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IDA/R2015-0106/1

May 6, 2015

**Closing Date: Tuesday, May 26, 2015
at 6 p.m.**

FROM: The Corporate Secretary

**Burkina Faso, Mali, Niger, Senegal, Chad, Mauritania
and Permanent Interstate Committee for Drought Control in the Sahel**

Regional Sahel Pastoralism Support Project

Attached is the Project Appraisal Document regarding proposed credits and grants to Burkina Faso, Mali, Niger, Senegal, Chad, Mauritania and Permanent Interstate Committee for Drought Control in the Sahel for a Regional Sahel Pastoralism Support Project (IDA/R2015-0106), which is being processed on an absence-of-objection basis.

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Document of
The World Bank

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Report No: PAD1091

INTERNATIONAL DEVELOPMENT ASSOCIATION
PROJECT APPRAISAL DOCUMENT
ON
FOUR PROPOSED CREDITS
IN THE AMOUNTS OF
SDR 21.8 MILLION (US\$30 MILLION EQUIVALENT)
TO BURKINA FASO
SDR 32.7 MILLION (US\$45 MILLION EQUIVALENT)
TO THE REPUBLIC OF MALI
SDR 32.7 MILLION (US\$45 MILLION EQUIVALENT)
TO THE REPUBLIC OF NIGER
SDR 21.8 MILLION (US\$30 MILLION EQUIVALENT)
TO THE REPUBLIC OF SENEGAL
AND ON
THREE PROPOSED GRANTS
IN THE AMOUNTS OF
SDR 32.7 MILLION (US\$45 MILLION EQUIVALENT)
TO THE REPUBLIC OF CHAD
SDR 32.7 MILLION (US\$45 MILLION EQUIVALENT)
TO THE ISLAMIC REPUBLIC OF MAURITANIA
SDR 5.8 MILLION (US\$8 MILLION EQUIVALENT)
TO THE PERMANENT INTERSTATE COMMITTEE FOR DROUGHT CONTROL IN THE SAHEL
FOR A
REGIONAL SAHEL PASTORALISM SUPPORT PROJECT

May 4, 2015

Agriculture Global Practice (GFADR)
Africa Regional Integration Department (AFCRI)
Africa Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective: March 31, 2015)

Currency Unit = United States Dollars (US\$)
US\$1 = SDR 0.72490558

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AFAO	<i>Association des Femmes d'Afrique de l'Ouest</i> (West Africa Women Association)
AFD	<i>Agence Française de Développement</i> (French Development Agency)
AGIR	<i>Alliance Globale pour la Résilience</i> (Global Alliance for Resilience)
ALG	Integrated Development Authority of the Liptako-Gourma region (Burkina Faso/Mali/Niger)
APESS	Association for the Promotion of Livestock in the Sahel and Savannah
ASALs	Arid and Semi-Arid Lands
AU	African Union
AU-IBAR	African Union / Inter-African Bureau for Animal Resources
BRICKS	Building Resilience through Innovation, Communication, and Knowledge Services
CAADP	Comprehensive African Agriculture Development Programme
CAS	Country Assistance Strategy
CBPP	Contagious bovine pleuropneumonia
CEMAC	Central Africa Economic and Monetary Union
CILSS	<i>Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel</i> (Permanent Interstate Committee for Drought Control in the Sahel)
CIRAD	<i>Centre de Coopération Internationale en Recherche Agronomique pour le Développement</i> (French Agricultural Research Center for International Development)
CIRDES	<i>Centre International de Recherche-Développement sur l'Élevage en Zone Subhumide</i> (International Center for Research and Development of Animal Husbandry in the Sub-Humid Zone)
CORAF/WECARD	<i>Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricoles</i> (West and Central African Council for Agricultural Research and Development)
CPS	Country Partnership Strategy
CRP	<i>Comité Régional de Pilotage</i> (Regional Steering Committee)
CRSA	<i>Centre Régional de Santé Animale</i> (Regional Animal Health Center)
CSO	Civil society organization
CTR	<i>Comité Technique Régional</i> (Regional Technical Committee)
EDF	European Development Fund
EC	European Commission
ECCAS	Economic Community of Central African States
ECOWAP	ECOWAS Agricultural Programme
ECOWAS	Economic Community of West African States
ECTAD	Emergency Centre for Trans-boundary Animal Diseases (FAO)
EISMV	<i>Ecole Inter-Etats des Sciences et Médecine Vétérinaires</i> (Inter-State School of Veterinary Science and Medicine) (Dakar)
ESMF	Environmental and Social Management Framework
EU	European Union

FAO	Food and Agriculture Organization of the United Nations
FCV-CCSA	Fragility, Conflict, and Violence Cross-Cutting Solutions Area
FM	Financial management
GDP	Gross Domestic Product
HH	Household
ICR	Implementation Completion and Results Report
IDA	International Development Association
IDP	Internally Displaced People
IFC	International Finance Corporation
IGAD	Inter-Governmental Authority on Development (Horn of Africa)
IIED	International Institute for Environment and Development
INSAH	<i>Institut du Sahel</i> (Sahel Institute)
IRM	Immediate Response Mechanism
IRM-OM	Immediate Response Mechanism Operational Manual
IRR	Internal Rate of Return
ISRA	Institut Sénégalais de Recherches Agricoles (Senegalese Institute for Agricultural Research)
LEGS	Livestock Emergency Guidelines and Standards
M&E	Monitoring and evaluation
MDR	<i>Ministère du Développement Rural</i> (Ministry of Rural Development), Mali
ME	<i>Ministère de l'Elevage</i> (Ministry of Livestock), Mauritania
MEH	<i>Ministère de l'Elevage et de l'Hydraulique</i> (Ministry of Livestock and Hydraulics), Chad
MEL	<i>Ministère de l'Elevage</i> (Ministry of Livestock), Niger
MEPA	<i>Ministère de l'Elevage et des Productions Animales</i> (Ministry of Livestock and Animal Production), Senegal
MoU	Memorandum of Understanding
MRA	Ministère des Ressources Animales (Ministry of Animal Resources), Burkina Faso
NAIP	National Agriculture Investment Program
NEPAD	New Partnership for Africa's Development
N-PCU	National Project Coordination Unit
NRM	Natural Resource Management
NSC	National Steering Committee
NVS	National Veterinary Services
OECD	Organization for Economic Cooperation and Development
OIE	World Organization for Animal Health
OP/BP	Operational Policies/Bank Policies
PCN	Project Concept Note
PCU	Project Coordination Unit
PDO	Project Development Objective
PFPP	<i>Point Focal Pastoralisme – Pays</i> (Country Pastoralism Focal Point)
PMP	Pest Management Plan
PPA	Project Preparation Advance
PPR	<i>Peste des Petits Ruminants</i> (small ruminant plague)
PRAPS	<i>Projet Régional d'Appui au Pastoralisme au Sahel</i> (Regional Sahel Pastoralism Support Project)
PRP	<i>Priorité Résilience Pays</i> (Country Priority Resilience Program)
PPZS	<i>Pôle Pastoralisme et Zones Sèches</i> (Pastoralism and Dry Zones Pole)
PVS	Evaluation of the Performance of Veterinary Services (OIE tool)
R-PCU	Regional Project Coordination Unit
RAP	Resettlement Action Plan
RAIP	Regional Agriculture Investment Program

RBM	<i>Réseau Bilital Maroobe</i> (Bilital Maroobe Network)
RIAS	Regional Integration Assistance Strategy
ROPPA	<i>Réseau des Organisations Paysannes et de Producteurs de l'Afrique de l'Ouest</i> (Network of Farmers' and Agricultural Producers' Organizations of West Africa)
RPF	Resettlement Policy Framework
RPLRP	Regional Pastoral Livelihoods Resilience Project
RVF	Rift Valley Fever
SIPSA	<i>Système d'Information sur le Pastoralisme au Sahel</i> (Information System on Pastoralism in the Sahel)
SORT	Systematic Operations Risk-rating Tool
TFRP	Sahel Regional Task Force on Pastoralism
USAID	United States Agency for International Development
WAAPP	West Africa Agricultural Productivity Program
WAEMU	West African Economic & Monetary Union

Regional Vice President:	Makhtar Diop
Regional Director:	Colin Bruce
Country Directors:	Ousmane Diagana (Burkina Faso)
	Paul Noumba Um (Chad, Mali, Niger)
	Vera Songwe (Mauritania, Senegal)
Sr. Global Practice Director:	Juergen Voegele
Practice Manager:	Martien van Nieuwkoop
Task Team Leaders:	Christian Berger (TTL)
	Philippe Dardel (Co-TTL)
	Nicolas Ahouissoussi (Co-TTL Burkina Faso)
	Jane Hopkins (Co-TTL Chad)
	Nicaise Ehoué (Co-TTL Mali)
	Brahim Sall (Co-TTL Mauritania)
	Soulemane Fofana (Co-TTL Niger)
	Jean-Philippe Tré (Co-TTL Senegal)

AFRICA
Regional Sahel Pastoralism Support Project

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PAD DATA SHEET

Africa

Regional Sahel Pastoralism Support Project (P147674)

PROJECT APPRAISAL DOCUMENT

AGRICULTURE GLOBAL PRACTICE

Report No.: PAD1091

Basic Information			
Project ID: P147674	EA Category: B - Partial Assessment	Team Leader(s): Christian Berger, Philippe Dardel	
Lending Instrument: Investment Project Financing	Fragile and/or Capacity Constraints []		
	Financial Intermediaries []		
	Series of Projects []		
Project Implementation Start Date: 26-May-2015	Project Implementation End Date: 30-Jun-2021		
Expected Effectiveness Date 30-Sep-2015	Expected Closing Date 31-Dec-2021		
Joint IFC: No			
Practice Manager: Martien van Nieuwkoop	Senior Global Practice Director: Juergen Voegele	Regional Director: Colin Bruce	Regional Vice President: Makhtar Diop
Borrowers: CILSS, Burkina Faso, The Republic of Chad, The Republic of Mali, The Islamic Republic of Mauritania, The Republic of Niger, The Republic of Senegal			
Responsible Agency (regional level): Permanent Interstate Committee for Drought Control in the Sahel (CILSS)			
Contact: Djime Adoum Telephone No.: +226 5037 4125		Title: Executive Secretary Email: Djime.adoum@cilss.bf	
Responsible Agency: Ministry of Animal Resources, Burkina Faso			

Contact: Edith Vokouma	Title: Director General for Pastoral Areas Management and Development							
Telephone No.: +226 7024 2143	Email: vokedith@yahoo.fr							
Responsible Agency: Ministry of Livestock and Hydraulics - Republic of Chad								
Contact: Ahmat Hassan Moussa	Title: Director General for Pastoral Development and Animal Production							
Telephone No.: + 235 6629 6031	Email: ahmathassan@hotmail.fr							
Responsible Agency: Ministry of Rural Development - Republic of Mali								
Contact: Abdoul-Wahab Diarra	Title: Head, Pastoral Development and Hydraulics							
Telephone No.:+223 6671 3719	Email: Wahabd06@yahoo.fr							
Responsible Agency: Ministry of Livestock - Islamic Republic of Mauritania								
Contact: Lemrabott Ould Nemine	Title: Counselor to the Minister							
Telephone No.:+222 2235 1149	Email: olemrabott@yahoo.fr							
Responsible Agency: Ministry of Livestock - Republic of Niger								
Contact: Mahaman Sanoussi Fode Camara	Title: Director of Pastoral Development							
Telephone No.:+227 9697 1546	Email: Sfode2001@yahoo.fr							
Responsible Agency: Ministry of Livestock and Animal Production - Republic of Senegal								
Contact: Ibrahima Niang	Title: Head, Pastoral Division							
Telephone No.:+221 77104 5491	Email: ibniang@gmail.com							
Project Financing Data (in USD million)								
<input type="checkbox"/> Loan <input checked="" type="checkbox"/> Credit	<input type="checkbox"/> IDA Grant <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Guarantee <input type="checkbox"/> Other							
Total Project Cost:	248.00							
Financing Gap:	0.00							
Financing Source								
BORROWER/RECIPIENT	Amount							
International Development Association (IDA)	0.00							
Total	248.00							
Expected Disbursements (in USD million)								
Fiscal Year	2015	2016	2017	2018	2019	2020	2021	2022

Annual	4.00	5.00	28.00	50.00	60.00	60.00	40.00	1.00													
Cumulative	4.00	9.00	37.00	87.00	147.00	207.00	247.00	248.00													
Institutional Data																					
Practice Area (Lead)																					
Agriculture and Rural Development																					
Contributing Practice Areas																					
Environment & Natural Resources (GENDR)																					
Fragile, Conflict & Violence (GCFDR)																					
Cross Cutting Areas																					
[X] Climate Change [X] Fragile, Conflict & Violence [X] Gender [] Jobs [] Public Private Partnership																					
Sectors / Climate Change																					
Sector (Maximum 5 and total % must equal 100)																					
Major Sector	Sector		%	Adaptation Co-benefits %		Mitigation Co-benefits %															
Agriculture, fishing, and forestry	Animal production		60	30																	
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector		40	20																	
Total			100																		
<input type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this Project.																					
Themes																					
Theme (Maximum 5 and total % must equal 100)																					
Major theme	Theme				%																
Rural development	Rural services and infrastructure				30																
Trade and integration	Regional integration				20																
Rural development	Rural policies and institutions				10																
Environment and natural resources management	Other environment and natural resources management				40																

Total	100
Proposed Development Objective(s)	
To improve access to essential productive assets, services, and markets for pastoralists and agro-pastoralists in selected trans-border areas and along transhumance axes across six Sahel countries, and strengthen country capacities to respond promptly and effectively to pastoral crises or emergencies.	
Components	
Component Name	Cost (USD Millions)
Animal Health Improvement	50.48
Natural Resource Management Enhancement	70.87
Market Access Facilitation	45.38
Pastoral Crisis Management	37.56
Project Management and Institutional Support	43.71
Systematic Operations Risk- Rating Tool (SORT)	
Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Substantial
OVERALL	Substantial
Compliance	
Policy	
Does the Project depart from the CAS in content or in other significant respects?	Yes [] No [X]
Does the Project require any waivers of Bank policies?	Yes [] No [X]
Have these been approved by Bank management?	Yes [] No []
Is approval for any policy waiver sought from the Board?	Yes [] No [X]
Does the Project meet the Regional criteria for readiness for implementation?	Yes [X] No []

Safeguard Policies Triggered by the Project		Yes	No
Environmental Assessment OP/BP 4.01		X	
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36			X
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11		X	
Indigenous Peoples OP/BP 4.10			X
Involuntary Resettlement OP/BP 4.12		X	
Safety of Dams OP/BP 4.37			X
Projects on International Waterways OP/BP 7.50			X
Projects in Disputed Areas OP/BP 7.60			X
Legal Covenants			
Name	Recurrent	Due Date	Frequency
CILSS – Regional Steering Committee		31-Oct- 2015	
The Recipient shall establish and maintain thereafter until the completion of the Project, a Regional Steering Committee, under terms of reference satisfactory to the Association vested with responsibility for providing policy guidance and for overseeing the implementation of regional level activities under the Project.			
Name	Recurrent	Due Date	Frequency
CILSS – Regional Project Coordination Unit		31-Oct- 2015	
The Recipient shall establish and maintain thereafter until the completion of the Project, a Regional Project Coordination Unit, under terms of reference and staffing satisfactory to the Association.			
Name	Recurrent	Due Date	Frequency
CILSS – Appointment of all key staff required for the Project		31-Oct- 2015	
Description of Covenant			
The Recipient shall, no later than one (1) month after the Effective Date, appoint all key staff required for the Project, including a Financial Management Specialist and a Procurement Specialist, with terms of reference and qualifications satisfactory to the Association.			
Name	Recurrent	Due Date	Frequency
CILSS – Internal Auditor		31-Dec- 2015	
Description of Covenant			
The Recipient shall, no later than three (3) months after the Effective Date, appoint an internal auditor for the			

Project, with terms of reference and qualifications satisfactory to the Association.			
Name	Recurrent	Due Date	Frequency
CILSS – External Auditor		28-Feb- 2016	
Description of Covenant The Recipient shall, no later than five (5) months after the Effective Date, appoint an external auditor for the Project, with terms of reference and qualifications satisfactory to the Association.			
Name	Recurrent	Due Date	Frequency
CILSS – Computerized Accounting System		30-Nov- 2015	
Description of Covenant The Recipient shall, no later than two (2) months after the Effective Date, make available to the Project a computerized accounting system, with technical specifications satisfactory to the Association.			
Name	Recurrent	Due Date	Frequency
Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal - Appointment of all key staff required for the Project		31-Oct- 2015	
Description of Covenant Each Recipient shall, no later than one (1) month after the Effective Date, appoint all key staff required for the Project, including a Financial Management Specialist and a Procurement Specialist, with terms of reference and qualifications satisfactory to the Association.			
Name	Recurrent	Due Date	Frequency
Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal – Internal Auditor		31-Dec- 2015	
Description of Covenant Each Recipient shall, no later than three (3) months after the Effective Date, appoint an internal auditor for the Project, with terms of reference and qualifications satisfactory to the Association.			
Name	Recurrent	Due Date	Frequency
Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal – External Auditor		28-Feb- 2016	
Description of Covenant Each Recipient shall, no later than five (5) months after the Effective Date, appoint an external auditor for the Project, with terms of reference and qualifications satisfactory to the Association.			
Name	Recurrent	Due Date	Frequency
Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal - Computerized Accounting System		30-Nov- 2015	

Description of Covenant		
Each Recipient shall, no later than two (2) months after the Effective Date, make available to the Project a computerized accounting system, with technical specifications satisfactory to the Association.		
Conditions		
Source of Fund	Name	Type
IDA	CILSS, Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal: Project Implementation Manual	Effectiveness
Description of Condition		
Each Recipient has adopted the PIM in form and substance acceptable to the Association.		
Source of Fund	Name	Type
IDA	CILSS: Regional Project Coordination Unit – Hiring of Regional Coordinator	Effectiveness
Description of Condition		
The Recipient has recruited a regional coordinator for the Project, with the terms of reference and qualifications acceptable to the Association.		
Source of Fund	Name	Type
IDA	Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal: National Project Coordination Unit – Appointment of National Coordinator	Effectiveness
Description of Condition		
Each Recipient has appointed a national coordinator for the Project, with the terms of reference and qualifications acceptable to the Association.		
Source of Fund	Name	Type
IDA	Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal: Subsidiary Agreement	Effectiveness
Description of Condition		
The Subsidiary Agreement has been executed on behalf of each Recipient and the CILSS.		
Source of Fund	Name	Type
IDA	Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal – Immediate Response Mechanism Operational Manual (IRM-OM).	Disbursement
Description of Condition		
Each Recipient has adopted an IRM-OM, in form and substance acceptable to the Association, before payments against activities under Sub-Component 4.2 of the Project can be made.		
Team Composition		
Bank Staff		

Name	Role	Title	Specialization	Unit
Nicolas Ahouissoussi	Team Member	Sr. Agriculture Economist	Sr. Agriculture Economist and Co-TTL for Burkina Faso	GFADR
Volana Andriamasinoro	Team Member	Program Assistant	Program Assistant	GFADR
Amadou Ba	Team Member	Sr. Agriculture Economist	Sr. Agriculture Economist (Niger)	GFADR
Siaka Bakayoko	Financial Management Specialist	Lead Financial Management Specialist	Lead Financial Management Specialist (Regional)	GGODR
Christian Berger	Team Leader (ADM Responsible)	Sr. Agricultural Specialist	Sr. Agricultural Specialist	GFADR
Benjamin Billard	Team Member	Operations Officer	Operations Officer	GFADR
Juvenal Nzambimana	Team Member	Sr. Operations Officer	Sr. Operations Officer	GFADR
Loraine Ronchi	Team Member	Sr. Economist	IFC Economist	GTCDR
Eugene Moses	Team Member	Strategy Officer	IFC Advisor	CMGAF
Eric Brintet	Team Member	Lead Financial Management Specialist	Lead Financial Management Specialist	GGODR
Myriam Chaudron	Team Member	Livestock Specialist	Livestock Specialist	GFADR
Philippe Dardel	Team Leader	Sr. Environmental Specialist	Sr. Environmental Specialist	GENDR
Bleoue Nicaise Ehoue	Team Member	Sr. Agriculture Economist	Co-TTL for Mali	GFADR
Moustapha Ould El Bechir	Team Member	Sr. Procurement Specialist	Sr. Procurement Specialist (Mauritania)	GGODR
Ningayo Charles Donang	Team Member	Sr. Procurement Specialist	Sr. Procurement Specialist (Chad)	GGODR
Ngor Sene	Team Member	Financial Management Specialist	Financial Management Specialist (Burkina Faso)	GGODR
Souleman	Team	Sr. Rural Development	Sr. Rural Development	GFADR

Fofana	Member	Specialist	Specialist and Co-TTL for Niger	
Salam Hailou	Team Member	Program Assistant	Program Assistant	GFADR
Johannes Hoogeveen	Team Member	Sr. Economist	Sr. Economist	GPVDR
Jane Hopkins	Team Member	Sr. Agriculture Economist	Sr. Agriculture Economist and Co-TTL for Chad	GFADR
Anders Jensen	Team Member	Sr. Monitoring and Evaluation Specialist	Sr. Monitoring and Evaluation Specialist	GPSOS
Remi Kini	Team Member	Sr. Agriculture Economist	Sr. Agriculture Economist	GFADR
Jean Charles Amon Kra	Team Member	Sr. Financial Management Specialist	Sr. Financial Management Specialist (Niger)	GGODR
Dahlia Lotayef	Safeguards Specialist	Lead Environmental Specialist	Lead Environmental Specialist	GENDR
Sylvie Nenonene	Team Member	Sr. Communications Officer	Sr. Communications Officer	AFREC
Celestin Adjalou Niamien	Team Member	Sr. Financial Management Specialist	Sr. Financial Management Specialist (Mali and Chad)	GGODR
Caroline Plante	Team Member	Livestock Specialist	Livestock Specialist	GFADR
Anna Wielogorska	Procurement Specialist	Sr. Procurement Specialist	Sr. Procurement Specialist (Regional)	GGODR
Brahim Sall	Team Member	Sr. Rural Development Specialist	Sr. Rural Development Specialist and Co-TTL for Mauritania	GFADR
Fatou Fall Samba	Team Member	Financial Management Specialist	Financial Management Specialist (Mauritania, Senegal)	GGODR
Ibrah Rahamane Sanoussi	Team Member	Sr. Procurement Specialist	Sr. Procurement Specialist (Niger)	GGODR
Abdoul Wahabi Seini	Safeguards Specialist	Sr. Social Development Specialist	Sr. Social Development Specialist	GSURR
Mamadou	Team	Consultant	Procurement Specialist	GGODR

Mansour Mbaye	Member		(Senegal)		
Mahamadou Bambo Sissoko	Team Member	Sr. Procurement Specialist	Sr. Procurement Specialist (Mali)	GGODR	
Catalina Quintero	Team Member	Extended Term Consultant	Fragility, Conflict, and Violence	GCFDR	
Mamata Tiendrebeogo	Team Member	Sr. Procurement Specialist	Sr. Procurement Specialist (Burkina Faso)	GGODR	
Cheick Traore	Team Member	Sr. Procurement Specialist	Sr. Procurement Specialist (Senegal)	GGODR	
Jean-Philippe Tre	Team Member	Sr. Agriculture Economist	Sr. Agriculture Economist and Co-TTL for Senegal	GFADR	
Charlotte Spinazze	Team Member	Consultant	Operations Officer	GFADR	
Aissatou Diallo	Disbursement Officer	Sr. Finance Officer	Sr. Finance Officer	WFALA	
Faly Diallo	Disbursement Officer	Finance Officer	Finance Officer	WFALA	
Kishor Uprety	Counsel	Sr. Counsel	Sr. Counsel	LEGAM	
Extended Team					
Name		Title	City		
Yamina Cherrou		Agronomist - FAO	Rome (Italy)		
Abdoulaye Mbaye		Sr. Agronomist - FAO	Rome (Italy)		
Julien Vallet		Economist - FAO	Rome (Italy)		
Niels Morel		Economist, Consultant	Washington DC (USA)		
Bernard Bonnet		Pastoral Specialist - IRAM	Montpellier (France)		
Christophe Benard		Economist - IRAM	Montpellier (France)		
Abder Benderdouche		Economist - IRAM	Montpellier (France)		
Locations					
Country	First Administrative Division	Location	Planned	Actual	Comments
Burkina Faso	Cascades	Cascades	X	X	
	Hauts Bassins	Hauts Bassins	X	X	

	Boucle du Mouhoun	Boucle du Mouhoun	X	X	
	Nord	Nord	X	X	
	Sahel	Sahel	X	X	
	Est	Est	X	X	
Chad	Lac	Lac	X	X	
	Hajder Lamis	Hajder Lamis	X	X	
	Kanem	Kanem	X	X	
	Barh Al Ghazal	Barh Al Ghazal	X	X	
	Batha	Batha	X	X	
	Borkou	Borkou	X	X	
	Ennedi Est	Ennedi Est	X	X	
	Ennedi Ouest	Ennedi Ouest	X	X	
	Waddi Fira	Waddi Fira	X	X	
	Ouaddaï	Ouaddaï	X	X	
	Sila	Sila	X	X	
	Guera	Guera	X	X	
Mali	Kayes	Kayes	X	X	
	Koulikoro	Koulikoro	X	X	
	Segou	Segou	X	X	
	Mopti	Mopti	X	X	
	Tombouctou	Tombouctou	X	X	
	Kidal	Kidal	X	X	
	Gao	Gao	X	X	
	Sikasso	Sikasso	X	X	
Mauritania	Hodh Echarghui	Hodh Echarghui	X	X	
	Hodh Elgharbi	Hodh Elgharbi	X	X	
	Assaba	Assaba	X	X	
	Tagant	Tagant	X	X	
	Adrar	Adrar	X	X	
	Guidimagha	Guidimagha	X	X	

	Gorgol	Gorgol	X	X	
	Brakna	Brakna	X	X	
	Trarza	Trarza	X	X	
	Inchiri	Inchiri	X	X	
Niger	Agadez	Agadez	X	X	
	Diffa	Diffa	X	X	
	Dosso	Dosso	X	X	
	Maradi	Maradi	X	X	
	Tahoua	Tahoua	X	X	
	Tillaberi	Tillaberi	X	X	
	Zinder	Zinder	X	X	
Senegal	Kaffrine	Kaffrine	X	X	
	Louga	Louga	X	X	
	Matam	Matam	X	X	
	Tambacounda	Tambacounda	X	X	
	Saint-Louis	Saint-Louis	X	X	
Consultants (will be disclosed in the Monthly Operational Summary)					
Consultants Required?		Consulting services to be determined			

I. STRATEGIC CONTEXT

A. Regional and Country Context

1. Pastoralism, the extensive, mobile rearing of livestock on communal rangelands, is the prevailing livelihood and production system practiced in the world's arid and semi-arid lands (ASALs). Recent estimates indicate that 50 million of the world's 120 million pastoralists and agro-pastoralists reside in Sub-Saharan Africa. In the Sahel,¹ ASALs represent more than 75 percent of the land area and support an estimated 20 million pastoralists,² along with an estimated 60 million cattle and 160 million small ruminants.³

2. Within and across Sahelian countries, large numbers of people—and at least half of all pastoralists—have been displaced in the wake of drought, famine, and conflict. Some countries are living with a legacy of civil war and other forms of instability. Countries bordering the Sahel have sparked insecurity in the region, unleashing a rise in trafficking and other criminal activities in some areas, along with spates of violence, incursions of extremism, and even terrorism. Growing insecurity in the Sahel also contributes to the vulnerability of pastoral communities. In this context, increasing attention has turned to the connections between pastoralism and the factors that drive or mitigate conflict and instability.

3. Amid these destabilizing influences, an extensive trade in livestock (mostly live animals) continues to show promise. Livestock are the most valuable agricultural commodity traded in West Africa and a mainstay of Sahelian economies. The livestock trade links the Sahelian countries to the Atlantic coastal countries, which are net importers of animal products, and contributes significantly to national GDP (10–20 percent of GDP and 30–50 percent of agricultural GDP). In Niger and Chad, the livestock sub-sector is the second-highest export earner after uranium (Niger) and petroleum (Chad), with pastoralists and agro-pastoralists supplying 80 percent of production. Throughout West Africa, the production systems of Sahelian pastoralists provide an income for 80 million people⁴ and supply a significant portion of the meat and the milk consumed in urban areas.⁵

4. In the medium term, demand for livestock products in Africa should grow very significantly, propelled by increased urbanization and incomes. By 2050, demand for meat is projected to reach 34.8 million tons, and demand for milk will reach 82.6 million tons, an increase of 145 and 155 percent, respectively, over 2005/07 levels.⁶ If current policies persist, however, production is unlikely to keep pace with consumption, and Africa will increasingly become a net importer of livestock products.

¹ The Sahel is usually defined as the area receiving 200–800 millimeters of mean annual rainfall. It includes much of the national territory of Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal.

² Figures vary by data source and by the definition of pastoralism.

³ Worldwide, arid and semi-arid grazing land covers some 10 million square kilometers, collectively appropriated and managed by some 200 million herders raising 1 billion ruminants.

⁴ SPSA estimate.

⁵ Touré, I., A. Ickowicz, A. Wane A., I. Garba, and P. Gerber (eds.) (2012), “Atlas des évolutions des systèmes pastoraux au Sahel 1970–2012” (FAO, Rome).

⁶ FAO, ILRI, and AU-IBAR (2013), “Investing in African Livestock: Business Opportunities in 2030–2050” (Rome).

5. Pastoralists' economic importance to Sahelian countries is beyond dispute, yet they remain one of the most marginalized and vulnerable segments of the population.⁷ The incidence of extreme poverty among African pastoralists ranges from 25 percent to 55 percent; it is estimated to be 40 percent in the Sahel. Protecting the sustainability and potential of pastoralist production systems and fostering the stability they confer upon this impoverished population are major strategic concerns for the region.⁸

6. The Sahel is an environment where severe climatic variability—characterized by rainfall that is highly scattered and unpredictable over time and space, and droughts that are unpredictable but periodic and expected—is the norm rather than the exception. Even so, funds have been more readily available to respond to the emergencies unleashed by natural disasters than to prepare for them and mitigate their risks, although the costs of dealing with emergencies are far higher.

7. Climate change is likely to worsen and intensify the frequency and magnitude of droughts and floods in the region.⁹ Pastoralists have sought to take advantage of new economic opportunities and means of communication, but over the last several decades, their traditional livelihoods have become more tenuous as droughts of varying intensity have stricken with increasing frequency, severely challenging the natural resource base. In 2009/10, for example, drought killed more than 4.8 million livestock of all species (about 25 percent of the herd) in Niger's pastoral areas.¹⁰ The direct economic loss from that drought was estimated at nearly US\$700 million. It is not only the immediate loss of animals and incomes that matters, however. Droughts dramatically alter the herd structure. Herds may need 10 years or more to recover—years in which pastoralist households become less resilient with successive droughts, the resource base suffers repeated damage, and pastoralist systems enter a decline that becomes challenging to reverse.¹¹

8. In summary, the pastoralists and pastoralism in the Sahel face several challenges at the regional and country levels that demand attention. Policy and institutional reforms, as well as investments in improving the productivity and resilience of pastoral production systems, are required to ensure that the economic opportunities generated by growing demand for animal products translate into widespread benefits for pastoral and agro-pastoral populations. The proposed Regional Sahel Pastoralism Support Project (*Projet Régional d'Appui au Pastoralisme au Sahel*, PRAPS) intends to build resilience over the longer term while establishing a contingency emergency response mechanism that permits participating countries to reallocate funds and rapidly

⁷ For example, pastoralists' access to basic services (education, healthcare, water) remains well below national averages; in Chad, for example, nomads represent 5–8 percent of the population but only 2 percent of children attend nomadic schools, with a very pronounced gender inequality (Swift 2011). With little access to vaccines, nomads are the main victims of diseases such as polio (Kessely 2011).

⁸ Pastoralism is considered to be an important stabilizing factor, but the ways in which the development of pastoralist economies and livelihoods contributes to regional stability, and under what conditions, are not yet well understood. See De Haan, Dubern, Garancher, and Quintero (2014), "Pastoralism Development in the Sahel: A Road to Stability?" (World Bank, Washington DC, processed).

⁹ OECD (2010), "Sahelian Climate: Past, Current, Projections" (Paris); World Bank (2013), "Turn Down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience," Report No. 2 (Washington, DC).

¹⁰ UNDP, WFP, FWES-NET, Oxfam, FAO, and World Bank Interim Strategy Note, Niger (2011), "Evaluation rapide de l'impact de la crise pastorale 2009–2010 sur la décapitalisation du cheptel et les moyens de subsistance des populations pastorales et agro-pastorales du Niger" (Republic of Niger, Niamey).

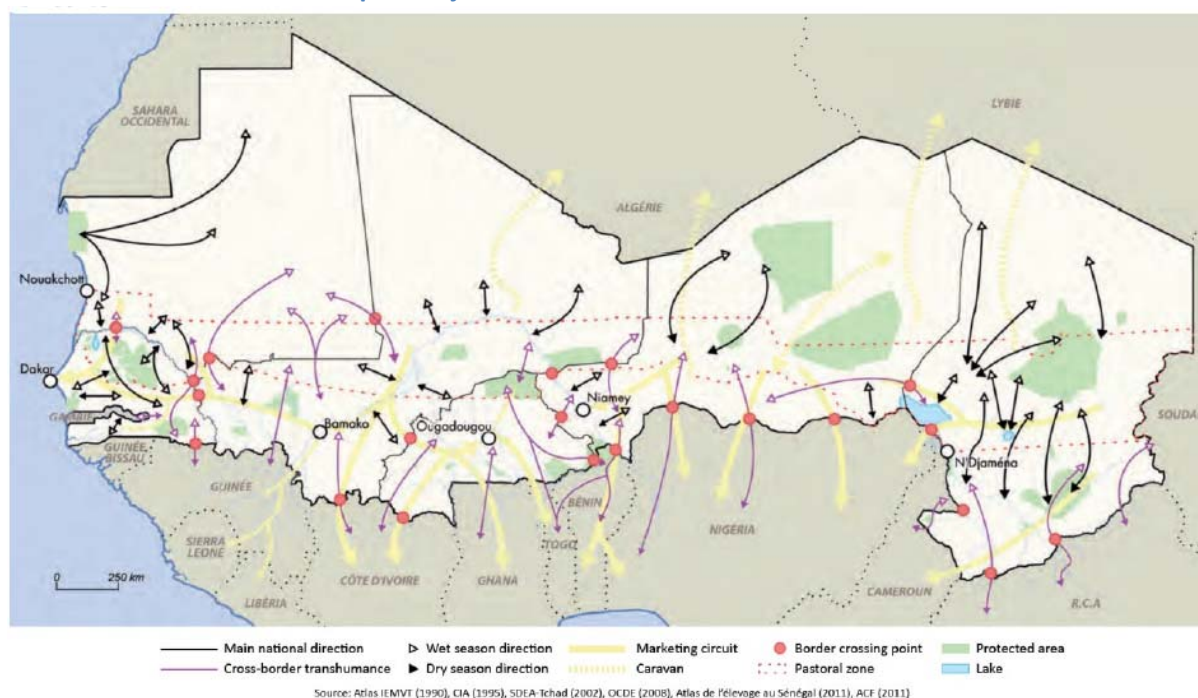
¹¹ Pastoral production strategies (livestock mobility, common property tenure regimes, and negotiated access to resources) lessen the impact of drought and maximize production under highly variable conditions. For details on threats to these strategies, see Lesnoff, M., C. Corniaux, and P. Hiernaux. (2012), "Sensitivity Analysis of the Recovery Dynamics of a Cattle Population Following Drought in the Sahel Region," *Ecological Modeling* 232: 28–39; Hesse, C., S. Anderson, L. Cotula, J. Skinner, and C. Toulmin (2013), "Managing the Boom and Bust: Supporting Climate Resilient Livelihoods in the Sahel," IIED Issues Paper (International Institute for Environment and Development, London).

address any serious natural catastrophe that disrupts resilience-building efforts and causes hardship among the project's beneficiaries.

B. Sectoral and Institutional Context

9. Seasonal and trans-boundary mobility define pastoralists' livelihoods and are their primary means of coping with drought and conflict. The ecosystems from which pastoralists derive their livelihoods extend across national borders; so do the market networks that provide opportunities for income growth. Transhumance and marketing routes in the Sahel (Map 1) reveal the regional nature of the pastoral economy and the interdependence between countries, which extends from the border with Sudan to the Atlantic coast.

Map 1: Major transhumance routes in the Sahel



Source: CIRAD and FAO, 2012.

10. Competition over natural resources, especially land and water, along with the erosion of traditional range management and tenure systems, have inflamed conflicts among pastoralists and between pastoralists and settled farming populations in the Sahel over the past three decades. The prevailing political, ethnic, and religious tensions add fuel to the flames.¹² The increased circulation of firearms in many countries has made traditional raids and cattle theft more deadly. Demographic trends clearly imply that a growing number of young, uneducated pastoralists will never make a living from pastoralism alone. Under these circumstances, they are easily persuaded to work for traffickers and armed groups.

11. Experience with projects in arid and semi-arid settings in West, Central, and East Africa demonstrates that problems limiting pastoralists' resilience often are regional in nature and require

¹² See, for example, International Crisis Group (2014), "Afrique Centrale: Les Défis Sécuritaires du Pastoralisme," Report No. 215 (Brussels).

regional solutions. Threats related to climate change and other forms of instability, along with new settlements, large-scale development schemes, and border controls, are making traditional transhumance routes less accessible, marketing corridors more dangerous, and livestock production more risky. Channeling herds through a smaller number of routes will almost certainly degrade those areas in the absence of an appropriate management system. Trans-boundary migration is part of the regional solution, because it permits rangelands in the ASALs to be used and protected efficiently and enables adaptation to climate change. Access to livestock markets also requires trans-boundary mobility.¹³ The prospects for income growth increase as pastoralists become integrated into West Africa's increasingly dynamic regional and national livestock markets.

12. In other words, although Sahelian pastoralists successfully adapted to and overcame major changes and setbacks in the past, a series of proliferating and accelerating changes threaten the sustainability of their way of life and the production system on which it relies. These changes include more frequent and severe crises (drought, conflict), more stringent restrictions on access to natural resources and on mobility (occasioned by changing land use patterns, conflict, legal and policy frameworks, and other factors) and a more widespread inability of stakeholders to shift their approach to managing natural resources by incorporating sustainable collective management and effective strategies to promote mobility.

13. Building on the collective action of the countries in the region, the proposed project will deliver a set of public goods that address the challenges and build on the opportunities created by this changing environment, including trans-boundary animal diseases, shared rangelands and water resources, cross-border trade, market information, and pastoral risks (which include shocks such as droughts and conflicts). All of these challenges and opportunities cut across national borders and have key regional dimensions.

14. Animal diseases are a prime example of the trans-national challenges and opportunities presented by pastoralism. A study evaluating the economic cost of contagious bovine pleuropneumonia (CBPP) and the benefits of its control in 12 sub-Saharan countries¹⁴ finds that the value of morbidity and mortality losses is in the order of €30 million (€2.5 million per country). The total economic cost (direct and indirect production losses plus disease control costs) is an estimated €44.8 million (€3.7 million per country). Data from 2014 on small ruminant plague (*peste des petits ruminants*, PPR) in Burkina Faso¹⁵ place the economic cost of PPR at about US\$16 per animal. A recent summary of evaluations of veterinary services by the World Organization of Animal Health (OIE) in ECOWAS countries¹⁶ highlights the services' lack of budgetary resources and the mismatch between the human resources that are required and actually available for preventing and controlling animal diseases. In terms of the strategic action required to sustain animal health, all of the countries identified the need to improve the coverage of their surveillance programs as well as the control of high-priority animal diseases.

¹³ Aklilu, Y., and A. Catley (2010), "Mind the Gap: Commercialization, Livelihoods, and Wealth Disparity in Pastoralist Areas of Ethiopia" (Feinstein International Center and DFID, Medford).

¹⁴ N.E. Tambi, W.O. Maina, and C. Ndi (2006), "An Estimation of the Economic Impact of Contagious Bovine Pleuropneumonia in Africa," *Rev. sci. tech. Off. int. Epiz.* 25(3): 999–1012.

¹⁵ Not yet published.

¹⁶ Feasibility study for a program to improve veterinary governance and the control of priority trans-boundary animal diseases in West Africa (OIE, September 2013).

15. The Nouakchott Declaration on Pastoralism (adopted in October 2013) recognizes the profound need for well-coordinated regional interventions to address issues related to pastoralism.¹⁷ Preparations for the Nouakchott forum revealed an ample institutional base for regional collaboration (Table 1). Regional priorities identified to date reflect the opportunities and challenges just mentioned: market access and trade (including pastoral mobility, trans-boundary crossing and animal disease control, trade promotion and market development, and transportation development), natural resource management (including access to land and water), migration and livelihood strategies, and conflict prevention and disaster risk management.

Table 1: The institutional framework for regional collaboration on issues related to pastoralism

Framework organization/agreement	Date	Purpose
African Union Policy Framework for Pastoralism in Africa	2001	The first political initiative in Africa to ensure, protect, and improve life, subsistence, and the rights of African pastoralists.
Comprehensive Africa Agriculture Development Programme (CAADP) under the New Partnership for Africa's Development (NEPAD)	2003	Under CAADP, the six Sahelian countries developed the policies and strategies embodied in their National Agricultural Investment Programs (NAIPs) and in the Regional Agricultural Investment Program (RAIP) of ECOWAS, including strategic options and regional activities for pastoral development.
Global Alliance for Resilience (Alliance Globale pour la Résilience, AGIR) Sahel and West Africa	2012	AGIR's top priorities include pastoralism as well as national and international strategies for regional stabilization and long-term development of Sahelo-Saharan areas.
N'Djamena Declaration	2013	This major reference describes the current frameworks and defines priorities for supporting policies contributing to regional pastoralism, while closely linking development and security issues.

