b>	<b>231,818</b>	<b>-157,319</b>	<b>-1,008</b>	<b>-84,130</b>	<b>-17,125</b>	<b>-55,056</b>	<b>0</b>	<b>19,457</b>	<b>11,591</b>	<b>-7,866</b>
<b>Total emissions, tCO<sub>2</sub>-e/ha</b>	<b>12.4</b>	<b>7.4</b>	<b>-5.0</b>	<b>0.0</b>	<b>-2.7</b>	<b>-0.5</b>	<b>-1.8</b>	<b>0.0</b>			
<b>Total emissions, tCO<sub>2</sub>-e/ha/yr</b>	<b>0.6</b>	<b>0.4</b>	<b>-0.3</b>	<b>0.0</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.1</b>	<b>0.0</b>			

  

Uncertainty level	tCO <sub>2</sub> -e/yr	Percent
Without	19,457	46%
With	11,591	48%
Balance	-7,866	42%

\*\* = Source / - = Sink  
Results presented here include GHG fluxes on mineral and organic soils  
See further down for detailed results on organic soils  
\* Includes fisheries, aquaculture and inputs & investments that are not included in the AFOLU definition.

7. The AF shows a sequestration potential, in particular, the activities that will support fodder production. This area is intended to provide a double benefit for cattle and self-consumption. The promotion of better crop management will accumulate a benefit of -144,271 tCO<sub>2</sub>-e. On the other hand, support landscape management and the improvement of grassland through sustainable landscape management activities as treatment of degraded pastoral land, direct seeding, and dune fixation, accumulate a benefit of -8,053 tCO<sub>2</sub>-e over 20 years. More details of the computation of data in EX-ACT and detailed table summarizing those activities, the EX-ACT module, and the data used are available.



**Annex 3. Summary of Adaptation and Mitigation Benefits under the AF**

1. The Project Development Objective (PDO) of the parent project, PRAPS II, is to improve the resilience of pastoralists and agro-pastoralists in the selected areas in the Sahel Region. It recognizes that the resilience of a household depends on the options available to make a living. In the context of PRAPS II this is reflected through the different components. This AF enhances the components to : 1) sustain and maintain assets (livestock); 2) sustain and maintain ecosystems; and 3) sustain and maintain means of making a living and generating income. The AF builds on the strong foundations of climate adaptation and GHG mitigation and seeks to further strengthen and scale up these initiatives. Given in the table below is a summary of each of the sub-components and activities and the specific adaptation and mitigation benefits that they would achieve.

Country	Sub-components & activities	Climate Adaptation Benefits	Climate Mitigation Benefits
Component 2: Sustainable landscape management and governance enhancement (original project US\$74.3 million IDA of which US\$7.7 million for Mauritania and US\$13.2 million for Niger; additional financing US\$9.7 million for Mauritania and US\$32.9 million for Niger)			
	The objective of this component is to secure livestock mobility and access to better managed pastoral and water resources and increase cultivated forage production, aiming to enhance the resilience of (agro)pastoralists to climate risks while strengthening peace and social cohesion over use of shrinking pastoral areas with climatic imbalance.	Pastoral systems are highly adapted to the agro-ecological conditions in arid and semiarid areas and are often the only productive activity that these territories can support. Pastoralism has a superior adaptation to arid and semi-arid climates compared to sedentary systems. Livestock movement deliver landscape services by maintaining and restoring rangelands, halting desertification, and increasing carbon sinks.	Pastoralism and livestock corridors promote enhancing carbon stocks in grasslands by expecting an reduced level of degradation.
Sub-component 2.1: Access to natural resources and sustainable landscape management (additional financing US\$1.1 million in Mauritania; US\$9.8 million in Niger)			
Mauritania	The AF proposes to scale-up community-based interventions aiming to protect natural pastoral areas against wildfires (1000 km of fire strips) and recover degraded land through: building	Climate related risks, such as droughts, are expected to increase and hamper agriculture and pastoralist activities. The protection of	Sustainable landscape protection and recovery, in particular grasslands, can halt the degradation, already identify as