16. The proposed project (PRAPS) stems directly from the Nouakchott Declaration, which calls for rapid progress toward a medium-term action program¹⁸ to be managed by the Permanent Interstate Committee for Drought Control in the Sahel (*Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel*, CILSS)¹⁹ under the political leadership of ECOWAS and the West African Economic and Monetary Union (WAEMU), plus Chad and Mauritania. Leaders of the six Sahelian countries have called on technical and financial partners to respond to their requests to mobilize resources at the appropriate level and for the required period in support of pastoralism in the Sahel. The World Bank committed to formulating a regional project that would foster rapid progress in securing pastoral activities, contribute to increasing the economic weight of the livestock sub-sector, and sustainably raise the incomes of Sahelian pastoral groups. As a direct follow-up, CILSS organized a regional workshop in January 2014 to build momentum for preparing PRAPS and to establish the Sahel Regional Task Force on Pastoralism (TFRP)—an ad hoc discussion, knowledge sharing and decision-making forum in which all regional stakeholders participate.²⁰

¹⁷ The Declaration (“Mobilizing Jointly an Ambitious Effort to Ensure Pastoralism without Borders”) was adopted by the six Sahelian countries (Burkina Faso, Chad, Mauritania, Mali, Niger and Senegal) following a landmark, high-level forum organized by the Government of the Islamic Republic of Mauritania, CILSS, and the World Bank, in collaboration with the AU, ECOWAS, and WAEMU Commissions and FAO.

¹⁸ The overall objective is to “secure the lifestyle and means of production of pastoral populations and increase the gross output of livestock production by at least 30 percent in the six concerned countries over the next five years, with a view to significantly increasing the incomes of pastoralists within a period of 5 to 10 years.”

¹⁹ Includes the Regional Animal Health Center (Centre Régional de Santé Animale, CRSA) in Bamako as a partner institution for animal health.

²⁰ TFRP includes international bodies (World Bank Group, FAO, ALG, CORAF, CIRDES, OIE, AU-IBAR, CRSA, EISMV, PPZS/CIRAD), National Pastoralism Focal Points of the six countries involved, and regional representatives of producer organizations and civil society (APESS, AFAO, RBM, ROPPA).

C. Higher Level Objectives to which the Project Contributes

17. The proposed project contributes to the World Bank's Africa Development Strategy, especially Pillar 2 (vulnerability and resilience), given that it is designed to prevent or mitigate the effects of shocks such as natural disasters while strengthening public sector capacity and supporting mutual learning among Sahelian countries.²¹ PRAPS is also part of the World Bank's Sahel Initiative, which seeks to address the regional drivers of vulnerability, conflict, and underdevelopment.

18. As a core partner in implementing the CAADP process at the regional and national level, the World Bank has considerable practical experience in agriculture and livestock development in the region. That experience ranges from policy dialogue to investment lending and/or budgetary support targeted to national programs, as well as capacity development and institutional support programs.

19. Fighting extreme poverty and fostering shared prosperity are central goals of the World Bank Group's corporate strategy. PRAPS supports those goals in several ways. The proposed investments will be made in historically under-resourced marginal areas with a large share of poor households that are locked into low-asset poverty traps and vulnerable to drought.²² PRAPS will invest in infrastructure and deliver services to improve animal health, natural resource management, market conditions (including better trading options), and crisis management mechanisms. These investments are expected to promote shared prosperity by enabling households to withstand future shocks with fewer losses and to invest in human capital development. As noted, interventions in ASALs have typically focused on short-term emergencies rather than longer-term prevention and mitigation.

20. The proposed project's regional approach is fully consistent with the overarching goal and strategic pillars of the Regional Integration Assistance Strategy (RIAS) for Sub-Saharan Africa. It supports institutional cooperation and economic integration by improving the sub-regional infrastructure network, including migration corridors, markets for regional trade in livestock products, and shared water points; building capacity for regional collaboration/coordination to prevent and manage shocks affecting livestock, such as drought and disease; encouraging and expanding capacity for collaboration among participating countries and integration within the regional economic communities; and overcoming constraints on the provision of regional public goods such as water for humans and animals and the control of trans-boundary and zoonotic animal diseases.

21. At the national level, PRAPS will enhance the resilience of key ecosystems and of poor and vulnerable groups whose livelihoods rely almost entirely on natural resources. The proposed project supports the main objectives of national development strategies and policies and is fully consistent with the Country Partnership Strategy (CPS) for each of the six countries involved. All

²¹ World Bank (2011), "Africa's Future and the World Bank's Support to It" (Washington, DC).

²² Pastoralists' comparatively poor access to basic services is discussed in an earlier footnote (see also Swift 2011; Kesseley 2011). Pastoralists' animals are also comparatively disadvantaged. In Niger, for example, 11 percent of nomadic herders vaccinate their animals, compared with 48 percent of transhumant herders, owing to poor distribution of vaccination pens and services (SIPSA 2011). It is essential to point out that data on livestock and livestock ownership are scarce and unreliable for the Sahel for a number of reasons, including the fact that surveys cannot reach many transient livestock-keeping households. On average, however, approximately 70 percent of the rural poor depend fully or partly on livestock for their livelihoods in Sahelian countries; many have no alternative sources of income, and arid lands can be put to no other use at present (World Bank report, "Enhancing the Resilience of Drylands in Sub-Saharan Africa," in preparation, and data from Save the Children, UK).

of those strategies place agriculture at the center of their agenda for economic growth, resilience, and job creation (Table 2).

Table 2: Alignment of PRAPS with national development policies and Country Partnership Strategies

Country	Alignment of national strategies with PRAPS
Burkina Faso	The recently approved CPS (FY2013–16) reflects the government’s Medium Term Vision, articulated in the Strategy for Accelerated Growth and Sustainable Development (2011–15). PRAPS is aligned with the three main strategic objectives of the CPS: accelerate inclusive and sustained growth; enhance governance for delivering social services more efficiently; and reduce social, economic, and environmental vulnerabilities.
Chad	PRAPS is consistent with the World Bank’s Interim Strategy Note and forthcoming CPF (2015), which supports re-engagement in agriculture to increase productivity in the sector. PRAPS is also aligned with the National Development Plan (PND 2013–15) and with the government’s main framework for promoting growth, poverty reduction, and food security, which underpins the current National Food Security Program 2014–21 (<i>Programme National de Sécurité Alimentaire</i> , PNSA).
Mali	PRAPS is consistent with the World Bank’s current re-engagement in Mali; it is aligned with the goals in the CPF (2015), NAIP, the government’s legal framework for agriculture (<i>Loi d’Orientation Agricole</i> , LOA 2006), and current Agricultural Development Policy (PDA 2013).
Mauritania	PRAPS supports the five pillars of the CPS for FY14–16, which is aligned with the Country Poverty Reduction Strategy (CSLP III) and the agricultural investment program for 2014–19 contained in the Rural Development Strategy. The new legal framework for agriculture (LOA) also plans for the development of pastoralism.
Niger	PRAPS strongly coincides with the strategic objectives of the CPS (2013–16), which are to assist Niger to achieve resilient growth, reduce vulnerability, and strengthen capacity for service delivery. The CPS is fully aligned with the 2012 Government Plan for Social and Economic Development (PDES) and the World Bank’s Africa Strategy.
Senegal	PRAPS is consistent with the Emerging Senegal Plan (PSE), which aims to increase the production, productivity, and competitiveness of the livestock sub-sector. PRAPS is aligned with the CPS (2013–17), especially Pillar 1 (accelerating inclusive growth and creating employment). PRAPS will support the regional agenda of the CPS to deepen integration, leverage additional funding, and build knowledge across the region.

II. PROJECT DEVELOPMENT OBJECTIVE

A. PDO

22. The Project Development Objective (PDO) is to “improve access to essential productive assets, services, and markets for pastoralists and agro-pastoralists in selected trans-border areas and along transhumance axes across six Sahel countries, and strengthen country capacities to respond promptly and effectively to pastoral crises or emergencies.” In this way, the proposed project will support improved productivity, sustainability, and resilience of pastoral livelihoods, as prioritized in the Nouakchott Declaration on Pastoralism.

23. The PDO will be achieved through a combination of strategic investments, capacity building, and policy dialogue. The pastoral population includes all people (active and inactive persons of all ages) who are members of a livestock-keeping household that: (i) obtains at least 90 percent of its animal feed requirement from grazing natural vegetation and (ii) derives at least 50 percent of its income from livestock. The agro-pastoral population includes all people (active and inactive persons of all ages) who are members of a livestock-keeping household that: (i) obtains 10 percent or more of its animal feed requirement from crop residues and (ii) derives at least 50 percent of its income from cropping activities.²³

²³ Definitions based on the World Bank report, “Enhancing the Resilience of Drylands in Sub-Saharan Africa” (in preparation).

B. Project Beneficiaries

24. The main beneficiaries of PRAPS will be pastoralists and agro-pastoralists in Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal; specific trans-boundary geographic areas and transhumance axes are prioritized in each of these six countries (see the map of PRAPS intervention areas in Annex 7). The proposed project is expected to benefit 2,070,000 people directly (200,000 in Burkina Faso, 400,000 in Chad, 440,000 in Mali, 400,000 in Mauritania, 400,000 in Niger, and 230,000 in Senegal) whose livelihoods rely mainly on pastoral activities, including but not limited to livestock keeping or marketing. Target groups include women and youth, who will benefit from the project's overall activities and from activities specifically addressing their needs whenever possible.

25. Secondary beneficiaries include service providers (both public and private), as well as national and regional institutions. CILSS will be a major institutional beneficiary of this project, alongside CRSA (*Centre Régional de Santé Animale*, the ECOWAS Regional Animal Health Center, based in Bamako)²⁴ and other regional coordinating partners at the technical level. Under the harmonized approach of the *Alliance Globale pour la Résilience* (Global Alliance for Resilience, AGIR) partnership, the goals of PRAPS and other development partners are expected to align to strengthen coordination and monitoring capacities within the Sahel.

C. PDO Level Results Indicators

26. The key PDO indicators are: (i) prevalence of two regional priority animal diseases—herd prevalence of CBPP and post-vaccinal seroprevalence of PPR; (ii) land area where sustainable land management practices have been adopted as a result of the project; (iii) average distance between functional water points accessible to pastoralists and agro-pastoralists in targeted zones; (iv) animals sold at markets rehabilitated and constructed as a result of the project; (v) in a pastoral crisis, time to reach 50 percent of the targeted beneficiaries as foreseen in the inclusive intervention plan; and (vi) direct project beneficiaries (of which female).

III. PROJECT DESCRIPTION

27. PRAPS is a US\$248 million regional operation to scale up selected activities within six Sahelian countries that have already proven their capacity to support pastoralist groups and enhance their regional integration; the activities are recognized throughout the region to have the potential to provide significant beneficial spillover effects. The proposed project will build a solid alliance to support pastoralism by pooling the expertise and resources of various actors (bilateral and multilateral technical and financial partners, governments, the private sector, and pastoral civil society organizations). This support is aligned with national priorities, takes regional dynamics into account, and complies with the subsidiarity principle. PRAPS will enhance the current frameworks for concerted action to develop a consolidated, regionally harmonized framework that serves as a platform for multiple actors to promote sustainable actions that support pastoralism. This approach provides flexibility to link country-specific outputs with broader, region-wide priorities.

²⁴ CRSA was initially established in 2006 by FAO-ECTAD, OIE, and AU-IBAR. Chad and Mauritania are officially covered by the activities of this Center. CRSA is in process of becoming a regular technical ECOWAS body in 2012.

28. **Key problems addressed.** The Nouakchott Declaration describes the main technical pillars and scope of operational programs to support pastoralism (enhancing production services, improving the competitiveness of the livestock sub-sector and market access, and strengthening the security of the assets, rights, and lifestyles of pastoral people). PRAPS will coherently address a set of fundamental, interrelated problems that weaken the resilience of pastoral groups, impede the development of pastoralist production systems, and increasingly ignite conflict. Aside from the scarcity and very limited reliability of basic data on pastoralism in the Sahel,²⁵ the key problems include: (i) weak productivity of pastoral systems caused by inadequate access to services and essential inputs (such as veterinary services, water, weather data, herd and rangeland management practices, animal nutrition, improved breeding stock, credit, and market information, and advisory services adapted to mobile communities); (ii) insufficient national and regional cooperation, particularly for disease control, natural resource management, trans-boundary movements of herds, and the facilitation of trade; (iii) lack of recognition and protection of the fundamental concept of mobility; and (iv) increasing vulnerability owing to increased risks (climate change, animal diseases including zoonotic diseases, economic hazards, conflicts, and insecurity.)²⁶

29. The success with which these key problem are addressed and future opportunities are pursued can be influenced by actions taken outside the purview of the proposed project. In parallel with their participation in PRAPS, governments can do much to further develop livestock sub-sector policies aimed at: (i) strengthening the role of regional economic integration organizations (ECOWAS/WAEMU) as facilitators and regulators of trans-boundary movements and trade; (ii) applying revised or new frameworks for land ownership that secure access to resources; (iii) systematically including the concerns of pastoral populations in decentralization legislation; and (iv) bringing coastal countries (market outlets) into discussions on pastoral policies, mobility, trade issues for animals and their products (including imports), and sector taxation.

30. **Gender mainstreaming.** Women's roles in pastoral communities and pastoralist livelihoods varies by country and ethnic group.²⁷ Women's participation in income-generating activities may be circumscribed by a lack of mobility and resources and by cultural and religious norms. Men usually own the livestock and migrate with most of the cattle, while women may remain at the homestead to manage the household, food security, children, and a few livestock. Even with these constraints, women are social, economic, and political actors in their own right. Empowering women and recognizing their inputs in pastoralism will reduce communities' vulnerability to external shocks, including conflict.

31. The project has been designed to integrate issues and particular needs pertinent to women and youth into its activities to give them sufficient attention. All activities undertaken through PRAPS must demonstrate that gender issues have been considered whenever possible. A gender assessment will be conducted as part of the mid-term review, and its results will be factored into subsequent improvements in the project's design as necessary. Progress reports, such as Implementation Status and Results reports (ISRs), will systematically cover gender. It is expected that national project coordination units (N-PCUs) will recruit gender facilitators with local language skills to make sure that women participate actively during consultations and are duly

²⁵ A notable contribution of the proposed project is to generate sound data on pastoral systems across the Sahel.

²⁶ Development challenges and security risks are often more acute in border areas.

²⁷ For example, in Burkina Faso and Niger, once the household's need for milk products is satisfied, any surplus products belong solely to women, who sell them. In other cases (among the Fula, Sarakole, and Soninke, for example), milk belongs to couples, who decide together how it will be used.

represented in all decisions. Data collected on beneficiaries will be disaggregated by gender. At the regional level, appropriate capacity strengthening will take place at CILSS for a coordinated approach to gender issues within the Sahel Initiative.

32. **Nutrition.** Animal protein is an important aspect of balanced human nutrition, particularly during the early years of life. Livestock are important to the poor not only because of their economic contribution but also because of their contribution to human development outcomes. Animals provide nutrients and micronutrients that would otherwise be scarce or nonexistent in local diets. In Sahelian countries, increasing the share of foods from animal sources in the caloric intake of the poor could have many positive nutritional benefits. Promoting livestock ownership has the potential to positively affect human nutrition in rural areas. Evidence indicates that support for livestock development often translates into nutritional benefits for target communities; ownership of various livestock species increases consumption of foods from animal sources and improves children's nutritional status.²⁸ PRAPS will promote livestock development in pastoral areas, and it will support the dissemination of information on sound nutritional practices among rural beneficiaries, particularly women and children.

33. **Climate-smart agriculture.** Despite being a source of greenhouse gas (GHG) emissions and pollutants, livestock can also mitigate—and in many instances reverse—the adverse environmental impacts of conventional husbandry methods. In many arid and semi-arid areas, pastoralism is the only renewable, non-extractive use of dryland resources, and it is essential for maintaining soil and water quality. In the Sahel, where livestock are not present, the land becomes degraded and the loss of biodiversity accelerates. Engagement with small-scale producers is a critical entry point to enlist their efforts as effective agents of environmentally sound practices that provide ecological services and help to minimize or even reverse the negative impacts of current practices. Building resilience for pastoral and agro-pastoral communities is a core dimension of PRAPS.

34. **Greenhouse gas emissions.** Pastoralist systems typically have higher GHG emissions per unit of meat or milk product than more intensified systems. The main reason for this difference is that animal productivity is low in pastoralist systems as a result of poor feed rations, poor animal genetic potential, and poor health; producers also must maintain large numbers of “unproductive” animals to act as a buffer against losses and provide goods and services such as draft power, fiber, and savings. In turn, pastoralist systems offer equally high mitigation opportunities, which the proposed project will tap. Interventions that improve animal health, feeding, and marketing will reduce direct GHG emissions per unit of meat or milk product. In addition, project activities to improve rangeland management and productivity will positively affect soil carbon stocks, offset GHG emissions, and provide other ecosystem services related to biodiversity and water resources.

35. **Private sector involvement.** The project focuses primarily on the provision of public goods (such as animal health, communal rangeland development, market infrastructure, and crisis management systems) that will increase the productivity of pastoral production systems. Better provision of these public goods will help to expand business opportunities for the private sector in West Africa's rapidly growing livestock trade. The project will also contract with private companies to undertake many of its activities (such as construction or service provision, among

²⁸ Azzarri, C., E. Cross, B. Haile, and A. Zezza (2014), “Does Livestock Ownership Affect Animal Source Foods Consumption and Child Nutritional Status? Evidence from Rural Uganda,” Policy Research Working Paper No. WPS 7111 (World Bank, Washington, DC).

others). The project design acknowledges the important role played by the private sector in the delivery of veterinary services by supporting the installation of private animal health providers in underserved areas, and strengthening the capacity of such providers where they exist. The project builds on the critical role of the private sector in the booming domestic and cross-border live animal trade in West Africa. The multi-stakeholder inter-profession associations that the project will help to establish and strengthen will improve the vertical and horizontal coordination of the live animal value chains and enhance market efficiency. Representatives of the private sector—particularly producers, traders, market intermediaries, and butchers—will form the majority on the committees that will manage the market infrastructure financed under the project. The creation of such management committees will be a pre-condition for building the agreed infrastructure, as the committees will participate in selecting the construction sites. Project support will also help to transform market information systems (where they exist) into second-generation systems geared toward meeting the specific needs of the private sector, especially producers and traders (including exporters). Traders operating in cross-border corridors will participate in data collection on harassment on roads and at border crossings.

36. The project will finance small-scale private rural slaughter facilities, milk collection units, and small-scale dairy processing units operated by cooperative enterprises and women's associations (dairy units). Although the project does not finance large-scale meat production and processing infrastructure or industrial dairy units, the International Finance Corporation (IFC) was consulted frequently during preparation to explore investment possibilities when participating countries expressed the need for such support. In some cases, IFC is already supporting private companies in the development of viable value chains, notably in the dairy sub-sector near the urban centers of Nouakchott and Dakar.

37. **Subsidiarity principle.** Within PRAPS, national activities will be conducted under a regionally harmonized framework designed to facilitate the project's implementation, strengthen its impact, and promote simplicity. National activities are clearly aligned with regional priorities that were defined by the countries themselves and form part of the ECOWAS Agricultural Program (ECOWAP). During preparation, it was also agreed that the subsidiarity principle would apply when it makes better sense to undertake certain activities at the regional level rather than in each individual country. For this reason, certain regional activities²⁹ other than those linked directly to PRAPS management and coordination have been delegated to CILSS to execute on behalf of the Sahelian countries (and to CRSA for animal health activities). This approach applies specifically with respect to three types of regional activities: targeted technical assistance, information/knowledge sharing, and training. Those regional activities will be financed jointly by the Sahelian countries as follows: each country will make 4 percent of its IDA credit/grant proceeds for PRAPS available to CILSS.³⁰ CILSS (and CRSA for animal health activities) will be responsible for implementing technical regional activities identified on the basis of the subsidiarity principle.

²⁹ The activities were selected based on several criteria: they were consistent with the subsidiarity principle; they would build on possible complementarities and synergies with CILSS (and CRSA) programs and projects; they would generate a regional net added value; and they would take CILSS (and CRSA) absorption capacity into account.

³⁰ As with the West Africa Agricultural Productivity Program (WAAPP), each country will sign a subsidiary grant agreement with CILSS, detailing the nature of assistance expected from CILSS (apart from its coordination role, which is financed directly through a Regional IDA grant) and the level of financial support that each country will provide to CILSS. The signature of that agreement is a condition of effectiveness for a country to participate in PRAPS.

A. Project Components

38. **Component 1: Animal Health Improvement (US\$50.48 million).** PRAPS will support critical national and regional efforts to build more sustainable and efficient National Veterinary Services (NVS),³¹ as well as to conduct surveillance and control campaigns for major diseases affecting large and small ruminants.³² The project will focus particularly on providing local animal health services in remote pastoral areas. The intermediate outcome to be achieved under this component is a decrease in the herd prevalence of CBPP and an increase in the immunity protection of small ruminants against PPR, which are two regionally important livestock diseases.³³ The short-term outcomes are an increased share of animals vaccinated against the two diseases and the construction and rehabilitation of veterinary units. This component will benefit livestock owners, including women, who often own domestic animals (particularly small ruminants).

39. As indicated, responsibility for overall regional coordination of Component 1 will be transferred by CILSS to CRSA through a Memorandum of Understanding (MoU). PRAPS will strengthen CRSA to fulfill its mandate to coordinate, support, and harmonize animal health strategies and activities across countries within the region. The World Organization for Animal Health (OIE) will assist CRSA in this task as CRSA moves toward assuming its responsibilities as the ECOWAS Specialized Agency for Animal Health, in conformity with the 2012 decision of ECOWAS Heads of State.

40. **Sub-component 1.1: Upgrading infrastructure and strengthening National Veterinary Services' capacities.** To strengthen NVS and improve the local provision of animal health services in pastoral and agro-pastoral areas, the proposed project will: (i) upgrade essential infrastructure and equipment for NVS to carry out their duties; (ii) establish animal health professionals in strategic areas for pastoralists; (iii) build capacity through academic and continuing training programs; and (iv) provide targeted technical assistance.

41. **Sub-component 1.2: Support for the surveillance and control of priority animal diseases and veterinary medicines.** To curb the prevalence of critical regional diseases (especially CBPP and PPR), the project will support the implementation of: (i) region-wide vaccination campaigns using national/regional public vaccine production capacities to the extent possible;³⁴ (ii) surveillance programs for a wider range of diseases, including Rift Valley fever (RVF), foot and mouth disease (FMD), and brucellosis; (iii) a veterinary drug quality surveillance program; and (iv) awareness campaigns and training for pastoralists and agro-pastoralists to increase their involvement in animal disease surveillance and control.

³¹ OIE defines *Veterinary Services* as governmental and non-governmental organizations that implement animal health and welfare measures and other standards and recommendations in the Terrestrial Code and the OIE Aquatic Animal Health Code in the territory. The Veterinary Services are under the overall control and direction of the Veterinary Authority.

³² The design of this component draws upon findings and recommendations from the PVS Pathway reports for each participating country. OIE's PVS Pathway program is a global initiative to enable NVS to comply with international quality standards for veterinary services. PVS Pathway reports provide objective evidence to identify priorities and guide investments. Information from the six PVS Pathway reports was consolidated to design a consistent regional program for PRAPS.

³³ Because very little official data is available to set up baselines and targets, the figures indicated in the Results Framework will have to be reviewed and improved at project mid-term to better reflect the epidemiological situation of the six countries using epidemiological data collected during the first three years.

³⁴ Notably for Senegal through ISRA (*Institut Sénégalais de Recherches Agricoles*) and LNERV (*Laboratoire National d'Etudes et de Recherche Vétérinaires*), Chad (*Laboratoire de Farcha*), Mali (*Laboratoire Central Vétérinaire*, LCV), and Niger (LABOCEL, *Laboratoire Central d'Elevage*); access to a Regional Vaccine Bank will also be made available through CILSS/CRSA with OIE's assistance.

42. *At the regional level*, the proposed project will support: (i) the coordination of national animal health activities; (ii) the provision of technical assistance tailored to particular needs, mainly epidemiological surveillance; and (iii) the development and implementation of training programs. Regional activities will improve the efficiency and harmonization of high-priority trans-boundary programs for disease surveillance and control, facilitate safer livestock movement and trade within the region, and enhance the sharing of animal health information across countries. Such activities will be coordinated by CRSA.

43. **Component 2: Natural Resource Management (NRM) Enhancement (US\$70.87 million).** This component aims to enhance pastoral and agro-pastoral communities' sustainable management of and secure access to natural resources. It will focus specifically on water and rangeland resources, which often extend across national boundaries. The medium-term outcomes to be achieved in the targeted zones are an increase in the land area on which sustainable land management practices have been adopted, a decrease in severe conflicts over access to grazing, and a decrease in the average distance between functional water points accessible to pastoralists and agro-pastoralists in targeted zones. To achieve these outcomes, the area under joint management will be increased, a greater share of conflicts will be referred to conflict resolution and mediation mechanisms, and the number of functional water points in targeted zones will be increased. Women will be involved in rangeland management activities, and they will also benefit from better access to water because they will spend less time procuring it.

44. **Sub-component 2.1: Improved access to natural resource and sustainable rangeland management.** The overall aim of this sub-component is to promote sustainable natural resource use in arid and semi-arid areas of the Sahel through the implementation of concerted management practices across all groups of users and at different scales (local, national, and beyond). These interventions should help to prevent conflicts and build peace among communities. They will also promote macro and micro mobility of the livestock herd (which is a determinant of sustainable NRM in drylands), particularly along transhumance corridors.

45. Activities include: (i) the development, negotiation, and adjustable implementation, using participatory and community-driven approaches, of concerted NRM plans,³⁵ mostly at the local level and along transhumance corridors; (ii) communication to raise awareness of policies and legal frameworks³⁶ on trans-boundary transhumance, access and use rights related to natural resources, and the importance of local natural resource management committees; (iii) promotion of conflict prevention and dispute resolution mechanisms³⁷ through information and training, as well as trans-boundary consultation platforms involving either local communities in target areas or stakeholders and officials involved in the national livestock sub-sector; and (iv) strengthening the capacity of officials and pastoral communities in participating countries to monitor specific natural resource indicators that are important to pastoralism (such as rangeland health, water

³⁵ The plans will promote sustainable, collective, and ecological range management practices, developed to reflect rangeland ecologies in the ASALs and adapted to other Sahelian conditions.

³⁶ Including, in some cases, prior updating, adaptation, and harmonization of texts.

³⁷ The Initiative on Pastoralism and Stability, co-led by the Agriculture Global Practice and the FCV-CCSA, will feed into these activities and provide direct support.

facilities, bushfires, and transhumance flows) and disseminate information and decision support tools.³⁸

46. Implementing NRM plans at the local level will entail, among other activities, works to mark 5,100 kilometers of pastoral tracks and develop associated rest areas, rehabilitate/improve degraded rangeland, develop pasture reserves over 55,000 hectares, and open fire breaks. It will also entail support to rural communities—analysis, advice, training, and forums to share experiences—to set up and strengthen local management committees and promote sustainable management practices, technologies, and innovations among pastoral communities.³⁹ The project will also build related capacities for local governments and support services.

47. **Sub-component 2.2: Sustainable management of infrastructure for access to water.** This sub-component recognizes the importance of water for pastoralism and the scale of the investment needed. Drawing from planning and consultation activities undertaken under Sub-component 2.1, this sub-component will include: (i) designing, building, and/or rehabilitating more than 450 water facilities particularly along transhumance corridors; (ii) setting up and building capacities of water user associations and management committees at the community level to manage and maintain water facilities (including experience sharing and advisory/training support services); (iii) training maintenance staff and service suppliers; and (iv) providing guidance for developing policies and strategies (best practices, priority directions, experience sharing, studies, and consultation).

48. **Regional activities** will be coordinated by CILSS. They will entail: (i) technical support to PRAPS countries (related, for example, to resource monitoring systems and regulatory commitments made at the regional level); (ii) efforts to share and assess experiences (for example, with developing and managing water facilities, or with innovative and sustainable practices for managing rangeland); and (iii) joint training initiatives (support for master's degrees and short-term training courses).

49. **Component 3: Market Access Facilitation (US\$45.38 million).** Ensuring producers' access to competitive, inclusive markets for ruminant livestock is likely to foster broad-based poverty reduction and improve the resilience of pastoralist households. Unfortunately, a range of constraints related to infrastructure, institutions, and logistics impede access to markets in pastoral areas, especially for small-scale producers. This component aims to increase pastoralists' access to competitive, inclusive markets and to increase trade in pastoral products (especially live animals) in selected areas of each country where the project will operate. The medium-term outcome is expected to be an increase in the number of animals sold at markets rehabilitated and constructed as a result of the project (a proxy for improved market access). The short-term outcome is expected to be an increase in the number of markets operating according to defined criteria. Investments related to small-scale dairy collection centers and processing units will particularly benefit women.

³⁸Such as the extension of the pasture monitoring system set up with CILSS in Senegal and Niger to the other four participating countries, and in relationship with activities related to early warning under Component 4. In general, the project will build on the monitoring tools developed by CILSS and other institutions (for example, the *Centre de Suivi Ecologique* in Senegal), such as the Information System for Monitoring Pastoral Dynamics in the Sahel (*Système d'Information sur le Pastoralisme au Sahel*, SIPSA).

³⁹ These efforts are likely to emphasize (among other activities) improvements in rangeland health, assessments of carrying capacity, land improvement and rehabilitation, sylvo-pastoralism, forage resources for the dry season, and fire control. Technical guidance and support services for pastoral communities will emphasize the introduction and testing of innovations to make rangeland practices more sustainable over the long term.

50. **Sub-component 3.1: Support to market infrastructure and information systems.** This sub-component will finance the following types of investments to develop market infrastructure and small-scale processing activities that add value: (i) construction or rehabilitation of 105 livestock markets (in all six countries) along selected trade corridors; (ii) rehabilitation of 300 kilometers of rural roads (in Senegal⁴⁰); (iii) construction of 8 livestock rest areas (5 in Chad and 3 in Mauritania) equipped with appropriate logistics and services (paddock, water supply, veterinary services); (iv) creation of small-scale processing units to add value to livestock products;⁴¹ and (v) the establishment or upgrading of 6 (one per country) second-generation livestock market information systems using adapted information and communication technology.

51. **Sub-component 3.2: Support to producer and inter-professional organizations, and trade facilitation.** If efficient market institutions that support inclusive, competitive livestock value chains are to emerge, producer organizations and inter-professional bodies will require support. To that end, PRAPS will finance the following capacity-strengthening and advisory services: (i) support for the establishment, management, and governance of producer organizations;⁴² (ii) technical assistance and small office equipment to facilitate effective governance of livestock inter-professional organizations and their integration in value chains; (iii) training in value-adding activities for pastoralists; (iv) training to develop and operate a business;⁴³ and (v) initiatives to facilitate trade and learning.⁴⁴

52. **Regional activities** implemented by CILSS under this component will include: (i) establishing a regional livestock market information system connecting the six countries and linking them to the import markets of West African coastal countries; (ii) monitoring and reporting incidents of road harassment, illegal levies, and other trans-boundary difficulties; (iii) supporting regional livestock trade associations; (iv) providing technical support to countries (such as training and workshops to upgrade tools and methods); and (v) sharing knowledge on how to facilitate regional trade.

53. **Component 4: Pastoral Crisis Management (US\$37.56 million).** This component is intended to improve crisis preparedness, prevention, and response at the national and regional levels. The medium-term outcome to be achieved is a reduction in the time required during a pastoral crisis to reach 50 percent of the targeted beneficiaries (identified in a previously developed crisis intervention plan that specifically includes pastoralists). The short-term outcomes are an increase in the number of specific pastoral parameters integrated in national early warning systems and a reduction in the time required to provide funding to governments to respond to a pastoral crisis that meets the eligibility criteria. The activities financed under this component will build greater resilience by: (i) strengthening early warning systems; (ii) enhancing the crisis response at the national and regional level; and (iii) supporting income diversification in vulnerable pastoral and agro-pastoral communities. The emergency response mechanism enables participating countries to reallocate funds to deal with any serious pastoral crisis. Support for vocational training

⁴⁰ Senegal is an important consumption market; the rehabilitation of rural roads is to connect with regional markets and facilitate regional trade flows.

⁴¹ Includes 56 milk collection centers, 21 small-scale dairy units, 25 small-scale community slaughter facilities, and 11 community butcheries.

⁴² Assistance to develop by-laws for producer organizations and cooperatives, develop internal conflict resolution mechanisms, keep records, and perform similar administrative and managerial functions.

⁴³ Includes training in literacy, bookkeeping, developing and implementing a business plan, promoting the use of weights and grade standards for selling and buying live animals, helping pastoralists (including women) to take advantage of emerging high-value markets for dairy and other livestock products.

⁴⁴ Includes support for producers, processors, and traders to participate in local exchange visits, foreign study tours, and regional trade shows.

and micro-project financing under this sub-component—many of them will specifically target women and young people—will help to diversify livelihoods and incomes and enable households to better withstand intermittent crises.

54. Sub-component 4.1: Pastoral crisis preparedness and livelihood diversification.

Activities directly related to crisis preparedness (Window A) will include: (i) strengthening and harmonizing information systems and early warning systems for pastoralists; (ii) developing pastoral crisis response plans; and (iii) strengthening the capacity to implement early warning systems. Under this sub-component, the proposed project will finance: (i) information technology and communication equipment; (ii) training and capacity building from the central to local level in pastoral crisis management guidelines, such as Livestock Emergency Guidelines and Standards (LEGS); and (iii) technical assistance. Income diversification (Window B) will be achieved by identifying and strengthening opportunities for alternative livelihoods, with special attention to improving the living standards of the bottom 40 percent of the population in the target areas, as well as women and youth. PRAPS will promote viable livelihoods for pastoralist households and alternatives for people to move out of pastoralism by financing: (i) vocational training adapted to pastoralists so that they can improve their employability in other economic sectors and (ii) supporting diversification through competitive funding (grants) for micro-projects that generate local value addition and employment opportunities.

55. *At the regional level*, PRAPS will support CILSS in realizing its core mandate to harmonize efforts by member countries to build effective pastoral early warning systems. CILSS will also facilitate training for participating countries in pastoral crisis preparedness, prevention, and response.

56. Sub-component 4.2: Contingency emergency response (US\$0). When a natural event precipitates a major disaster affecting the livelihoods of pastoralists and agro-pastoralists in the project areas, governments may request the World Bank to reallocate project funds to support mitigation, response, recovery, and reconstruction. This sub-component will draw resources from unallocated funds and/or allow countries to request the World Bank to reallocate financing from other project components to partially cover the costs of emergency response and recovery. Detailed operational guidelines acceptable to the World Bank for implementing the PRAPS contingency emergency response will be prepared at the regional level during the first year of the project's implementation. All expenditures under this sub-component will be in accordance with paragraph 12 of World Bank OP 10.00 (Investment Project Financing) and will be appraised, reviewed, and found to be acceptable to the World Bank before any disbursement is made. Disbursements will be made against an approved list of goods, works, and services required to support crisis mitigation, response, recovery, and reconstruction.

57. Component 5: Project Management and Institutional Support (US\$43.71 million). This component focuses on all aspects of project management, including fiduciary management, monitoring and evaluation (M&E), knowledge generation and management, communication, and monitoring mitigation measures related to safeguards. This component also supports critical needs for institutional support, capacity building, and training identified in the six participating countries and at CILSS.⁴⁵ The institutional arrangements for implementing this project reflect the fact that

⁴⁵ This support is in addition to the technical support and training provided to implement activities under the project's other components.

it will operate at three levels—regionally, nationally, and at the sub-national (local) level. The training and other institutional support provided under this project will benefit women to the extent possible.

58. All projects that are part of the Sahel Initiative, including PRAPS, will take advantage of synergies and complementarities to build capacity in a consistent, coherent manner for project management and implementation.⁴⁶ Specific areas that will receive attention include financial management, procurement, M&E, and communication.⁴⁷

59. In line with the subsidiarity principle, this component will also organize regional forums (for launching PRAPS and the project's mid-term review) and undertake regional studies identified with Sahelian countries during the project's implementation. It will develop and maintain the project's regional website as well.

60. **Sub-component 5.1: Project coordination, fiduciary management, monitoring and evaluation, data generation, and knowledge management.** CILSS will host the PRAPS Regional Project Coordination Unit (R-PCU), while line ministries responsible for implementing PRAPS in the six countries will each host a National Project Coordination Unit (N-PCU). This sub-component will support staff salaries, operating costs, and key national/regional studies to prepare or document interventions under PRAPS. It will also support inter-ministerial work and cooperation of regional bodies required for implementing the project. M&E will be undertaken at national and regional levels; it will include regular monitoring of implementation performance and results, annual outcome assessments, annual thematic studies, technical audits of infrastructure, and case studies. This sub-component will also finance the generation of data on pastoral activities in the Sahel, which will be critical to guide and calibrate investments. Knowledge management activities will include cross-country modules supported by CILSS at sub-national, national, and regional levels, as well as dissemination at the same three levels of lessons (based on M&E data) learned from implementing the project.

61. **Sub-component 5.2: Institutional support, capacity building, advocacy, and communication.** This sub-component focuses on building capacity at CILSS and CRSA and within the N-PCUs. It will provide technical and investment support to enhance the provision of services by CILSS⁴⁸ and other regional institutions or organizations relevant to the development of pastoralism. To this end, CILSS will: (i) conduct an internal capacity gap analysis (including an evaluation of staffing, skills, equipment, systems, and other parameters); (ii) produce consolidated training plans for CILSS and other implementing agencies at the regional and national level; and (iii) identify potential synergies and cross-fertilization possibilities among the operations within the Sahel Initiative. This sub-component also supports greater coordination and engagement of the six participating countries in regional decision and policy-making processes related to drylands and pastoral areas, as well as coordination and engagement with other relevant regional public and non-public organizations. Advocacy at the regional and national level for additional

⁴⁶ Those projects include Building Resilience through Innovation, Communication, and Knowledge Services, the Sahel Disaster Resilience Project (PRECA), and the Sahel Irrigation Initiative Project.

⁴⁷ As agreed during the visit of the CILSS delegation to the World Bank Group headquarters in July 2014; minutes are available.

⁴⁸ CILSS will be the implementing agency for the project and will have primary responsibility for regional coordination, guided by the decisions of the PRAPS Regional Steering Committee of CILSS Projects and Programs (CRP) under the political leadership of ECOWAS/WAEMU. For regional oversight of specific technical areas outside CILSS' areas of technical specialization, CILSS may delegate operational coordination to other accredited regional bodies (such as CRSA in the case of Component 1 on animal health).

complementary support to pastoralism, based on the Nouakchott Declaration, as well as regional and national communication activities, will also be supported. As much as possible, training will be based on regional curriculums and carried out across countries, with support from CILSS and other accredited regional technical bodies; some specific training on cross-cutting themes may be done at the national level.⁴⁹

B. Project Financing

62. PRAPS will be financed through an Investment Project Financing (IPF) for the participating countries, as follows: Burkina Faso (US\$30 million equivalent); Chad (US\$45 million equivalent); Mali (US\$45 million equivalent); Mauritania (US\$45 million equivalent); Niger (US\$45 million equivalent); and Senegal (US\$30 million equivalent). An IDA grant will also be provided to CILSS (US\$8 million equivalent) to coordinate and harmonize interventions at the regional level. PRAPS costs are estimated based on an IDA allocation (national allocations and a grant for regional coordination activities) for an overall estimated budget of US\$248 million over a six-year period, including a regional IDA envelope of US\$168 million. CILSS and the Governments of Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal have all secured a Project Preparation Advance to undertake key studies and initiate project preparation. Project costs and financing are summarized in Table 3.

63. All participating countries have agreed to support the proposed project through an estimated total contribution of US\$16.70 million equivalent. Beneficiaries' contributions to PRAPS are estimated at US\$8.38 million equivalent.

64. The four eligibility criteria to access regional IDA funding for PRAPS are fully satisfied. First, all six countries involved in the project (two of which are classified as fragile states) participate in achieving the project's objectives. Second, the project's benefits clearly spill over country boundaries and generate positive externalities across countries. Third, clear evidence of ownership for the project (regionally on the part of ECOWAS and CILSS, and nationally in each participating country) demonstrates strong regional and national commitment to its implementation. Fourth, the proposed project will enhance the harmonization of policies across the Sahelian countries and form part of a well-developed, broadly supported regional strategy to foster pastoral development.

65. Although CILSS benefits from other support through the World Bank and other donors to implement part of its operational strategy in the Sahel, the regional IDA grant to CILSS is necessary to coordinate PRAPS. The grant conforms to World Bank guidelines on eligibility criteria for access to IDA grants for regional institutions. Specifically:

- CILSS is a bona fide regional organization with the legal status and fiduciary capacity to receive grant funds (it cannot have access to IDA credit) and has the legal authority and mandate from its Member States⁵⁰ to carry out the activities financed by such grants.

⁴⁹ Note that country-specific technical capacity building and training are undertaken and accounted for through the project's technical components.

⁵⁰ Benin, Burkina Faso, Cape Verde, Chad, Côte d'Ivoire, Gambia, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal, and Togo.

Table 3: Cost and financing, Regional Sahel Pastoralism Support Project (PRAPS)

Project components	Project cost (US\$ 000s)								
	Burkina Faso	Chad	Mali	Mauritania	Niger	Senegal	CILSS	Total IDA financing	%
1. Animal Health Improvement									
1.1. Upgrading infrastructure and strengthening National Veterinary Services' capacities	3.28	4.03	3.90	3.00	5.73	4.38		24.32	
1.2. Support for the surveillance and control of priority animal diseases and veterinary medicines	1.29	6.79	4.27	6.18	5.07	2.56		26.16	
Sub-total	4.57	10.82	8.17	9.18	10.80	6.94		50.48	20.35
2. Natural Resource Management Enhancement									
2.1. Improved access to natural resource and sustainable rangeland management	5.46	4.12	4.47	5.35	4.31	3.74		27.45	
2.2. Sustainable management of infrastructure for access to water	5.95	9.84	8.30	7.04	6.88	5.41		43.42	
Sub-total	11.41	13.96	12.77	12.39	11.19	9.15		70.87	28.58
3. Market Access Facilitation									
3.1. Support to market infrastructure and information systems	2.87	4.37	5.89	8.81	7.30	4.46		33.70	
3.2. Support to producer and inter-professional organizations, and trade facilitation	1.60	2.58	2.37	3.82	0.70	0.61		11.68	
Sub-total	4.47	6.95	8.26	12.63	8.00	5.07		45.38	18.30
4. Pastoral Crisis Management									
4.1. Pastoral crisis preparedness and livelihood diversification	4.28	7.43	8.68	4.25	9.20	3.72		37.56	
4.2. Contingency emergency response									
Sub-total	4.28	7.43	8.68	4.25	9.20	3.72		37.56	15.15
5. Project Management and Institutional Support									
5.1. Project coordination, fiduciary management, monitoring and evaluation, data generation, and knowledge management	4.22	5.48	5.86	6.24	5.27	4.48	6.80	38.35	
5.2. Institutional support, capacity building, advocacy, and communication	1.05	0.36	1.26	0.31	0.54	0.64	1.20	5.36	
Sub-total	5.27	5.84	7.12	6.55	5.81	5.12	8.00	43.71	17.62
Total project cost	30.00	45.00	45.00	45.00	45.00	30.00	8.00	248.00	100.00

- The costs and benefits of the activity to be financed with the IDA grant are not easily allocated to national programs. While the regional IDA grant will support capacity building in CILSS and facilitate implementation of all five project components at the regional level, support for concrete investments under the project's technical components will be financed through the individual country credits or grants, as noted.
- The activities to be financed under this grant are related to regional infrastructure development, institutional cooperation for economic integration, and coordinated interventions across the six participating Sahelian countries to provide regional public goods such as harmonized policies, conflict prevention, an overall improvement in livestock health, and a reduction in major animal diseases affecting all Sahelian countries.
- Alternative funding is not readily available from other development partners (for example, resources from the EU's 11th European Development Fund will not be available to Sahelian countries until 2016), and because governments have requested rapid action by the World Bank as part of the Sahel Initiative, PRAPS was under a very tight preparation deadline.
- CILSS, as the regional agency responsible for implementing and providing overall coordination for the proposed project, is fully associated with this IDA-funded regional operation (in which 6 of CILSS' 13 Member States are involved).

C. Lessons Learned and Reflected in the Project Design

66. The design of the proposed project incorporates lessons from several sources. It reflects the consensus on priorities for pastoralism in the Sahel formed among stakeholders, experts, and practitioners, as well as findings from the recent literature on development issues related to pastoralism and drylands.⁵¹ Lessons from interventions in arid and semi-arid areas across Africa (including the participating countries) by the World Bank and other development partners, particularly the French Development Agency (*Agence Française de Développement*, AFD), Swiss Cooperation, Belgian Cooperation, and African Development Bank (AfDB), were also instructive.⁵²

67. The project's design reflects many aspects of the current consensus on priorities for developing the livestock sub-sector in the Sahel, especially with respect to pastoralists and agro-pastoralists. There is widespread agreement that policies, enforced regulations, and functioning institutions are needed to support pastoralism's transformation to a more resilient, sustainable, productive, and remunerative economic system supplying livestock and livestock products in the Sahel. That enabling environment will be ineffective, however, without better national and regional coordination. Functioning national institutions (public, private, and civil society organizations) must be able to interact productively with each other and with regional institutions on trans-boundary issues, such as the development and enforcement of trans-boundary policies and regulations, disease monitoring and control measures, natural resource management strategies, and measures to facilitate trade. Maintaining natural resources (especially rangeland and water) and animal capital (by managing risks related to disease and drought) are high priorities. It is also vital to identify complementarities between extensive, mixed crop/livestock, and semi-intensive production systems, and to identify specialized approaches to improve the productivity of these

⁵¹ Including two reports by the International Institute for Environment and Development (IIED). See Hesse et al. (2013) (cited previously), and Krätli, S., M. Monimart, B. Jallo, J. Swift, and C. Hesse (2013), "Evaluation et capitalisation de 20 ans d'interventions du Groupe AFD portant sur le secteur de l'hydraulique pastorale au Tchad" (IIED, London).

⁵² Based on a review by FAO/TCI undertaken to prepare the present project through the World Bank-FAO cooperation program.

systems—for example, in mobile systems the goal should be to improve productivity per hectare, whereas in sedentary systems the goal should be to improve productivity per animal. Access to domestic and sub-regional markets is vital, given clear indications of rising demand for livestock and livestock products.

68. The forthcoming World Bank report on African drylands⁵³ emphasizes that keeping livestock can remain an important component of the livelihood strategy of populations in ASALs, yet this traditional activity will increasingly need to be complemented by other sources of income—not only post-harvest value-adding activities related to the processing of agricultural products, but employment in the services and manufacturing sectors. PRAPS Component 4 takes population growth in the drylands into account, given that such growth will require pastoralists to shift out of agricultural and natural resourced-based livelihoods and move toward employment in other sectors.

69. Evidence from recent research on alternatives for improving livelihoods in pastoral communities elsewhere in the world⁵⁴ indicates that better outcomes tend to be achieved when people have opportunities to seek a more sedentary way of life. For this reason, livelihood diversification activities under PRAPS will primarily target people moving out of pastoralism, with a particular emphasis on women and youth.

70. Another recent study, which was commissioned by the World Bank’s Fragility, Conflict, and Violence (FCV) specialists, yielded insights on the connections between pastoralism and (in)stability that are relevant to the design of PRAPS.⁵⁵ A primary finding is that economic development, employment generation, and political inclusion could help to reduce pastoral peoples’ involvement in illicit activities.

71. The project’s design also benefited from specific lessons learned in implementing a sister project in East Africa (the Regional Pastoral Livelihoods Resilience Project, RPLRP).⁵⁶ Like RPLRP, the proposed project is based on two fundamental characteristics of resilience in pastoralist systems. First, enhancing resilience is a more cost-effective response to drought than humanitarian interventions such as food aid—so PRAPS will focus on resilience. Second, mobility is the key for pastoralists to use and protect rangelands efficiently, adapt to climate change, evade conflict, and reach markets.⁵⁷ The proposed project supports the policy dialogue on mobility by providing updated assessments of the economic impacts of diseases and market opportunities, epidemiological studies, and analyses of potential technical responses, including technical and economic feasibility.

72. A major lesson from large regional agricultural projects, such as the West Africa Agriculture Productivity Program (WAAPP), is that regional integration and knowledge sharing do not occur automatically; regional planning, exchange, and monitoring mechanisms should be clearly defined and harmonized at the design stage. A regional task force (TRFP) was set up to facilitate the

⁵³ “Enhancing the Resilience of Drylands in Sub-Saharan Africa.”

⁵⁴ Chuan Liao, Christopher B. Barrett, and Karim-Aly S. Kassam, “Does Diversification Translate into Improved Livelihoods? Evidence from Pastoral Households in the Altay and Tianshan Mountains of Xinjiang, China,” *Development and Change*. (2014).

⁵⁵ De Haan et al. (2014), previously cited.

⁵⁶ The RPLRP, which built on lessons from the Arid Land Resource Management Project in Kenya, covers the Horn of Africa and involves (at this stage) Ethiopia, Kenya, and Uganda.

⁵⁷ West Africa has made progress with legislation to enable pastoral mobility (the International Transhumance Certificate, developed by ECOWAS).

preparation, design, and implementation of PRAPS; this decision-making body includes all regional and national stakeholders. A regional approach also increases the challenges for reporting and evaluation; under PRAPS, the same financial management and M&E software systems will be used at the national and regional levels. Regional projects also require a strong regional project coordination unit (a role played by CILSS in the proposed project) and strong and regular supervision and implementation support by the World Bank. WAAPP also provided the template for arrangement to finance CILSS' regional activities (and ensure its accountability) under the proposed project. Like other World Bank projects in West Africa, PRAPS will use existing government structures and systems for implementing the project and will pay particular attention to clearly defining responsibilities of stakeholders at different levels.

73. Experience with Kenya's Arid Lands Resources Management Project (ALRMP II) also informed the proposed project.⁵⁸ For example, a primary lesson from ALRMP was that adaptation to climate change can be pursued jointly with management of short-term emergencies; although PRAPS focuses on resilience and adaptation, its contingency emergency response mechanism is designed for coping rapidly with emergencies if they arise. The proposed project also reflects other lessons: it incorporates conflict resolution into its NRM component (ALRMP participants felt that conflict resolution was among the project's most important contributions); seeks to ensure that good management information systems will be in place to detect emerging problems in this risky environment and address them early; gives attention to the challenging governance and capacity issues related to working in fragile agro-ecologies with dispersed, mobile populations; and intends to use strong M&E and management information systems to track dispersed expenditures and investments and link them with outputs.

74. Cameroon's Agro-Pastoral and Land Management Project also concluded that land management is a powerful means of building consensus and reducing conflicts among land users, and that communities benefit from sustainable land management when they can market what they produce. PRAPS includes a component on managing natural resources (focusing on rangeland and water) and another on trade facilitation. A central lesson from Ethiopia's Pastoral Community Development Projects is that pastoralists require not only investments to meet immediate needs but strategic investments to enhance the opportunities available to them. In this regard, PRAPS supports the control of zoonotic animal diseases, the rehabilitation of rangelands and the development of local and regional markets; it also includes training for pastoralists to diversify their incomes.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

75. PRAPS was prepared by national governments in coordination with CILSS and other regional entities, and with political leadership from ECOWAS/WAEMU. The TFRP was set up in January 2014 to advance the project's preparation and has met regularly since (May and September 2014). Its role (to discuss and move decisions on PRAPS forward during preparation) prefigures the role that the PRAPS Regional Technical Committee (*Comité Technique Régional*, CTR) will play during implementation.

⁵⁸ Based on the Implementation Completion Report for that project.

76. To fully integrate national and regional priorities, this operation combines assistance to CILSS to perform a regional coordination role with support to countries to fund and implement activities at the regional, national, and sub-national levels according to the subsidiarity principle. Separate project financing agreements will be concluded with CILSS and at the national level, with funds to be disbursed directly through existing institutional structures.

77. CILSS—created in 1973 after devastating droughts in the Sahel—is mandated to invest in food security research and fight against the effects of drought and desertification, with the aim of achieving a new ecological equilibrium in the Sahel. The CILSS Secretariat is based in Burkina Faso, and the Committee has two technical institutions: the AGRHYMET Regional Center in Niger, in charge of information, research and training; and the Sahel Institute (*Institut du Sahel*, INSAH) based in Mali, in charge of coordinating agro-socio-economic research.

78. Given that CILSS bears no competence in animal health, it will delegate operational responsibility related to Component 1 of PRAPS to CRSA. CRSA's mission is to contribute to the fight against poverty and food insecurity through the improvement of animal health and the sustainable development of animal production at the national and regional level. CRSA offers expertise, information, and training to facilitate the development, coordination, and implementation of animal health policies. OIE currently hosts the permanent secretariat of CRSA, until CRSA assumes its role as the ECOWAS Specialized Agency for Animal Health, in conformity with the decision of ECOWAS Heads of State.⁵⁹

79. The proposed project clearly assigns roles and responsibilities among the partners at the different operational levels. Its design also includes close monitoring of the services that CILSS (and CRSA) will deliver with IDA funds.

80. **Regional level.** CILSS will be the overall implementing agency, with primary responsibility for regional coordination, guided by the decisions of the existing Regional Steering Committee of CILSS Projects and Programs (*Comité Régional de Pilotage*, CRP).⁶⁰ A Regional Project Coordination Unit (R-PCU) for PRAPS will be set up by CILSS within its secretariat in Ouagadougou (Burkina Faso), which is anchored at the Regional Support Program for Food Security, Combatting Desertification, and Population and Development.⁶¹ The R-PCU's core functions include the coordination of resource mobilization, regional programming and M&E services, regional capacity development and technical assistance, regional data generation, and knowledge management and communication. CILSS has benefited from a Project Preparation Advance (PPA).

81. The R-PCU will be staffed as needed, taking into account current human resources and arrangements, as well as support provided by other projects under the Sahel Initiative for such cross-cutting functions as financial management, procurement, M&E, and communication. It will channel project funds related to CILSS (and CRSA for Component 1), operate under the aegis of

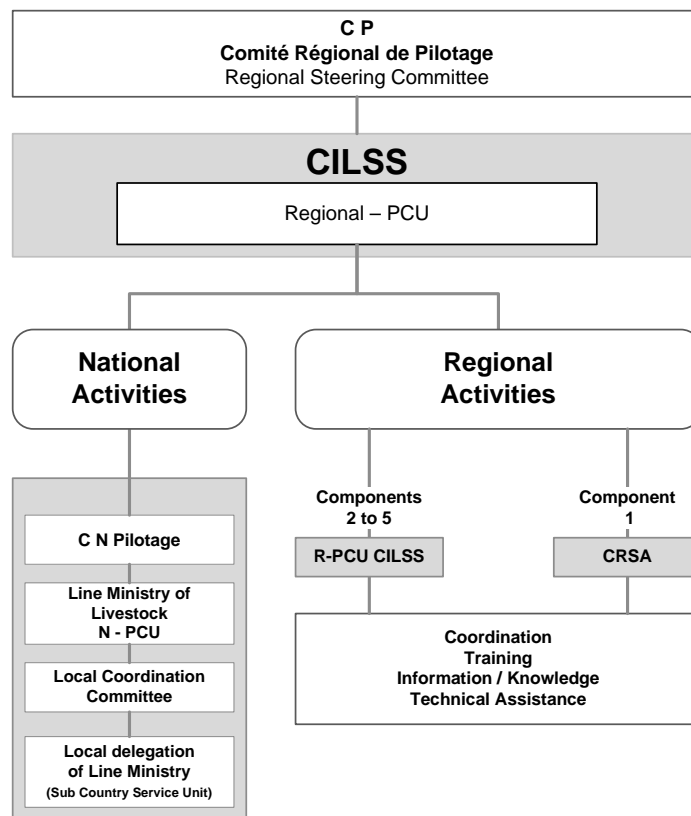
⁵⁹ Decision A/SA-20/02/12, ratified by ECOWAS Heads of State in 2012.

⁶⁰ Under the chairmanship of ECOWAS/WAEMU and with the CILSS Secretariat, this committee currently includes representatives of all CILSS Member States, of the regional agriculture producer association (ROPPE), and of a number of donors (EU, AFD, USAID, AfDB). It is agreed that this composition will be adjusted to include partners for new projects under the Sahel Initiative.

⁶¹ PRA/SA/LCD-POP-DEV.

a Regional Technical Committee⁶² (CTR), and report to the CRP. The R-PCU will also coordinate and facilitate the implementation of trans-boundary interventions, provide a convening platform for coordination among regional and national participants, provide a platform for technical assistance, M&E, training, knowledge sharing, and communication, and support policy dialogue with countries for regional alignment and harmonization. CILSS' coordination role in implementing PRAPS will be fully financed by a regional IDA grant to CILSS. Figure 1 shows the institutional arrangements for the proposed project.

Figure 1: Institutional arrangements for implementing the Regional Sahel Pastoralism Support Project (PRAPS)



82. The units of CILSS that will be involved in implementing project activities at the regional level include the Secretariat, the AGRHYMET Regional Center, and INSAH.⁶³ CILSS management support units⁶⁴ will be fully involved in supporting the project implementation. These structures/units will be strengthened as required with staff to support the implementation of PRAPS and will contract with consultants, community-based organizations, local and international non-governmental organizations (NGOs), or consulting firms to implement some activities. Operationally, CILSS will liaise with the participating countries through designated focal points.

⁶² This committee will replace the current TFRP; it will be chaired by CILSS Executive Secretary (or his representative) and include the Regional PRAPS Coordinator and all National PRAPS Coordinators, representatives of regional implementation agencies (such as OIE/CRSA), regional pastoralist organizations, regional civil society organizations, regional academic institutions, and major donors and service providers.

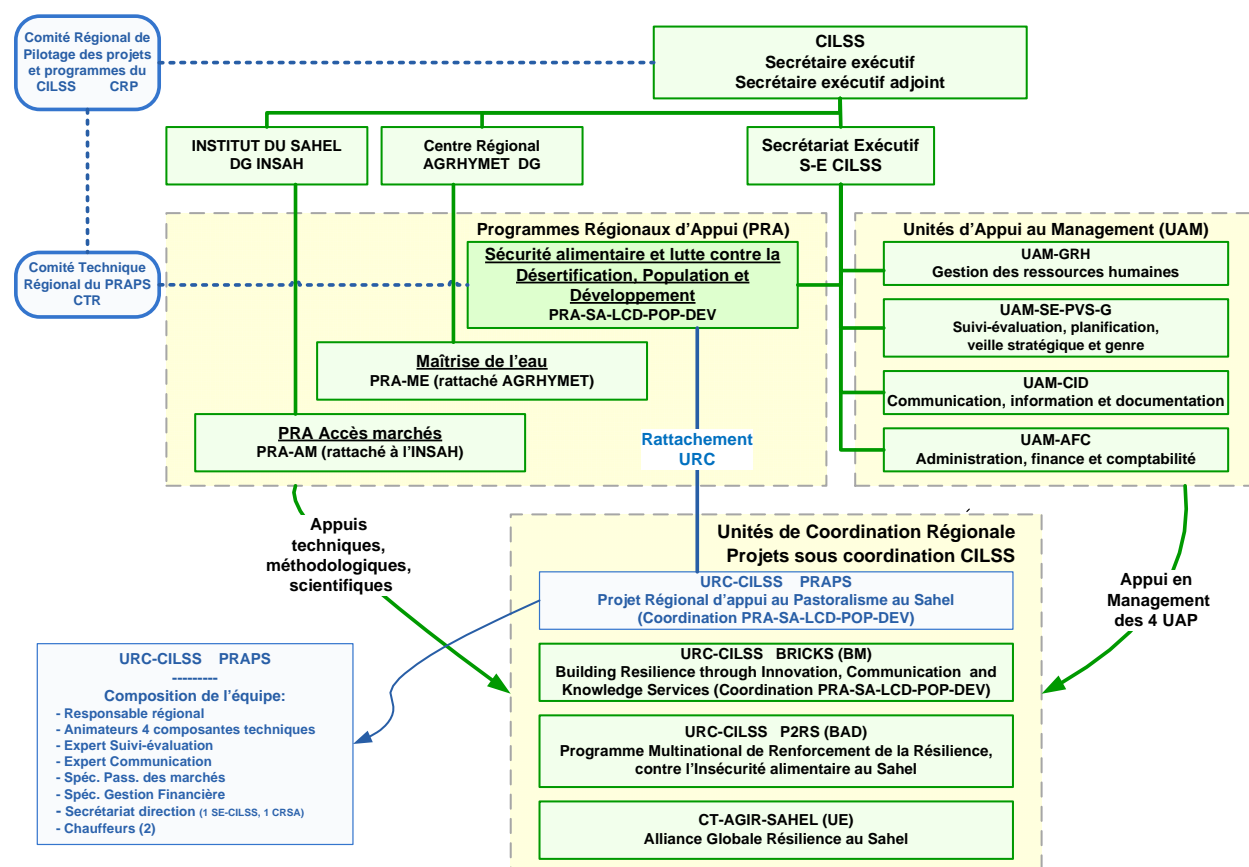
⁶³ The Secretariat leads the Regional Support Program for Food Security, Combatting Desertification, and Population and Development (PRA/SA/LCD-POP-DEV); AGRHYMET leads the Regional Support Program for Access to Water (PRA/MA); and INSAH leads the Regional Support Program for Access to Markets (PRA/MA).

⁶⁴ UAM-GRH, UAM-SE-PVS-G, UAM-CID, and UAM-AFC (see Figure 2).

The Administration, Finance, and Accountability Management Support Unit (UAM-AFC) will be responsible for managing funds. The environmental sections of CILSS' specialized institutions will also support PRAPS implementation. The Monitoring and Evaluation, Programming, Strategic Awareness, and Gender Unit (UAM-SE-PVS-G) will monitor and supervise PRAPS implementation. Figure 2 depicts the institutional arrangements within CILSS for implementing PRAPS.

83. CILSS is preparing a detailed Project Implementation Manual (PIM), which will incorporate all operational details at the regional level, including technical activities, M&E, safeguard implementation, and administrative and fiduciary procedures. The Regional PIM will incorporate CRSA's operating procedures as needed. A draft is available and the approval of this manual by the World Bank is a condition of effectiveness.

Figure 2: Institutional arrangements within CILSS for implementing the Regional Sahel Pastoralism Support Project (PRAPS)



84. For CILSS, conditions of effectiveness include: (i) the adoption of a PIM and (ii) the recruitment of a Regional Project Coordinator. Dated legal covenants include: (i) the establishment of the Regional Steering Committee (before October 31, 2015); (ii) the establishment of the R-PCU (before October 31, 2015); (iii) the appointment of all key R-PCU staff (no later than one month after effectiveness), (iv) the availability of a computerized accounting system (no later than two months after effectiveness), (v) the appointment of an internal auditor (no later than three

months after effectiveness), and (vi) the appointment of an external auditor (no later than five months after effectiveness).

85. **National level.** Implementation arrangements for PRAPS do not feature the establishment of new institutions but rather focus on strengthening and networking with existing national institutions to better support current or planned national and regional activities. The arrangements pertaining to each country are as follows (for details, see Annex 3):

- Project Preparation Advances were obtained to prepare the project and are managed by PCUs of ongoing World Bank projects.
- The responsible agencies are the line ministries in charge of livestock (Table 4).
- PRAPS will be anchored at the General Secretariat of the responsible agency (except for Mauritania, where the project is anchored at the Cabinet Office of the Ministry of Livestock).
- The national coordination units (N-PCUs) will be established, hosted within the responsible agency (with their offices in the ministry's own buildings, to the extent possible), and staffed as needed, taking into account existing human resources and arrangements.
- National Coordinators (civil servants) will be appointed to head N-PCUs.
- Key cross-cutting functions (financial management, procurement, M&E, gender, safeguards, and communication) will be included in N-PCUs under IDA financing.
- Technical experts to implement components of the project will be included in N-PCUs under IDA financing for all countries, but to a varying extent, depending on existing capacities.
- N-PCUs channel project funds and will be responsible for: (i) managing the project at the national level, including financial management, procurement in accordance with World Bank guidelines and procedures, and M&E; (ii) finalizing the national PIMs before effectiveness; (iii) producing national progress reports on the project; and (iv) national communication related to PRAPS.
- National Steering Committees (NSCs) and Technical Committees (CTs) or Operational Technical Committees (CTOs) will be established (in all countries except Niger, which will set up an NSC only).
- Sub-national Coordination Offices will be established to support implementation in the field.
- Sub-national Coordination Committees will be used (when existing) or established to monitor implementation.

Table 4: Ministries responsible for implementing the Regional Sahel Pastoralism Support Project (PRAPS) at the national level

Country	Ministry responsible for implementation
Burkina Faso	<i>Ministère des Ressources Animales (MRA)</i> (Ministry of Animal Resources)
Chad	<i>Ministère de l'Elevage et l'Hydraulique (MEH)</i> (Ministry of Livestock and Hydraulics)
Mali	<i>Ministère du Développement Rural (MDR)</i> (Ministry of Rural Development)
Mauritania	<i>Ministère de l'Elevage (ME)</i> (Ministry of Livestock)
Niger	<i>Ministère de l'Elevage (MEL)</i> (Ministry of Livestock)
Senegal	<i>Ministère de l'Elevage et des Productions Animales (MEPA)</i> (Ministry of Livestock and Animal Production)

86. Under the coordination of CILSS, each of the six countries is preparing a detailed PIM, which will incorporate all operational details at the national and at the sub-national (local) levels, including the implementation of technical activities, M&E, safeguard implementation, and administrative and fiduciary procedures. All six drafts are available, and each national PIM will be approved by the World Bank as a condition of effectiveness.

87. At the national level, the arrangements for Sub-component 4.2 (Contingency Emergency Response) are as follows: to enable access to the Immediate Response Mechanism (IRM), each country will define an IRM Coordinating Agency and expenditure management procedures during implementation. For each country, these arrangements will be reflected in a separate Immediate Response Mechanism Operational Manual (IRM-OM). The IRM-OM will specify the financial management, procurement, and disbursement arrangements, as well as coordinating mechanisms, roles, and responsibilities of relevant implementing and oversight bodies. If the IRM is coordinated by a central agency not involved in implementing PRAPS (the Ministry of Finance, for example), the IRM-OM will set out who will be responsible in practice for implementing Sub-Component 4.2. All IRM-OMs will be prepared separately and approved by the World Bank, in line with the flexibility provided under paragraph 11 of OP 10.00.

88. For each participating country, conditions of effectiveness include: (i) the signature of a subsidiary agreement with CILSS; (ii) the adoption of a PIM; and (iii) the nomination of a National Project Coordinator. Dated legal covenants include: (i) the appointment of all key N-PCU staff (no later than one month after effectiveness); (ii) the availability of a computerized accounting system (no later than two months after effectiveness); (iii) the appointment of an internal auditor (no later than three months after effectiveness); and (iv) the appointment of an external auditor (no later than five months after effectiveness). The disbursement condition for Sub-Component 4.2 (contingency emergency response) is that each participating country has adopted an IRM-OM acceptable to the Bank.

B. Results Monitoring and Evaluation

89. The proposed project will operate regionally, nationally, and locally, across six countries in which the primary beneficiaries often are a mobile population dispersed across a large area where governance may be limited. In this context, it is no simple task to collect and organize data for M&E, even under the best of conditions. Annex 3 (Table A3.18) provides an assessment of the M&E capacity for each participating country, including an action plan for improvement.

90. The main instrument for M&E in PRAPS is the Results Framework (Annex 1), which is the same for all participating countries and will be reported in the ISRs. The framework's design takes into account the unusual features of the pastoral sector and weak local capacity, especially with respect to the number and selection of indicators, the data sources, and data collection methods. Table A3.20 in Annex 3 provides an overview of the PDO indicators and their significance and use, especially in relation to the regional dimension of the project.

91. All indicators are disaggregated by country, with further disaggregation as necessary—for example, by gender (percent female) for the core indicator on direct project beneficiaries, and by type of disease (CBPP, PPR) for the animal health indicators. All indicators have baselines and targets. The frequency of data collection and the data sources and methodology for calculating

baselines and progress are also specified. Data sources vary by country, so CILSS will establish a mechanism for ensuring the quality of the data.

92. M&E will be undertaken **at the regional level** by CILSS (and CRSA for Component 1) and **at the national level** by the six participating countries. The Results Framework indicates whether the designated M&E units in the six countries are responsible for collecting data on a given indicator or whether the responsibility rests with CILSS. CILSS will coordinate the M&E function for the project as a whole, based on an M&E manual detailing the requirements for all countries and at the regional level. CILSS will design and implement data collection efforts that are best done at the regional level, and it will be responsible for ensuring that all participating countries provide data and information of the required quality on time. CILSS will also provide technical backstopping in M&E to participating countries and encourage cross-country learning.

93. M&E undertaken for this project will draw upon and strengthen national and regional systems to monitor results and needs across the Sahel, in accordance with the Sahel Initiative and CILSS' mandate. The project will place special emphasis on mapping project interventions and results by geocoding activities and overlaying data on key development indicators. This information will be accessible through platforms along the lines of the Mapping for Results initiative.

94. Regional and national messages related to the project will use data from the M&E system. The national communication strategies for PRAPS will be developed jointly with CILSS. CILSS will sequence messages for key events (such as the Sahel Heads of State summits). A project logo was designed during preparation, with variations for the national and regional participants (Figure 3).

Figure 3: Logos for the national and regional participants in the project



C. Sustainability

95. **Institutional sustainability.** PRAPS will build pastoralists' and agro-pastoralists' capacity to maintain their investments, particularly with respect to managing their natural capital. The proposed project will also strengthen regional, national, and sub-national institutions in a number of ways that contribute to sustainability. First and foremost, the project will reinforce coordination and collaboration across levels (contributing to ongoing devolution processes, where applicable) and expand links with other institutions and partners (for example, with technical directorates). The project relies on existing institutions for implementation, especially structures already established for projects with similar objectives; the N-PCUs, for example, are placed within the ministries in charge of livestock. The capacity of implementing institutions to provide services will be strengthened, along with capacity in M&E.

96. **Economic sustainability.** The proposed project should reinforce the economic sustainability of activities pursued by pastoral and agro-pastoral communities. For example, animal mortality

caused by drought should decline because producers will have better access to grazing and animal health services. Improved early warning systems and response mechanisms (such as commercial destocking in line with LEGS) should increase off-take (and provide income) during droughts, and herds should recover faster if producers gain better access to primary and secondary markets to facilitate restocking. Community participation at the local level will ensure that the technology, knowledge, and support provided by the project responds to producers' choices and preferences and thus accommodates their income-earning strategies. The introduction or consolidation of conflict resolution mechanisms should foster better economic integration of rural communities over the longer term.

97. **Physical sustainability.** All pastoralist and agro-pastoralist groups will receive advisory support to maintain facilities for animal health, land and water management, and marketing. They will also receive training in environmental safeguards to ensure that investments are environmentally sound.

V. KEY RISKS AND MITIGATION MEASURES

A. Risk Ratings Summary Table

98. The Systematic Operations Risk-rating Tool (SORT) has been used to evaluate risks across the proposed project and will continue to be used to monitor risks during implementation. The focus is on risks to development results associated with PRAPS—the risks of failing to achieve the intended results, and the risks that the project might cause unintended (possibly negative) results. Table 5 summarizes and rates the major risks associated with the proposed project.

Table 5: Summary ratings of major risks associated with the Regional Sahel Pastoralism Support Project

Risk category		Rating
1.	Political and governance	H
2.	Macroeconomic	S
3.	Sector strategies and policies	M
4.	Technical design of project	S
5.	Institutional capacity for implementation and sustainability	S
6.	Fiduciary	S
7.	Environment and social	M
8.	Stakeholders	S
Overall		S

Note: H = high, S = substantial, M = moderate.

B. Overall Risk Rating Explanation

99. The overall implementation risk is **substantial**, primarily owing to risks of political instability and conflict in the Sahel, the fragile macroeconomic context, and institutional weaknesses, including financial management and procurement risks among the implementing agencies. PRAPS could be derailed by high degrees of political instability and insecurity in the region. One country has recently emerged from conflict (Mali), and two of the six countries involved are considered fragile states (Chad and Mali). Governance factors and serious insecurity concerns in pastoral areas could severely affect the project's capacity to achieve the PDO, as well

as Bank capacity to supervise some activities. At the operational level (both central and decentralized), political commitment is required in a context of uncertainty. The operation may also present serious threats to local powerful vested interests. At the regional level, the major risks relate to the ability of ECOWAS/WAEMU to provide effective political leadership to technical institutions such as CILSS and CRSA, as well as the capacity of CILSS and CRSA to perform their regional coordination role effectively.

100. The Agriculture Global Practice and the Fragility, Conflict, and Violence Cross-Cutting Solutions Area (FCV-CCSA) are leading an initiative that will help the two regional projects on pastoralism in Africa (PRAPS and RPLRP) to understand and leverage their impacts on stabilization and conflict prevention.⁶⁵ The initiative will also help to promote the exchange of knowledge and expand the knowledge base related to the connections between pastoralism and stability in the Sahel and Horn of Africa, in collaboration with interested partners, including national governments and the two regional implementation agencies.⁶⁶

101. Progress at the macroeconomic level remains uncertain, and democratic systems remain weak across the Sahel, where decentralization processes have barely started. All countries show macroeconomic imbalances and substantial vulnerability to external shocks, with limited room for policy adjustment. Tight fiscal space requires difficult decisions, which may affect the availability of counterpart funds.

102. All countries are implementing strategies that include the development of pastoralism and are generally adequate for the purposes of PRAPS, with no adverse impact on the PDO. Funding for the livestock sub-sector still is not commensurate with the economic weight of the livestock trade, however. Efforts to harmonize policies for the livestock sub-sector across West Africa are proceeding, to the extent that International Transhumance Certificates have been developed, for example. Regional harmonization needs to continue, and regional policies need to be enforced—which often remains a sticking point. Two countries participating in PRAPS are not ECOWAS members (Chad and Mauritania).

103. The regional nature of the proposed project, including the large number of participating countries and institutions, makes it a complex operation. The multi-faceted nature of pastoralism adds another layer of complexity, as it did for RPLRP in the Horn of Africa. For these reasons, the preparation process focused on simplifying implementation arrangements (which are the same for every country), as well as simplifying the panel of technical activities to be promoted under PRAPS.

104. The clients have experience with the kinds of activities included in PRAPS, but the implementing agencies have a diverse range of experience in working with World Bank procedures, and institutional capacity is generally weak in these countries. Capacity building and institutional strengthening are key activities within the project. Action plans to mitigate fiduciary risks have been included for each institutional partner, and all six countries and CILSS benefited from Project Preparation Advances to become familiar with operational work. The Country

⁶⁵ The Initiative on Pastoralism and Stability in the Sahel and the Horn of Africa has been approved; it is funded through two grants (from the State and Peace-Building Fund and the Korean Trust Fund) totaling US\$2.8 million. This initiative will provide direct support to PRAPS by integrating FCV expertise into the project team and providing support and guidance for operationalizing conflict prevention and conflict resolution activities, including the training and support component on conflict prevention under PRAPS.

⁶⁶ CILSS for PRAPS and the Inter-Governmental Authority on Development (IGAD) for RPLRP.

Assistance/Partnership Strategies for each country have developed risk mitigation measures, all of which include activities and mechanisms to strengthen accountability in institutions.

105. The likelihood that environmental risks (such as drought) will adversely affect the proposed project has been taken into consideration, with the result that a contingency response mechanism is part of the design. Although the project is expected to lead to many social benefits and positive effects (on poverty and equity, and for women and other vulnerable groups, for example), difficulties may arise between pastoralist groups or between pastoralists and sedentary rural communities over access to investments supported under the project.

106. At the national level, some stakeholders may also question the project's regional focus, although the project was developed through extensive consultation in which the rationale and benefits of the supranational approach were closely examined and discussed. The approach has been strongly supported by all stakeholders throughout the project's preparation, and other donors have been consulted to ensure complementarity. At the local level, however, fundamental approaches such as the improvement of mobility for pastoralists may not always be well understood. It is also possible that duplication or inconsistencies may arise with similar activities supported by NGOs or other donors.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analysis

107. The detailed economic and financial analysis (EFA) of the project is presented in Annex 5. Project interventions should result in a number of measurable impacts, such as: (i) a decreased prevalence of two animal diseases with high priority in the region—CBPP and PPR; (ii) an increase in the land area where sustainable land management practices have been adopted; (iii) a decrease in severe conflicts over access to grazing; (iv) an increased volume of animals sold in markets rehabilitated and constructed as a result of the project; (v) a decrease in the average distance between functional water points accessible to pastoralists and agro-pastoralists in targeted zones; and (vi) a reduction in the time taken during a pastoral crisis to reach 50 percent of the targeted beneficiaries. These outcomes constitute the initial accomplishments that set the stage for building the resilience of pastoralists in the ASALs of the six countries—namely, to support these pastoral populations to anticipate, manage, adapt to, cope with, and recover from crises and risks to livelihoods. The project is also expected to create a number of positive externalities, such as institutional strengthening, enhanced capacities of stakeholders, natural resource protection, and biodiversity conservation. These intangible benefits will not be fully quantified due to the difficulty of attributing a monetary value to their contribution to the PDO.

108. The EFA shows that a strong economic rationale exists for the public interventions proposed under the project. Investments will take place in marginal, historically under-resourced areas, where a large proportion of households are locked in low-asset poverty traps and remain vulnerable to shocks. Poverty rates are as high as 70–90 percent in areas with a very high proportion of livestock-dependent people.⁶⁷ Finally, the very nature of cross-border pastoralism makes it a key

⁶⁷ “Enhancing the Resilience of Drylands in Sub-Saharan Africa,” forthcoming World Bank report.

vehicle for promoting regional integration, strengthening ties between people, enhancing prosperity, and enhancing economic growth and stability.

109. The World Bank can add considerable value to its support for a regional effort such as PRAPS, given the Bank's recent implementation of a regional project in the ASALs of East Africa (RPLRP) and the extensive research undertaken for the forthcoming report on "Enhancing the Resilience of Drylands in Sub-Saharan Africa." Not only can the PRAPS benefit from the latter operation and ESW, but also the PRAPS will complement Bank interventions to provide support for pastoralism across the African continent.

110. A number of economic analyses reported in the literature provide compelling insights about the cost-effectiveness of interventions in the ASALs of Africa (see Annex 5). For example, analysis from East Africa indicates that (i) a late humanitarian response could cost US\$3–20 billion more than resilience-building activities over 20 years; (ii) every dollar spent in commercial destocking of animals as an early response measure for pastoralists makes it possible to avoid about US\$140 in aid and losses; and (iii) investment in a range of specific interventions for livestock (such as veterinary care and feeding) and water (such as storage structures and wells) can yield as much as US\$25 in benefits for every dollar spent. Other studies show that most non-pastoralist livelihoods in ASALs yield lower incomes than pastoralism, with the exception of urban livelihoods and irrigated farming. The ex-ante EFA for RPLRP indicates that the project could yield desirable Net Present Values (NPVs) and that Internal Rates of Return (IRR) could lie between 17 percent and 19 percent, depending on the country. An ex-post economic analysis of projects funded by AFD in Chad suggests that investments securing access to natural resources (building and rehabilitating facilities to access water, demarcating traditional livestock migration routes, and so forth) yielded IRRs above 10 percent.

111. The comprehensive literature review undertaken as part of the EFA for PRAPS confirms the prominence of the livestock sub-sector in the economy of the Sahel Region and indicates that the proposed investments are likely to be economically justified. The analysis finds that the project's investments are well aligned with the World Bank's twin goals of fighting poverty and fostering shared prosperity. The EFA describes in some detail the methodology (livestock herd dynamics models using the EcoRum module of the CIRAD/ALIVE LSIPT toolkit)⁶⁸ used to calculate the IRR and NPV for the project and to perform the sensitivity analysis. The results show the project to be economically justified: under the current modelling assumptions, IRRs in the 6 countries are on the order of 18.9–23.5 percent, while NPVs range from US\$16 million to US\$44 million. It is important to emphasize, however, that the limited availability of baseline data and the need to make assumptions to describe the with-project scenario (in both drought and non-drought contexts) make it imperative to consider these ex-ante results as indicative rather than final. The project is sensitive to changes in some variables (animal mortality rates and off-take rates), confirming that sustainable investments to improve animal nutrition, access to water, and access to animal health services are central to the project's success.

⁶⁸ Developed by CIRAD and ILRI under the ALIVE program. CIRAD is the *Centre de Coopération Internationale en Recherche Agronomique pour le Développement* (French Agricultural Research Center for International Development); ILRI is the International Livestock Research Institute; and LSIPT is the Livestock Sector Investment Policy Toolkit. The EcoRum module of LSIPT has been used in EFA's for other Bank-financed projects, such as RPLRP (in Ethiopia, Kenya, and Uganda) and the Livestock Development and Animal Health Project in Zambia (ZLDAHP). This toolkit is appropriate for assessing the economics of traditional extensive livestock systems.

B. Technical

112. **Regional approach.** The project's regional nature is highly relevant and justifiable, given the trans-boundary aspects of pastoralism in the Sahel, particularly with regard to disease transmission, the use of natural resources (transhumance corridors are one example), livestock trade and transportation, and knowledge sharing. The need for a regional approach is reflected in fact that all six Sahelian countries are willing to participate. This approach does not necessarily prescribe that the target areas must be limited only to districts or provinces along borders. For example, infrastructure such as markets or vaccination pens is often financed in inland areas, and access to natural resources such as water, pasture, and rangeland is often shared by communities from different countries or along extended transhumance corridors.

113. **Linking essential aspects of pastoral development for regional benefits.** The four technical components of PRAPS are all critical for pastoral development and the generation of regional public goods: healthier herds (and improved regional status at OIE), secure access to water and pastures, products sold at markets throughout the Sahel, and better crisis preparedness and response. The fifth component is essential for generating consistent data on pastoralists and pastoralism in the Sahel (the lack of data has been a serious problem for effective policy and planning). Experience and evidence from other partners engaged in supporting pastoral development emphasize that a holistic approach such as the one described here is a key prerequisite for providing a truly transformative package.

114. **Realizing the potential of pastoralism.** PRAPS builds on the assumption that the mobility (macro and micro) of domestic grazing animals is fundamental for efficient and ecological use of rangelands, and therefore mobility is central to pastoralists' capacity to adapt appropriately to an increasingly variable climate and other changes in their environment. Because pastoral communities often operate across national boundaries, pastoralism has particular potential to benefit from regional approaches to policy reform and harmonization.

115. **Aligning risk mitigation with development.** Intermittent pastoral crises are the Sahelian "normal." Risk-based approaches, such as drought cycle management, were developed many years ago in the Sahel, yet food aid remains by far the dominant response to emergencies. Especially through Component 4, PRAPS aims to orient management policies toward risk-based livelihood approaches and early response in pastoral areas. Early market-based interventions such as commercial destocking with private sector partners, combined with supplementary feeding of selected breeding stock, have been highly effective.

C. Financial Management

116. During the preparation phase, financial management assessments⁶⁹ of the regional and national institutions that would be implementing the project concluded that the national implementing ministries, despite prior experience with Bank-funded operations, did not have the financial management arrangements and internal control environment in place to provide a reasonable assurance that project funds would be used for the intended purposes. For that reason, financial management arrangements for this operation were set up through Project Preparation

⁶⁹ In accordance with the Financial Management Manual for World Bank-Financed Investment Operations (effective March 1, 2010) and AFTFM Financial Management Assessment and Risk Rating Principles.