	stone cordons to promote water infiltration; establishing pastoral reserves (15 reserves of 50 ha each) and assisting natural regeneration (20 sites of 50 ha each). Implementation arrangements will be identical to the parent project.	landscape and the recovery of degraded land are key to enhance the adaptive capacity of the landscape and animals. Engagement at the community-level can root the activities and hence a longer duration and appropriation.	severely degraded. Seeding of grasslands, and water infiltration helps to soil preservation and increase the carbon stocks.  The activities can improve the vegetative cover increasing the soil carbon stocks regenerating degraded areas.
Niger	The AF proposes to support national and cross-border landscape management activities to protect agro-pastoral areas. Proposed activities include (i) restoration of degraded pastoral land over 10,000 ha; (ii) dunes fixation over 3.050 ha; (iii) fire strips (4000 km); and (iv) interventions to control the spread of invasive species over 800 ha. Implementation arrangements will be as in the parent project.	The improvement of the governance of pastoral lands, leads to access to new and improved grazing areas making more natural forage available, which is key to the adaptation and resilience of pastoral systems. In turn, pastoral mobility strengthens pastoralists' adaptation to climate change.	
Sub-component 2.2: Sustainable management of infrastructure for access to water (additional financing US\$3.1 million in Mauritania; US\$6.8 million in Niger)			
Mauritania	The AF proposes to support the construction of additional water points (30 boreholes, 40 pastoral wells and 80 watering pounds). Beyond rehabilitation and construction, the project will also establish and/or strengthen the executive committees to manage, monitor and maintain the water points, and refine existing social agreements in order to increase the sustainability of these structures. Implementation arrangements will be the same as in the parent project.	Water points enable mobile pastoral communities to use more of the available pastoral land and promote the mobility securing water access. Furthermore, it can reduce livestock and communities' vulnerability. Reduced livestock mortality in turn will increase productivity with higher live weight and milk production. In addition, it can reduce water stress points.	N/A
Niger	The AF proposes to support highly vulnerable pastoral and agropastoral households in	Better access and mobility of livestock corridors with inclusive institution and	



	targeted areas through the rehabilitation of additional climate-resilient pastoral water infrastructure including 65 cemented wells, 30 boreholes for pastoral pumping stations, 10 watering ponds, and establishment of effective management structures. Implementation arrangements will be the same as in the parent project.	social agreements can reduce conflicts over water.	
Sub-component 2.3: Fodder production (additional financing US\$5.5 million in Mauritania; US\$16.3 million in Niger)			
Mauritania	The AF will support the development of additional cultivated fodder crop sites (80 ha irrigated and 394 ha rainfed) in areas prioritized by the AF. Investments including provision of drought-tolerant seeds adapted to the agro-ecological conditions, acquisition of small equipment (e.g., seeding and cutting machines), 20 fodder storage units, and provision of technical assistance to support the swift adoption of climate-smart production techniques and technologies. Under the AF, this sub-component will also include the rehabilitation of up to 10,000 ha of food crop perimeters, including the rehabilitation of small water retention infrastructure, fencing, as well as the provision quality seeds and fertilizers, small agriculture equipment, and food crop storage units (22) to reduce food waste and losses. Increasing fodder production capacity will strengthen the capacity of herders to weather future climate related shocks, and offset reduction of transhumance possibilities	It is paramount to provide means of assistance for a significant increase in the number of food insecure people during the upcoming lean season in both countries.  The AF foresee to significantly increase fodder crop productions to adapt to the increasingly unpredictable productivity of natural rangelands; fodder production will also be carried out in rotation with food crop production, maximizing soil fertility and use of crop residues to provide additional feed to the livestock, while main food crops can be used for self-consumption or sold, increasing the resilience of the communities.  Additional technologies such as irrigated perimeters seeds, organic	Soil-crop-water management can increase the soil organic matter levels, and improve soil’s nutrient retention capacity. This can result in improved physical and biological conditions for crop production (food, fodder).  By reintroducing native plants that help meet fodder requirements, fix the soil and stop sand encroachment, ecosystems can be restored and carbon stocks enhanced. In sum, the project will provide technical assistance and support in the adoption of climate-smart agriculture which include better crop management practices as (reduced tillage, soil-water management, mulching, etc.); additional fodder production will