Advances requested by the governments of each country. Each country will set up an N-PCU within the implementing ministry and take action (Table 6) to ensure that the N-PCU has adequate financial management arrangements (with regard mainly to staffing, internal control, reporting, and audit).

117. The overall financial management residual risk for the project is deemed **moderate** for Burkina Faso, Mauritania, Senegal, and CILSS. It is deemed **substantial** for Chad, Mali, and Niger (mainly owing to the project’s complexity—its regional design, numbers of stakeholders, the dysfunction of some sub-national committees, and limited capacity at sub-national and community levels). The detailed financial management assessments, together with the proposed arrangements for disbursements, accounting, auditing, and monitoring, are provided in Annex 3. Taking the measures in Table 6 into account, the proposed financial management arrangements meet the World Bank’s minimum requirements under OP/BP 10.00. The project’s implementing entities will ensure that the Bank’s Guidelines (“Preventing and Combating Fraud and Corruption in Projects financed by IBRD Loans and IDA Credits and Grants,” revised January 2011) are followed. Mechanisms for the flow of funds at the lowest level of implementation will be fully described in the Project Manual of Administrative, Accounting, and Financial Procedures.

Table 6: Measures to mitigate financial management risk associated with the Regional Sahel Pastoralism Support Project (PRAPS)

Prior to effectiveness, all participating countries will:	<ul style="list-style-type: none"> • Develop financial management procedures for the project as part of the PIM. • Recruit an experienced financial management officer on a competitive basis.
The implementing agencies in each country will undertake additional measures (set as dated covenants) to strengthen the financial management capacity and internal control environment of the N-PCUs:	<ul style="list-style-type: none"> • Competitively recruit qualified accountants based on terms of reference acceptable to the World Bank. • Set up appropriate accounting software to ensure timely recording of financial information, as well as timely production of quarterly and annual financial statements. • Recruit an internal auditor to conduct ex-post reviews of project transactions and physical verifications (the auditor will provide support to the project supervision team as well, when and as needed). • Recruit an external auditor to supplement weak capacity of weak external audit bodies in all participating countries.
In addition to these measures, the Government of Chad will:	<ul style="list-style-type: none"> • Strengthen the accounting team with one senior accountant and one accounting assistant, both familiar with the World Bank’s financial management procedures. • Reinforce the internal control system with the assignment to the project of one financial controller to handle prior reviews of project transactions.

D. Procurement

118. Procurement for the proposed project will be carried out in accordance with the World Bank’s “Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers,” dated January 2011 and updated July 2014; and “Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credit and Grants by World Bank Borrowers,” dated January 2011 and updated July 2014; and the provisions stipulated in the Legal Agreement. Contract awards will also be published in UNDB, in accordance with the Bank’s Procurement Guidelines (para. 2.60) and Consultants Guidelines (para. 2.31). Project activities will also be implemented following “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants,” dated October 2006 and revised January 2011.

119. Procurement assessments were carried out for each of the implementing agencies in the participating countries as well as CILSS. Annex 3 summarizes the assessment for each agency and participating country.

120. A detailed Procurement Plan was developed and agreed prior to negotiations. It will consolidate the Procurement Plans for each country and for the regional activities coordinated by CILSS. This plan was reviewed, discussed, and agreed upon by the Borrowers and the project team at negotiations and covers the first 18 months of the project. It will be available in the project database for each participating country, and a summary will be disclosed on the Bank's external website once the project is approved by the Board. The Procurement Plan will be updated in agreement with the project team annually or as required to reflect the project's actual implementation needs and improvements in institutional capacity.

121. The overall project risk for procurement is **substantial** but expected to be **moderate** once the mitigation measures and hiring of the required specialists are complete.

E. Social (including Safeguards)

122. The proposed project is classified as Environmental Category B. The project triggers the following policies: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Pest Management (OP 4.09), Physical Cultural Resources (OP 4.11), and Involuntary Resettlement (OP 4.12).

123. The project takes a framework approach to safeguards, because the specific locations of its activities have not yet been identified. A Regional Environmental and Social Management Framework (ESMF) and a Regional Resettlement Policy Framework (RPF), including specific national data, have been prepared to clarify principles, mitigation measures, and the appropriate organizational arrangements for each implementing agency to ensure that those affected by project implementation, positively or negatively, have a voice and a mechanism for influencing project outcomes in line with World Bank safeguard policies. The project will include training in Safeguard Policies, and a Safeguards Focal Point has been nominated by each country during preparation to oversee the development of country-specific safeguard documents. These individuals will ensure compliance with the project's environmental and social safeguards instruments during implementation.

124. The monitoring of social development outcomes is a key part of the project and will be reviewed during implementation support missions. The project's activities are expected to provide substantial positive social benefits to over two million direct beneficiaries in the six countries involved, whose livelihoods rely on pastoral and agro-pastoral activities, including but not limited to livestock keeping or marketing. Some indirect benefits will also be realized from beneficiaries' agricultural activities. Community involvement in the planning, design, and implementation of project activities will increase social cohesion within communities and promote local ownership of activities and infrastructure provided under the project. Most activities at the local level are likely to benefit vulnerable groups (such as women and youth). To reduce social tensions related to land issues, particular attention will be paid to vulnerable herders and agriculturalists.

125. **Stakeholders' participation.** The project is explicitly designed to include stakeholders and primary beneficiaries in decision making as a means of promoting participation, transparency, and a sense of community ownership and accountability. The project was initially designed through an intensive participatory process at the local, national, and regional level. A substantial effort was made to engage beneficiaries, stakeholders, and any groups potentially affected by the project through a series of workshops, meetings, and consultations. NGOs and civil society (especially pastoral and other producer associations) were involved during the identification of activities and the preparation and validation of key studies and project documents. The consultative process initiated during preparation will be continued during implementation to ensure that the project's activities involve and benefit the entire community in target areas.

126. **Social safeguards.** Although the project is not anticipated to have major negative social impacts, each country has prepared, validated, and disclosed an RPF in accordance with World Bank Safeguard Policy OPBP 4.12 to provide guidance for dealing with any negative social impacts associated with land acquisition, involuntary resettlement, loss of access to resources, and other matters arising from the implementation of project activities at the local level. The RPF provides clear principles and detailed guidance on minimizing land acquisition and subsequent physical or economic displacement; compensating project-affected persons; rehabilitating livelihoods; addressing grievances; and implementing the RPF through the preparation of Resettlement Action Plans (RAPs) as needed. The RPFs from each participating country have been consolidated by CILSS to prepare a Regional RPF.

F. Environment (including Safeguards)

127. **Environmental dimensions.** This project has multiple environmental dimensions. It focuses on dryland areas where adaptation to climate change is vital and where the use and management of natural resources (particularly water and rangeland) transcend national boundaries. Many of the project's activities are directed toward preserving the natural capital of these countries, which is integral to their economic development.

128. **Environmental safeguards.** The project is classified as a Category B project because the anticipated environmental impacts are not major, are mostly site specific, and can easily be avoided and/or managed. Those impacts are expected to be largely outweighed by improved governance of natural resources. The project triggers Environmental Assessment OP/BP 4.01, as the project will support local and community investments, including some with trans-border dimensions, which might have environmental and social impacts, such as the construction of new and rehabilitation of existing water facilities and livestock markets. A Regional ESMF has been prepared, given that the exact activities and their respective sites have yet to be identified. The Regional ESMF incorporates the ESMFs prepared at the national level by the participating countries; they define uniform screening mechanisms and monitoring procedures for the identification and management of potential adverse environmental and social impacts, and provide a grievance redress mechanism with guidance on the reception, recording, handling, and reporting of complaints that may be encountered during project implementation. The Regional ESMF has country-specific sections clarifying: (i) the environmental and social context in the targeted areas of intervention of the project in each country; (ii) the policy context, as well as the institutional and legal frameworks; (iii) the environmental impact assessment system in the country, including

the review and approval mechanism; (iv) an evaluation of the environmental institutional capacities in the country; and (v) an estimate of the budget needed to implement the framework.

G. Other Safeguards Policies Triggered

129. **Natural Habitats OP/BP 4.04.** The project is not expected to conduct any activities in critically important natural habitats, but the exact sites of the proposed investments are not yet known, and the impacts of severe climate conditions, insecurity, and conflicts may cause the project's activities to extend to areas where it had not anticipated working.

130. **Pest Management OP 4.09.** The project will mainly promote the use of integrated pest management (IPM) techniques rather than pesticides, but pasture protection or veterinary services and the fight against vector-borne diseases may necessitate the use of pesticides. Country-specific Pest Management Plans (PMPs) have been developed and integrated within the Regional ESMF.

131. **Physical Cultural Resources OP/BP 4.11.** Chance-find procedures will be recommended for inclusion in work contracts, especially in areas that may potentially have physical cultural resources.

132. **Disclosure of safeguard documents.** All of the Borrowers' assessments (national and regional ESMFs and RPFs) are completed and have been disclosed in the six countries involved. The Regional ESMF and the Regional RPF were disclosed at the World Bank InfoShop on March 30, 2015. The project complies with all relevant World Bank safeguard and national policies, and it has met the requirements of the World Bank's Disclosure Policy.

H. World Bank Grievance Redress

133. Communities and individuals who believe that they are adversely affected by a World Bank-supported project may submit complaints to existing project-level grievance redress mechanisms or the World Bank'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 World Bank's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of World Bank 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 Inspection Panel, please visit www.inspectionpanel.org.

Annex 1: Results Framework and Monitoring

AFRICA: REGIONAL SAHEL PASTORALISM SUPPORT PROJECT (P147674)

PDO: Improve access to essential productive assets, services, and markets for pastoralists and agro-pastoralists in selected trans-border areas and along transhumance axes across six Sahelian countries, and strengthen country capacities to respond promptly and effectively to pastoral crises or emergencies.														
PDO indicators	Core	Unit of measurement	Baseline		Targets						Fre-quency	Data sources and methodology ⁷⁰	Responsibility for data collection	
					YR1	YR2	YR3	YR4	YR5	YR6				
Indicator One: ⁷¹ Prevalence of two regional priority diseases (herd prevalence of contagious bovine pleuropneumonia [CBPP] and post-vaccinal seroprevalence of small ruminant plague [PPR])	☐	%	REG: (simple average)	CBPP: 76	76	66	56	46	41	36	Annual	Sample-based, based on blood samples living animals and reports from pastoralists and agro-pastoralists (active and passive surveillance) ^{72,73}	CILSS with OIE as well as M&E function of respective ministries responsible for the pastoral and agro-pastoral sectors	
				PPR: 33	33	38	43	48	53	63				
			BF	CBPP : 80	80	70	60	50	45	40				
				PPR : 30	30	35	40	45	50	60				
			CH	CBPP : 80	80	70	60	50	45	40				
				PPR : 30	30	35	40	45	50	60				
			ML	CBPP : 80	80	70	60	50	45	40				
				PPR : 30	30	35	40	45	50	60				
			MR	CBPP : 80	80	70	60	50	45	40				
				PPR : 30	30	35	40	45	50	60				
			NE	CBPP : 80	80	70	60	50	45	40				
				PPR : 40	40	45	50	55	60	70				
			SN	CBPP : 60	60	50	40	30	25	20				
				PPR : 40	40	45	50	55	60	70				
Indicator Two: Land area where sustainable land management practices have been	☒	ha (in thousands)	REG: (total)		0	0	235	785	1,500	2,150	2,450	Annual	Direct observation. Semi-structured interviews. Review of signed agreements.	CILSS with M&E function of respective ministries responsible for the pastoral and
			BF :		0	0	30	60	200	350	400			
			CH :		0	0	0	200	400	600	750			
			ML :		0	0	50	150	350	450	500			
			MR :		0	0	80	150	250	300	300			

⁷⁰ Further details on data sources and methodology in Table A3.16.

⁷¹ Very little official data is available to set up baselines and targets; figures will need to be reviewed and improved at project mid-term to better reflect the epidemiological situation of the six countries using epidemiological data collected during the first three years.

⁷² “Active surveillance” = surveillance based on sample-based survey in general animal population using blood samples.

⁷³ “Passive surveillance” = surveillance based on reports from livestock owners or herders of sick and dead animals.

adopted as a result of the project			NE :	0	0	50	150	200	300	300		Geo-referenced maps	agro-pastoral sectors
			SN :	0	0	25	75	100	150	200			
Indicator Three: Average distance between functional water points accessible to pastoralists and agro-pastoralists in targeted zones	<input type="checkbox"/>	Km	REG: (simple average)	47	47	47	40	35	31	27	Annual	Geo-referenced maps. Semi-structured interviews. Direct observation/technical inspection of water points.	CILSS with M&E function of respective ministries responsible for the pastoral and agro-pastoral sectors
			BF :	40	40	40	35	30	25	25			
			CH	40	40	40	38	35	30	25			
			ML:	50	50	50	42	33	25	20			
			MR:	50	50	50	47	44	40	35			
			NE:	50	50	50	40	35	30	20			
			SN:	50	50	50	40	35	35	35			
Indicator Four: Animals sold at markets rehabilitated and constructed as a result of the project	<input type="checkbox"/>	Number (in thousands)	REG: (total)	720	720	955	1,182	1,411	1,650	1,877	Annual	Daily records of animals sold. Semi-structured interviews. Direct observation. Technical inspection by market experts.	CILSS with M&E function of respective ministries responsible for the pastoral and agro-pastoral sectors
			BF :	225	225	240	250	260	270	300			
			CH :	40	40	40	60	100	160	200			
			ML :	90	90	150	192	201	210	227			
			MR :	80	80	120	180	230	270	300			
			NE :	225	225	340	430	540	650	750			
			SN :	60	60	65	70	80	90	100			
Indicator Five: In a pastoral crisis, time to reach 50% of the targeted beneficiaries as foreseen in the inclusive intervention plan	<input type="checkbox"/>	Weeks	REG: (simple average)	33	33	32	27	20	17	13	Annual	Review of reports by national institutions responsible for response to pastoral crisis. Pastoral crisis may not affect all countries.	CILSS with M&E function of respective ministries responsible for response to emergency situations and associations of pastoralists and agro-pastoralists
			BF :	52	52	50	45	40	35	30			
			CH :	52	52	52	40	25	25	20			
			ML :	52	52	52	40	30	20	10			
			MR :	18	18	18	18	12	12	9			
			NE :	15	14	10	10	8	6	6			
			SN :	8	8	7	6	5	4	4			
Indicator Six: Direct project beneficiaries (of which female)	<input checked="" type="checkbox"/>	Number (in thousands) (%)	REG	(total)	0	0	182	675	1,250	1,762	Annual	Activity and project records	CILSS with country project management units
				(weight. avg.) (0)	(0)	(24)	(27)	(28)	(29)	(30)			
			BF		0	0	20	75	150	200			
					(0)	(10)	(30)	(30)	(30)	(30)			
			CH		0	0	50	150	300	400			
					(0)	(30)	(30)	(30)	(30)	(30)			
			ML		0	0	50	150	250	350			
					(0)	(30)	(30)	(30)	(30)	(30)			

			MR	0	0	0	100	200	300	400				
					(0)	(0)	(20)	(25)	(30)	(30)				
			NE	0	0	0	100	200	300	400				
					(0)	(0)	(20)	(25)	(25)	(30)				
			SN	0	0	62	100	150	212	230				
					(0)	(20)	(30)	(30)	(30)	(30)				
INTERMEDIATE RESULTS														
Component One: Animal Health Improvement														
Intermediate Results Indicator One: Share of animals vaccinated against two regional priority animal diseases (CBPP, PPR)	☐	%	REG (avg.)	CBPP :	47	47	50	54	59	63	68	Annual	Field level survey: sample-based review of certificates, blood samples	CILSS with OIE as well as M&E function of respective ministries responsible for the pastoral and agro-pastoral sectors
				PPR:	13	13	17	21	26	30	34			
			BF	CBPP :	33	33	35	40	43	45	50			
				PPR :	3	3	5	7	8	9	10			
			CH	CBPP :	10	10	15	20	30	40	45			
				PPR :	0	0	5	10	15	20	25			
			ML	CBPP :	60	60	62	65	70	75	80			
				PPR :	7	7	10	12	18	18	20			
			MR	CBPP :	75	76	78	80	82	84	85			
				PPR :	0	3	10	20	30	40	45			
			NE	CBPP :	52	55	60	65	70	75	80			
				PPR:	35	38	41	44	47	51	55			
SN	CBPP ⁷⁴	-	-	-	-	-	-	-						
	PPR	20	25	30	35	40	45	50						
Intermediate Results Indicator Two: Veterinary units ⁷⁵ constructed or rehabilitated by the project that are functional in the targeted zones	☐	Number	REG: (total)	0	0	24	87	148	238	238	Annual	Technical inspection by experts	CILSS with OIE as well as M&E function of respective ministries responsible for the pastoral and agro-pastoral sectors	
			BF :	0	0	0	10	20	34	34				
			CH :	0	0	10	22	42	82	82				
			ML :	0	0	5	14	25	29	29				
			MR :	0	0	0	15	25	47	47				
			NE :	0	0	6	15	25	35	35				
			SN :	0	0	3	11	11	11	11				

⁷⁴ Mass vaccination stopped in 2005 (no outbreaks since 1978). New cases occurred in 2012; when outbreaks are reported, targeted vaccination is carried out by veterinary services. National CBPP vaccination strategy will be reviewed in 2015.

⁷⁵ Veterinary Units include private services

Component Two: Natural Resource Management Enhancement													
Intermediate Results Indicator One: Share of targeted zones under joint natural resources management ⁷⁶	□	%	REG: (simple average)	0	0	1	11	17	21	28	Annual	Direct observation. Semi-structured interviews. Review of signed agreements. Geo-referenced maps.	CILSS with M&E function of respective ministries responsible for the pastoral and agro-pastoral sectors
			BF :	0	0	0	15	20	25	30			
			CH :	0	0	0	5	10	15	33			
			ML :	0	0	0	10	15	20	30			
			MR :	0	0	0	8	12	16	20			
			NE :	0	0	0	8	15	20	25			
			SN :	0	0	5	20	30	30	30			
Intermediate Results Indicator Two: Functional water points accessible to pastoralists and agro-pastoralists in targeted zones as a result of the project.	□	Number	REG: (total)	0	0	10	135	255	345	395	Annual	Geo-referenced maps. Semi-structured interviews. Direct observation/ technical inspection of water points.	CILSS with M&E function of respective ministries responsible for the pastoral and agro-pastoral sectors
			BF :	0	0	0	45	75	80	80			
			CH :	0	0	0	20	40	60	80			
			ML :	0	0	0	20	40	60	60			
			MR :	0	0	0	15	35	55	70			
			NE :	0	0	0	20	40	60	65			
			SN :	0	0	10	15	25	30	40			
Component Three: Market Access Facilitation													
Intermediate Results Indicator One: Markets operational according to defined criteria (rehabilitated and constructed as a result of the project)	□	Number	REG: (total)	0	0	18	38	60	73	84	Annual	Technical inspection by market experts	CILSS with M&E function of respective ministries responsible for the pastoral and agro-pastoral sectors
			BF :	0	0	0	4	8	8	8			
			CH :	0	0	0	3	6	9	12			
			ML :	0	0	3	5	7	7	7			
			MR :	0	0	2	6	12	17	20			
			NE :	0	0	10	15	19	24	29			
			SN :	0	0	3	5	8	8	8			
Component Four: Pastoral Crisis Management													
Intermediate Results Indicator One: Specific pastoral parameters integrated in national early warning system	□	Number	REG: (simple average)	4	4	5	6	7	8	8	Annual	Review of early warning system	CILSS with M&E function of respective ministries responsible for the pastoral and agro-pastoral sectors and
			BF :	4	4	4	8	8	8	8			
			CH :	2	2	2	4	4	5	5			
			ML :	6	6	7	8	9	10	10			
			MR :	4	4	5	6	7	8	9			
			NE :	4	4	5	6	7	7	7			

			SN : 4	4	5	6	7	8	9			pastoral crisis response
Intermediate Results Indicator Two: Time between request from government to making funds available to respond to an eligible pastoral crisis	□	Weeks	REG: (simple average) 35	35	12	12	12	12	12	Annual	Funding request (letter) from government to respond to pastoral crisis. Bank statements from national banks.	CILSS with Ministries of Finance
			BF : 52	52	12	12	12	12	12			
			CH : 32	32	12	12	12	12	12			
			ML : 52	52	12	12	12	12	12			
			MR : 24	24	12	12	12	12	12			
			NE : 32	32	12	12	12	12	12			
			SN : 16	16	12	12	12	12	12			

Annex 2: Detailed Project Description

AFRICA: REGIONAL SAHEL PASTORALISM SUPPORT PROJECT

1. PRAPS is a US\$248 million regional operation to scale up selected activities within six Sahelian countries that have already proven their capacity to support pastoralist groups and enhance their regional integration; the activities are recognized throughout the region to have the potential to provide significant beneficial spillover effects. The proposed project will build a solid alliance to support pastoralism by pooling the expertise and resources of various actors (bilateral and multilateral technical and financial partners, governments, the private sector, and pastoral civil society organizations). This support is aligned with national priorities, takes regional dynamics into account, and complies with the subsidiarity principle. PRAPS will enhance the current frameworks for concerted action to develop a consolidated, regionally harmonized framework that serves as a platform for multiple actors to promote sustainable actions that support pastoralism. This approach provides flexibility to link country-specific outputs with broader, region-wide priorities.

2. **Key problems addressed.** The Nouakchott Declaration describes the main technical pillars and scope of operational programs to support pastoralism (enhancing production services, improving the competitiveness of the livestock sub-sector and market access, and strengthening the security of the assets, rights, and lifestyles of pastoral people). PRAPS will coherently address a set of fundamental, interrelated problems that weaken the resilience of pastoral groups, impede the development of pastoralist production systems, and increasingly ignite conflict. Aside from the scarcity and very limited reliability of basic data on pastoralism in the Sahel,⁷⁷ the key problems include: (i) weak productivity of pastoral systems caused by inadequate access to services and essential inputs (such as veterinary services, water, weather data, herd and rangeland management practices, animal nutrition, improved breeding stock, credit, and market information and advisory services adapted to mobile communities); (ii) insufficient national and regional cooperation, particularly for disease control, natural resource management, trans-boundary movements of herds, and the facilitation of trade; (iii) lack of recognition and protection of the fundamental concept of mobility; and (iv) increasing vulnerability owing to increased risks (climate change, animal diseases including zoonotic diseases, economic hazards, conflicts, and insecurity.)⁷⁸

3. The success with which these key problem are addressed and future opportunities are pursued can be influenced by actions taken outside the purview of the proposed project. In parallel with their participation in PRAPS, governments can do much to further develop livestock sub-sector policies aimed at (i) strengthening the role of regional economic integration organizations (ECOWAS/WAEMU) as facilitators and regulators of trans-boundary movements and trade; (ii) applying revised or new frameworks for land ownership that secure access to resources; (iii) systematically including the concerns of pastoral populations in decentralization legislation; and (iv) bringing coastal countries (market outlets) into discussions on pastoral policies, mobility, trade issues for animals and their products (including imports), and sector taxation.

⁷⁷ A notable contribution of the proposed project is to generate sound data on pastoral systems across the Sahel.

⁷⁸ Development challenges and security risks are often more acute in border areas.

4. **Gender mainstreaming.** Women's roles in pastoral communities and pastoralist livelihoods varies by country and ethnic group.⁷⁹ Women's participation in income-generating activities may be hampered by a lack of mobility and resources and by cultural and religious norms. Men usually own the livestock and migrate with most of the cattle, while women remain at the homestead to manage the household, food security, children, and a few livestock. Even with these constraints, women are social, economic, and political actors in their own right. Empowering women and recognizing their inputs in pastoralism will reduce communities' vulnerability to external shocks, including conflict.

5. The project has been designed to integrate issues and particular needs pertinent to women and youth into its activities to give them sufficient attention. All activities undertaken through PRAPS must demonstrate that gender issues have been considered whenever possible. A gender assessment will be conducted as part of the mid-term review, and its results will be factored into subsequent improvements in the project's design as necessary. Progress reports, such as ISRs, will systematically cover gender. It is expected that national project coordination units (N-PCUs) will recruit gender facilitators with local language skills to make sure that women participate actively during consultations and are duly represented in all decisions. Data collected on beneficiaries will be disaggregated by gender. At the regional level, appropriate capacity strengthening will take place at CILSS for a coordinated approach to gender issues within the Sahel Initiative.

6. **Nutrition.** Animal protein is an important aspect of balanced human nutrition, particularly during the early years of life. Livestock are important to the poor not only because of their economic contribution but because of their contribution to human development outcomes. Animals provide nutrients and micronutrients that would otherwise be scarce or nonexistent in local diets. In Sahelian countries, increasing the share of foods from animal sources in the caloric intake of the poor could have many positive nutritional benefits. Promoting livestock ownership has the potential to positively affect human nutrition in rural areas. Evidence indicates that support for livestock development often translates into nutritional benefits for target communities; ownership of various livestock species increases consumption of foods from animal sources and improves children's nutritional status.⁸⁰ PRAPS will promote livestock development in pastoral areas, and it will support the dissemination of information on sound nutritional practices among rural beneficiaries, particularly women and children.

7. **Climate-smart agriculture.** Despite being a source of greenhouse gas (GHG) emissions and pollutants, livestock can also mitigate—and in many instances reverse—the adverse environmental impacts of conventional husbandry methods. In many arid and semi-arid areas, pastoralism is the only renewable, non-extractive use of dryland resources, and it is essential for maintaining soil and water quality. In the Sahel, the land may also become degraded and the loss of biodiversity may accelerate in the absence of livestock. Engagement with small-scale producers is a critical entry point to enlist their efforts as effective agents of environmentally sound practices that provide ecological services and help to minimize or even reverse the negative impacts of

⁷⁹ For example, in Burkina Faso and Niger, once the household's need for milk products is satisfied, any surplus products belong solely to women, who sell them. In other cases (among the Fula, Sarakole, and Soninke, for example), milk belongs to couples, who decide together how it will be used.

⁸⁰ Azzarri, C., E. Cross, B. Haile, and A. Zezza (2014), "Does Livestock Ownership Affect Animal Source Foods Consumption and Child Nutritional Status? Evidence from Rural Uganda," Policy Research Working Paper No. WPS 7111 (World Bank, Washington, DC).

current practices. Building resilience for pastoral and agro-pastoral communities is a core dimension of PRAPS.

8. **Greenhouse gas emissions.** Pastoralist systems typically have higher GHG emissions per unit of meat or milk product than more intensified systems. The main reason for this difference is that animal productivity is low in pastoralist systems as a result of poor feed rations, poor animal genetic potential, and poor health; producers also must maintain large numbers of “unproductive” animals to act as a buffer against losses and provide goods and services such as draft power, fiber, and savings. In turn, pastoralist systems offer equally high mitigation opportunities, which the proposed project will tap. Interventions that improve animal health, feeding, and marketing will reduce direct GHG emissions per unit of meat or milk product. In addition, project activities to improve rangeland management and productivity will positively affect soil carbon stocks, offset GHG emissions, and provide other ecosystem services related to biodiversity and water resources.

9. **Private sector involvement.** The project focuses primarily on the provision of public goods (such as animal health, communal rangeland development, market infrastructure, and crisis management systems) that will increase the productivity of pastoral production systems. Better provision of these public goods will help to expand business opportunities for the private sector in West Africa’s rapidly growing livestock trade. The project will also contract with private companies to undertake many of its activities (such as construction or service provision, among others). The project design acknowledges the important role played by the private sector in the delivery of veterinary services by supporting the installation of private animal health providers in underserved areas, and strengthening the capacity of such providers where they exist. The project builds on the critical role of the private sector in the booming domestic and cross-border live animal trade in West Africa. The multi-stakeholder inter-profession associations that the project will help establish and strengthen will improve the vertical and horizontal coordination of the live animal value chains and enhance market efficiency. Representatives of the private sector—particularly producers, traders, market intermediaries, and butchers—will form the majority on the committees that will manage the market infrastructure financed under the project. The creation of such management committees will be a pre-condition for building the agreed infrastructure, as the committees will participate in selecting the construction sites. Project support will also help to transform market information systems (where they exist) into second-generation systems geared toward meeting the specific needs of the private sector, especially producers and traders (including exporters). Traders operating in cross-border corridors will participate in data collection on harassment on roads and at border crossings.

10. The project will finance small-scale private rural slaughter facilities, milk collection units, and small-scale dairy processing units operated by cooperative enterprises and women’s associations (dairy units). Although the project does not finance large-scale meat production and processing infrastructure or industrial dairy units, the International Finance Corporation (IFC) was consulted frequently during preparation to explore investment possibilities when participating countries expressed the need for such support. In some cases, IFC is already supporting private companies in the development of viable value chains, notably in the dairy sub-sector near the urban centers of Nouakchott and Dakar.

11. **Selection of national and regional activities.** Within the harmonized regional framework, four criteria are used to determine which activities will be pursued at the national level. First, the

proposed activities must be national priorities (with potential for sub-regional spillovers); second, they must be clearly aligned with regional priorities defined by the countries themselves and/or as part of the ECOWAS Agricultural Program (ECOWAP); third, they must have proven potential to address immediate and long-term needs in the livestock sub-sector; and fourth, the host country must demonstrate interest in scaling up and sustaining the activities.

12. During preparation, it was agreed that the subsidiarity principle would apply when it makes better sense to undertake certain activities at the regional level rather than in each individual country, specifically with respect to three types of regional activities: targeted technical assistance, information/knowledge sharing, and training. For this reason, certain regional activities within each component,⁸¹ other than those linked directly to PRAPS management and coordination, have been delegated to CILSS to execute on behalf of the Sahelian countries (and to CRSA for animal health activities). Those regional activities will be financed jointly by the Sahelian countries as follows: each country will make 4 percent of its IDA credit/grant proceeds for PRAPS available to CILSS.⁸² CILSS (and CRSA for animal health activities) will be responsible for implementing technical regional activities identified on the basis of the subsidiarity principle.

A - Component 1: Animal Health Improvement (US\$50.48 million)

13. To improve animal health in the six targeted countries, PRAPS will support critical national and regional efforts to build more sustainable and efficient National Veterinary Services (NVS).⁸³ The project will focus specifically on providing local animal health services in remote pastoral areas. The project design draws upon findings and recommendations from each country's PVS Pathway⁸⁴ reports, which provide an objective means of identifying priorities and guiding investments for the sustainable improvement of NVS. Due consideration was also given to specific constraints faced by pastoralists and agro-pastoralists and major health risks to their livestock.

14. The intermediate outcome to be achieved under this component is a decrease in the herd prevalence of CBPP and an increase in the immunity protection of small ruminants against PPR, which are two regionally important livestock diseases. Very little official data is available to set up baselines and targets; for that reason, figures indicated in the Results Framework will have to be reviewed and improved at project mid-term to better reflect the epidemiological situation of the six countries using epidemiological data collected during the first three years. The short-term outcomes are an increase of the share of animals vaccinated against CBPP and PPR and the construction and rehabilitation of veterinary units. This component will benefit women, who often own domestic animals, particularly small ruminants.

⁸¹ The activities were selected based on several criteria: they were consistent with the subsidiarity principle; they would build on possible complementarities and synergies with CILSS (and CRSA) programs and projects; they would generate a regional net added value; and they would take CILSS (and CRSA) absorption capacity into account.

⁸² As with WAAPP in West Africa, in PRAPS each country will sign a subsidiary grant agreement with CILSS, detailing the nature of assistance expected from CILSS (apart from its coordination role, which is financed directly through a Regional IDA grant) and the level of financial support that each country will provide to CILSS. The signature of that agreement is a condition of effectiveness for a country to participate in PRAPS.

⁸³ OIE defines *veterinary services* as governmental and non-governmental organizations that implement animal health and welfare measures and other standards and recommendations in the Terrestrial Code and the OIE Aquatic Animal Health Code in the territory. The Veterinary Services are under the overall control and direction of the Veterinary Authority.

⁸⁴ Each of the six countries has engaged in the OIE PVS (Performance of Veterinary Services) Pathway, a global program set up by the OIE for the sustainable improvement of NVS toward compliance with international standards of quality of Veterinary Services. PVS Pathway reports provide objective and harmonized qualitative and quantitative elements helping to identify priorities and guide investments. Information from the six PVS pathways reports was consolidated at the regional level to design a consistent regional program.

15. At the national level, PRAPS will support the improvement of essential NVS infrastructure and equipment, build capacity, and provide support to surveillance and control campaigns for major diseases affecting large and small ruminants. At the regional level, PRAPS will strengthen CRSA⁸⁵ so that it can fulfill its mandate to coordinate, support, and harmonize animal health strategies and activities among countries in the region.

16. Sub-component 1.1: Upgrading infrastructure and strengthening National Veterinary Services' capacities. To strengthen NVS, the project will support: (i) the upgrading of essential infrastructure and equipment for NVS to carry out their duties; (ii) the establishment of animal health professionals in strategic areas for pastoralists; and (iii) capacity building through initial and continuing training programs, as well as targeted technical support. The project will focus particularly on infrastructure and equipment required at the local level (field veterinary units) in remote pastoral areas strategically located along key transhumance routes. The project will also support installation of a sustainable system of private animal health professionals in pastoral areas with low coverage of animal health services (either individual veterinarians or in the form of networks of animal health professionals). Specific activities have been designed to build synergies and complementarities between public and private actors in animal health. Capacity-building activities will include continuing training plans tailored to the mandates of public and private NVS actors, as well as scholarships for training new veterinarians. Actors from all levels of the animal health system will benefit from training, including the pastoralists.

17. To address needs in the most remote areas, the project will pilot several innovative interventions: (i) inter-sectoral interventions combining animal and human health service provision (Chad, Mali) and (ii) mobile animal health units for the Chadian northern Sahara regions.

18. Sub-component 1.2: Support the surveillance and control of priority animal diseases and veterinary medicine. To decrease the prevalence of critical regional diseases (especially CBPP and PPR), the project will support the implementation of: (i) region-wide vaccination campaigns using national/regional public vaccine production capacities to the extent possible;⁸⁶ (ii) surveillance programs for a wider range of diseases, including RVF, FMD, and brucellosis; (iii) a veterinary drug quality surveillance program; and (iv) awareness campaigns and training to increase pastoralists' and agro-pastoralists' involvement in animal disease surveillance and control. These initiatives will be achieved by:

- Strengthening the capacity of NVS to implement their activities by providing critical equipment and financing the incremental operating costs; the equipment will include geographical information system equipment, sampling and vaccination materials, livestock restraining equipment, laboratory equipment related to surveillance and diagnosis of selected diseases, and equipment for emergency interventions in major disease outbreaks.
- Increasing the involvement of private veterinarians in the provision of animal health services by delegating official government activities in disease surveillance and vaccination campaigns to them. The project will orient incentives to areas with low coverage for animal health

⁸⁵ *Centre Régional de Santé Animale*, based in Bamako (Mali), which as discussed later is in the process of becoming the ECOWAS Specialized Agency for Animal Health.

⁸⁶ Notably for Senegal (through ISRA and LNERV), Chad (*Laboratoire de Farcha*), Mali (LCV), and Niger (LABOCEL); access to a Regional Vaccine Bank will also be made available through CILSS/CRSA with OIE's assistance.

services. The health of pastoralists' livestock will improve as a result of screening for parasitic diseases, nutrient deficiencies, and other problems.

- Expanding the involvement of pastoralists and agro-pastoralists through broad-based awareness campaigns involving multiple stakeholders and using a variety of communication media (such as community radio and articles in local language newspapers) and by providing training in best practices for ensuring animal health.

19. **At the regional level**, the proposed project will support: (i) the coordination of national animal health activities; (ii) the provision of technical assistance tailored to specific needs (related mainly to epidemiological surveillance); and (iii) the development and implementation of training programs. Options for sourcing high-quality vaccines from regional vaccine banks using the established OIE mechanism⁸⁷ are also proposed.

20. Under the supervision of CILSS, the implementation of regional animal health activities will be delegated to CRSA,⁸⁸ whose capacities will be strengthened. A consultation mechanism will be established to: (i) facilitate the development of harmonized procedures for trans-boundary animal movement control; (ii) allow the identification of strategic border inspection posts and quarantine locations to be built or renovated; and (iii) address other priority issues identified by the countries for discussion at the regional level, such as quality control for veterinary medicines and vaccines, and regulation of animal health professions.

21. Regional technical assistance will include: (i) the design of national risk-based disease surveillance and control programs for regional priority diseases such as PPR, CBPP, RVF, FMD, and brucellosis and (ii) the development of an epidemiological data bank. Regional training support will include (i) the training of critical NVS staff from the six countries and (ii) the development of national training programs. PRAPS regional financing will also support knowledge sharing among countries, including the dissemination of best practices. These regional activities will contribute to improved efficiency and harmonization of priority trans-boundary disease surveillance and control programs, facilitate safer intra-regional movements and trade of livestock, and enhance communication and sharing of animal health information between countries.

22. Indicators identified to measure the progress and results associated with Component 1 are:

- At the PDO level: Prevalence of two regional priority diseases (specifically, herd prevalence of CBPP and post-vaccinal seroprevalence of PPR).
- At the Intermediate Result level: The share of animals vaccinated against two regional priority animal diseases (CBPP, PPR); the veterinary units constructed or rehabilitated by the project that are functional in the targeted zones.

⁸⁷ See <http://www.oie.int/en/support-to-oie-members/vaccine-bank/>

⁸⁸ CRSA was initially established in April 2006 by FAO-ECTAD, OIE, and AU-IBAR. Chad and Mauritania are officially covered by the activities of this Center. CRSA was instituted as a regular technical ECOWAS body in 2012, through Supplementary Act n° A/SA-20/02/12 signed by the Heads of States.

B - Component 2: Natural Resource Management (NRM) Enhancement (US\$70.87 million)

23. This component aims at enhancing the sustainable management and secure access by pastoral and agro-pastoral communities to natural resources (essentially water and rangeland) with trans-boundary significance. It supports two sets of activities: (i) improved access to natural resources and sustainable rangeland management and (ii) sustainable management of infrastructure for access to water. The medium-term outcomes to be achieved in targeted zones are an increase in the land area where sustainable land management practices have been adopted, a decrease in severe conflicts over access to grazing, and a decrease in the average distance between functional water points accessible to pastoralists and agro-pastoralists in targeted zones. To achieve these outcomes, the area under joint management will be increased, a greater share of conflicts will be referred to conflict resolution and mediation mechanisms, and the number of functional water points in the targeted zones will be increased. Women will be involved in rangeland management activities and will also benefit from enhanced access to water (by spending less time procuring it, for example). Improved rangeland productivity in general, along with the creation of specific pasture reserves (in Mauritania, for instance) will contribute to improved dairy production, an economic activity that benefits women.

24. Sub-component 2.1 – Improved access to natural resource and sustainable rangeland management. The overall aim of this sub-component is to promote natural resource use in arid and semi-arid areas of the Sahel through concerted ecological range management practices by all user groups and at different scales (local, national, and beyond). Through this effort, the project will help prevent conflicts with respect to natural resources (most notably conflicts between settled farmers and pastoralists in transhumance transit and arrival areas) and build peace among communities. In particular, this sub-component will promote the formulation and negotiation of local agreements specifying natural resource access and management rules, and related development plans. It will also promote mechanisms for resolving local conflicts.

25. The project will promote herd mobility, both locally (“micro mobility” through ecological range management practices) and through transhumance (“macro mobility”), which is a determinant of sustainable natural resource management in drylands and the most effective and sustainable livestock production system under Sahelian and Saharan conditions to date. In doing so, the project will ensure adjustable, integrated planning at the local level and along corridors to balance the availability of water and pasture resources with herd and flock movements. Activities will include:

- (i) *The development, negotiation, and implementation of concerted NRM plans at the local level and along corridors:*⁸⁹
 - (a) Preparation of master plans,⁹⁰ including characterization and mapping of intervention areas;
 - (b) Strengthening, or support for, the establishment of local consultation frameworks and formulation of local conventions and concerted plans over the access, use, development, and management of resources/facilities. This effort may entail local mapping and delineation of areas, the formation of management committees, and the formal validation of

⁸⁹ To inform this component, the project, in its early phase, will conduct and exercise to take stock at the regional level of recent experiences in range management in arid zones, particularly in the Sahel.

⁹⁰ Implementation of these plans will entail technical support as well as hard investment.

- plans, agreements, and transfer of management duties to local groups.⁹¹ These developments will mainly deal with, respectively, (i) communities in pastoral/agro-pastoral areas (such as “Pastoral Units” in Senegal) and (ii) along transhumance corridors. Local plans will form the basis for determining the project’s further technical and capacity building support to the communities, land improvements, and infrastructure development. The project will promote participatory and community-driven processes; related support activities will in most cases be outsourced to specialized firms or NGOs, while ensuring appropriate involvement of relevant services (Forestry, for example) and local governments;
- (c) Advisory and training support to local communities to set up or strengthen related local management committees and implement sustainable NRM practices. The practices will promote sustainable, collective ecological range management, taking into consideration rangeland ecology in ASALs and Sahelian conditions (examples include practices related to time management, flexible planning,⁹² rangeland health monitoring, silvo-pastoralism, fire control, and dry season forage resources), and including approaches such as exchange visits between communities. In some cases, innovative rangeland management practices may be proposed to pastoral communities for testing through action research;
 - (d) Physical delineation of 5,100 kilometers of transhumance tracks and development of associated rest areas;
 - (e) Rehabilitation of degraded land and development/improvement of pasture reserves and, in Mali, *bourgou* pasture (over 55,000 hectares); and
 - (f) Opening/maintenance of fire breaks at the community level, mostly through labor-intensive approaches (including 800 kilometers in Senegal and 500 kilometers in Chad).
- (ii) *Communication to raise awareness of policies and legal frameworks* that deal with trans-boundary transhumance, access/use rights over natural resources, and related management/organizations. Related frameworks include, at the regional level, the ECOWAS transhumance card, and, at the national level, sections of legal texts (Codes, for example) dealing with pastoralism as such, as well as land tenure, forests, and water regulations, among others. Activities will entail the development and dissemination of communication products (manuals, radio programs, theater sketches, information meetings, and so on) in local languages, adapted to different groups—pastoralists, traditional community chiefs, land commission members, and local government officers, among others. In some countries (such as Chad and Mauritania), activities will also include legal studies to develop recommendations for making the different legal frameworks more consistent.
- (iii) *Promotion of dispute resolution mechanisms* through information and training on existing regulatory provisions and effective methods/tools. Mechanisms may include traditional systems (*djemaa* in Mauritania) as well as systems formally described by regulations (such as Niger’s Code Rural). The interventions will focus, in most countries, on targeted high-risk areas (such as southeastern Mauritania and the Lake Chad region in Chad) and essentially benefit the same categories of stakeholders mentioned previously in item (ii), particularly persons in charge of these mechanisms at different levels. The project will also promote trans-boundary consultation platforms. They may include (firstly) ordinary meetings under existing formal bilateral

⁹¹ With the necessary flexibility to adjust the plan to changing conditions arising from their regular rangeland monitoring or unexpected events (intrusion from communities not willing to follow the plan; bushfire; drought, flood).

⁹² The plan should allow for flexibility so that the pastoral communities would be able to adjust continuously their management plan taking into account results of their regular rangeland monitoring or any unexpected events (intrusion from communities not willing to follow the plan; bushfire; drought, flood, etc.).

agreements (between Mauritania and, respectively, Senegal and Mali, for example) or new exchanges, including exchanges with coastal countries (Niger with Benin, for example), to which the project contributes improved preparation (through analytical work) and participation (for example, by pastoral organizations). Secondly, the project will organize consultations between local communities across the border in targeted areas (between Chad and Niger near the Kanem region, for example, and along the Mali-Mauritania border), to encourage improved planning, coordination, and shared rules for using local resources and facilities. These efforts will be supported by technical assistance and training in conflict resolution for project staff and beneficiaries through the Initiative on Pastoralism in the Sahel and the Horn of Africa, which is supported through the State and Peace-Building Fund and Korean Trust Fund. The project may hire a local NGO or firm experienced in working with these communities to help conduct such activities.

- (iv) *Strengthening countries' capacity to monitor natural resources integral to pastoralism and disseminate information and decision support tools.* These activities will be coordinated with those in Component 4 on early warning systems. With CILSS' guidance, the project will strengthen and extend to the other four countries the pasture resource monitoring system already set up in Senegal and Niger.⁹³ The system relies on satellite imagery and annual field observations across the country, and produces a regional quarterly bulletin. Depending on the existing databases in the respective countries, interventions will also aim at undertaking/completing inventories/maps (for example, of transhumance corridors and water facilities in Chad) and improving systems for monitoring water resources, bushfires, conflicts, and, in Chad, transhumance flows. Water-related activities will be coordinated with Sub-component 2 activities (below).

26. Finally, activities will aim at building related capacities for local governments and support services, in particular regarding social mobilization and participatory planning. This support is vital, given the movement in several of the participating countries toward greater empowerment of decentralized institutions on matters related to NRM.

27. Sub-component 2.2 - Sustainable management of infrastructure for access to water. This sub-component reflects the importance of water resources for pastoralism and the scale of the investment needs. Related activities will draw from prior planning and consultation undertaken under sub-component 2.1. Activities will mainly include:

- (i) *Designing, building, and rehabilitating water facilities* (about 192 wells, 143 boreholes, and 119 water pans/reservoirs—in other words, more than 450 facilities in total), including 37 units with comprehensive storage and distribution facilities, in Senegal, Chad, and Mali. Related planning will take into account the carrying capacity of surrounding pasture and environmental considerations (prior assessments), among other factors.⁹⁴ The project will generally aim to form a network of water points (for example, at a recommended distances from one another) that will facilitate mobility while preventing over-grazing and land degradation. Targeted areas will include transhumance corridors and, in primarily pastoral areas, grazing areas that remain under-exploited due to poor access to water. For new construction in Mauritania, the project

⁹³ At the level of pastoral and agro-pastoral communities, the project will build capacity to monitor rangeland health, as a tool to continuously adjust communities' collective rangeland and natural resource management plans.

⁹⁴ Such as areas of high ecological interest in Mauritania.

will target under-equipped areas, since the country is already relatively well covered. In addition, Chad will undertake technical trials to improve success rates of drilling under difficult ground conditions, in particular along the Niger border (Kanem). To reduce maintenance costs and extend the lifetime of this infrastructure, the project will promote works of substantial quality—for example, in terms of technical specifications, bidding process (best bidder vs. lowest bidder), and technical options (solar energy).

(ii) *Setting-up/building capacities of water user associations and management committees at the community level for the management and maintenance of water facilities*⁹⁵ through consultation, information, training, technical guidance, and supervision of related communities.

(iii) *Training local maintenance staff and service suppliers.* In some countries, this training may be linked to efforts under Component 4 to promote income-generating activities. In Chad, training will also deal with construction techniques to produce works of higher quality and longer durability.

(iv) *Providing guidance to policies and strategies on related best practices and priority directions.* This effort will include the development of a national pastoral water strategy in Burkina Faso, a study on national maintenance financing mechanisms in Chad, and the sharing of experiences between countries on pastoral water development/management, with CILSS' guidance.

28. **Regional activities** under this component will be coordinated by CILSS and will entail: (i) technical support to PRAPS countries on (among other items) resource monitoring systems, collaborative natural resource planning/management tools,⁹⁶ and trans-boundary consultation initiatives; (ii) activities to take stock of experiences and share lessons (on water development/management, for example); and (iii) joint training initiatives at the regional level (Masters in Pastoralism with AGHRYMET in universities in Niger and Senegal; short-term training courses to enhance national executives' skills in specialized/emerging issues).

C – Component 3: Market Access Facilitation (US\$45.38 million)

29. Markets facilitate the conversion of livestock into disposable income to buy grain (and ensure pastoralist households' food and nutrition security) and procure goods, services, and inputs that enhance households' living standards and increase the productivity of their livestock. Markets also help pastoralists to manage herds effectively through timely destocking and restocking and to minimize losses during disasters. Given that livestock is the single most important agricultural commodity traded across West Africa and the Sahel, ensuring pastoralists' access to competitive and inclusive ruminant livestock markets is likely to contribute to broad-based poverty reduction and to enhance the resilience of pastoralists' households. The current rapid growth (4 percent annually) of demand for meat and livestock products in the Sahel and West Africa offers a great opportunity to notably reduce the depth and extent of poverty and spur economic growth in pastoral areas.

30. Unfortunately, pastoralists' efforts to access markets are often hampered by a range of infrastructural, institutional, and security problems that translate into: (i) traveling long distances on bad and insecure roads to reach a market; (ii) frequent road blocks and harassment by road agents who collect illegal taxes; (iii) multiple regulations and administrative procedures mostly

⁹⁵ Unless management is given to private individuals, as is the case with a few boreholes.

⁹⁶ CILSS will build on a range of monitoring tools it has developed, in particular under its system to monitoring pastoral dynamics (SIPSA).

unknown to them; and (iv) wasted and underweight animals reaching markets. These difficulties reduce market participation in many pastoral areas and often leave animal sellers as price takers at the mercy of individual rural aggregators. As a result, most smallholder pastoralists in remote production areas miss opportunities to earn income and improve their living conditions.

31. This component aims to increase pastoral communities' access to competitive and inclusive markets and to increase the trade in pastoral products, especially live animals, in the selected project areas in each country. The medium-term outcome to be achieved is an increase in the number of animals sold at markets rehabilitated and constructed as a result of the project, which is a proxy for improved market access. The short-term outcome is an increase in the number of operational markets (according to defined criteria). These outcomes will be pursued through investments included in the two subcomponents described next. The investments related to small-scale dairy collection centers and processing units will particularly benefit women.

32. Sub-component 3.1 - Support to market infrastructure and information systems. This sub-component will finance (i) physical infrastructure that increases buyer-seller concentration and improves market performance and (ii) small-scale value-added processing to increase the competitive advantage of pastoral products in local and urban markets. Targeted categories of investments include:

- Construction or rehabilitation of 105 livestock markets (in all 6 countries) along selected trade corridors.
- Rehabilitation of 300 kilometers of rural road in Senegal⁹⁷ to connect with regional markets and facilitate regional trade flows.
- Construction of 8 livestock rest areas in Chad (5) and Mauritania (3) equipped with appropriate logistics and services (paddock, water supply, veterinary services).
- Establishment or upgrading of 6 (one per country) second-generation livestock market information systems using adapted information and communication technology.
- Creation of small-scale value-added units to process livestock products, including: (i) 56 milk collection centers in 5 countries; (ii) 21 small-scale dairy units in 4 countries; (iii) 25 small-scale community slaughter facilities in 3 countries; and (iv) 11 community butchery and meat processing shops in Mali.

33. Sub-component 3.2 - Support to producer organizations, inter-professional bodies, and trade facilitation. This sub-component aims to contribute to the development of effective marketing systems and to overcome the exchange coordination failure and opportunistic behavior that reduce market performance. It will strengthen pastoral organizations and emerging inter-professions of livestock and livestock product value chains, by creating innovative institutions that reduce transaction costs and enhance market coordination, such as producer and marketing cooperatives, national or regional livestock marketing associations, and processor organizations. Targeted investments in organizational capacity strengthening and institutional innovation will focus on the following areas:

⁹⁷ Senegal is an important trade outlet and consumption market.

- *Organizational management and governance.* Assistance will be provided to establish and strengthen local and national pastoral, trader, processor, and other stakeholder organizations in livestock value chains (producer organizations, cooperatives, marketing associations, and others), develop and implement related by-laws, and adopt internal conflict resolution mechanisms.
- *Institutional and technical support* to emerging inter-professional bodies in the livestock and livestock product value chains, in terms of training, small office equipment, development and implementation of strategic action plans, and study tours to achieve effective governance and coordination of inclusive livestock and animal product value chains;
- *Technical capacity of pastoral producers* in value-adding activities (such as fattening, improved forage production, and so on).
- *Developing and running a business,* including assistance in literacy, bookkeeping, developing and implementing business plans, promoting the use of weights and grade standards for selling and buying live animals, and assistance for pastoralists (especially women) to capture and exploit emerging niches for high-value products in dairy and other product markets.
- *Trade facilitation and learning.* Developing new business models, including business-to-business partnerships and public-private partnerships; participation of producers, processors, and traders in local exchange visits and foreign study tours; and participation in regional trade shows and other activities.

34. **Regional activities.** CILSS will support the above-mentioned activities by expanding ongoing efforts to include livestock and livestock products in the areas of market information management and promotion of regional agricultural commodity trade. Specific investments will include:

- Establishment of a regional livestock market information system connecting the six countries and linking them to import markets of West African coastal countries.
- Support to regional livestock trade associations through trade fairs, development and implementation of policy advocacy programs, trans-boundary business-to-business partnerships, production and dissemination of leaflets of key regional regulations pertaining to livestock trade, and similar activities.
- Piloting the provision of targeted trade-related advisory services to producers and traders, and to exporters at one major terminal market site in each country (especially in locations that serve as export hubs): basic trade and transport information, trade regulations, and compliance guides, including leaflets of key regional trade regulations pertaining to livestock and livestock products, stocks of necessary trading forms, assistance in filling these forms, and so on.
- Enhancing (central corridor) or establishing (western and eastern corridors) the monitoring of road harassment by government agents behind the border and across borders by: (i) raising the profile and role of private sector actors such as pastoralist groups, national and regional livestock marketing associations (such as COFENABVI in West Africa), livestock value chain inter-professions, NGOs (ROPPE, APSS, and others), and the media in the reporting process and (ii) supporting broader dissemination of periodic monitoring reports in the participating countries and in high-level meetings of regional integration bodies.

- Training and awareness-raising of producers, traders, exporters, border agents, and other government agents in: (i) enforcing and complying with relevant national and regional trade regulations; (ii) combatting unlawful taxes and non-tariff barriers to domestic and cross-border trade; and (iii) using existing reporting and grievance mechanisms (ECOWAS/WAEMU).
- Technical support to countries (training, workshops to upgrade tools, methods, and so on).
- Sharing knowledge on regional trade facilitation.

D - Component 4: Pastoral crisis management (US\$37.56 million).

35. This component will enhance crisis preparedness, prevention, and response at the national and regional levels. The medium-term outcome to be achieved is a reduction in the time required during a pastoral crisis to reach 50 percent of the targeted beneficiaries as foreseen in the inclusive intervention plan. The short-term outcomes are an increase in the number of specific pastoral parameters integrated in national early warning system and a reduction in the time that elapses after a government issues a request for funds to respond to an eligible pastoral crisis and the funds are made available. This component will dedicate many of its activities to women and young people, particularly vocational training and micro-project financing.

36. Sub-component 4.1 - Pastoral crisis preparedness and livelihood diversification. Under *Window A of sub-component 4.1*, the focus will be on activities aimed at: (i) strengthening and harmonizing pastoralism-related information systems and early warning systems (EWS)—notably by decentralizing the existing system (into community-based pastoral EWS) and selecting and effectively monitoring indicators that are specific to a pastoral crisis; (ii) developing pastoral crisis response plans at the national and local level (such plans may include destocking/restocking strategies, for example); and (iii) strengthening the capacity of EWS activation by financing strategic investments, such as storage facilities for livestock feed. A substantial effort will be made to assist participating countries in using better targeting strategies when rolling out pastoral crisis response plans to ensure that they reach the most vulnerable members in each affected community (including young people, women, and the elderly). The project will mobilize important capacity-building initiatives, most notably by financing training from the central to local level in pastoral crisis management guidelines, such as LEGS.

37. *At the regional level, Window A activities* will center largely upon CILSS' regional harmonizing and coordinating responsibilities. PRAPS will support CILSS in realizing its core and historical mandate to harmonize efforts of Member States to build effective pastoral EWS. CILSS will also facilitate capacity building for participating countries in pastoral crisis preparedness, prevention, and response. CILSS' capacity-building role will include regional workshops and exchange visits as well as technical support to national institutions. These activities will provide countries with actions and guidance to upgrade their EWS and response mechanisms for pastoral crises.

38. *Window B activities will focus on income diversification.*⁹⁸ Income diversification will be achieved by identifying and strengthening alternative livelihood opportunities and give special attention to improving the living standards of the bottom 40 percent of the population in the

⁹⁸ Window B will not be financed/implemented in Senegal, because related activities are covered through other projects.

targeted areas. PRAPS will promote viable livelihoods for pastoral households and alternatives for people moving out of pastoralism. Activities to be financed will include: (i) enhancing employability (particularly of young people) by developing access to adapted vocational training opportunities and (ii) using competitive funding (grants) to help vulnerable people (particularly women, youth, and displaced persons) engage successfully in selected micro-projects designed to diversify incomes by generating local opportunities for value addition and employment.

39. Implementation modalities will be tailored to each national context and especially to existing opportunities (Table A2.1), to build on either: (i) recognized specialized national institutions such as the vocational training funds in Chad, Mauritania, and Mali or (ii) existing IDA-financed projects pursuing similar objectives and implemented through a Community Driven Development approach (as in Burkina Faso and Niger). In the latter case, identification and implementation of livelihood support activities will follow community demand-driven processes, building on established participatory processes.⁹⁹

Table A2.1: Income diversification activities financed and partner institutions

Countries	Activities financed	Partnering institution / project
Chad, Mali, Mauritania	Activities supporting an increase in the range of vocational training opportunities accessible to pastoral communities. Building the capacities of pastoralist organization to refer eligible vocational training candidates to national institutions funding vocational training.	Chad: <i>Fonds National d'Appui à la Formation Professionnelle (FONAP)</i> Mali: <i>Fonds d'Appui à la Formation Professionnelle et à l'Apprentissage (FAFPA)</i> Mauritania: <i>Institut National de Promotion de la Formation Technique et Professionnelle (INAP-FTP)</i>
Burkina Faso, Niger	PRAPS will support selected communes in promoting revenue generation and income diversification through the financing of livelihood micro-projects.	Burkina Faso: The third phase (APL 3) of the community-based rural development project in support of the national program for decentralized rural development. Niger: The Community Action Program Phase 3.

40. **Sub-component 4.2 – Contingency emergency response (zero budget).** Following an adverse natural event that causes a major natural disaster, the respective governments may request the Bank to reallocate project funds to support response and reconstruction. This component would draw resources from the unallocated expenditure category and/or allow the government to request the Bank to re-categorize and reallocate financing from other project components to partially cover emergency response and recovery costs. This component could also be used to channel additional funds should they become available as a result of an eligible emergency.

41. Detailed operational guidelines acceptable to the Bank for implementing the contingency emergency response component under PRAPS will be prepared during the first year of project implementation. Should this Sub-Component be triggered, all expenditures will be in accordance with paragraph 11 of OP 10.00 and will be reviewed and accepted by the Bank before any disbursement is made. In accordance with paragraphs 11 and 12 of OP 10.00, this component would provide immediate, rapidly disbursing support to finance goods (positive list agreed with governments), works, and services needed for response, mitigation, and recovery and reconstruction. Operating costs eligible for financing would include the incremental expenses incurred for early recovery efforts arising from the impact of a major pastoral crisis.

⁹⁹ Existing active IDA-financed Community Driven Development projects in the communes selected by PRAPS.

42. Goods, works, and services under this component would be financed based on a review of satisfactory supporting documentation presented by the government, including adherence to appropriate procurement practices in an emergency context. All supporting documents for reimbursement of such expenditures will be verified by the internal auditors of the governments and by the project director, certifying that the expenditures were incurred for the intended purpose and to enable rapid recovery following the damage caused by adverse natural events, before the application is submitted to the Bank. This verification should be sent to the Bank together with the application. Specific eligible expenditures under the category of goods may include: (i) food and agricultural inputs; (ii) inputs for livestock; (iii) construction materials; (iv) water, land, and air transport equipment, including supplies and spare parts; (v) petroleum and fuel products; and (vi) communication equipment. Specific eligible expenditures under the category of works may include urgent food distribution, destocking of livestock, infrastructure works (repairs, rehabilitation, construction, and others) to mitigate the risks associated with the disaster for affected populations. Specific eligible expenditures under the category of services may include urgent studies (technical, social, environmental, or other) needed as a result of the effects of the disaster (identification of priority works, feasibility assessments, delivery of related analyses, and so on).

E- Component 5: Project Management and Institutional Support (US\$43.71 million).

43. This cross-cutting component focuses on all aspects related to project management, including fiduciary aspects (financial management and procurement), M&E, knowledge generation and management, communication, and the monitoring of safeguard mitigation measures. It also provides for critical cross-cutting institutional support, meeting capacity-building and training needs identified in the six countries and at CILSS, on top of specific technical capacity-building activities undertaken within the four technical components. Implementation arrangements include three levels (the regional, national, and sub-national or local level). Activities under this component will benefit women in every aspect, to the extent possible.

44. PRAPS, as part of the Sahel Initiative, will seek synergies and complementarities in cross-cutting areas at the regional level with other projects also built around CILSS that are in preparation or already under implementation.¹⁰⁰ The specific areas of interest in this respect are financial management, procurement, M&E, and communication (as agreed during the July 2014 CILSS delegation visit to World Bank headquarters); they will be targeted to enable projects under the Sahel Initiative to build capacity at CILSS in a consistent, coherent manner. For example, staff hired for procurement should constitute a pool of competencies and shared support, available to provide additional assistance to a project in need at a particular time. Likewise, financial management and M&E software can be shared among Sahel Initiative projects or other pastoralism-related support projects to provide not only economies of scale but also the capacity to more easily aggregate data at the regional level. The role of communication to beneficiaries and other stakeholders will be critical for PRAPS and other Sahel Initiative projects, given their local, national, and regional dimensions. Finally, gender will be mainstreamed in all PRAPS activities and its importance fully addressed (as all countries have planned). Expertise in this area will be

¹⁰⁰ The three other projects include the Building Resilience through Innovation, Communication and Knowledge Services, the Sahel Disaster Resilience Project (PRECA), and the Sahel Irrigation Initiative Project.

included in all PCUs to ensure that women's needs are properly taken into account and that females benefit from PRAPS activities.

45. Regional level. PRAPS will rigorously apply the subsidiarity principle, meaning that regional project activities within each component (other than those directly linked to PRAPS management and coordination) will be delegated by Sahelian countries to CILSS to execute (and to CRSA for Component 1 activities related to animal health). The choice of PRAPS regional activities to be financed within each component will meet several criteria. They must: (i) abide by the subsidiarity principle; (ii) build upon possible complementarities and synergies between programs and projects of CILSS (including projects that are part of the Sahel Initiative); (iii) generate a regional net added value;¹⁰¹ and (iv) take into account CILSS' (and CRSA's, for animal health) absorption capacity.¹⁰²

46. Sub-component 5.1 – Project coordination, fiduciary management, monitoring and evaluation, data generation, and knowledge management. CILSS will host the PRAPS coordination unit (R-PCU) at the regional level, while line ministries in charge of PRAPS implementation in the six countries will each host a national coordination unit (N-PCU). PRAPS will support staff salaries, operating costs, and key national/regional studies aiming at preparing or documenting the project's intervention. PRAPS will also support inter-ministerial work and cooperation of regional bodies (namely ECOWAS/WAEMU) for PRAPS implementation. M&E activities will be undertaken at national and regional levels and include regular monitoring of implementation performance and results, annual outcome assessments, annual thematic studies, technical audits of infrastructure, and case studies. PRAPS will also finance the generation of data on pastoral activities in the Sahel, which is critical to guide and calibrate investments. Knowledge management activities will include cross-country modules supported by CILSS at the local, national, and regional level as well as the dissemination of lessons learned under PRAPS at the same three levels, based on M&E activities.

47. Sub-component 5.2 - Institutional support, capacity building, advocacy, and communication. PRAPS will help build capacities at CILSS and the R-PCU. It will provide technical and investment support to enhance provision of services by CILSS¹⁰³ and other cross-cutting regional institutions or organizations relevant to pastoralism development. To this end, CILSS will: (i) conduct an internal capacity gap analysis (including staffing, skills, equipment, systems, and other variables); (ii) produce consolidated training plans at CILSS level and for the various implementing agencies at the regional and country level; and (iii) identify potential synergies and cross-fertilization possibilities among the various operations pertaining to the Sahel Initiative.

¹⁰¹ In principle, an activity is entrusted to the regional level if its coordination at the regional level generates a *net* added value (considering high costs of coordination) surpassing an uncoordinated individual activity of the six countries of PRAPS; this could include economies of scale (for example, lobbying, some creation/capitalization of knowledge, research, expertise, capacity building) and consideration of country interdependence.

¹⁰² Taking into account CILSS' absorption capacity, so that it can still perform satisfactorily; in general, regional activities are time-consuming, notably outside the office, for teams that have limited staff. There is an implied risk in terms of capacity to manage tasks and procedures in an efficient manner and timely fashion. This risk increases when teams need to manage various activities that involve different partners.

¹⁰³ CILSS will be the overall project implementing agency and will be primarily responsible for regional coordination, guided by the decisions of the PRAPS Regional Steering Committee of CILSS Projects and Programs (CRP) under the political leadership of ECOWAS/WAEMU (plus Chad and Mauritania). For regional oversight of specific technical areas where CILSS is not the most competent regional partner, CILSS may delegate operational coordination to other accredited regional bodies, such as CRSA in the case of Component 1 (animal health), and possibly others for Components 2, 3, and 4. Technical and investment support to enhance provision of such services will, however, be undertaken and accounted for through the respective technical components.

48. PRAPS will also assist in supporting greater engagement and coordination of the six countries in regional decision- and policy-making processes on drylands and pastoral areas, as well as among regional public and non-public organizations. As much as possible, training will be done through the development of regional curriculums and will be carried out across countries, supported by CILSS and other accredited regional technical bodies; some cross-cutting specific training may also be done at the national level.¹⁰⁴

49. Advocacy (for additional complementary support to pastoralism on the basis of the Nouakchott Declaration) and communication activities will also be supported by PRAPS at the national and regional levels. The project includes activities for communication and information sharing, such as Sahel-wide dissemination activities, reporting on program challenges and progress, periodic consultations with participating countries, and advocacy for pastoralism support, including raising awareness on strategic issues at the decision and policy levels of participating countries, regional economic communities, and development partners.

50. **Project synergies.** Other World Bank–financed projects are active in each country and at the regional level. Table A2.2 summarizes how those projects complement PRAPS in providing support to livestock-related activities.

Table A2.2: Other active World Bank projects in relation to PRAPS

Country/entity	National projects	Regional projects	Type of synergies with PRAPS
CILSS		P130888 Building Resilience through Innovation, Communication, and Knowledge Services (BRICKS)	Sahel Initiative Complementarities with PRAPS Components 2 and 5
Burkina Faso, Mali, Niger, Senegal		P117148 WAAPP-1B, Burkina Faso P122065 WAAPP-1C, Niger P129565 WAAPP-2A, Mali and Senegal	Complementarities with PRAPS Components 2 and 3
Burkina Faso, Chad, Mali, Niger, Senegal		P143778 Promoting regional trade in meat and livestock-related products in ECOWAS and CEMAC/CEBEVIRHA	Complementarities with PRAPS Component 3
Chad, Mali, Mauritania, Niger		P150080 Sahel Women's Empowerment and Demographics Project	Complementarities
	P129688 Community Based Rural Development – 3 rd Phase (PNGT3)		Co-financing for PRAPS Component 4
	P081567 Agricultural Diversification and Market Development Project (PAFASP)		Complementarities with PRAPS Components 2 and 3
Burkina Faso	P114236 Agricultural Productivity and Food Security Project (PAPSA)		Complementarities with PRAPS Components 2 and 3
	P143192 Emergency Livestock Feed Access Project (PUAABB)		Complementarities with PRAPS Component 4
		P122402 West Africa Regional Communications Infrastructure Project	Complementarities in information and communication technology (ICT) applications
Chad	P126576 Emergency Agriculture Production Support Project (PAPAT)		Complementarities with PRAPS Components 1 and 2

¹⁰⁴ Country-specific technical capacity building and training will be undertaken and accounted for through the respective technical components.

Country/entity	National projects	Regional projects	Type of synergies with PRAPS
Mali	P151215 Emergency Food and Livestock Crisis Response Project (PURCAE)		Complementarities with PRAPS Components 1 and 2
	P133021 Value Chain Support Project (PACV)		Complementarities with PRAPS Component 3
	P095091 Fostering Agricultural Productivity (PAPAM)		Complementarities with PRAPS Components 2 and 3
	P081704 Agriculture Competitiveness and Diversification Project (PCDA)		Complementarities with PRAPS Component 3 and Co-financing for PRAPS Component 4
Mauritania	P118974 Skills Development Support Project (PA-FTP)		Results capitalization for PRAPS Component 4
	P126902 Basic Education Sector Support Project (BESSP)		Results capitalization for PRAPS Component 4
	P127543 Local Government Development Program		Complementarities with PRAPS Component 4
	P144183 Sustainable Landscape Management under SAWAP (PGDTEF)		Complementarities with PRAPS Component 2
		P123093 West Africa Regional Communications Infrastructure Project	Complementarities in ICT applications
Niger	P095210 Agro-Pastoral Export and Market Development Project (PRODEX)		Complementarities with PRAPS Components 2 and 3, and Co-financing for PRAPS Component 4
	P132306 Community Action Program (PAC3)		Complementarities with PRAPS Components 2 and 4
	P125669 Community Action Project for Climate Resilience (PRAC)		Complementarities with PRAPS Components 2,3, and 4
	P127204 Competitiveness and Growth Support		Complementarities with PRAPS Component 3
Senegal	P129164 Food Security and Livestock Support Project (PASAEL)		Complementarities with PRAPS Components 1, 3, and 4
	(P124018) Senegal Sustainable and Inclusive Agribusiness Project (PDIDAS)		Complementarities with PRAPS Components 2 and 3

Annex 3: Implementation Arrangements

AFRICA: REGIONAL SAHEL PASTORALISM SUPPORT PROJECT

PROJECT INSTITUTIONAL AND IMPLEMENTATION ARRANGEMENTS

Project Administration Mechanisms

1. PRAPS has been prepared by national governments in coordination with CILSS¹⁰⁵ and other relevant regional entities, under the political leadership of ECOWAS/WAEMU (plus Chad and Mauritania). The Regional Task force on Pastoralism (TFRP) was formed to advance the project's preparation in January 2014 and has met regularly ever since (May and September 2014) to discuss and move forward with preparation. The TFRP's role prefigures that of the PRAPS Regional Technical Committee (CTR) during implementation.
2. PRAPS will be funded through IDA and will support a regional approach to improve access to critical productive assets, services, and markets for pastoralists and agro-pastoralists in trans-border areas and along transhumance axes in six Sahelian countries. To fully integrate national and regional priorities, this operation combines assistance to CILSS to perform a regional coordination role with support to countries to fund and implement activities at the regional, national, and sub-national levels, according to the subsidiarity principle.¹⁰⁶ Separate project financing agreements will be concluded with CILSS and with the participating countries, with funds disbursed directly through existing institutional structures.
3. Application of the subsidiarity principle dictates that the six participating countries should delegate regional activities under each component of the project (other than those in component 5, which are directly linked to PRAPS management and coordination) for CILSS to execute (and to CRSA for activities related to Component 1 on animal health). More specifically, the choice of PRAPS regional activities to be financed within each component was made with respect to several criteria, namely: (i) abide by the subsidiarity principle; (ii) build upon possible complementarities and synergies between programs and projects of CILSS;¹⁰⁷ (iii) generate a regional net added value;¹⁰⁸ and (iv) take into account CILSS' absorption capacity.¹⁰⁹ As such, regional activities financed through the subsidiarity principle will be jointly financed by the participating Sahelian countries by making a percentage (4 percent) of the proceeds of each participating country's IDA financing available to CILSS. As in the case of WAAPP, each country will therefore sign a subsidiary grant agreement with CILSS, detailing the nature of the assistance expected from CILSS (apart from its coordination role, which is directly financed through a Regional IDA grant) and the level of financial support to be provided to CILSS by each participating country. The signing of such agreements will be a condition of effectiveness for each country to participate in

¹⁰⁵ CILSS includes the Executive Secretariat of CILSS (SE-CILSS) in Ouagadougou, the AGHRYMET Regional Center in Niamey, and the Sahel Institute (INSAH) in Bamako.

¹⁰⁶ Under which responsibility for an intervention is entrusted to the highest-performing geographical level, but also the lowest one (from local to national, then regional, continental and global).

¹⁰⁷ Including projects that are part of the Sahel Initiative.

¹⁰⁸ In principle, an activity is entrusted to the regional level if its coordination at the regional level generates a *net* added value (considering high costs of coordination) surpassing an uncoordinated individual activity of the six countries of PRAPS; this could include economies of scale (for example, lobbying, some creation/capitalization of knowledge, research, expertise, capacity building) and consideration of country interdependence.

¹⁰⁹ Taking into account CILSS' absorption capacity, so that it can still perform satisfactorily; in general, regional activities are time-consuming, notably outside the office, for teams that have limited staff. There is an implied risk in terms of capacity to manage tasks and procedures in an efficient manner and timely fashion. This risk increases when teams need to manage various activities that involve different partners.

PRAPS. CILSS (and CRSA for activities related to animal health) will be technically responsible for the direct implementation of regional activities deriving from the subsidiarity principle.

CILSS

4. CILSS will be the overall program implementing agency and primarily responsible for regional coordination, guided by the decisions of the existing Regional Steering Committee of CILSS Projects and Programs (CRP).¹¹⁰ Detailed institutional arrangements are shown in Figures A3.1 and A3.2. The CILSS Secretariat will set up a Ouagadougou-based R-PCU for PRAPS within the Executive Secretariat of CILSS (SE-CILSS) and anchored at the Regional Support Program for Food Security, Combatting Desertification, and Population and Development (PRA/SA/LCD-POP-DEV), whose core functions include coordination of resource mobilization, regional programming and M&E services, regional capacity development and technical assistance, regional data generation, knowledge management, and communication. CILSS has benefited from a Project Preparation Advance.

5. The R-PCU will channel project funds related to CILSS (and CRSA for Component 1); it will be placed under a Regional Technical Committee (CTR), and report to the CRP; it will coordinate and facilitate the implementation of the cross-boundary interventions, provide a convening platform for coordination among regional and national participants, provide a platform for technical assistance, M&E, training, knowledge sharing, and communication, and it will support policy dialogue with countries for regional alignment and harmonization. CILSS' coordination role to implement PRAPS will be fully financed by a Regional IDA grant to CILSS.¹¹¹

6. CILSS executing units that will be involved in implementing PRAPS at the regional level include SE-CILSS, AGRHYMET, and INSAH, which will respectively lead the Regional Support Program for Food Security, Combatting Desertification, and Population and Development (PRA/SA/LCD-POP-DEV), the Regional Support Program for Access to Water (PRA/MA), and the Regional Support Program for Access to Markets (PRA/MA). These structures will be fully involved, as well as the CILSS management support units (UAM-GRH, UAM-SE-PVS-G, UAM-CID and UAM-AFC), which will support PRAPS implementation. As required, these structures/units will be strengthened, notably with staff to support PRAPS implementation¹¹² and hire consultants, community-based organizations, local/international NGOs, or consulting firms to implement the activities. Operationally, CILSS will liaise with the countries through designated focal points. The Administration, Finance, and Accountability Management Support Unit (UAM-AFC) will be responsible for managing funds and will facilitate the implementation of activities. The environmental sections of CILSS specialized institutions will also support implementation. The Monitoring and Evaluation, Programming, Strategic Awareness, and Gender Support Unit (UAM-SE-PVS-G), which is responsible notably for M&E of each concerned structure/unit, will monitor and supervise PRAPS implementation.

7. CILSS has organized preparation of a detailed PIM, which will incorporate all operational details at the regional level, including technical activities (subsidiarity), M&E, safeguard

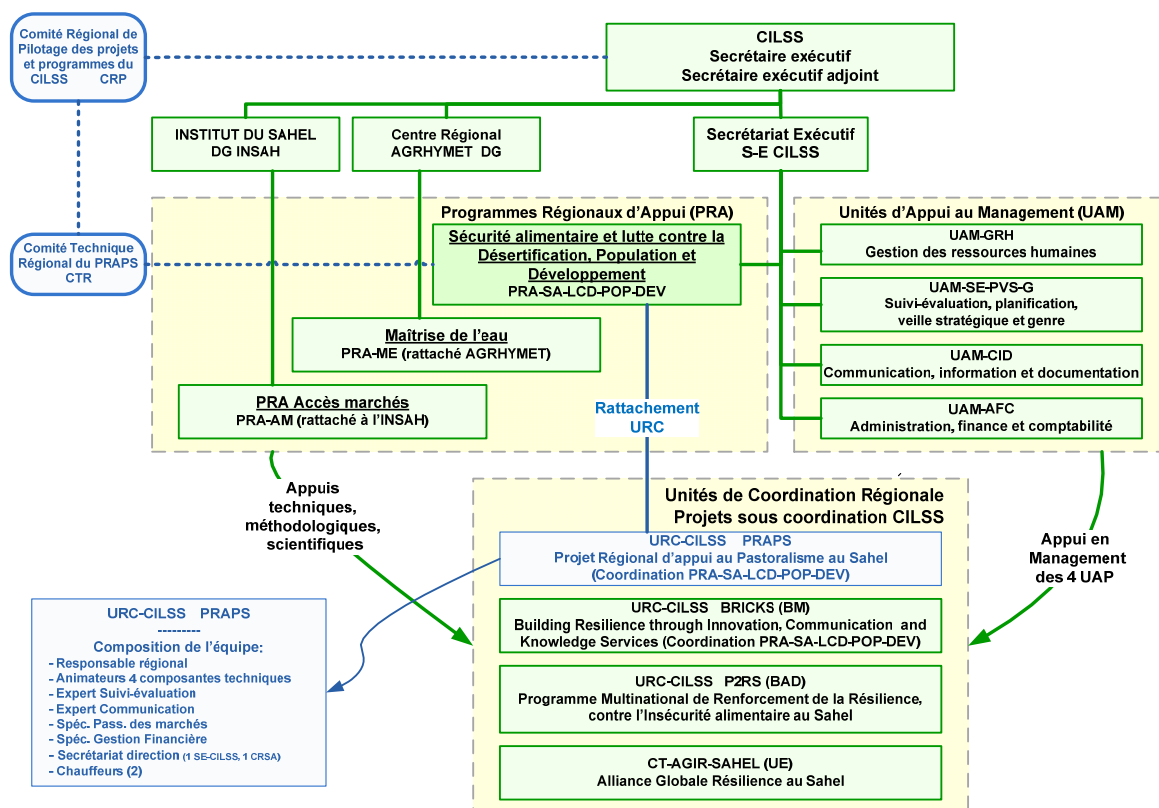
¹¹⁰ CILSS is to change the current denomination and tasks to the Committee, only covering EU-related projects.

¹¹¹ Direct World Bank support to CILSS will cover PRAPS administration, management, coordination, and capacity-building needs under Component 5.

¹¹² Fiduciary Experts (Financial Management and Procurement) will belong to the UAM-AFC; the M&E Expert will belong to the UAM-SE-PVS-G; and the Communication Expert will belong to the Communication, Information, and Documentation Management Support Unit (UAM-CID).

implementation, as well as administrative and fiduciary procedures. The Regional PIM will incorporate CRSA's operating procedures as needed; it will be approved by the World Bank.

Figure A3.1: PRAPS institutional and implementation arrangements for CILSS



8. For CILSS, conditions of effectiveness include: (i) the adoption of a PIM and (ii) the recruitment of a Regional Project Coordinator. Dated legal covenants include: (i) the establishment of the Regional Steering Committee (before October 31, 2015); (ii) the establishment of the R-PCU (before October 31, 2015); (iii) the appointment of all key R-PCU staff (no later than one month after effectiveness), (iv) the availability of a computerized accounting system (no later than two months after effectiveness), (v) the appointment of an internal auditor (no later than three months after effectiveness), and (vi) the appointment of an external auditor (no later than five months after effectiveness).

Figure A3.2: Institutional and implementation arrangements for PRAPS-CILSS

REGIONAL STEERING COMMITTEE OF CILSS PROJECTS AND PROGRAMS (CRP)	Exchange and Guidance Body. Chaired by ECOWAS and WAEMU, with CILSS as Secretariat, it includes EU, AFD, USAID, AfDB, ROPPA, and representatives of PRAPS countries (composition is to evolve). Meeting frequency: At least once a year.
REGIONAL TECHNICAL COMMITTEE (CTR)	Implementation Monitoring Body. Direct follow-up of TFRP, chaired by CILSS Executive Secretary (or representative); includes the Regional PRAPS Coordinator and all National PRAPS Coordinators, representatives of regional implementation agencies (such as OIE/CRSA), regional pastoralist organizations, regional CSOs, regional academic institutions, and service providers. Meeting frequency: At least twice a year, one virtual meeting and one physical meeting.
REGIONAL PROJECT COORDINATION UNIT FOR PRAPS-CILSS (CILSS R-PCU) Financial Management Procurement Monitoring & Evaluation Communication	In charge of day-to-day management of the implementation of PRAPS-CILSS activities. The CILSS R-PCU will comprise the following: A Regional PRAPS Coordinator (contractor) A Regional Animal Health Coordinator (contractor, based at CRSA in Bamako) A Regional Natural Resource Management Coordinator (contractor) A Regional Market Access Coordinator (contractor) A Regional Pastoral Crisis Management Coordinator (contractor) An Administrative & Financial Management Expert (contractor) and an Accountant (contractor) A Procurement Expert (contractor) and a Procurement Assistant (contractor) An M&E Expert (contractor) A Communication Expert (contractor) An Administrative Assistant (contractor) <hr/> Support Staff: Two Executive Assistants (contractors, with one based at CRSA in Bamako) Two Drivers (contractors, with one based at CRSA in Bamako)
Implementation Stakeholders <i>Component 1 Improve Animal Health</i>	Regional Animal Health Center (CRSA in Bamako) World Organization for Animal Health - OIE Regional Coordinator of Component 1 (based at CRSA in Bamako)
Implementation Stakeholders <i>Component 2 Improve Natural Resource Management</i>	CILSS PRA/ME Regional Natural Resource Management Coordinator of Component 2
Implementation Stakeholders <i>Component 3 Facilitate Market Access</i>	CILSS PRA/AM Regional Market Access Coordinator of Component 3
Implementation Stakeholders <i>Component 4 Improve Pastoral Crisis Management</i>	CILSS PRA/SA/LCD/POP/DEV Regional Pastoral Crisis Management Coordinator of Component 4

Participating countries

9. PRAPS implementation arrangements will not support the establishment of new institutions but rather focus on strengthening and networking with existing national institutions to better support ongoing or planned national/regional activities. Experienced N-PCUs were set up during the preparation phase, including adequate fiduciary capacities to manage Project Preparation Advance funding. The six N-PCUs will channel project funds and will be responsible for: (i) national project management, including M&E, financial management of funds, and procurement in accordance with World Bank guidelines and procedures; (ii) the finalization of the national PIMs before project effectiveness; (iii) producing national project progress reports; and (iv) national PRAPS communication. National Steering Committees (NSCs) and N-PCUs will be established at the relevant administrative level. The N-PCUs will be staffed as needed, taking into account the existing human resources and arrangements, as well as support provided in cross-cutting areas (financial management, procurement, M&E, and communication) by other projects that are part of the Sahel Initiative.

10. Under the coordination of CILSS, each of the six countries is already engaged in the preparation of a detailed PIM, which will incorporate all operational details at the national level, including the implementation of technical activities, M&E, safeguard implementation, and administrative and fiduciary procedures. At the national level, each operation's PIM will be approved by the Bank as a condition of effectiveness.

11. For each participating country, conditions of effectiveness include: (i) the signature of a subsidiary agreement with CILSS; (ii) the adoption of a PIM; and (iii) the nomination of a National Project Coordinator. Dated legal covenants include: (i) the appointment of all key N-PCU staff (no later than one month after effectiveness); (ii) the availability of a computerized accounting system (no later than two months after effectiveness); (iii) the appointment of an internal auditor (no later than three months after effectiveness); and (iv) the appointment of an external auditor (no later than five months after effectiveness). The disbursement condition for Sub-Component 4.2 (contingency emergency response) is that each participating country has adopted an IRM-OM acceptable to the Bank.