	<p>in bordering countries, in Mali in particular. Implementation arrangements will be the same as in the parent project. Implementation arrangements will be the same as in the parent project. A partnership agreement with the Ministry of Agriculture will be established with the PCU to clarify roles and responsibilities with respect to implementation of activities supported by the AF under this sub-component.</p>	<p>fertilizers, soil conservation techniques, will improve productivity, in line with climate-smart agriculture practices to have both adaptation and mitigation outcomes.</p>	<p>also reduce overgrazing and degradation of fragile rangelands .</p>
<p>Niger</p>	<p>In Niger, scaled up activities will support additional production and access to fodder for livestock (600 ha). This will be achieved through provision of drought-tolerant seeds, fertilizer, and technical assistance.</p> <p>New activities supported by the AF will include : (i) the development of small irrigation infrastructure and provision of related equipment to improve 1,050 ha in approximately 230 existing collectively managed small irrigation perimeters; (ii) provision of fertilizers, drought-tolerant seeds (e.g. dual-purpose alfalfa, bourgou, cowpea, sorghum, and maize among other crops) and grinders; and (iii) provision of technical assistance (e.g. promotion of improved livestock feeding practices, and climate smart fodder/food crop production, including regenerating degraded agro-pastoral lands; promoting food and fodder crops in multiplication centers; management of perimeters) thereby also increasing climate</p>		



	resilience. As in Mauritania, strengthening the capacities of women and youth producer groups will be prioritized. Implementation arrangements of new activities will be clarified in the PIM. A partnership agreement with the Ministry in charge of agriculture will be established to reflect specific implementation responsibilities under the AF for this sub-component		
Component 4: Social and economic inclusion improvement, women and youth (original project US\$47.1 million IDA, of which US\$8 million for Niger; additional financing US\$1.9 million for Niger)			
	The objective of this component is to contribute to a greater socio-economic inclusion of pastoral populations, in particular young people and women, through increased access to vocational training, inclusion in social and civil registries, and direct support to develop income generating activities.	Pastoralism has an important impact in the local economies and contributes to the overall agriculture. Moreover, pastoralism provides a diverse range of outputs including milk, meat, manure, traction, that when added up provide a great value for the pastoralists.	
Sub-component 4.3: Income-generating activities (additional financing US\$1.9 million in Niger)			
Niger	These activities will follow selection criteria and mechanisms established under the parent project. They may include, e.g., small processing units, sheltered mills, small warehouses, storage facilities, that will enhance the economic resilience of vulnerable people and communities, while supporting agro-pastoral value chains. In addition to enhancing resilience to climate shocks, reducing environmental degradation by limiting such-activities as tree-cutting for income, and expanding medium- to long-term income-earning opportunities, the grants will boost	Revenues generated by the activities will increase capacity to weather climatic shocks. Prioritized investments will support the value addition of productions, and reduce food losses, contributing to a more efficient use of natural resources.	Diversifying sources of income will reduce recourse to practices detrimental to the environment, including tree cutting to sell wood or charcoal, among others. Investments will also use energy efficient technologies.





	<p>food and nutrition security by allowing beneficiaries to purchase food in local markets or through alternate provisions. As in the parent project, women and youth will be targeted, with young women prioritized. Implementation arrangements will be the same as in the parent project, with an adjustment in the targeting of beneficiaries to align with the Support Plan.</p>		
<p>Component 5: Project coordination, institutional strengthening, crisis prevention and response (original project US\$73.3 million IDA of which US\$7.9million for Mauritania and US\$8.4 million for Niger; additional financing US\$32.3 million for Mauritania and US\$15.2 million for Niger)</p>			
<p>Sub-component 5.1: Project coordination (U\$ 2.3 million in Mauritania; US\$0.8 million in Niger)</p>			
Mauritania	<p>The PCU staffing will be strengthened with the competitive recruitment of two additional M&amp;E assistants, one additional accounting assistant, one additional procurement specialist and two technical specialists (on hydraulics and rural engineering) over three years. Consultants would also be recruited on a need-basis to support the PCU staff, including a part-time gender-based violence (GBV) specialist.</p>	<p>Improved M&amp;E capacity and technical support will ensure the adequate implementation and improvement of project interventions, including with respect to climate mitigation and adaptation (trainings, sharing best practices, deriving lessons learned)</p>	<p>Improved M&amp;E capacity and technical support will ensure the adequate implementation and improvement of project interventions, including with respect to climate mitigation and adaptation (trainings, sharing best practices, deriving lessons learned)</p>
Niger	<p>In Niger, one animal/ plant production specialist will be recruited to support activities under component 2, and one social development expert will also be added to the PCU to support component 4. An additional procurement assistant and a gender/GBV specialist will be recruited to reinforce the PCU team. To ensure smooth implementation other capacities will be added through consultancies, on a need basis. Communication capacity and knowledge management will also be enhanced through</p>		