Burkina Faso

12. PRAPS-Burkina Faso (PRAPS-BF) will be anchored at the Secretariat General of the Ministry of Animal Resources (SG-MRA). A Steering Committee (CP) will be established at the national level, chaired by the Secretary General of MRA (or a representative designated by MRA), and will serve as an exchange and guidance body. To monitor PRAPS-BF implementation, a Technical Committee (CT) will also be established and chaired by the National Coordinator, comprising all relevant technical stakeholders. The BF-PCU will be headed by a National Coordinator (civil servant), who will report to the Secretary General of MRA. The National Coordinator will be assisted by a technical team comprising all relevant disciplines (financial management, procurement, M&E, gender, safeguards, and communication) as well as experts to cover (respectively) Components 2 and 4. It is expected that national focal points will be appointed in the concerned Technical Departments (DGSV, DGEAP, DGPA, DGESE, and so on) to facilitate PRAPS-BF implementation. At the sub-national level in Burkina Faso, three (3) Sub-national Coordination Offices (ACR-BF) will be established within the concerned Regional Directorates

of Animal Resources (DRRA) to assist with PRAPS-BF implementation in targeted areas; correspondingly, three existing Regional Coordination Committee of Agriculture Projects (CR/CPSA) will monitor PRAPS-BF implementation. Detailed institutional arrangements are shown in Figures A3.3 and A3.4.

Figure A3.3: PRAPS institutional and implementation arrangements for Burkina Faso

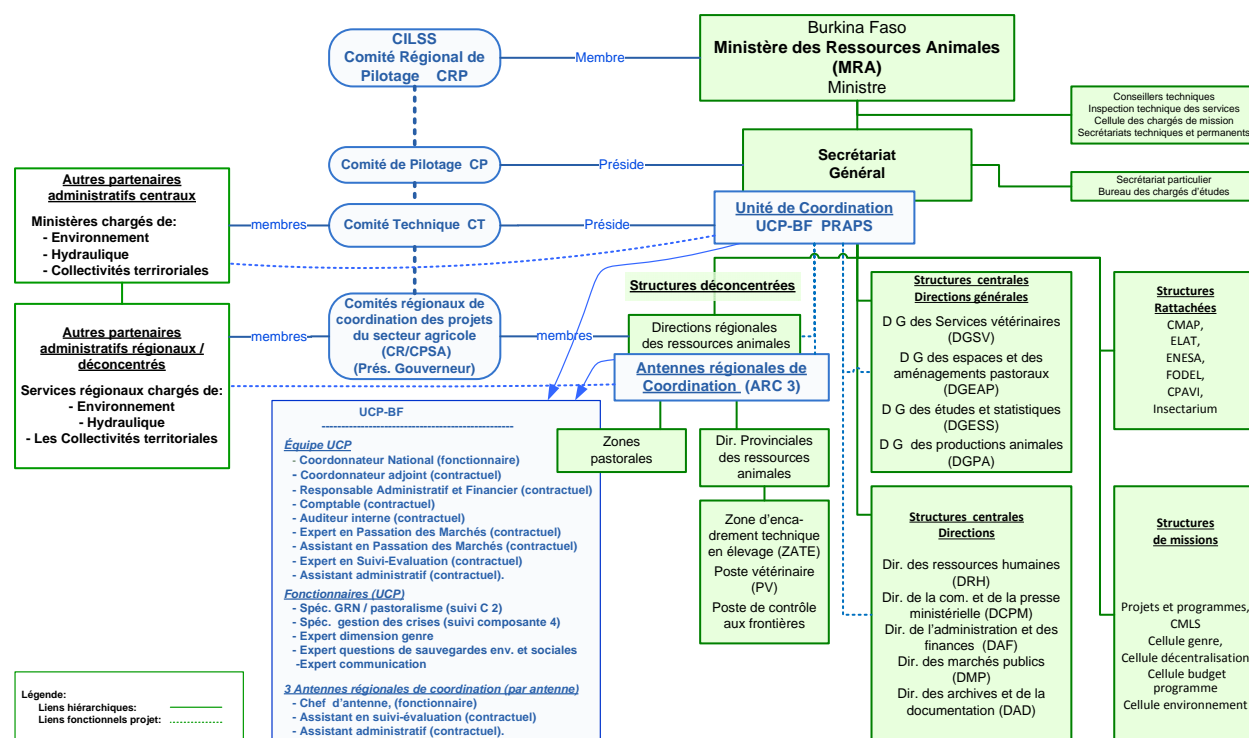


Figure A3.4: Institutional and implementation arrangements for PRAPS-BF

STEERING COMMITTEE (CP)	Exchange and Guidance Body. Chaired by the Secretariat General of MRA (or a representative designated by MRA), Ministry of Animal Resources (SG, Cabinet, UCP-BF, DGEAP, DGSV, DGPA, DGESE, DAF, DMP, DCMEF, FODEL, DRRA), Ministry of Economy and Finance (DGCOOP, DGEP, DGTCP), Ministry of Environment and Sustainable Development, Ministry of Agriculture and Food Security (DGFOMR), Ministry of Water and Sanitation, Ministry of Decentralization, Ministry of Land Administration and Security, local communities, projects and programs involved in pastoralism, producer organizations (pastoral people and traders) and NGOs, CILSS, FAO, OIE, and the World Bank (observer). Meeting frequency: At least twice a year.
TECHNICAL COMMITTEE (CT)	Implementation Monitoring Body. Chaired by the National Coordinator and comprised of representatives of implementation agencies (DGSV, DGEAP, DNGPA...), producer organizations, other livestock projects, research and education, plus other contracting service providers. Meeting frequency: at least once each quarter.
PROJECT COORDINATION UNIT FOR PRAPS-BF (BF-PCU) Financial Management Procurement Monitoring & Evaluation Gender Environment and Social Safeguards Communication	In charge of day-to-day management of the implementation of PRAPS-BF activities. The BF-PCU will comprise the following: A National Coordinator (civil servant) A Deputy Coordinator (contractor) A Pastoralism/NRM Specialist (appointed civil servant) A Pastoral Crisis Management Specialist (appointed civil servant) An Administrative & Financial Management Expert (contractor) and an Accountant (contractor) A Procurement Expert (contractor) and a Procurement Assistant (contractor) An M&E Expert (contractor) An Administrative Assistant (contractor) A Gender Expert (appointed civil servant) An Environment and Social Safeguard Expert (appointed civil servant) A Communication Expert (appointed civil servant) <hr/> Support Staff (drivers, liaison agents, guards, etc.) Focal Points in the concerned Technical Directorates Technical Assistance Pool of 60 man-months for entire project life plus other Technical Assistance (to be determined)
IMPLEMENTATION ARRANGEMENTS IN TARGETED REGIONS (in association with existing Regional Coordination Committees of Agriculture Projects - CR/CPSA for activity guidance) Three (3) Regional Coordination Units will be created within the Regional Directorates of Animal Resources (DRRA), and each composed of the following: A Head of Regional Coordination Unit (civil servant) An M&E Assistant (contractor) An Administrative Assistant (contractor) <hr/> Support Staff (drivers, liaison agents, guards, etc.)	
Implementation Stakeholders Component 1 Improve Animal Health	DGSV Partners: Association of Private Veterinarians (COVEP), producer organizations, NGOs (VSF-B, SNV, ...), local administrative authorities, projects/programs, National School of Livestock and Animal Health (ENESA), School for Fighting Tsetse (ELAT), Public Procurement Directorate (DMP), Police.
Implementation Stakeholders Component 2 Improve Natural Resource Management	DGEAP for the two sub-components (including interventions in pastoral hydraulics). Partners: Ministry in charge of hydraulics in support to DGEAP (Sub-component 2); implementation through specialized operators (producer organizations, NGOs, companies) for all social engineering activities by geographical region/zone (Sub-component 1); and through various specialized providers for the different type of infrastructure (markings, hydraulics...).
Implementation Stakeholders Component 3 Facilitate Market Access	DGPA for the two sub-components Partners: for SIM-B, General Directorate for Studies and Sector Statistics (DGESE) of MRA and General Directorate for the Promotion of Rural Economy (DGPÉR) of the Ministry of Agriculture
Implementation Stakeholders Component 4 Improve Pastoral Crisis Management	Part A: DGEAP Partners: SE-CNSA, SAP, OPs, <i>OPs (producer organizations)</i> and training service providers Part B: DGEAP. Implementation through PNGT II – Phase 3

13. PRAPS-Chad (PRAPS-TD) will be anchored at the Secretariat General of the Ministry of Livestock and Hydraulics (SG-MEH). A National Steering Committee (CNP) will be established, chaired by an Executive (Secretary General level) of the current “Monitoring Mechanism for Rural Development Projects & Programs,” and will serve as an exchange and guidance body. To monitor PRAPS-TD implementation, an Operational Technical Committee (CTO) will also be established and chaired by the National Coordinator, comprising all relevant technical stakeholders. The TD-PCU will be headed by a National Coordinator (civil servant), who will report to the SG-MEH. The National Coordinator will be assisted by a technical team comprising all relevant disciplines (financial management, procurement, M&E, gender, safeguards, and communication). National Focal points will be appointed in the concerned Technical Directorates (DSV, DSSP, DDFA, DOPEFE, DESPA) to facilitate PRAPS-TD implementation. At the sub-national level in Chad, six (6) Sub-national Delegations of MEH will be established to assist PRAPS-TD in targeted areas. As for sub-national governance, Regional Action Committees (CRAs) will be established to monitor PRAPS-TD implementation. Detailed institutional arrangements are in Figures A3.5 and A3.6.

Figure A3.5: PRAPS institutional and implementation arrangements for Chad

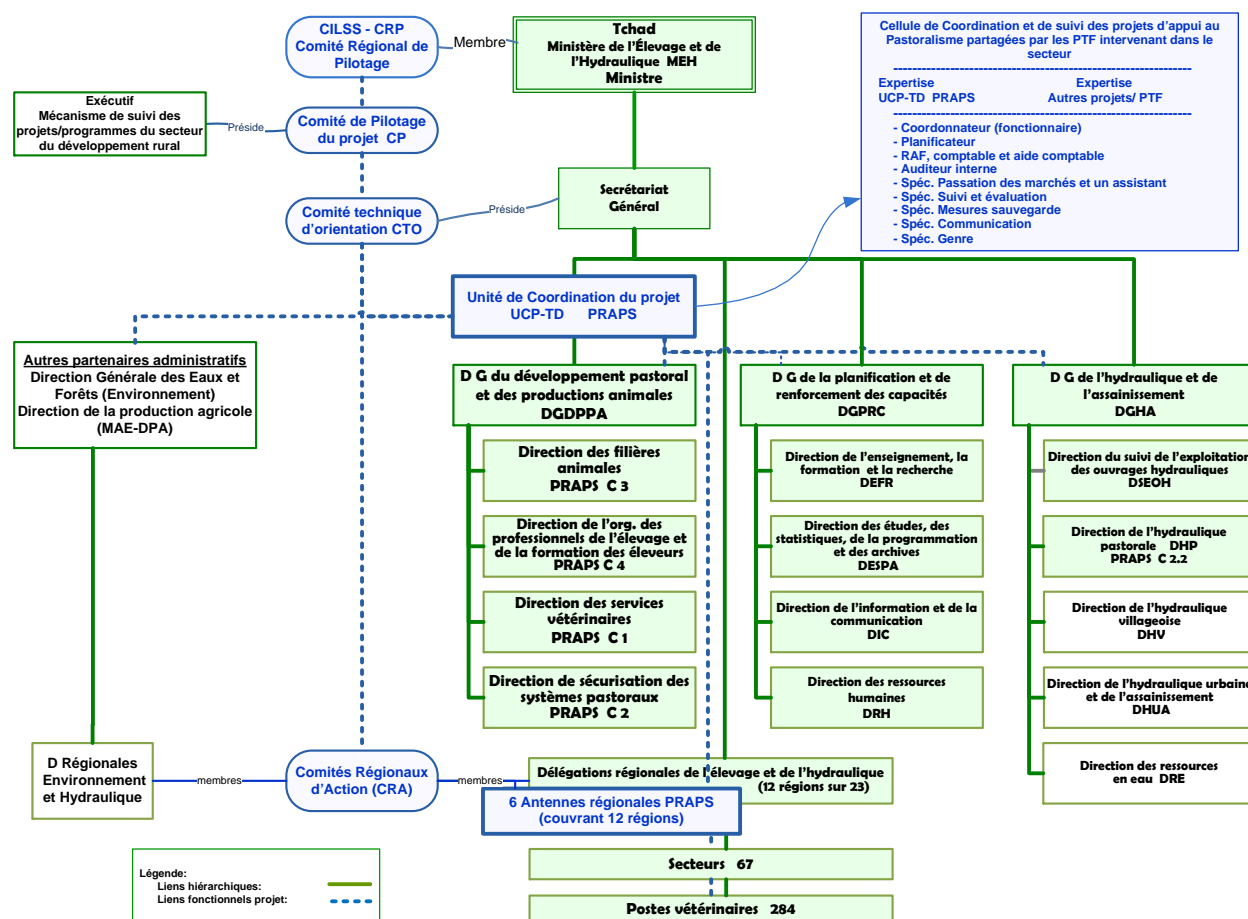


Figure A3.6: Institutional and implementation arrangements for PRAPS-TD

NATIONAL STEERING COMMITTEE (CNP)	Exchange and Guidance Body. Chaired by the Executive Secretary General of the “Monitoring Mechanism for Rural Development Projects & Programs,” SG-MEH, SG-MAE, SG MAT, SG Planning, SG-MFB, Ministry of Professional Training, Presidential/Prime Minister Rural Development Advisor, Lead Ag. Sector Development Partner, producer organization representative, civil society organization representative, CILSS representative. Meeting frequency: At least once a year.
OPERATIONAL TECHNICAL COMMITTEE (CT)	Implementation Monitoring Body. Chaired by the Secretary General of MEH (secretariat done by National Coordinator) and comprising representatives of Technical Directorates, livestock organizations, NGOs, producer organizations (CONFIFET, CONFENET, CONORET, CNRPT), research and university, and of SAP, SIPSA, CAS, SIM-B...) and pastoralism support projects. Meeting frequency: Once each quarter.
PROJECT COORDINATION UNIT FOR PRAPS-TD (TD-PCU) Financial Management Procurement Monitoring & Evaluation Gender Environment and Social Safeguards Communication	In charge of day-to-day management of the implementation of PRAPS-TD activities. The TD-PCU will comprise the following: A National Coordinator (civil servant) A Planning Assistant (contractor) An Administrative & Financial Management Expert (contractor) and an Accountant (contractor) A Procurement Expert (contractor) and a Procurement Assistant (contractor) An M&E Expert (contractor) A Gender Expert (contractor) An Environment and Social Safeguard Expert (contractor) A Communication Expert (contractor) An Internal Auditor (contractor) <hr/> Support Staff (assistants, drivers, guards, etc.) One correspondent for each component in concerned Technical Directorates (DSV for Component 1, DSSP for Component 2, DDFA for Component 3, DOPEFE for Component 4, DESPA for Component 5), plus support from technical staff from DSV, DSSP, DDFA, DOPEFE, and DESPA Directorate for Information and Communication Technical Assistance Pool (permanent or on request), national or international, for 223 man-months over 6 years, plus 18 man-months of expertise to conduct technical studies
IMPLEMENTATION ARRANGEMENTS IN TARGETED REGIONS (in association with the Regional Action Committees for activity guidance) Six (6) Regional Coordination Units (Sub-national Delegations of MEH) will be created and each composed of the following: A Regional Coordinator (contractor) An M&E Assistant (contractor) An Administrative Assistant (contractor) + MEH-appointed Staff (civil servants) <hr/> Support Staff (drivers, guards, etc.)	
Implementation Stakeholders <i>Component 1 Improve Animal Health</i>	DSV (Director and Technical Staff) Regional Delegations Producer Organizations
Implementation Stakeholders <i>Component 2 Improve Natural Resource Management</i>	DSSP (Director and Technical Staff) DHP Regional Delegations Partnerships with producer organizations, NGOs, Pastoral Platform Construction companies
Implementation Stakeholders Component 3 <i>Facilitate Market Access</i>	DFA (Director and Technical Staff), DOPEFE (strengthening of operational services provided by producer organizations to its members), DSSP (support to site identification for trade hydraulic infrastructure) Regional Delegations Partnerships with producer organizations, traders, unions, federations, local inter-professions, NGOs, Pastoral Platform
Implementation Stakeholders Component 4 <i>Improve Pastoral Crisis Management</i>	DOPEFE (Director and Technical Staff) Regional Delegations, DSSP (linked to information system activities on pastoralism and early warning systems) Crisis Management Committees Partnerships with producer organizations, NGOs, Pastoral Platform Training providers

Mali

14. PRAPS-Mali (PRAPS-ML) will be anchored at the Secretariat General of the Ministry of Rural Development (SG-MDR). A Steering Committee (COP) will be established at the national level, chaired by MDR, and will serve as an exchange and guidance body. To monitor PRAPS-ML implementation, an Operational Technical Committee (CTO) will also be established and chaired by the National Coordinator, comprising all relevant technical stakeholders. The ML-PCU will be headed by a National Coordinator (civil servant), who will report to the Secretary General of MDR. The National Coordinator will be assisted by a technical team comprising all relevant disciplines (financial management, procurement, M&E, gender, safeguards, and communication) as well as three experts to cover (respectively) Components 2, 3, and 4. National Focal Points will be appointed in the concerned technical departments (DNSV, DNA, DNH, DNACPN...) to facilitate PRAPS-ML implementation. At the sub-national level, three (3) Sub-national coordination units (UCR-ML) will be established within the Regional Directorates of Production and Animal Industries (DRPIA) to assist PRAPS-ML implementation in the targeted areas. As for governance in the regions of Mali, three (3) Regional Coordination Committees (CRCs) will be established to monitor PRAPS-ML implementation. Detailed institutional arrangements are shown in Figures A3.7 and A3.8.

Figure A3.7: PRAPS institutional and implementation arrangements for Mali

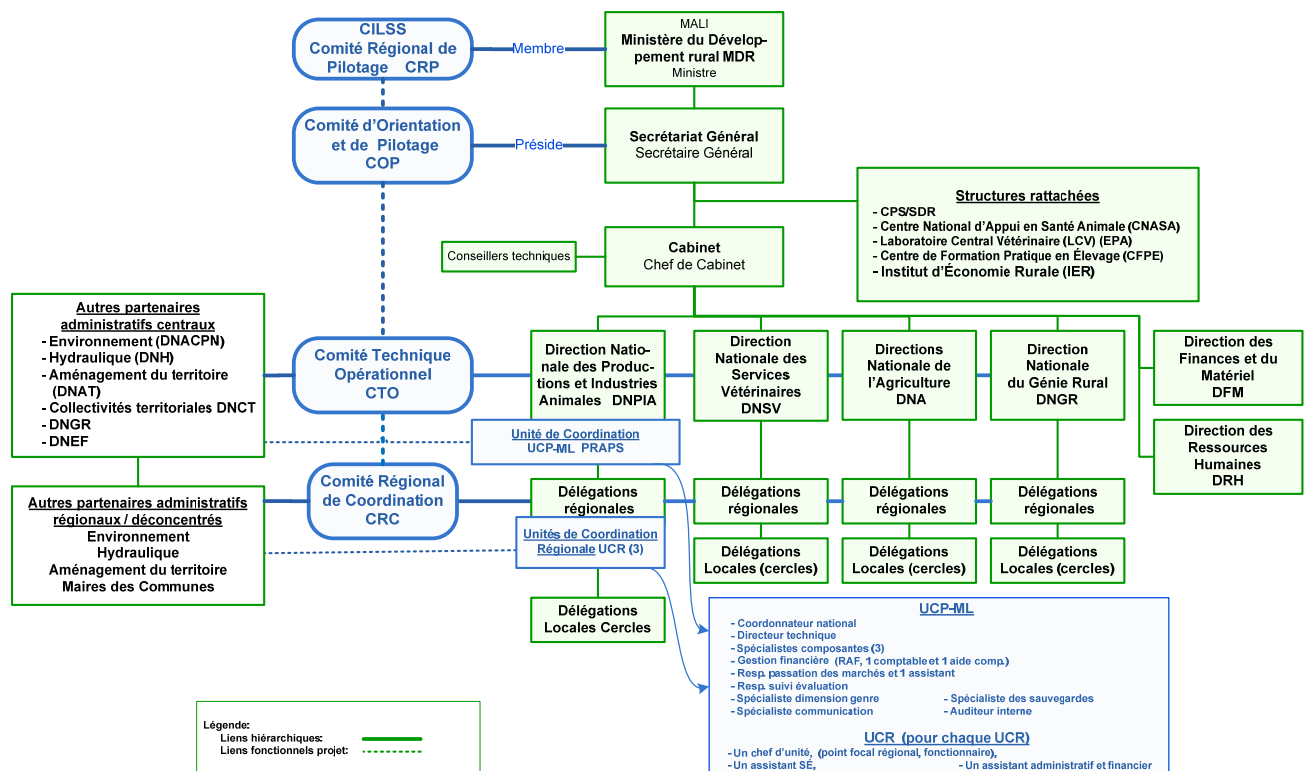


Figure A3.8: Institutional and implementation arrangements for PRAPS-ML

GUIDANCE STEERING COMMITTEE (COP)	Exchange and Guidance Body. Chaired by MDR, Ministry Departments in charge of Livestock (MDR), Hydraulics, Environment, Economy & Finance, Trade, Land Administration and Decentralization, Security, Territory Management and Planning, Women/Children and Family, Food Security Commissariat, High Council of Local Communities. Observers include (inter alia): APCAM, CPS/SDR, DFM/SDR, pastoral organizations (RBM, APESS), Council of Veterinarians, Regional Councils, CONACILSS, World Bank, Lead Livestock Sub-Sector Development Partner. Meeting frequency: At least once a year.
OPERATIONAL TECHNICAL COMMITTEE (CTO)	Implementation Monitoring Body. Chaired by the National Coordinator and comprising implementation partner representatives (DNSV, DNA, DNH, DNPIA, DNGR, DNACPN, DNAT, DNCT, DNEF, CNASA, LCV...) and representatives of pastoral livestock producer organizations, of other livestock projects/programs, research and education, plus other contracting service providers, pastoral livestock project/programs of development partners. Meeting frequency: At least once each quarter.
PROJECT COORDINATION UNIT FOR PRAPS-ML (ML-PCU) Financial Management Procurement Monitoring & Evaluation Gender Environment and Social Safeguards Communication	In charge of day-to-day management of the implementation of PRAPS-ML activities. The ML-PCU will comprise the following: A National Coordinator (civil servant) A Technical Director (contractor) A NRM Specialist (contractor) A Market Access Specialist (contractor) A Pastoral Crisis Management Specialist (contractor) An Administrative & Financial Management Expert (contractor) and two Accountants (one main and one assistant; both contractors) An internal auditor (contractor) A Procurement Expert (contractor) and a Procurement Assistant (contractor) An M&E Expert (contractor) A Gender Expert (contractor/consultant) An Environment and Social Safeguard Expert (contractor/consultant) A Communication Expert (contractor) <hr/> Support Staff (executive assistants, drivers, guards, etc.) Focal Points in concerned Technical Directorates Technical Assistance Pool of 60 man-months for entire project life plus other Technical Assistance (to be determined)
IMPLEMENTATION ARRANGEMENTS IN TARGETED REGIONS (in association with Regional Coordination Committees for activity guidance) Three (3) Regional Coordination Units (UCR) will be created within the Regional Directorates of Production and Animal Industries (DRPIA), and each composed of the following: A Zonal Representative (civil servant) An M&E Assistant (contractor) An Administrative Assistant & Accountant (contractor) <hr/> Support Staff (executive assistants, drivers, guards, etc.)	
Implementation Stakeholders <i>Component 1 Improve Animal Health</i>	DNSV (Director and Technical Staff) Regional, Local and Communal Veterinary Services, OPE, NGOs, OVM, private veterinarians, local communities, LCV, CNASA, service providers, rural radio stations, Ministry of Health, Ministry of Interior, Customs, Police.
Implementation Stakeholders <i>Component 2 Improve Natural Resource Management</i>	DNPIA (Director and Technical Staff) Private operators through competitive bidding (Sub-component 2.1), Water and Forestry Directorate, (Sub-component 2.1: infrastructure), Rural Hydraulic Directorate (Sub-component 2.2) through Agreements. NGOs or other specialized operators through expression of interest (management, capacity-building of communities) Construction companies
Implementation Stakeholders Component 3 <i>Facilitate Market Access</i>	DNPIA Regional, local and Communal services Service Providers
Implementation Stakeholders Component 4 <i>Improve Pastoral Crisis Management</i>	Food Security Commissariat (CSA) SAP, partnerships, producer organizations, NGOs Service providers

Mauritania

15. PRAPS-Mauritania (PRAPS-MR) will be anchored at the Cabinet of the Ministry of Livestock (Cab-ME). A Steering Committee (CP) will be established at the national level, chaired by a representative of the Ministry of Economic Affairs and Development (MAED), and will serve as an exchange and guidance body. A representative of ME will be Vice-Chair of the Steering Committee. To monitor PRAPS-MR implementation, a Technical Committee (CT) will also be established and chaired by the National Coordinator, comprising all relevant stakeholders. The MR-PCU will be headed by a National Coordinator (civil servant), who will report to the Minister of Livestock. The National Coordinator will be assisted by a technical team comprising all relevant disciplines (financial management, procurement, M&E, gender, safeguards, and communication) as well as four (4) technical experts to cover each of the Components 1, 2, 3, and 4. At the sub-national level in Mauritania, seven (7) Sub-national Coordination Offices will be established in the most directly concerned Regional Delegations of ME and strengthened to assist in PRAPS-MR implementation. As for governance in the regions, the existing Regional Development Committees (CRD) will monitor PRAPS-MR implementation. Detailed institutional arrangements are shown in Figures A3.9 and A3.10.

Figure A3.9: PRAPS institutional and implementation arrangements for Mauritania

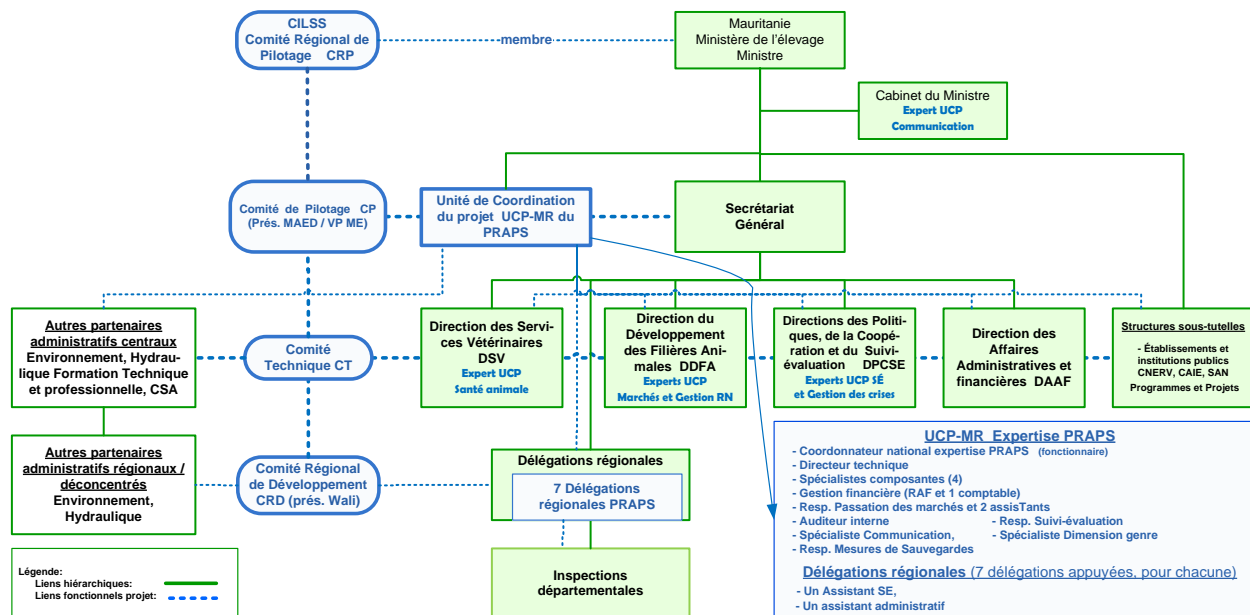


Figure A3.10: Institutional and implementation arrangements for PRAPS-MR

STEERING COMMITTEE (CP)	Exchange and Guidance Body. Chaired by MAED, including ME, Ministry of Environment, Ministry of Hydraulics, other concerned ministries, Ministry of Technical Professional Training, development partners involved in pastoralism and NRM, local representatives, NGO representative, producer organization representative, research and university representatives, CSO representative, pastoralism project representative, CILSS representative. Meeting frequency: At least once a year.
TECHNICAL COMMITTEE (CT)	Implementation Monitoring Body. Chaired by the National Coordinator and comprising representatives of Technical Directorates, livestock producer organizations, other livestock projects (as applicable), and other key representatives (selected ad hoc). Meeting frequency: Each quarter.
PROJECT COORDINATION UNIT FOR PRAPS-MR (MR-PCU) Financial Management Procurement Monitoring & Evaluation Gender Environment and Social Safeguards Communication	In charge of day-to-day management of the implementation of PRAPS-MR activities. The MR-PCU will comprise the following: A National Coordinator (civil servant) A Technical Director (contractor) An Animal Health Specialist (contractor) An NRM Specialist (contractor) A Market Access Specialist (contractor) A Pastoral Crisis Management Specialist (contractor) An Administrative & Financial Management Expert (contractor) and an Accountant (contractor) An internal auditor (contractor) A Procurement Expert (contractor) and two Procurement Assistants (contractors) An M&E Expert (contractor) A Gender Expert (contractor) An Environment and Social Safeguard Expert (contractor) A Communication Expert (contractor) <hr/> Support Staff (drivers, liaison agents, guards, etc.) ME Staff appointed to support concerned Technical Directorates.
IMPLEMENTATION ARRANGEMENTS IN TARGETED REGIONS (associating Regional Development Committees - CRD for activity guidance) Seven (7) Regional Coordination Units will be created within existing ME Regional Delegations, each comprising the following: A Head of Regional Coordination Unit (civil servant) An M&E Assistant (contractor) An Administrative Assistant (contractor) <hr/> Support Staff (drivers, liaison agents, guards, etc.)	
Implementation Stakeholders <i>Component 1 Improve Animal Health</i>	DSV and regional and local ME services UCP-MR Animal Health Specialist (contractor) Partners: CNERV, REMENA, CAIE Local administrative authorities, traditional authorities Private veterinarians, producer organizations, NGOs, private operators
Implementation Stakeholders <i>Component 2 Improve Natural Resource Management</i>	Director and Technical Staff from DDFA Director and Technical Staff from DH Director and Technical Staff from DPN UCP-MR NRM Specialist (contractor) Regional levels Specialized Consultancy Firm (ICB), main operator for social engineering interventions Partnerships with Producer Organizations, NGOs (expression of interest) for direct support to local communities Ministries of Hydraulics and Environment (Agreements/MoUs): supervision of hydraulic and NRM interventions Consultancy firms and construction companies for hydraulic infrastructure
Implementation Stakeholders Component 3 <i>Facilitate Market Access</i>	Director and Technical Staff from DDFA (operational strengthening for services provided by producer organizations through its members) UCP-MR Market Access Specialist Regional Levels Partnerships with producer organizations, traders, unions, federations, inter-professions, NGOs Construction companies
Implementation Stakeholders Component 4 <i>Improve Pastoral Crisis Management</i>	Food Security Commissariat (CSA) UCP-MR Pastoral Crisis Management Specialist Partnerships with FAO, producer organizations, INAP-FTP Training providers

Organisation de l'Unité de Coordination du projet UCP-NE du PRAPS

Niger Ministère de l'élevage Ministre (Membre du CILSS TFRP, Préside le Comité de Pilotage CP)

Secrétariat Général (Préside l'Unité de Coordination du projet UCP-NE du PRAPS)

Unité de Coordination du projet UCP-NE du PRAPS

Directions Principales :

- Direction Générale de la Production et des Industries Animales (DGPIA)** (DDP, DPFA/Q, DIA)
- Direction Générale des Services Vétérinaires (DGSV)** (DSA, DSSD/AOA, DPVPPV)
- Directions Transversales** (DEP, DRFM, DRH, DPOE, DL, DS, DPGCR, DAID/RP, DMP/DS)
- Directions Rattachées** (LABOCEL, CMB, Abattoirs frigorifiques)

Directions Régionales

Coordinations Régionales PRAPS (7)

Directions Départementales

Services Communaux Postes Elevage (PE)

Cellules d'Intervention de Base (CIB)

Autres partenaires administratifs :

- DG des Eaux et Forêts (Environnement)
- Dir. Hydraulique pastorale (Hydraulique)
- Code Rural, Secrétariat Permanent et ses démembrements (Agriculture)
- Dir. de l'Aménagement du Territoire et du Développement Communautaire (MPATDC)
- Ht Commissariat à l'Initiative 3N
- Ministère de la Formation professionnelle

Comité Régional de Coordination CRC

Comité de Pilotage CP

Légende :

- Liens hiérarchiques : —
- Liens fonctionnels projet : - - -

Figure A3.12: Institutional and implementation arrangements for PRAPS-NE

STEERING COMMITTEE (CP)	Exchange and Guidance Body. Chaired by MEL, representative of MP/AT/DC, representatives of i3N, representatives of concerned Technical Ministries, representatives of Niger Union of Municipalities, CSO representatives, CILSS representative, Lead Ag. Sector Development Partner. The CP may invite any relevant party to its meetings, whenever it is felt necessary. Meeting frequency: St least twice a year.
PROJECT COORDINATION UNIT FOR PRAPS-NE (NE-PCU) Financial Management Procurement Monitoring & Evaluation Gender Environment and Social Safeguards Communication	In charge of day-to-day management of the implementation of PRAPS-NE activities. The NE-PCU will comprise the following: A National Coordinator (civil servant) A Planning Assistant (contractor) An Administrative & Financial Management Expert (contractor) and two Accountants (one main, one assistant; both contractors) A Procurement Expert (contractor) and a Procurement Assistant (contractor) An M&E Expert (contractor) An Administrative Assistant (contractor) A Gender Expert (contractor) An Environment and Social Safeguard Expert (contractor) in link with BEEEI A Communication Expert (contractor) <hr/> Support Staff (assistants, drivers, guards, etc.) MEL Technical Directorates, other sector ministries (Agriculture, Environment, Hydraulics, Equipment, etc.) and research institutes to facilitate implementation of Components 1, 2, 3, and 4. Technical Assistance Pool of 60 man-months for entire project life plus other Technical Assistance (to be determined)
IMPLEMENTATION ARRANGEMENTS IN TARGETED REGIONS (associating Regional Coordination Committees for activity guidance) Seven Regional Coordination Units will be created within the Regional Livestock Directorates (DREL), each composed of the following: A Regional Focal Point (MEL civil servant) An M&E Assistant (contractor) An Administrative & Financial Assistant (contractor) <hr/> Support Staff (drivers, liaison agents, guards, etc.)	
Implementation Stakeholders <i>Component 1 Improve Animal Health</i>	DGSV DSA and DREL Partners: SVPP, producer organizations
Implementation Stakeholders <i>Component 2 Improve Natural Resource Management</i>	DGPIA in link with the Directorate for Rural Conflicts, the Regional Livestock Directorates (DREL), and the Permanent Secretariat of the Rural Code plus DDP Partners: Civil society organizations, NGOs, OPEL Construction companies
Implementation Stakeholders Component 3 <i>Facilitate Market Access</i>	Directorate of Livestock Statistic (DES)/SIM-B Partners: DGPIA (DFAQ), DREL Producer organizations, NGOs... Construction companies
Implementation Stakeholders Component 4 <i>Improve Pastoral Crisis Management</i>	DGPIA/DDP, DNPCCA, OSV, DREL Partners: NGOs, civil society organizations, producer organizations, OPEL Training service providers

17. PRAPS-Senegal (PRAPS-SN) will be anchored at the Secretariat General of the Ministry of Livestock and Animal Production (SG-MEPA). A National Steering Committee (COPIL) will be established at the national level, chaired by MEPA, and will serve as an exchange and guidance body. To monitor PRAPS-SN implementation, a Technical Committee (CT) will also be established and chaired by the National Coordinator, comprising all relevant technical stakeholders. The SN-PCU will be headed by a National Coordinator (civil servant), who will report to the Secretary General of MEPA. The National Coordinator will be assisted by a technical team comprising all relevant disciplines (financial management, procurement, M&E, capacity building and gender, safeguards, and communication) as well as experts to cover (respectively) Components 2 and 4. National Focal Points will be appointed in the concerned Technical Departments to cover Components 1 and 3. At the sub-national level in Senegal, two (2) Sub-national Coordination Offices (ACR-SN) will be established within the concerned Regional Livestock Services to assist PRAPS-SN implementation in targeted areas; correspondingly, the existing Regional Dialogue Committees (CRCs) will monitor PRAPS-SN implementation. Detailed institutional arrangements are shown in Figures A3.13 and A3.14.

Figure A3.13: PRAPS Institutional and implementation arrangements for Senegal

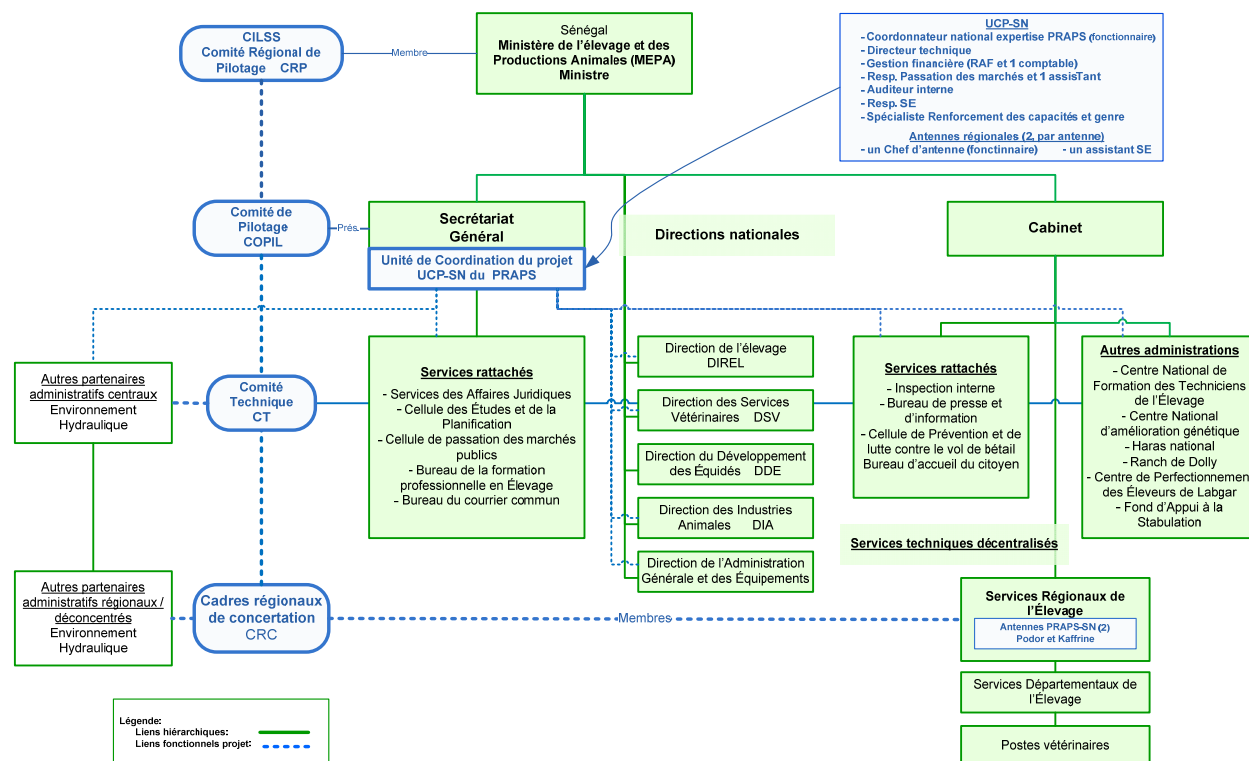


Figure A3.14: Institutional and implementation arrangements for PRAPS-SN

NATIONAL STEERING COMMITTEE (COPII)	Exchange and Guidance Body. Chaired by MEPA, representative of the Ministry of Economy and Finance, MHA, MAER, ATCT, MEDD, ITTD, adviser in charge of CEP, legal advisor, Head of Professional Training Office, Directorate for Animal Industry, Directorate for Veterinary Services, Directorate for Livestock Husbandry, Directorate for Horse Development, Head of DIREL Pastoral Division (MEPA), representatives of DG ISRA, CILSS national committee, WAAPP and other relevant project coordinators, PPZS, SCA, Presidents of the Council of the Order of Veterinarians, CNCR, National Directory of women in livestock, representatives of Herders Organizations, World Bank representative, Lead Ag. Sector Development Partner, Food Safety and Rural Development Group (observer). Meeting frequency: Twice a year.
TECHNICAL COMMITTEE (CT)	Implementation Monitoring Body. Chaired by the National Coordinator and comprised of representatives of implementation agencies (DSV, DIREL, DIA...) and representatives of producer organizations, other livestock projects, research and education, plus other contracting service providers. Meeting frequency: At least once each quarter.
PROJECT COORDINATION UNIT FOR PRAPS-SN (SN-PCU) Financial Management Procurement Monitoring & Evaluation Capacity Building & Gender Environment and Social Safeguards Communication	In charge of day-to-day management of the implementation of PRAPS-SN activities. The SN-PCU will comprise the following: A National Coordinator (civil servant) A Technical Director (contractor) An Administrative & Financial Management Expert (contractor) and an Accountant (contractor) A Procurement Expert (contractor) and a Procurement Assistant (contractor) An M&E Expert (contractor) A Capacity Building and Gender Expert (contractor) An Internal Auditor (contractor) <hr/> Support Staff (executive assistants, drivers, guards, etc.) One Focal Point for Component 1 (Animal Health) appointed at DSV, one Focal Point for Component 2 (NRM) appointed at DIREL, and one Focal Point for Component 3 (Market Access) appointed at DIA One Focal Point in charge of Environmental and Social Safeguards at the Environment and Categorized Establishment Directorate, Ministry of Environment and Sustainable Development Technical Assistance Pool of 60 man-months for entire project life plus other Technical Assistance (to be determined)
IMPLEMENTATION ARRANGEMENTS IN TARGETED REGIONS (associating Regional Dialogue Committees for activity guidance) Two Regional Coordination Units (Antennes) in Kaffrine and Podor will be created, within the Regional Livestock Directorates, each composed of the following: A Head of Regional Coordination Unit (civil servant) An M&E Assistant (contractor) <hr/> Support Staff (executive assistants, drivers, guards, etc.)	
Implementation Stakeholders <i>Component 1 Improve Animal Health</i>	Direction of Veterinary Services (DSV) (Director and Technical Staff) Local and Regional Livestock Services and Veterinary Posts Partners: OPE, NGO, ISRA Vaccine Production (MAER), ISRA-LNERV (MAER), private veterinarians, local communities, ODVS EISMV, CIRAD, ESP (MERS) Service providers, foreign laboratories, rural radio stations Ministry of Health, Ministry of the Interior, Customs, Police
Implementation Stakeholders <i>Component 2 Improve Natural Resource Management</i>	Pastoral Division (DIREL) Partners: Main specialized provider, either CSE or other through competitive bidding (Sub-component 2.1), Water and Forestry Directorate, (Sub-component 2.1: infrastructure), Rural Hydraulic Directorate (Sub-component 2.2) through Agreements. NGOs or other specialized operators through expression of interest (management, capacity-building of communities) Construction companies
Implementation Stakeholders Component 3 <i>Facilitate Market Access</i>	Direction of Animal Industries (DIA) Partners: Local and Regional Livestock Services, CEP, service providers
Implementation Stakeholders Component 4 <i>Improve Pastoral Crisis Management</i>	DIREL (Director and Technical Staff) Partners: CEP, SE-CNSA, ISRA/PPZS, producer organization / NGO partnerships, service providers

FINANCIAL MANAGEMENT, DISBURSEMENTS, AND PROCUREMENT

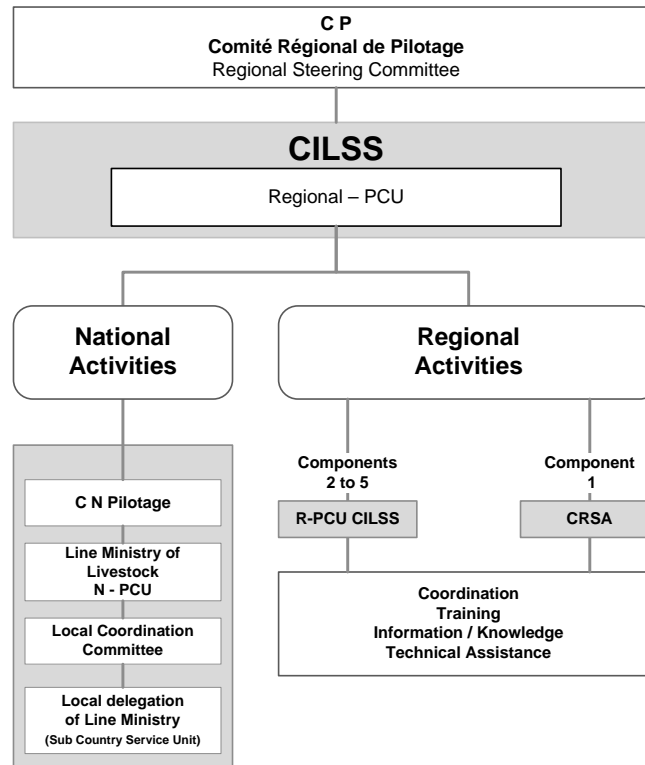
Financial Management

18. The following entities that operate at the national and regional levels will be directly involved in the implementation, supervision, and monitoring of the project. Implementation arrangements, responsibilities, and procedures are described in the Key Responsibilities section of this annex. Further detailed terms of reference are provided in the PIM.

- (i) National Project Coordination Units (N-PCUs): Project activities will principally be supported by light established N-PCUs within selected ministries in agreement with the respective governments. The N-PCU is responsible for overall project implementation support at the national level, including (among other things) supervision, proposal preparation, project financial management and procurement, M&E, and reporting.
- (ii) Governments (line ministries in charge of livestock): House the N-PCU, participate in the National Steering Committee, advise on strategic planning, and engage in supervision at the national level. Furthermore, other government entities will be responsible for the actual implementation on the basis of contractual arrangements under the oversight of the N-PCU.
- (iii) National Steering Committee (NSC): Established at the national level and chaired by the relevant ministry in charge of livestock. The Steering Committee (SC) will serve as an exchange and guidance body. The SC will consist of national agencies (public and private) directly related to the project. The SC will meet twice a year.
- (iv) Permanent Interstate Committee for Drought Control in the Sahel (CILSS): The project will operate under the overall guidance and coordination of CILSS, whose main task is to set policy guidelines and coordinate resource mobilization, regional programming and M&E, regional capacity development and technical assistance, regional data generation, and knowledge and communication.
- (v) Regional Steering Committee (RSC): Coordinate and facilitate the cross-boundary interventions, provide a platform for technical assistance, M&E, training, knowledge sharing and communication, and support policy dialogue with countries for regional alignment and harmonization.
- (vi) Development partners, private sector and NGOs: There are no co-financing or parallel financing arrangements in place; IDA will provide full funding. Mechanisms are nonetheless in place to harmonize implementation in the field with other development partners (DPs) when interventions overlap. Regarding private sector entities and NGOs (local or international), contracting will be on the basis of competitive bidding in accordance with World Bank procedures as agreed to with the N-PCUs.

19. This annex also lays out the fiduciary arrangements of the project with respect to financial management, procurement, safeguards, and M&E. All N-PCUs will, to the extent feasible, use the same fiduciary procedures as well as the same accounting software.

Figure A3.15: PRAPS institutional implementation



Note: CILSS provides project oversight and guidance to the entire project. Regional coordination of Component 1 (Animal Health) is delegated to CRSA. Regional Steering Committee leads the project at the regional level. Regional Project Coordination Unit for implementation support (regional). National Steering Committee leads the project at the national level. National Project Coordination Unit for implementation support (national). Government has a financial and legal oversight role over the project. Sub-national Coordination Committees in the field, at the level of sub-national delegation of the line ministry in charge of livestock.

Key responsibilities

Governments

20. Each government hosting PRAPS will sign a Financing Agreement with IDA. The government will specify the N-PCU as the Implementing Support Entity. It will define the responsibilities of the Entity, including fiduciary arrangements, reporting arrangements, and the terms and conditions for its operation. The government will also sign a funding agreement (subsidiary agreement) with CILSS for its work on some regional aspects of the project (subsidiarity).

21. In addition to those directly involved in execution, the following agencies will provide support and oversight to the operation:

- (i) The Ministry of Finance (MoF) will ensure government commitment and ownership of the project, as well as ensure the funding channels for disbursement (details on disbursement arrangements are provided in the Financial Management section of this annex).

- (ii) The ministry in charge of livestock (the ministry housing the N-PCU) will ensure project ownership, and ensure alignment between the project and national pastoralist policies.
- (iii) Other line ministries, depending on the focus of the selected national program, will seek to promote sector impact of the project, facilitate partnership, support project activities, and align the project with national strategy.
- (iv) N-PCUs: The performance and funding agreement between IDA and the governments will provide details on this Unit. Project implementation support and supervision at the national level are always integrated within an existing ministry.

CILSS

22. CILSS will attend to the following:

- (i) Strategic decisions to ensure the continued coherence between the program support and sector development and regional pastoralism development priorities.
- (ii) Decisions concerning deviations from the program support document.
- (iii) Consider the findings and recommendations of the N-PCUs.
- (iv) Review and guide the overall progress of the program with a special focus on delays, problems, and bottlenecks (approval of progress and financial reports, decisions on follow-up activities presented).
- (v) Oversee the implementation of cross-cutting issues as identified in the project documents; visit countries, provide consultations, and recommend improvements.
- (vi) Facilitate national, regional, and international networking and outreach activities for the project as a whole.
- (vii) Review the extent and performance of individual countries collaboration.
- (viii) Review and approve capacity-building plans of the overall project.
- (ix) Overseeing audits (approval of the annual audit, overseeing follow-up on recommendations in the annual audit report presented by countries).

Financial Management, Disbursements, and Procurement

23. A Financial Management (FM) assessment was conducted on the FM arrangements for the Regional Sahel Pastoralism Support Project. The project will be implemented by N-PCUs, for which an FM assessment has been conducted. All N-PCUs are established within the ministries in charge of livestock.

24. The objective of the assessment was to determine whether the implementing entities had acceptable FM arrangements in place that satisfied the Bank's Operation Policy/Bank Procedure (OP/BP) 10.00. These arrangements would ensure that the implementing entities: (i) use project funds only for the intended purposes in an efficient and economical way; (ii) prepare accurate and reliable accounts as well as timely periodic financial reports; (iii) safeguard assets of the project; and (iv) have acceptable auditing arrangements. The FM assessments were carried out in

accordance with the Financial Management Manual issued by the FM Sector Board on March 1, 2010.

Financial management risk assessment and mitigation

CILSS FM risk assessment and mitigation

25. The FM strengths of CILSS are: (i) experience in implementing a Bank-financed-project¹¹³ and projects financed by other donors—European Investment Bank, West African Development bank, AFD, EU, the United States Agency for International Development (USAID), and Canada; (ii) the existence of an Internal Auditor position, who reports to the Executive Secretariat and the Council of Ministers; and (iii) its CILSS-IMIS accounting system (supported by an Oracle application), which includes several modules (accounts payable, fixed assets, inventory control, treasury management, general ledger, and budget monitoring).

26. Owing to their large workload, CILSS FM staff must be reinforced to handle the additional transactions resulting from the new project. A Project Finance and Accounting Officer has been recruited during PRAPS preparation. Table A3.1 summarizes the FM risk assessment and corresponding mitigation measures.

Table A3.1: R-PCU financial management risk assessment and mitigation measures (CILSS)

Risk	Risk rating	Risk mitigation measures	Risk rating after mitigation measures
I. Inherent Risks:	M		M
Country level: N/A	N/A		N/A
Entity level	M		M
Project level	M		M
II. Control Risks:	M		M
Budgeting	M		M
Accounting Work overload of FM staff.	M	A Project Finance and Accounting Officer will be recruited. A computerized accounting system will be set up for CILSS and all countries participating in PRAPS.	L
Internal Controls	M	The project will rely on the existing manual of administrative, finance, and accounting procedures. Specific internal measures of control will be designed and included in the PIM for PRAPS.	M
Funds Flow	M	A Designated Account will be opened at a commercial bank.	M
Financial Reporting	M	The financial reporting monitoring format will be agreed upon during appraisal.	M
External Auditing Delays in the submission of audit reports.	S	A qualified, experienced independent auditor acceptable to IDA will be recruited.	M
Overall Risk	M		M

Note: H= high, S = substantial, M = moderate, L = low.

¹¹³ CILSS is an Implementing Agency of the World Bank-financed project, Building Resilience through Innovation, Communication, and Knowledge Services (P130888).

Burkina Faso FM risk assessment and mitigation

27. The FM weakness of the MRA is that the N-PCU is not yet set up. Table A3.2 summarizes the FM risk assessment and corresponding mitigation measures.

Table A3.2: BF-PCU financial management risk assessment and mitigation measures

Risk	Risk rating	Risk mitigation measures	Risk rating after mitigation measures
I. Inherent Risks:	S		M
Country level Delay in the audit of the Government Financial Statements by the Court of Accounts.	M	The government is committed to reform the current legal status of the Court of Accounts in close cooperation with the justice sector, in order to allow the Court of Accounts to be more efficient.	M
Entity level MRA has no experience in financial management of World Bank-financed projects.	S	An experienced financial management staff will be recruited. It will comprise an Administrative and Finance Officer, an Accountant, and an Internal Auditor.	M
Project level: Coordination issues due to the involvement of diverse groups of stakeholders and several technical implementing entities (others ministries).	S	A National Steering Committee will be established. It will oversee project activities.	M
II. Control Risks:	S		M
Budgeting Unrealistic annual work plan and budget that will not be a decision-making tool.	S	The policies, rules, and procedures for annual work plan and budget preparation will be developed in the PIM. The NSC will review and approve the annual work plan and budget.	M
Accounting Lack of accounting staff and accounting software.	S	An Administrative and Finance Officer and an Accountant will be recruited. A computerized accounting system will set up for all PRAPS participating countries and CILSS.	M
Internal Controls: Lack of internal control system: segregation duties policies, business ethics policies, internal measures of control, internal audit function.	S	The PIM will include financial management policies, rules, and procedures. An Internal Auditor will be recruited.	M
Funds Flow	M	A Designated Account will be opened at the BCEAO.	M
Financial Reporting Financial reports are submitted with delay	M	The financial reporting monitoring format will be agreed during appraisal. The accounting software will be designed to generate financial reports.	F
External Auditing Delays in the submission of audit reports.	S	A qualified, experienced independent auditor, acceptable to IDA, will be recruited	M
Overall Risk	S		M

Note: H= high, S = substantial, M = moderate, L = low.

Chad FM risk assessment and mitigation

28. The design of the project follows existing FM arrangements to implement World Bank-financed projects in Chad, which includes partial use of country FM systems whenever possible.

29. The country's political situation has affected governance and the corruption environment. In the context of the proposed project, the main weaknesses include the lack of familiarity and previous experience of DAF staff with the World Bank's FM procedures. Furthermore, despite improvements in policy, legislative frameworks, and systems, including detailed procedures for procurement and financial controls, the government is still struggling with compliance and implementation. However, effective implementation of FM mitigation measures as well as strengthened and effective oversight structures (mainly designing the program's FM arrangements to ensure compliance with the Bank's FM requirements and the involvement of the DGCF and institutions of control) would help mitigate weaknesses identified at the national, program, and control levels.

Table A3.3: Financial management action plan, Chad

Issue/topic	Recommended remedial action	Responsible body/person	Completion date	FM legal covenant?
Staffing	Appointment of an experienced FM manager (RAF) very familiar with World Bank FM procedures.	MPDLP/ PCU	1 month after effectiveness	Yes
	Appointment of (i) one principal accountant; (ii) one accountant; and (iii) one assistant very familiar with Bank FM procedures.	MPDLP/ PCU	2 months after effectiveness	No
	Assignment of a financial controller.	MFB + MPDLP/ PCU	1 month after Designated Account is opened	No
Information system accounting software	Acquisition and installation of accounting software for the project and training of the users.	MPDLP/ PCU	2 months after effectiveness	Yes
Administrative Accounting and Financial Manual	Preparation of the FM and administrative manual and training of the users, including dissemination to all the actors involved in the project implementation.	MPDLP/ PCU	By effectiveness	Effectiveness condition
Internal auditing	Recruitment of an internal auditor and contract signed.	MPDLP/ PCU	3 months after effectiveness	Yes
External auditing	Appointment of the external auditor completed and contract signed.	MPDLP/ PCU	5 months after effectiveness	Yes

Mali FM risk assessment and mitigation FM risk assessment and mitigation

30. Table A3.4 summarizes the inherent and control risks and mitigation measures proposed.

Table A3.4: ML-PCU financial management risk assessment and mitigation measures

Risk	Risk rating	Risk mitigation measures	Residual risk rating
I. Inherent Risks:	S		S
Country: Poor governance. Public Financial Management (PFM) system is weakened by several key problems in the area of financial management and control of the decentralized operations that may contribute to poor service delivery.	S	The strengthening of public financial management through the PFM - TA Project is expected to enhance the PFM system to provide timely and reliable information and improve governance.	S
Entity: Weak implementation capacity at MDR.	S	Minimum FM requirement will be set up at the PCU comprising adequate staffing and reporting arrangements.	S

Risk	Risk rating	Risk mitigation measures	Residual risk rating
Risk remains in terms of coordination due to the regional scope of the project and the involvement of several stakeholders.		A PIM will be developed and clearly define roles and responsibilities of the different stakeholders and segregation of duties. In addition, the setting up of a regional and a national steering committee will ensure adequate coordination and oversight of activities.	
Project: Delays on project implementation.	S	A PCU will be set up for the overall coordination of project activities, and staffing will be taken care of with the recruitment of experienced staff.	S
II. Control Risks:	S		S
Staffing: Lack of adequate FM staff.	S	Experienced FM officer and accountant will be recruited to take care of FM activities.	S
Budgeting: Deviations in budget execution of some components not captured by the reports. Variations from budgets not authorized.	S	The budget process will be clarified in the Financial and Administrative procedures of the PIM, with a clear description of preparation, approval, authorization, and monitoring processes.	M
Accounting: Delays in the treatment of financial information and in submissions of Financial Statements (interim and annual).	S	Adequate computerized accounting system will be set up to fit the project's needs and generate useful information and financial statements.	S
Internal Control and Audit: The lack of internal audit function and the weak internal control environment at the community level might promote improper use of the project funds.	S	The PIM will help clarify roles and responsibilities to properly frame the internal control system in addition to the internal auditor, who will be recruited to carry out quarterly internal control reviews and physical verifications.	S
Funds Flow: Funds may be diverted or used for non-project eligible purposes.	S	A Designated Account into which funds will be deposited will be opened and managed by the Coordination Unit.	M
Reporting and Monitoring: Delays in the submission of agreed IFRs and annual project financial statements.	S	Appropriate accounting software will be set up to ensure timely recording of financial information as well as timely production of quarterly and annual financial statements.	S
Auditing: Inadequate institutional arrangements in place for external audit.	S	An independent external auditor with terms of reference acceptable to IDA will be recruited.	S
Overall Risk:	S		S

Note: H= high, S = substantial, M = moderate, L = low.

31. *The overall residual FM risk for Mali is considered substantial.* The actions listed in Table A3.5 are required to enhance the financial management arrangements for the project:

Table A3.5: Financial management action plan, Mali

No.	Action	Due date	Responsible body/person
1	Agree on the format of the IFR	Done by negotiation	MDR/IDA
2	Develop FM and disbursement procedures as part of the implementation manual	Before effectiveness	MDR
3	Recruit an FM officer	Not later than 1 month after effectiveness	MDR
4	Recruit an accountant	Not later than 1 month after effectiveness	PCU
5	Set up an accounting software	Not later than 2 months after effectiveness	PCU
6	Recruit an internal auditor	Not later than 3 months after effectiveness	PCU
7	Recruit an external auditor	Not later than 5 months after effectiveness	PCU

Mauritania FM risk assessment and mitigation

32. Table A3.6 summarizes the inherent and control risks and mitigation measures.

Table A3.6: MR-PCU financial management risk assessment and mitigation measures

Risk	Risk mitigation measures	Legal covenant?	Residual risk/ (risk) rating
I. Inherent Risks			
Country Level			
Pending the results of the last PEFA assessment realized in 2014, the inherent risk of the PFM system is still rated substantial at the country level. The last PEFA dates to 2008 and the PFM reform action plan (<i>Schéma Directeur des Réformes des Finances Publiques – SDRFP</i>) has not been fully implemented.	<p>The Government has prepared a public financial management reform program to address the weaknesses in its Public Financial Management System.</p> <p>The Mauritania Public Sector Efficiency program funded by the World Bank is being prepared to address the key weaknesses related to the budget and accounting systems and the internal and external controls.</p>	No	S
Entity Level			
Although the legal and institutional framework is in place, implementation may be hampered by interference due to involvement of many stakeholders.	A National Steering Committee will oversee all matters related to project implementation.	No	S
Project Level			
Delays in implementation due to lack of experience of World Bank-executed projects in the Ministry of Livestock.	The institutional arrangements will facilitate project coordination and implementation.	No	S
Overall Inherent Risk	Residual Risk: S		
II. Control risk			
Internal control:			
Weak internal control environment	<p>An administrative and accounting manual of procedures will be set up.</p> <p>An internal auditor with experience and qualifications acceptable to the Bank will be recruited to strengthen the internal control framework.</p>	<p>Included in the PIM (condition of effectiveness)</p> <p>Yes</p>	S
Budget:			
Lack of budget monitoring process and control mechanism	The accountant software to be installed should allow budget monitoring by generating budget information. The budget process, particularly the reporting and monitoring process, will be clarified in the FM manual. Periodic reports of budget monitoring and recommendations will be done by the FM team.	No	M
Accounting:			
Lack of FM team	A FM officer and an accountant with competence and experience satisfactory to the Bank will be recruited.	Yes	S
Lack of FM software	The PCU will install appropriate accounting software.	Yes	M
Funds Flow:			
Funds may be diverted or used for non-project eligible purposes.	A Designated Account into which funds will be deposited will be opened	No	M
Financial Reporting:			
Delays in the submission of agreed IFRs and annual project financial statements.	The accounting software will be customized to facilitate compilation of accounting information, and the PCU will prepare and agree with the Bank on the format and content of the IFRs.	No	M

Risk	Risk mitigation measures	Legal covenant?	Residual risk/ (risk) rating
Auditing:			
Inadequate institutional arrangements in place for the appointment of external auditors	An external auditor with experience and qualifications acceptable to the World Bank will be recruited.	Yes	M
Overall Control Risk	M		
Overall Risk	M		

Note: H= high, S = substantial, M = moderate, L = low.

Niger FM risk assessment and mitigation

33. Table A3.7 summarizes the inherent and control risks and mitigation measures proposed.

Table A3.7: NE-PCU financial management risk assessment and mitigation measures

Risk	Risk rating	Risk mitigation measures	Residual risk rating
I. Inherent Risks:	S		S
Country: Risk of delay in implementing the recently adopted PFM plan on improvement of on quality of PFM. Corruption and poor governance may affect public sector performance.	S	Joint donor and government regular review and evaluation of implementation progress of the PFM action plan. Successful implementation of the current World Bank-financed Governance project; institutional strengthening of the External Audit through an IDF grant currently being implemented. Continued Bank policy dialogue through the DPO series which includes triggers linked to PFM reforms. A number of institutions to help fight against corruption have been set up and are currently operational, including the Procurement Regulatory Agency, the High Commission of Anti-Corruption, the General Inspection of Government Administration.	S
Entity: Weak FM implementation capacity at Ministry of Livestock. Risk remains in terms of coordination due to the regional scope of the project.	S	Minimum FM requirement will be set up at the PCU comprising adequate staffing and reporting arrangements. A PIM will be developed clearly defining roles and responsibilities of the different stakeholders and segregation of duties. In addition, the setting up of a Regional and a National Steering Committee will ensure adequate coordination and oversight of activities.	S
Project: Delays in project implementation.	S	A PCU will be set up for overall coordination of project activities and staffing will be taken care of with the recruitment of experienced staff.	S
II. Control Risks:	S		S
Staffing: Lack of adequate FM staff.	S	Experienced FM officer and accountant will be recruited to take care of FM activities.	S
Budgeting: Deviations in budget execution of some components not captured by the reports. Variations from budgets not authorized.	S	The budget process will be clarified in the Financial and Administrative procedures of the PIM, with a clear description of preparation, approval, authorization, and monitoring processes.	M
Accounting: Delays in the treatment of financial information and in submissions of Financial Statements (interim and annual).	S	Adequate computerized accounting system will be purchased and customized to fit the project's needs and generate useful information and financial statements.	S
Internal Control and Audit: The lack of internal audit function and the weak project internal control	S	The PIM will help clarify roles and responsibilities to properly frame the internal control system in addition to the internal auditor, who will be recruited to carry out quarterly internal control reviews and physical verifications.	S

Risk	Risk rating	Risk mitigation measures	Residual risk rating
environment might promote improper use of the project funds.			
Funds Flow: Funds may be diverted or used for non-project eligible purposes.	S	A Designated Account into which funds will be deposited will be opened and managed by the Coordination team.	M
Reporting and Monitoring: Delays on the submission of agreed IFRs and annual project financial statements.	S	Appropriate accounting software will be set up to ensure timely recording of financial information as well as timely production of quarterly and annual financial statements.	S
Auditing: Inadequate institutional arrangements in place for external audit.	S	Recruitment of qualified, experienced independent external auditor with terms of reference acceptable to IDA.	S
Overall Risk:	S		S

Note: H= high, S = substantial, M = moderate, L = low.

34. The overall residual FM risk for Niger is considered substantial. The actions listed in Table A3.8 need to be taken to enhance the financial management arrangements for the project:

Table A3.8: Financial management action plan, Niger

No	Action	Due date	Responsible body/person
1	Agree on the format of the IFR	Done by negotiation	Ministry of Livestock (MoL)/IDA
2	Develop FM and disbursement procedures as part of the implementation manual	Before effectiveness	MoL
3	Recruit an FM officer	No later than 1 month after effectiveness	MoL
4	Recruit an accountant	No later than 1 month after effectiveness	N-PCU
5	Set up accounting software	No later than 2 months after effectiveness	N-PCU
6	Recruit an internal auditor	No later than 3 months after effectiveness	N-PCU
7	Recruit an external auditor	No later than 5 months after effectiveness	N-PCU

Senegal FM risk assessment and mitigation

35. Table A3.9 summarizes the inherent and control risks and mitigation measures proposed.

Table A3.9: SN-PCU financial management risk assessment and mitigation measures

Risk	Risk mitigation measures	Legal covenants?	Residual risk/ (risk) rating
I. Inherent Risks			
Country Level:			
PFM system is weakened mainly by (i) weak oversight of public sector entities and agencies and (ii) difficulties in the interface between or integrating the various FM information systems: Budget expenditures (SIGFIP) and Accounting (ASTER).	Remedial measures are being taken to address the weaknesses of the budget execution procedures, accounting system, and internal and external controls through the ongoing PFM TA. However, these country issues would not materially impact the project as it is being implemented through a SN-PCU under the oversight of a National Steering Committee.	No	S
Entity Level:			
Although legal and institutional framework is in place, implementation	A National Steering Committee will oversee all matters of project implementation.	No	S

Risk	Risk mitigation measures	Legal covenants?	Residual risk/ (risk) rating
may be hampered by political interference.			
Project Level:			
Delays in implementation due to lack of experience of World Bank–executed projects of the Ministry of Livestock.	The institutional arrangements and a technical Steering Committee will facilitate the coordination and implementation.	No	S
Overall Inherent Risk	Residual Risk: S		
II. Control Risk			
Internal Control:			
Weak internal control environment.	An administrative and accounting manual of procedures will be set up. An internal auditor with experience and qualifications acceptable to the Association will be recruited to strengthen the internal control environment.	Included in the PIM (condition of effectiveness) Yes	S
Budget:			
Lack of budget monitoring process and control mechanism.	The accounting software to be installed should allow budget monitoring by generating budget information. The budget process, particularly the reporting and monitoring process, will be clarified in the FM manual. Periodic reports of budget monitoring and recommendations will be done by the FM team.	No	M
Accounting:			
Lack of FM team.	An FM officer and an accountant with competence and experience satisfactory to the Association will be recruited.	Yes	S
Lack of FM software.	The PCU will install appropriate accounting software.	Yes	M
Funds Flow:			
Funds may be diverted or used for non-project-eligible purposes.	A Designated Account into which funds will be deposited will be opened.	No	M
Financial Reporting:			
Delays in the submission of agreed IFRs and annual project financial statements.	The accounting software will be customized to facilitate compilation of accounting information, and the PCU will prepare and agree with the Bank on the format and content of the IFRs.	No	M
Auditing:			
Inadequate institutional arrangements in place for the appointment of external auditors.	An external auditor with experience and qualifications acceptable to the Association will be recruited.	Yes	M
Overall Control Risk	M		
Overall Risk	M		

Note: H= high, S = substantial, M = moderate, L = low.

36. *Senegal FM action plan.* The actions listed in Table A3.11 must be taken to enhance the financial management arrangements for the project.

Table A3.11: Financial management action plan, Senegal

Nº	Action	Due date	Responsible body/person
1.	Prepare and agree with the World Bank on the format of the IFR.	Done by negotiation	PCU
2.	<ul style="list-style-type: none"> Set up the Administrative and Accounting Manual of Procedures. Recruit a financial officer with competence and experience satisfactory to the Association. 	By effectiveness	PCU
3.	<ul style="list-style-type: none"> Set up Accounting Information System. Recruit an accountant with competence and experience satisfactory to the Association. Recruit an internal auditor with competence and experience satisfactory to the Association. 	2 months after effectiveness 3 months after effectiveness	PCU
4.	Select an external auditor with competence and experience satisfactory to the Bank.	5 months after effectiveness	PCU

Financial management arrangements

Budgeting arrangements

37. The budgeting process will be clearly detailed in the FM procedures, and the budget will be reviewed and adopted by the National Steering Committee before the beginning of the year—specifically, not later than November 30 each year. Annual budgets adopted by the steering committee will be submitted to the Bank’s non-objection before implementation.

Accounting arrangements

38. The current accounting standards in use in francophone West African countries for ongoing Bank-financed projects will be applicable. Project accounts will be maintained on a cash basis, supported with appropriate records and procedures to track commitments and to safeguard assets. Annual financial statements will be prepared by the PCU. Accounting and control procedures will be documented in the FM procedures.

Internal control and internal auditing arrangements

39. **Internal control systems.** FM and administrative procedures will document the FM and disbursement arrangements, including internal controls, budget process, assets safeguards, and clarify roles and responsibilities of all the stakeholders. Bonus payment to private veterinarian and support for income-generating activities arrangements (selection, control, payment, etc.) will be detailed as part of the PIM.

40. **Internal audit.** An internal audit function will be set up for the project. The internal auditor will conduct ex post reviews of the project transactions along with physical verification.

Funds flow and disbursement arrangements (Except Mauritania)

Designated Account

41. A Designated Account (DA) will be opened in FCFA in a commercial bank under the co-signature of the project coordinator and the FM officer according to the disbursement procedures

described in the Administrative, Accounting, and Financial Manual and Disbursement Letters, which has been discussed in detail with the relevant government officials during negotiations. From the DA, funds will flow to service providers and suppliers. The DA ceilings for each country are provided below (Table A3.12).

Table A3.12: Designated Accounts and ceilings

Recipient	CILSS	Burkina Faso	Chad	Mali	Mauritania	Niger	Senegal
Currency	CFAF (million)	CFAF (million)	CFAF (million)	CFAF (million)	USD (million)	CFAF (million)	CFAF (million)
DA Ceiling	270	1,000	1,500	1,500	3	1,500	1,000

Disbursement methods

42. The arrangements for disbursement procedures will be detailed in the accounting, administrative and financial procedures and the Disbursement Letter. Upon project effectiveness, transaction-based disbursements will be used. An initial advance up to the ceiling of the DA and representing four months forecasted project expenditures paid through the DA will be made into the DA, and subsequent disbursements will be made on a monthly basis against submission of Statement of Expenditures (SOE) or records as specified in the Disbursement Letter.

43. In addition to the “advance” method, the option of disbursing the funds through direct payments to a third party, for contracts above a pre-determined threshold for eligible expenditures (for example, 20 percent of the DA ceiling), will also be available. Another acceptable method of withdrawing proceeds from the IDA grant is the special commitment method, whereby IDA may pay amounts to a third party for eligible expenditures to be paid by the Recipient under an irrevocable Letter of Credit (LC). Figures A3.16 and A3. 17 show the flow of funds, except for Mauritania and CILSS.

Figure A3.16: Flow of funds (Chad, Mali, Niger, Senegal)

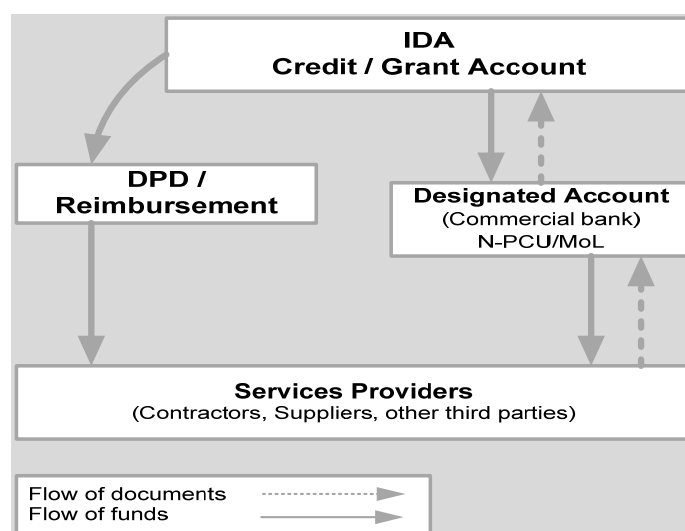
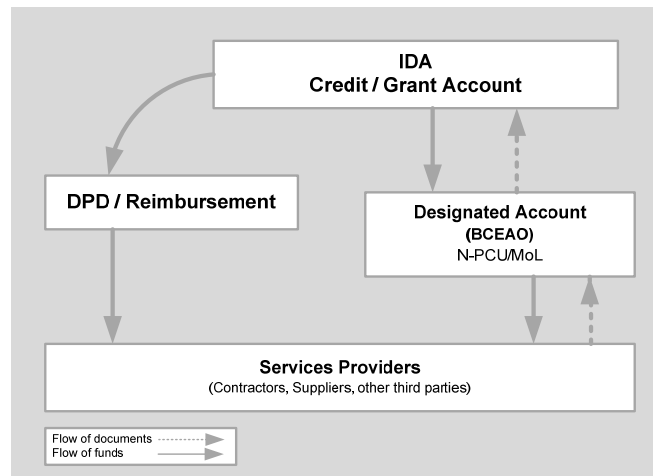


Figure A3.17: Flow of funds (Burkina Faso)



Funds flow and disbursement arrangements (Mauritania)

Disbursement arrangements

44. The following disbursement methods may be used under the project: reimbursement, advance, direct payment, and special commitment as specified in the Disbursement Letter and in accordance with the World Bank Disbursement Guidelines for Projects, dated May 1, 2006, Disbursements would be transactions-based whereas withdrawal applications will be supported with Statement of Expenditures.

45. All replenishments or reimbursement applications will be fully documented with statements of expenditures. Detailed supporting documentation will be retained at PCU for review by Bank staff and external auditors. The Disbursement Letter (together with the Disbursement Guidelines) provides additional instructions on the withdrawal of financing proceeds including the disbursement methods, required documentation, Designated Account ceiling, and minimum application size. On project closure, a period of four (4) months (grace period) after the closing date will be allowed to complete processing of disbursement for eligible expenditures incurred up to and until the closing date of the grant.

Banking arrangements

46. A separate DA for the project will be opened in the “Bank El Amana” and a Project Account (PA) will be opened in a commercial bank in Nouakchott on terms and conditions acceptable to the World Bank. The DA will be used for all eligible payments financed by the credit as indicated in the specific terms and conditions of the Financing Agreement.

47. The PCU will submit a first withdrawal application to the Bank based on four months forecast expenditures expected to be made through the DA. The Bank will process the withdrawal application and deposit funds into the Designated Account. The DA and the PA will be used to pay for most eligible expenditures, except for those exceeding 20 percent of the DA ceiling. Such payments should be made through the direct payment method or a special commitment letter issued by the Bank. The DA should be replenished on a monthly basis. Figure A3.18 shows the flow of funds for Mauritania. Figure A3.19 shows the flow of funds for CILSS.

Figure A3.18: Flow of funds and information (Mauritania)

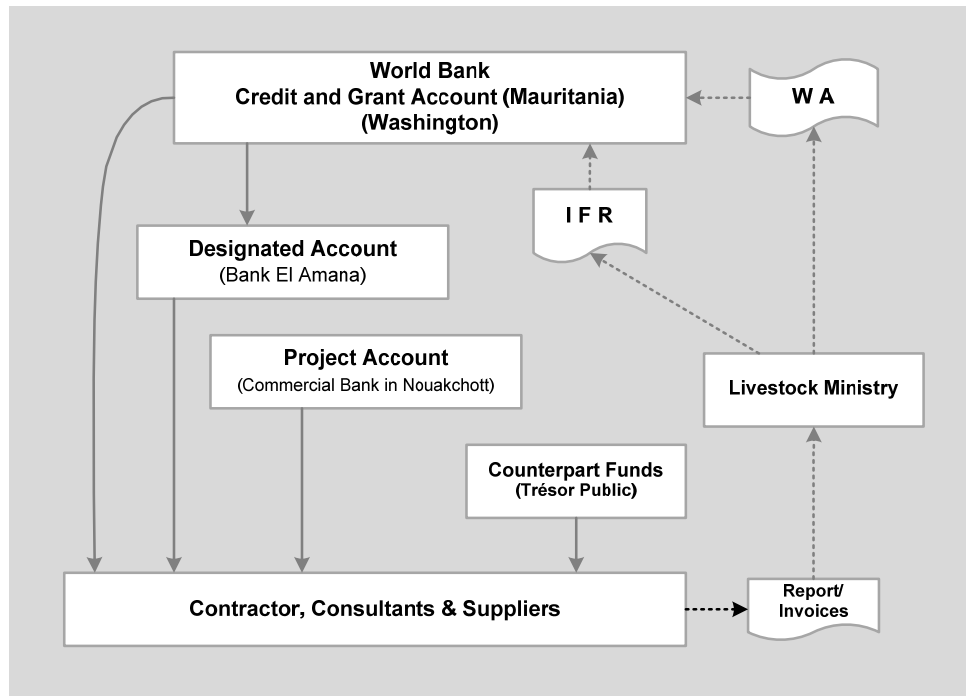


Figure A3.19: Flow of funds (CILSS)

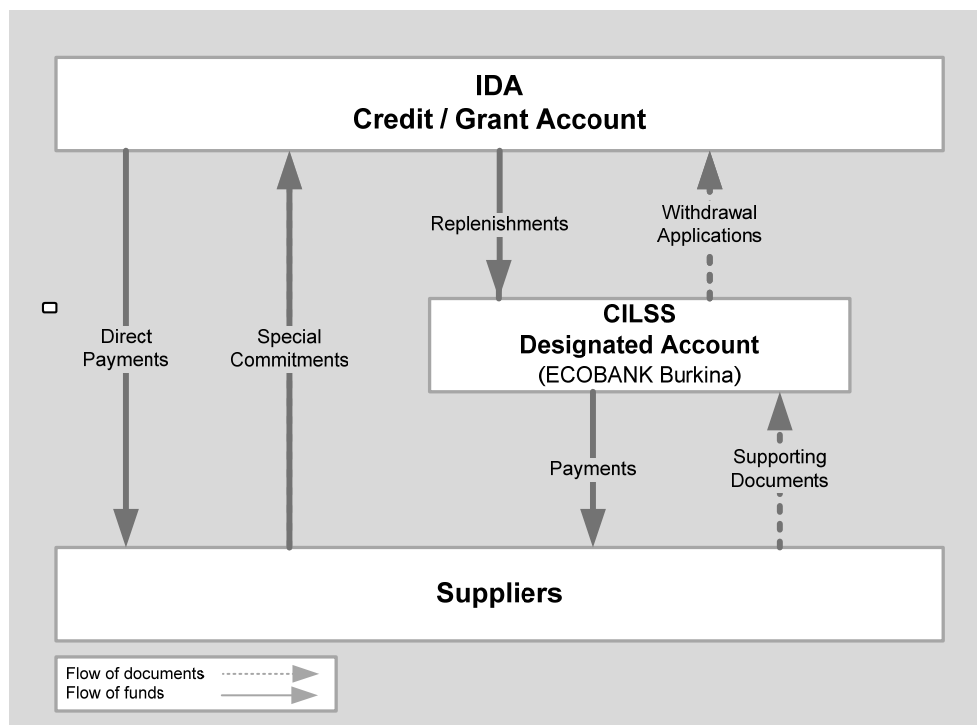


Table A3.13: Eligible Expenditures for participating countries

Expenditure category	Amount Allocated (expressed in USD)						Percentage Expenditures to be financed
	Burkina Faso	Chad	Mali	Mauritania	Niger	Senegal	
(1) Goods, works, non-consulting services, consultants' services, and Incremental Operating Costs for national level activities under Component 1, 2, 3, 4 (except Sub-component 4.2), and 5 (except regional activities financed to CILSS by participating Countries through a subsidiary agreement)	27,341,668	38,632,310	41,531,000	40,433,283	36,455,196	28,389,556	100 %
(2) Goods, works, Incremental Operating Costs, and consultants' services under Component 5 for regional activities financed to CILSS by participating Countries through a subsidiary agreement	1,200,000	1,800,000	1,800,000	1,800,000	1,800,000	1,200,000	100 %
(3) Sub-financing for Sub-projects under Sub- component 4.1/Window B	885,500	3,900,000	1,000,000	2,100,000	6,000,000	-	100 %
(4) Goods, works, non-consulting services, consultants' services, and Incremental Operating Costs for Contingency Emergency Response activities under Sub-component 4.1	-	-	-	-	-	-	100 %
(5) Refund of Preparation Advance	572,832	667,690	669,000	666,717	744,804	410,444	Amount payable pursuant to Section 2.07 of the General Conditions
Total amount (USD)	30,000,000	45,000,000	45,000,000	45,000,000	45,000,000	30,000,000	

Table A3.14: Eligible Expenditures for CILSS

Expenditure category	Amount Allocated (expressed in USD)	Percentage Expenditures to be financed
(1) Goods, works, non-consulting services, consultants' services, Incremental Operating Costs and Training under Component 5	7,000,960	100%
(2) Refund of Preparation Advance	999,040	Amount payable pursuant to Section 2.07 of the General Conditions
Total amount (USD)	8,000,000	

Financial Reporting Arrangements

48. The N-PCU will prepare Interim Financial Reports (IFRs). The format of IFRs includes the following: (i) reports on the sources and uses of funds for the period and cumulatively (year-to-date; project-to-date) and shows budgeted amounts versus actual expenditures, including a variance analysis, by component/activity; (ii) forecast of sources and uses of funds by component/activity; and (iii) reconciliation of advances to the DA. IFRs will be prepared on a quarterly basis reflecting operations of the DA and submitted to the Bank within 45 days after the end of the calendar quarterly period. The ministry in charge of livestock has agreed with the Bank on the format of the IFRs before negotiations.