	development of a communication service with strong community-level linkages.		
Sub-component 5.2: Institutional Strengthening (US\$30.0 million in Mauritania; US\$ 14.4 million in Niger)			
Mauritania	The AF will support the national food security emergency relief programs through the purchase of wheat for in-kind distribution to poorest households in targeted regions; and supply of subsidized wheat through the existing network of shops managed by CSA benefiting vulnerable households in priority areas, to mitigate the effects of rising food commodity prices in the most vulnerable areas. Wheat purchase will be carried out by WFP under a contractual arrangement with the PCU, CAAM will ensure its reception on behalf of the government, in accordance with its mandate, and will deliver it to the CSA. CSA will manage the storage and distribution of food to eligible households as well as supply of shops. These emergency activities will follow established harmonized standard mechanisms, based on a well-developed relationship between the World Bank and WFP in the region and within Mauritania. Food distribution and supply of shops by CSA will also follow established mechanisms detailed in the PNR allowing to target most vulnerable households and communes.	Such emergency support (food distribution to the most vulnerable, food price stabilization) will allow people most impacted by the drought to better weather the current shock and recover more rapidly, allowing them to also reduce their vulnerability to future climate crisis.	These emergency/recovery activities will help avoid negative coping strategies, including environmental degradation through over-grazing of rangelands and tree-cutting for income.
Niger	The AF will aim to leverage the framework and coordination mechanisms developed under DNP-GCA for rapid delivery of short-term assistance for recovery. Targeting highly vulnerable (agro)pastoral households identified	Short term support provided will avoid losses of critical assets (livestock) and thereby reduce the impact of the climate led crisis.	



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	<p>by the DNP-GCA-led process, activities will include a package comprising: (i) vaccination against telluric diseases (pasteurellosis, anthrax, blackleg) jointly with acquisition and distribution of antiparasitic and mineral and vitamin complexes; and (ii) the acquisition and distribution of livestock feed at the end of the lean season. These investments will provide vital support to avoid livestock losses, increase the resistance of the herds, which are essential to pastoral households' resilience to current and future shocks. This will also help avoid negative coping strategies, including environmental degradation through over-grazing of rangelands and tree-cutting for income. Implementation arrangements will be the same as in the parent project.</p>		
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**Annex 4. Institutional Arrangements**

New elements compared to the parent project are highlighted in bold

Mauritania

<p><b>STEERING COMMITTEE (CP)</b></p>	<p><u>Exchange and Guidance Body</u>. Chaired by General Secretary of Ministry of livestock (MOL), including Ministry of Economic Affairs and Promotion of Productive Sectors, <b>Ministry of Agriculture</b>, Ministry of Environment and Sustainable Development, Ministry of Hydraulics and Sanitation, Ministry of National Education, Technical Training, and Reform; other concerned ministries, development partners involved in pastoralism and NRM, local representatives, NGO representative, PO representative, research and university representatives, CSO representative, pastoralism project representative, CILSS representative, GGW country focal point. Meeting</p>
<p><b>TECHNICAL COMMITTEE (CT)</b></p>	<p><u>Implementation Monitoring Body</u>. Chaired by the National Coordinator and comprising representatives of technical directorates, livestock POs, other livestock projects (as applicable), and other key representatives (selected ad hoc, e.g <b>WFP, CAAM, CSA</b>). Meeting frequency: at least twice a year before the CP.</p>
<p><b>PROJECT COORDINATION UNIT FOR PRAPS-2-MR (MR-PCU)</b></p> <p><b>Technical Financial Management Procurement Monitoring &amp; Evaluation Gender Environment and Social Safeguards Communication</b></p>	<p><u>In charge of day-to-day management of PRAPS-2-MR activities</u>. The MR-PCU will comprise the following: A National Coordinator (contractor), a Technical Director (contractor), an Animal Health Specialist (contractor) an NRM Specialist (contractor), a Livestock Value Chain Improvement Specialist (contractor), a Social Development Specialist (contractor), an Infrastructure Engineer (contractor); An Administrative &amp; Financial Management Expert, an Accountant, and an Accountant assistant (contractors), an Internal Auditor (contractor), a Procurement Specialist and a Procurement Assistant (contractors) An M&amp;E Expert (contractor), a Gender and Social Intermediation Expert (contractor), an Environmental Safeguard Expert (contractor), a Social Safeguard Expert (contractor), a Communication Expert (contractor) Support Staff (Drivers, Liaison Agents, Guards, etc.) MDR Staff appointed to support concerned technical directorates. <b>For the duration of the AF: 1 additional procurement specialist, 1 additional accounting assistant, 2 additional M&amp;E assistants, a hydraulics specialist and a rural engineering specialist</b></p>
<p><b>IMPLEMENTATION ARRANGEMENTS IN TARGETED REGIONS (in association with Regional Development Committees for activity guidance)</b> 8 Regional Coordination Units will be established within existing MOL Regional Delegations, each comprising: A Head of Regional Coordination Unit (civil servant), a Regional Support Assistant (contractor), Support Staff (Drivers, Liaison Agents, Guards, etc.)</p>	
<p><b>Implementation Stakeholders Component 1</b></p>	<p>DSV (Direction des Services Veterinaires) and regional and local MDR services Partners: Ministry of Education, EISMV (Ecole InterEtats des Sciences de la Médecine Vétérinaire), ONARDEP (Office National pour la recherche et le développement de l'élevage et des parcours), REMEMA (Réseau Mauritanien d'Epidémiosurveillance et de Maladies Animales), local administrative authorities, traditional authorities, private veterinarians, POs, NGOs, private operators</p>
<p><b>Implementation Stakeholders Component 2</b></p>	<p>Director and Technical Staff from DDFAP (Directions du Développement des Filières Animales et du Pastoralisme), DH (Direction de l'Hydraulique), DECE (Direction de l'Evaluation et du Contrôle Environnemental), and DPN (Direction de la Protection de la Nature) ; Direction de la Protection et de la Restauration des Espèces et des Milieux (DPREM), Office national des services des eaux (ONSER) Regional levels : Specialized Consultancy Firm (ICB), main operator for social engineering interventions; Partnerships with POs, NGOs (expression of interest) for direct support to local communities <b>Under the AF : Partnership with Ministry of Agriculture (Direction d'Aménagement Rural -DAR)</b></p>
<p><b>Implementation Stakeholders Component 3</b></p>	<p>Director and Technical Staff from DDFAP (Directions du Développement des Filières Animales et du Pastoralisme) operational strengthening for services provided by POs, DSSIA (Direction des Statistiques et des Systèmes d'Informations Agropastorales), Regional Levels : Partnerships with POs, traders, unions, federations, interprofessions, NGOs, Construction companies</p>
<p><b>Implementation Stakeholders Component 4</b></p>	<p>DSSIA (Directorate of Statistics and Agropastoral Information Systems) and Director of Strategies, Cooperation and M&amp;E Partnerships with Social Registry, TAAZOUR Agency and INAP-TFP (Institut National de Promotion de la Formation Technique et Professionnelle), Training providers institutions</p>
<p><b>Implementation Stakeholders Component 5</b></p>	<p>MR-PCU, Partners and service providers (through agreements and contracts): DSV, DSSIA, DDFAP, DSCSE (Direction des Strategies, de la Cooperation et du Suivi-Evaluation), OSA (Observatoire de la Securite Alinetaire) <b>Under the AF: WFP (under contract), CAAM, CSA</b></p>



Niger

<p><b>STEERING COMMITTEE (CP)</b></p>	<p><b>Exchange and Guidance Body.</b> Chaired by the Ministry in charge of Livestock, with representatives of the Ministry of Planning, Ministry of Finance, HC i3N, concerned technical ministries (<b>Agriculture</b>, Trade, Environment, Interior, Youth, Gender, Vocational Training, Basic Education), National Agency for Information Technologies (ANSI), National Research Council, Niger Network of Chambers of Agriculture (RECA), CSOs, and GGW country focal points. The CP chair may invite other resource person as needed. Frequency: at least once per year.</p>
<p><b>PROJECT COORDINATION UNIT FOR PRAPS-2-NE (NE-PCU)</b></p> <p><b>Technical Financial Management Procurement Monitoring &amp; Evaluation Gender Environment and Social Safeguards Communication</b></p>	<p><u>In charge of day-to-day coordination of project activities.</u> The NE-PCU will comprise the following:  A National Coordinator (civil servant)  Heads of technical components (civil servants)  A Planning/Technical Operations Expert (contractor) – lead for Component 5  An Administrative &amp; Financial Management Expert, a Principal Accountant, and an Assistant Accountant (contractors), an Administrative Assistant (contractor)  An Internal Auditor (contractor), a Procurement Expert and a Procurement Assistant (contractors)  An M&amp;E Expert, and an M&amp;E Assistant (contractors)  A Social Safeguard, Gender &amp; GBV Expert (contractor), An Environment Safeguard Expert (contractor)  A Communication and Knowledge Management Expert (contractor)  Support Staff (IT Expert, Assistants, Drivers, Guards, etc.)  <b>For the duration of the AF: 2 technical experts (contractors) : an animal/food production expert; a social rural development expert; a gender/GBV specialist (full duration of project) ; an additional procurement assistant</b></p>
<p><b>IMPLEMENTATION ARRANGEMENTS IN TARGETED REGIONS (in association with Regional Coordination Committees for activity guidance)</b>  6 Regional Coordination Units (Agadez, Tahoua, Zinder, Maradi, Tillaberi, Dosso) will be created within the Regional Livestock Directorates (DREL), each composed of the following:  A Regional Focal Point (MEL civil servant)  M&amp;E Assistants: one per two regions: Agadez-Tahoua, Zinder–Maradi, and Tillaberi–Dosso (contractors)  Accountant Assistants: one per two regions: Agadez-Tahoua, Zinder–Maradi, and Tillaberi–Dosso (contractors)  Support staff (Drivers, Liaison Agents, Guards, etc.)</p>	
<p><b>Implementation Stakeholders Component 1</b></p>	<p>Lead: DGSV in close collaboration with LABOCEL  Partners: DSA, DPPV/PV, STD, SVPP, POs, ANSI, ANAB, Training institutes</p>
<p><b>Implementation Stakeholders Component 2</b></p>	<p>Lead: DGDP/PIA in close collaboration with the Directorate for Rural Conflicts, the Regional Livestock Directorates (DREL), and the Permanent Secretariat of the Rural Code  Partners: CSOs, ANSI, Communes (<i>collectivités territoriales</i>), DDP, DHP, DGCMB, INRAN  <b>For the AF : Ministry of Agriculture (DGGR, DGA, DGPV)</b></p>
<p><b>Implementation Stakeholders Component 3</b></p>	<p>Lead: Directorate of Livestock Statistic (DES)/SIM-B in close collaboration with DPFAQ  Partners: DREL, ANSI, communes (<i>collectivités territoriales</i>), DPOE, IP/BVCP, OPEL, RECA, etc.</p>
<p><b>Implementation Stakeholders Component 4</b></p>	<p>Lead: DGPIA  Partners: MEPT, Direction de l’alphabétisation, Etat Civil, Cellule filets sociaux, ANSI, DEXCCO, CSOs, OPEL  <b>For the AF : DNP-GCA as a partner in the identification of IGA beneficiaries and and RECA in beneficiaries ‘assistance</b></p>
<p><b>Implementation Stakeholders Component 5</b></p>	<p>Lead : NE-PCU in collaboration with DNP-GCA and SAP for sub -component 5.2)  Partners: DDP, ANSI, RECA, ANAB, training institutes, Ministry of Higher Education</p>

Note: LABOCEL : Laboratoire Centrale de l’Elevage ; DGCMB : Direction Générale des Centres des Multiplication du Bétail ; INRAN : Institut National des Recherche Agronomique du Niger ; DEXCCO : Direction des Examens et Concours, des Certifications et de l’Orientation ; ANSI : Agence Nationale pour la Société de l’Information ; IP/BVCP : Inter Profession de la Filière Bétail Viande Cuirs et Peaux ; ANAB : Agence Nationale d’Attribution des Bourses  
DGSV : Direction Générale des Services Vétérinaires ; DGPIA : Direction Générale de la Production et des Industries Animales ; DSA : Direction de la Santé Animale ; DPFAQ= Direction de la Promotion des Filières Animales et de la Qualité ; DPOE= Direction de Promotion des Organisations des Eleveurs ; DDP= Direction de Développement Pastoral ; DPV/PPVP= Direction des pharmacies vétérinaires privées et de la privatisation de la profession vétérinaire ; STD : Services Techniques Déconcentrés ; SVPP : Services Vétérinaires Privés de Proximité ; OPEL : Organisations des Professionnels de l’Elevage ; RECA : Réseau National des Chambres d’Agriculture du Niger ; MEPT / Ministère de l’Enseignement Professionnel et Technique ; DREL : Direction Régionale de l’Elevage ; DHP : Direction de l’Hydraulique Pastorale ; DNP-GCA : Dispositif National de Prévention et de Gestion des Crises Alimentaires ; SAP: Système d’Alerte Précoce, DGGR : Direction Générale de Génie Rural ; DGA : Direction Générale de l’Agriculture ; DPV : Direction de la Protection des Végétaux