49. The PCU will also produce the project's Annual Financial Statements, and these statements will comply with SYSCOHADA and World Bank requirements. These Financial Statements will comprise: (i) a Statement of Sources and Uses of Funds which recognizes all cash receipts, cash payments, and cash balances controlled by the PCU; (ii) a Statement of Commitments; (iii) Accounting Policies Adopted and Explanatory Notes; (iv) a Management Assertion that project funds have been expended for the intended purposes as specified in the relevant financing agreements.

Auditing arrangements

50. The Financing Agreement will require the submission of Audited Financial Statements for the project to IDA within six months after year-end. An external auditor with qualifications and experience satisfactory to the World Bank will be recruited to conduct an annual audit of the project's financial statements. A single opinion on the Audited Project Financial Statements in compliance with International Federation of Accountants (IFAC) will be required. The external auditors will prepare a Management Letter giving observations and comments, and providing recommendations for improvements in accounting records, systems, controls and compliance with financial covenants in the grant Agreement.

Financial covenants

51. The Borrower shall establish and maintain a financial management system including records, accounts, and preparation of related financial statements in accordance with accounting standards acceptable to the Bank. The Financial Statements will be audited in accordance with international auditing standards. The Audited Financial Statements for each period shall be furnished to the Association not later than six (6) months after the end of the project fiscal year. The Borrower shall prepare and furnish to the Association not later than 45 days after the end of each calendar quarter, interim un-audited financial reports for the project, in form and substance satisfactory to the Association. The Borrower will be compliant with all the rules and procedures required for withdrawals from the Designated Accounts of the project.

Implementation support plan

52. Based on the outcome of the FM risk assessment, the following implementation support plan is proposed (Table A3.15). The objective of the implementation support plan is to ensure the project maintains a satisfactory FM system throughout the project's life.

Table A3.15: Implementation support plan

FM Activity	Frequency
Desk reviews	
Interim financial reports review	Quarterly
Audit report review of the project	Annually
Review of other relevant information such as interim internal control systems reports	Continuous as they become available
On site visits	
Review of overall operation of the FM system	Semi-annual (Implementation Support Mission)
Monitoring of actions taken on issues highlighted in audit reports, auditors' management letters, internal audit and other reports	As needed
Transaction reviews (if needed)	As needed
Capacity-building support	
FM training sessions	During implementation and as and when needed.

Conclusion of the FM assessment

53. The conclusion of the assessment is that the FM arrangements will meet the Bank's minimum requirements under OP/BP 10.00 once the mitigation measures are implemented. The overall residual risk rating is **substantial**. The implementing entity will ensure that the Bank's Guidelines, "Preventing and Combating Fraud and Corruption in Projects financed by IBRD Loans and IDA Credits and Grants" (revised January 2011), are followed under the project.

Procurement

54. Procurement for the proposed project will be carried out in accordance with the World Bank "Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers," dated January 2011 and updated July 2014; and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credit and Grants by World Bank Borrowers," dated January, 2011 and updated July 2014; and the provisions stipulated in the Legal Agreement. Contract awards will also be published in United Nations Development Business (UNDB), in accordance with the Bank's Procurement Guidelines (para. 2.60) and Consultants Guidelines (para. 2.31).

55. The Borrowers have all developed detailed Procurement Plans for at least the first 18 months which were agreed and finalized at negotiations. Each Procurement Plan will be updated at least once a year for the needs of supervision missions or as required to reflect the actual project implementation needs and improvements in institutional capacity. The various items under different expenditure categories are described in the Procurement Plans. For each contract to be financed by the Grants and the Credit, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame have been agreed between each recipient and the Association and are reflected in the Procurement Plan.

56. Bank Procurement Specialists will participate regularly in implementation support to assist in monitoring of procurement procedures and Procurement Plans.

57. A PIM will be produced and will be submitted to Bank for review. It will define the project's internal organization and its implementation procedures (for each participating country and for CILSS), and will include, among other things, all the relevant procedures for calling for bids, selecting consultants, and awarding contracts.

58. Overall regional coordination will be the responsibility of CILSS. The fiduciary capacities of CILSS (including that of procurement) have been regarded positively by the Bank for small projects, yet while CILSS is recognized for its technical skills, it is felt that there are some limitations to its capacity to provide services to participating countries, and as a result implementation of procurement for each participating country will be handled within each country. The following paragraphs summarize the procurement capacity of each of the individual implementing agencies and CILSS.

CILSS procurement

59. A procurement capacity assessment of CILSS has found that it has a procurement unit established within the financial department. CILSS also uses an established manual of procedures, but the procurement procedures are not well described in the manual and most seriously there are no apparent provisions for resolving complaints. The procurement unit is managed by a Procurement Specialist with a master's degree in Law. This individual previously worked at the former national *Direction Générale des Marchés Publics*, and he has some limited experience in Bank procurement procedures. It is useful to note that CILSS has already implemented projects from other donors like AfDB, USAID, ACDI, EU, GEF, and AFD.

60. *Weaknesses and procurement risk.* The main weaknesses identified during the assessment are (i) the limited experience of the procurement staff of CILSS in the Bank procurement procedures; (ii) the possible termination of the procurement specialist's contract (the loan funding the contract will close early in 2015); and (iii) lack of an acceptable procurement system, including a complaint mechanism. The overall risk for the project is evaluated to be **substantial**.

CILSS procurement plan for the first 18 months (approved April 10, 2015)

ICB= International Competitive Bidding; LIB= Limited International Bidding; NCB= National Competitive Bidding; Shopping; Community Driven Development Procurement; SSS= Single-Source Selection; Semi-Annual Shopping; IC= Individual Consultant; CQS= Selection Based on the Consultants' Qualifications; LCS= Least-Cost Selection; CQSBS= Quality and Cost-Based Selection; FBS= Fixed-Budget Selection; QBS= Quality-Based Selection.

No	Expense Category	Thresholds (Amount in US\$)	Procurement Method	Prior
1	Works	C>=5,000,000	ICB	all contracts
		200,000= <C < 5,000,000	NCB	none
		C<200,000	Shopping	none
		No threshold	SSS	contracts C>=100,000
2	Goods and Services (Non Consulting Services)	C>=1,000,000	ICB	all contracts
		100,000= <C < 1,000,000	NCB	none
		C<100,000	Shopping	none
		For vehicles and gas C< 500,000	Shopping	none
		No threshold	SSS	contracts C>=100,000

3	Consultant Services (Firms)	C>= 200,000	QCBS, QBS, FBS, CQS, LCS	all contracts
		< 200,000	QCBS, QBS, FBS, CQS, LCS	none
		No threshold	SSS	all contracts
	Individual Consultant	C>=100,000	IC – request for Expression of Interest (EOI)	all contracts
		C<100,000	IC (comparison of CV)	none
		No threshold	SSS	all contracts
4	Trainings, Workshops and Study Tours	All contracts	TTL Prior	TTL Prior

1. Goods, Works and Non-Consulting Services

1	2	3	4	5	6	7	8
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Review by Bank (Prior / Post)	Expected Bid-Opening Date
1	Purchase of Vehicle for R-PCU	70,000	Shopping	No	No	Post	July 24, 2015
2	Purchase of Vehicle for RAHC/OIE	22,300	Shopping	No	No	Post	November 29, 2015
3	Purchase of Computer Equipment	62,665	Shopping	No	No	Post	June 14, 2015
4	Office Furniture	46,800	Shopping	No	No	Post	June 14, 2015
5	Purchase of FM and M&E Software (7 licenses for all participating countries and CILSS)	131,000	SSS	No	No	Prior	July 14, 2015
6	Office Supplies	21,060	Shopping	No	No	Post	June 16, 2015
7	Small Rehabilitation Works for R-PCU offices	150,000	Shopping	No	No	Post	June 16, 2015
8	Communication and Visio-conference Equipment for RAHC/OIE	20,000	Shopping	No	No	Post	November 29, 2015
9	Internet satellite contract for RAHC/OIE	26,500	Shopping	No	No	Post	January 25, 2016
10	Supplies and equipment for RAHC/OIE training center	16,000	Shopping	No	No	Post	January 25, 2016
11	Printing didactical material for RAHC/OIE	20,000	Shopping	No	No	Post	January 25, 2016
12	Supply for Vaccine bank PPR (OIE)	100,000	Shopping	No	No	Post	November 29, 2015
13	Supply for Vaccine bank CBPP (OIE)	50,000	Shopping	No	No	Post	November 29, 2015
14	Small Rehabilitation Works for RAHC/OIE offices	10,000	Shopping	No	No	Post	January 15, 2016

2. Consultant Services

1	2	3	4	5	6	7
Ref. No.	Contract Description	Estimated Amount (USD)	Selection Method	Review by Bank (Prior / Post)	Expected Proposals Submission Date	Comments
1	Recruitment of PRAPS Regional Coordinator	119,700	IC (EOI)	Prior	March 20, 2015	Pastoralist profile under recruitment
2	Recruitment of Regional Coordinator for Component 1	102,600	IC (EOI)	Prior	March 20, 2015	Veterinarian under recruitment
3	Recruitment of Regional Coordinator for Component 2	102,600	IC (EOI)	Prior	March 20, 2015	Agro-pastoralist under recruitment
4	Recruitment of Regional Coordinator for Component 3	102,600	IC (EOI)	Prior	March 20, 2015	Socio-economist under recruitment
5	Recruitment of Regional Coordinator for Component 4	102,600	IC (EOI)	Prior	March 20, 2015	Agro-zoo technician under recruitment
6	Recruitment of Procurement Specialist	85,500	IC (EOI)	Prior	March 20, 2015	Under recruitment
7	Recruitment of Financial Management Specialist	85,500	IC (EOI)	Prior	March 20, 2015	Under recruitment
8	Recruitment of Monitoring & Evaluation Specialist	85,500	IC (EOI)	Prior	March 20, 2015	Under recruitment
9	Recruitment of Communication Specialist	85,500	IC (EOI)	Prior	March 20, 2015	Under recruitment
10	Contract for regional study on pastoral household income in the Sahel / <i>pôle pastoralisme et zones sèches</i> - PPZS	87,500	SSS	Prior	October 2014	Ongoing study
11	Recruitment of planning consultant to assist in PIM preparation (6 countries and regional PIMs)	50,000	IC	Post	July 2014	Ongoing contract
12	Recruitment of a consultant for preparation of the regional pastoralism development and support strategy	60,000	IC	Post	December 2014	Ongoing contract
13	External Audit	18,000	IC	Post	February 2016	Year 2016
14	Preparation of M&E integrated data base	20,000	IC	Post	June 2015	
15	Preparation of Consultants data base	6,000	IC	Post	June 2015	

3. Training, Workshops and Study tours

1	2	3	4	6	7
Ref. No.	Training/workshop/study tours description	Estimated Amount (USD)	Duration	Expected date	Comments
1	Training for Information System Administrator	5,000	1 week	June 2015	IT systems and networks

Burkina Faso procurement

61. The public procurement system in Burkina Faso is currently under reform. Following a Country Procurement Assessment Report (CPAR) in 2005, the Council of Ministers adopted the 2005 CPAR Action Plan in March 2006. One of the major actions was to update the 2003 version of the National Procurement Act in light of WAEMU's Regional Guidelines, an action that was also endorsed by the World Bank and included in the CPAR recommendations. The procurement system was further strengthened in 2008 by: (i) the adoption of new procurement procedures; (ii) the creation of the *Autorité de Régulation des Marchés Publics*, including the *Commission de Règlement des Litiges à l'Amiable* (transformed in 2010 to *Commission de Règlement des Différends*), which is in charge of procurement policy and complaints; and (iii) the deployment of procurement specialists away from a centralized approach to key ministries.

62. The national standard bidding documents were finalized and published in July 2009. The Bank is working with the government to identify the inconsistencies with the Bank's standard bid documents in order to recommend some exceptions to the NCB method, to facilitate Bank investment operations. Until the NCB documents are finalized and acceptable to the Bank, the Bank ICB documents should be adapted for all NCBs, and the adapted version should be cleared by the Bank.

63. To reduce the number of controls and delays during the treatment of bidding documents, in 2012 the Ministry of Economy and Finances decided to combine the Directory of Financial Control and the Directory of Procurement into one unit called *Direction Générale du Contrôle des Marchés et des Engagement Financiers*.

64. The Ministry of Animal Resources (MRA) will have to be responsible for implementing PRAPS in Burkina. The project is classified as category A, meaning that: (i) a PCU will be created in the MRA and (ii) a civil servant will be nominated as project coordinator. However, depending on existing capacity, the PCU may be strengthened with recruited staff.

65. The procurement assessment conducted in the MRA noted that this ministry has a Procurement Department (the *Direction des Marchés Publics*, DMP), which supervises all procurement activities of the MRA. The DMP is particularly responsible for: (i) finalizing procurement documents prepared by the Financial Department or the technical structures; (ii) preparing the advertisement notices; and (iii) presiding over tender committees and drafting contracts for approval. The tender committee comprises both internal and external members. The DMP has three sub-departments, but each department is staffed with only one procurement specialist with very limited experience in Bank procurement procedures.

66. The procurement assessment shows that: (i) the DMP is not sufficiently staffed and is overloaded; (ii) the existing staff have limited qualifications, limited procurement skills, and insufficient experience in Bank procurement procedures; (iii) the DMP is located in a small office space, with limited office furniture and equipment; (iv) the Tender committee is not trained in the Bank procurement procedures; (v) there are significant time delays in the procurement process; and (vi) the filing system in place is not acceptable.

Burkina Faso procurement plan for the first 18 months (approved April 10, 2015)

ICB= International Competitive Bidding; LIB= Limited International Bidding; NCB= National Competitive Bidding; Shopping; Community Driven Development Procurement; SSS= Single-Source Selection; Semi-Annual Shopping; IC= Individual Consultant; CQS= Selection Based on the Consultants' Qualifications; LCS= Least-Cost Selection; CQSBS= Quality and Cost-Based Selection; FBS= Fixed-Budget Selection; QBS- Quality-Based Selection.

No	Expense Category	Thresholds (Amount in US\$)	Procurement Method	Prior
1	Works	C>=5 000,000	ICB	All contracts
		200,000= <C < 5 000,000	NCB	none
		C<200,000	Shopping	none
		No threshold	SSS	contracts C>=100,000
2	Goods and Services (Non Consulting Services)	C>=1,000,000	ICB	All contracts
		100,000= <C < 1,000,000	NCB	none
		C<100,000	Shopping	none
		For vehicles and gas C<500,000	Shopping	none
		No threshold	SSS	contracts C>=100,000
3	Consultant Services (Firms)	C>= 200,000	CQSBS, QBS, FBS, LCS	contracts C>=500,000
		< 200,000	CQS	none
		No threshold	SSS	contracts C>=100,000
	Individual Consultant	C>=100,000	IC – request for Expression of Interest	contracts C>=200,000
		C<100,000	IC (comparison of CV)	none
		No threshold	SSS	contracts C>=100,000

1. Goods

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1	Operating Costs for Vehicles (fuel, maintenance,...)	82,200	SSS	No	No	Post	October 30, 2015	Year 1. Unit costs are fixed in Burkina Faso
2	Satellite imagery for rangeland monitoring	50,200	SSS	No	No	Post	December 03, 2015	Images are produced by public entities
3	Air time for 80 radio programs on LORP	12,800	SSS	No	No	Post	November 30, 2015	Local radios. 40 in year 1 and 40 in year 2
4	Air time for 13 radio & TV spots about SIM-B	13,000	SSS	No	No	Post	January 2016	Local radios. Livestock trade information

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
5	Purchase of Vehicles: 43 motorcycles, 6 pick-up 4x4 trucks, 3 4x4 station wagon, 1 city car, and 1 temperature controlled pick-up	808,200	NCB	No	No	Prior (first NCB)	December 03, 2015	Temperature controlled pick-up for vaccines
6	Purchase of solar kits for veterinary posts, veterinary utensils and surveillance equipment	386,800	NCB	No	No	Post	February 14, 2016	Veterinary utensils include vaccination material
7	Purchase of Computer and Office Equipment	267,520	NCB	No	No	Post	September 2015	Including maintenance
8	Staff insurance	120,000	NCB	No	No	Post	September 2015	Year 1
9	Purchase of cold chain equipment	112,200	NCB	No	No	Post	September 2015	30 refrigerators, 30 freezers, 60 coolers and 120 gas tanks
10	Purchase of small office and computer goods	101,000	NCB	No	No	Post	October 2015	Years 1 and 2
11	Printing of 10,000 copies of document on legal context of pastoralism	56,000	Shopping	No	No	Post	November 2015	
12	Equipment for specialized operator	33,000	Shopping	No	No	Post	June 2015	
13	Office Furniture	30,000	Shopping	No	No	Prior	January 2016	
14	Equipment for animal identification (6 units)	30,000	Shopping	No	No	Prior	November 2015	For vaccination campaigns
15	Communication equipment	30,000	Shopping	No	No	Prior	December 2015	Year1 and 2
16	IT Equipment for SIM-B (livestock trade information system)	14,500	Shopping	No	No	Prior	June 2016	50 smartphones and 5 tablets
17	Database management software and training	16,000	Shopping	No	No	Prior	November 2015	For veterinary services and pastoral hydraulic infrastructure management
18	Purchase of 50 "compteurs Beta"	1,750	Shopping	No	No	Prior	February 2016	For veterinary surveillance network
19	Purchase of equipment for PCU	6,000	Shopping	No	No	Prior	October 2015	

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
20	Office cleaning & maintenance	2,400	Shopping	No	No	Prior	November 2015	Year 1

2. Works

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1	Construction and equipment of 10 new live animal markets	1,500,000	NCB	No	No	Post	June 2016	
2	Drilling of 22 boreholes	1,166,000	NCB	No	No	Post	April 2016	
3	Construction/rehabilitation of 7 “ <i>boulis</i> ”	462,000	NCB	No	No	Post	September 2016	Open water reservoirs
4	Rehabilitation of 5 live animal markets, including water access, civil engineering, offices, warehouse,...	400,000	NCB	No	No	Post	June 2016	Upgrading to appropriate standards
5	Construction of 10 vaccination pens	360,000	NCB	No	No	Post	June 2016	
6	Construction/rehabilitation of 15 small milk collecting/processing units	300,000	NCB	No	No	Post	June 2016	
7	Construction of 5 veterinary posts	300,000	NCB	No	No	Post	June 2016	60 square meters per post
8	Rehabilitation of 25 veterinary posts	250,000	NCB	No	No	Post	June 2016	
9	Construction of PRAPS-PCU offices	263,900	NCB	No	No	Post	February 2016	
10	Small works for 30 livestock rest areas	240,000	NCB	No	No	Post	November 2016	
11	Small works for the rehabilitation of 1000 ha degraded pasture land	140,000	Shopping	No	No	Post	November 2016	Soil conservation techniques
12	Rehabilitation (digging) of 2 existing “ <i>mares</i> ”	148,000	Shopping	No	No	Post	November 2016	Open water points
13	Construction/rehabilitation of 10 slaughtering areas	100,000	Shopping	No	No	Post	May 2016	Including water access
14	Rehabilitation of 3 sub-regional offices	30,000	Shopping	No	No	Post	May 2016	

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
15	Small works on 100 km of rural dirt roads	50,000	Shopping	No	No	Post	November 2016	

3. Consultant Services

1	2	3	4	5	6	7
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Comments
1	Communication consultant for 20 NRM sketches and other communication products	130,000	IC	Prior	January 2016	10 sketches in year 1 and 10 in year 2
2	Consultant firm for GIS training (executive and technical staff)	60,000	CQS	Post	January 2016	
3	Consultant firm for elaboration of the National Pastoral Hydraulics Strategy	80,000	CQS	Post	February 2016	
4	Consultant firm for training executive and technical staff on a wide number of subjects, including Livestock Emergency Support Standards, Management of Pastoral Activities, and alphabetization	180,200	CQS	Post	September 2016	Staff from MRA, SAP, SE/CNSA, NGOs and POs
5	Consultancy firm for a capitalization study on Pastoralism Crisis Indicators	30,000	CQS	Post	March 2016	
6	Consultancy firm to elaborate a Pastoral Crisis Management Plan	48,000	CQS	Post	July 2015	
7	Communications agency for various communication products including TV spots, radio transmissions, and printed material	149,000	CQS	Post	February 2016	
8	Consultancy firm for the creation of a Pastoral Infrastructure database	30,000	CQS	Post	November 2015	Years 1 and 2
9	Consultant for the preparation of Pastoral Infrastructure Technical Specifications	7,980	IC (3CV)	Post	November 2015	
10	Communication for the conception of posters and local language radio programs	24,000	IC (3CV)	Post	January 2016	Radio programs on LORP
11	SIM-B enhancement (livestock trade information system)	8,000	IC (3 CV)	Post	November 2015	
12	Translation of major national and regional rules into local languages	6,400	IC (3 CV)	Post	March 2016	
13	External Auditor	60,000	LCS	Post	November 2015	Years 1, 2 and 3
14	Study on Auxiliary Veterinary staff	54,000	IC (3CV)	Post	February 2016	
15	Diagnostic study for location of private veterinary services	54,000	IC (3CV)	Post	February 2016	
16	Evaluation study of past implementation of "Veterinary Mandates"	54,000	IC (3CV)	Post	March 2016	
17	Design of a PPR/CBPP Emergency Plan	1,600	IC (3CV)	Post	January 2016	
18	Specialized consultant for livestock keepers Information & Training	36,000	IC (3CV)	Post	February 2016	
19	Reporting on various technical initiatives	4,000	IC (3CV)	Post	September 2016	Years 1 and 2

1	2	3	4	5	6	7
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Comments
20	Technical studies for construction works of PRAPS-PCU offices and the monitoring of construction works	60,700	IC (3CV)	Post	September 2015	
21	Production of a set of 5 manuals on existing rules referring to pastoralism	20,000	IC (3CV)	Post	March 2016	

4. **Recruitment of specialized Technical Assistance (“Maitres d’Ouvrage Délégués - MOD)**

1	2	3	4	5	6	7
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Comments
1	TA-MOD for technical and methodological assistance in the identification of 16 multi-village pastoral areas (zoning, materialization and cartography)	707,380	SSS	Prior	November 2015	Includes negotiation with communities
2	TA-MOD for pastoral infrastructure design and implementation (pastoral roads, livestock rest areas, slaughtering areas)	530,000	QCBS	Prior	November 2015	
3	TA-MOD for construction/rehabilitation of live animal markets, vaccination pens, pastoral water points, small size processing units, and civil engineering (veterinary posts and sub-regional PRAPS-PCU offices)	4,883,000	QCBS	Prior	November 2015	

Chad procurement

67. A Country Procurement Assessment Report (CPAR) for Chad carried out in 1993 and 2000, and the audit of five large contracts undertaken by the Audit Office of the Supreme Court in 2002, highlighted the dysfunctions of the procurement systems in Chad. Based on the recommendations made in these reports, the government, with technical and financial support from the World Bank, undertook procurement reforms, and a new Procurement Code was published in December 2003. The Procurement Code and its implementation decrees took into account most of the recommendations of the CPAR. The Code, in Line 2 of Article 5, recognizes the primacy of international agreements in the event of a conflict with the provisions of the Code and the implementation decrees. The present key deficiencies of the national procurement system include: (i) the requirement that foreign bidders have to associate with national bidders or subcontract to national bidders; (ii) the obligation for all bidders (national and foreign alike) to obtain a qualification certificate prior to the submission of a bid; and (iii) a cumbersome procedure for the award and signature of contracts, involving the Minister of Finance and President of the Republic in contracts of relatively low value.

68. The deficiencies have been extensively discussed with the government during the appraisal mission, and their rectification in the Code and the national procurement regulations is part of the broader governance dialogue. Due to this situation, the Bank team has proposed the following

measures to facilitate the speedy implementation of project activities: (i) report to the Country Manager any procurement issues/problems; (ii) accelerate all procurement activities in the Procurement Plan; and (iii) ensure close procurement supervision.

69. A procurement capacity assessment of the Ministry of Livestock and Hydraulics was carried out during the pre-appraisal mission. This assessment revealed that a body in charge of opening and awarding bids (*Commission d'Ouverture et de Jugement des Offres* – COJO) exists in the Ministry of Livestock. It has the following members:

- The General Secretary of the Ministry of Pastoral Development and Animal Productions – President.
- The Representative of MEP – Vice-President – Member.
- The Procurement Specialist of the Procurement Unit (*Service de Passation des Marchés*) of the Ministry of Livestock – Member.
- The Director of Financial Control in Ministry of Finance and Budget – Member.
- The Public Procurement Body – Observer.

70. In addition to the COJO, there is a Procurement Unit (*Service de Passation des Marchés*) in the Ministry of Livestock, which prepares and monitors all procurement activities. The unit is staffed with two staff who are not familiar with World Bank procurement procedures. This unit also provides services to the secretariat of COJO. The assessment did not reveal any anomaly in the functioning of COJO. The submission of evaluation reports by the sub-commission in charge of bids evaluation normally does not exceed one week, and COJO rules on the evaluation report within three days. However, certain deficiencies that may affect project implementation were reported during the assessment, including: (i) slow process for contract validation and approval; (ii) insufficient number of staff in the Procurement Unit (only two staff); and (iii) insufficiency of World Bank procurement training for the two staff working in the Procurement Unit. To address these deficiencies, the project will: (i) ensure that the Ministry of Livestock will increase the number of staff with two additional staff; (ii) ensure that World Bank procurement training is provided at the specialized Regional Procurement Training Centers to these staffs; and (iii) anticipate all procurement activities in the Procurement Plan. Table A3.13 lists actions to be carried out for strengthening procurement capacities in the Procurement Unit of the Ministry of Livestock.

Chad procurement plan for the first 18 months (approved April 10, 2015)

ICB= International Competitive Bidding; LIB= Limited International Bidding; NCB= National Competitive Bidding; Shopping; Community Driven Development Procurement; SSS= Single-Source Selection; Semi-Annual Shopping; IC= Individual Consultant; CQS= Selection Based on the Consultants' Qualifications; LCS= Least-Cost Selection; QCBS= Quality and Cost-Based Selection; FBS= Fixed-Budget Selection; QBS- Quality-Based Selection.

No	Expense Category	Thresholds (Amounts in US\$)	Procurement Method	Prior Review
1	Works, All inclusive Contracts and Goods and Installation Assembly Contracts	≥ 10,000,000	ICB	All Contracts ≥ US\$5,000,000
		< 10,000,000	NCB	First contract and any other contract identified in Procurement Plan
2	Goods and Equipment	≥ 1,000,000	ICB	All Contracts ≥ US\$500,000
		< 1,000,000	NCB	First contract and any other contract identified in Procurement Plan
3	Goods, and Basic Products found locally	< 200 000	Shopping	None
4	Simple Civil Engineering Works	< 300 000	Shopping	None
5	Works, Good and Services (Non Consulting-Services)	No threshold	SSS	All Contracts
6	Consultant Services (Firms)	≥ 200,000	QBS, QCBS	All Contracts, First contract under each method regardless of amount, all audit contract and any other contract identified in Procurement Plan
		< 200 000	QCBS, QBS, FBS, CQS, LCS	None
7	Individual Consultants	≥ 100,000	IC – request for Expression of Interest (EOI)	All Contracts, First Individual Consultant contract regardless of amount, all audit contract and any other contract identified in Procurement Plan
		< 100,000	IC (comparison of CVs)	None
8	Firms and Individual Consultants	No threshold	SSS	All Contracts

1. Goods

1	2	3	4	5	6	7	8	9
N°	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1	Purchase of 16 vehicles (4X4) and 176 motorcycles	1,644,600	ICB	No	No	Prior	January 28, 2016	
2	Equipment (Computers, Communication, Communication Kits)	362,100	NCB	No	No	Post	November 28, 2015	Including SIPSA
3	Purchase of 2,000,000 doses of vaccines against CBPP and PPR	201,362	LIB	No	No	Prior	January 28, 2016	
4	Purchase of Cold Chain Equipment (freezers, containers, coolers)	149,200	Shopping	No	No	Post	March 30, 2016	
5	Veterinarian Kits and Sampling / Vaccination Kits	50,900	Shopping	No	No	Post	March 30, 2016	
6	Office Furniture for PCU and regional Offices	127,700	Shopping	No	No	Post	July 25, 2015	

1	2	3	4	5	6	7	8	9
N°	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
7	Power Generator	32,300	Shopping	No	No	Post	July 25, 2015	
8	Data Management Software	43,000	Shopping	No	No	Post	November 28, 2015	for SIPSA and DSV

2. Works

1	2	3	4	5	6	7	8	9
N°	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1	Rehabilitation of PCU offices	291,800	Shopping	No	No	Post	September 16, 2015	
2	Construction of 30 vaccination pens	601,080	NCB	No	No	Post	June 02, 2016	

3. Consultant Services

1	2	3	4	5	6	7
Ref	Description	Estimated Costs (USD)	Procurement Method	Bank Review (Prior/Post)	Expected Bid-Opening Date	Comments/
Component 1						
1	Drafting of an CBPP/PPR Emergency Plan	32,400	IC	Post	December 24, 2015	
2	Diagnosis and drafting of Recommendations on cold chain at regional level	20,000	IC	Post	September 20, 2015	
3	Drafting of a strategy and vaccination planning	20,000	IC	Post	September 20, 2015	
4	Recruitment of Technical Assistance for DSV	399,000	QCBS	Prior	February 28, 2016	
Components 2 and 3						
5	Study on the potential of drinking water in pastoral areas	92,200	CQS	Post	December 24, 2015	
6	Technical Study on infrastructure in loose sands and bedrock	150,500	CQS	Post	December 24, 2015	
7	Specification and mapping of PRAPS pasture and pastoral areas	20,400	IC	Post	December 24, 2015	methodological support from CILSS
8	Drafting of an harmonized data collection guide	20,000	IC	Post	October 20, 2015	
9	Economic and Environmental Feasibility Study of Pastoral Stations	20,000	IC	Post	December 20, 2015	
10	Technical Assistance in civil engineering and pastoral resource management (components 1, 2, 3)	1,785,000	QCBS	Prior	February 28, 2016	
11	Diagnosis for rehabilitated markets (infrastructure and management procedures), capitalization of results / good practices in market management and rehabilitation	30,100	IC	Post	December 24, 2015	

12	NGOs for community and Producer Organization Support	1,095,000	CQS	Prior	February 28, 2016	
Component 4						
13	Drafting of an implementation manual for emergency response and recovery program (IRM-OM)	40,000	IC	Post	February 28, 2016	
Component 5						
14	Recruitment of International Technical Assistance to support Project Implementation (planning, methodology...)	915,000	QCBS	Prior	February 28, 2016	
15	Technical Study for the rehabilitation of offices	70,000	CQS	Post	December 24, 2015	

Mali procurement

71. The World Bank team undertook a procurement assessment of the central unit of the Ministry of Rural Development (MDR) in charge of procurement. The Direction des Finances et du Matériel (DFM), established within and under the responsibility of the MDR, is the service dedicated to all procurement activities inside this ministry.

72. The assessment has revealed a number of weaknesses, including: (i) the absence of a manual of procedures within *Direction des Finances et du Matériel* (DFM); (ii) the lack of proficient procurement personnel to implement procurement actions in line with Bank procedures; (iii) the high-level staff within the PCU and the MDR responsible for process control and approval are not familiar with Bank procurement procedures; (iv) the risk of the PCU staff which is composed of civil servants to be influenced and pressured from their hierarchy; (v) the inadequate communication and interaction between the Technical Directorates and the PCU on the one hand, and between the PCU and the DFM on the other hand, which may lead to delays in the drafting of terms of reference or technical specifications and poor estimation of the costs; and (vi) the lack of adequate space and material dedicated to documents to be archived.

73. Furthermore, the World Bank's procurement experience in Mali has shown that significant delays have been experienced in procurement processing, with a significant part of the time spent on the preparation of procurement documents (Bidding Documents, Request For Proposals, Bidding Evaluation Reports, and Technical Evaluation Reports of proposals tend to be of poor quality), although most delays are experienced in contract award and the signature process within the government.

74. The N-PCU, comprising civil servants, has been set up during the project preparation phase and an MoU will be signed with the PCU to manage fiduciary aspects of the projects. However, it is still required to hire an experienced procurement specialist skilled in Bank procurement procedures to coordinate procurement activities. The procurement specialist, as a member of the PCU, will take part in the daily management, implementation, administration, project coordination, and M&E of the project.

75. The procurement specialist's main tasks will be: (i) preparing and/or submitting procurement documents which require World Bank review and/or clearance; (ii) contributing to the preparation of annual work plans and budgets, semi-annual and annual progress reports, and mid-term and completion review reports; and (iii) updating and implementing the Procurement Plan, and submitting it to the World Bank.

Mali procurement plan for the first 18 months (approved April 10, 2015)

ICB= International Competitive Bidding; LIB= Limited International Bidding; NCB= National Competitive Bidding; Shopping; Community Driven Development Procurement; SSS= Single-Source Selection; Semi-Annual Shopping; IC= Individual Consultant; CQS= Selection Based on the Consultants' Qualifications; LCS= Least-Cost Selection; QCBS= Quality and Cost-Based Selection; FBS= Fixed-Budget Selection; QBS- Quality-Based Selection.

No	Expense Category	Thresholds (Amount in US\$)	Procurement Method	Prior Review
1	Works	C ≥ 15,000,000	ICB	All contracts
		200,000 = <C < 15,000,000	NCB	All contracts
		C < 200,000	Shopping	none
		No threshold	SSS	All contracts
2	Goods and Services (Non Consulting Services)	C ≥ 3,000,000	ICB, LIB	All contracts
		100,000 = <C < 3,000,000	NCB	All contracts
		C < 100,000	Shopping	none
		No threshold	SSS	contracts C ≥ 100,000
3	Consultant Services (Firms)	C ≥ 500,000	QCBS, QBS, FBS, CQS, LCS	All contracts
		C < 500,000	QCBS, QBS, FBS, CQS, LCS	none
		No threshold	SSS	All contracts
	Individual Consultant*	C ≥ 100,000	IC with request for Expression of Interest	All contracts
		C < 100,000	IC (comparison of CV)	none
		No threshold	SSS	All contracts

*Consultant contracts for specific duties, such as for PIM preparation, M&E, Financial management, Auditing, Procurement management, Environmental & Social safeguards, Legal matters, are all subject to Prior Review. Pursuant to paragraph 2.7 of Bank Procurement guidelines for the selection of consultants, a shortlist of national consulting firms may be set-up for consultant services contracts of a value less than US\$200,000.

1. Works

1	2	3	4	5	6	7	8	9
Ref No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1	Rehabilitation of PCU central and sub-regional offices	49,000	Shopping	No	No	Post	July 23, 2015	
2	Construction of 500 km firewalls for securing pastoral land	328,800	Shopping	No	No	Post	February 20, 2016	

2. Goods

1	2	3	4	5	6	7	8	9
Ref No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1	Purchase of Vehicles (4x4 station wagon)	48,600	Shopping	No	No	Post	January 30, 2016	Veterinary Services
2	Office furniture	18,800	Shopping	No	No	Post	March 11, 2016	Veterinary Services
3	Computer equipment (WIFI and projection equipment)	81,800	NCB	No	No	Post	March 30, 2016	
4	Office equipment (copiers and printers)	24,700	Shopping	No	No	Post	February 09, 2016	Veterinary Services
5	Purchase of Vehicles (4x4 station wagon)	48,600	Shopping	No	No	Post	January 30, 2016	
6	Computer equipment for 6 duty stations	25,900	Shopping	No	No	Post	September 30, 2015	Veterinary Services
7	Cold Chain equipment (refrigerators, freezers, vaccine containers)	144,300	NCB	No	No	Post	March 02, 2016	Equipment for Sub-regional level
8	Veterinary equipment (utensils kits and coolers)	237,600	NCB	No	No	Post	January 21, 2016	Equipment for Sub-regional level
9	Communications and other equipment (cellphones, solar panels, GPS)	212,400	NCB	No	No	Post	January 16, 2016	Equipment for Sub-regional level
10	Purchase of Vehicles (13 pick-up trucks 4x4)	651,000	ICB	No	No	Prior	October 24, 2016	
11	Purchase of boating equipment	37,000	Shopping	No	No	Post	March 20, 2016	
12	Computer equipment for 16 duty stations	46,500	Shopping	No	No	Post	June 30, 2015	
13	40 Cellphones and user credit	36,500	Shopping	No	No	Post	July 10, 2015	
14	Office furniture (15 units)	104,300	NCB	No	No	Post	March 15, 2016	
15	Purchase of 110 Motorcycles	660,600	ICB	No	No	Post	April 17, 2016	
16	Purchase of 42 solar refrigerators	326,500	NCB	No	No	Post	June 11, 2016	
17	Purchase of (1) laboratory vehicle	114,500	NCB	No	No	Post	July 14, 2016	For vaccination campaigns
18	Purchase of 40 burners	31,400	Shopping	No	No	Post	March 11, 2016	For vaccination campaigns
19	Editing of trimestral information bulletins	12,000	Shopping	No	No	Post	April 04, 2016	Communication with herders

1	2	3	4	5	6	7	8	9
Ref No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
20	Travel tickets for study tours	29,400	Shopping	No	No	Post	October 25, 2016	10 tickets
21	Equipment for Producer Organization	19,000	Shopping	No	No	Post	April 25, 2016	Capacity building
22	Purchase of (1) vehicle	48,600	Shopping	No	No	Post	March 25, 2016	For Component 4
23	Purchase of equipment for coordination of Component 4	193,100	NCB	No	No	Post	October 16, 2016	
24	Purchase of equipment for Producer Organizations (20)	384,900	NCB	No	No	Post	April 12, 2016	Component 4
25	Preparation of Annual pastoral crisis analysis report	47,800	Shopping	No	No	Post	May 20, 2016	Component 4
26	Preparation and dissemination of pastoral crisis information bulletins	48,600	Shopping	No	No	Post	May 16, 2016	Component 4
27	Purchase of various computer equipment for PCU	48,600	Shopping	No	No	Post	June 09, 2015	For 25 duty stations
28	Purchase of Communication equipment for PCU	18,400	Shopping	No	No	Post	May 30, 2015	
29	Purchase of office furniture for PCU	48,600	Shopping	No	No	Post	May 25, 2015	
30	Purchase of (2) vehicles 4x4 station wagon	168,600	NCB	No	No	Post	September 16, 2015	
31	Purchase of (5) vehicles 4x4 pick-up	352,000	NCB	No	No	Post	September 13, 2015	
32	Purchase of air conditioning units for PCU	39,200	Shopping	No	No	Post	June 17, 2015	
33	Purchase of power generators for PCU	47,100	Shopping	No	No	Post	November 14, 2015	250 KVA
34	Maintenance / cleaning of PCU offices	19,600	Shopping	No	No	Post	November 30, 2015	Central and Sub-regional
35	Security services for PCU offices	19,600	Shopping	No	No	Post	November 30, 2015	Central and Sub-regional
36	Office decoration for PCU offices	9,800	Shopping	No	No	Post	February 16, 2016	Central and Sub-regional
37	Office supplies for PCU	39,200	Shopping	No	No	Post	May 30, 2015	Central and Sub-regional

1	2	3	4	5	6	7	8	9
Ref No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
38	Purchase of FM, M&E and Procurement software	49,000	Shopping	No	No	Post	July 15, 2015	
39	PRAPS Website	29,400	Shopping	No	No	Post	May 30, 2015	
40	Computer, communication and internet equipment maintenance	29,400	Shopping	No	No	Post	March 01, 2016	
41	Printing of PRAPS PCU material	23,500	Shopping	No	No	Post	November 16, 2015	
42	Maintenance of vehicles	19,600	Shopping	No	No	Post	November 09, 2015	
43	Spare parts for vehicles	9,800	Shopping	No	No	Post	July 30, 2016	Tires
44	Purchase of newspapers and magazines for PCU	5,900	Shopping	No	No	Post	November 30, 2015	

3. Consultant Services

1	2	3	4	5	6	7
Ref No.	Contract Description	Estimated Amount (USD)	Procurement Method	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1	Technical assistance (national)	24,500	IC	Prior	October 2015	50 days
2	Technical studies and works supervision for rehabilitation of (17) veterinary border posts	39,200	QCBS	Post	September 02, 2015	
3	Technical studies and works supervision for construction of (6) veterinary border posts	39,200	QCBS	Post	September 02, 2015	
4	Technical studies and works supervision for the rehabilitation of PCU offices	39,200	IC	Post	September 15, 2015	Central and sub-regional offices
5	Recruitment of a firm for support to mobile mixed health teams	83, 100	CQS	Post	December 22, 2015	Human and animal health in northern Mali
6	Study for (30) NRM management schemes	367, 300	QCBS	Post	April 16, 2016	
7	Preparation of MoUs for pastoral land management	153,100	QCBS	Post	April 13, 2016	
8	Setting-up of conflicts and NRM observatory	53,300	QCBS	Post	April 18, 2016	
9	Water availability prospective study for NRM planning	77,500	QCBS	Post	August 23, 2016	
10	Training of producer organizations on management & maintenance of pastoral hydraulics infrastructure	528,600	QCBS	Post	March 03, 2016	55 training sessions

1	2	3	4	5	6	7
Ref No.	Contract Description	Estimated Amount (USD)	Procurement Method	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
11	Financial sustainability mechanism for Pastoral hydraulics infrastructure maintenance	394,900	QCBS	Post	March 03, 2016	
12	Strategic plan for Producers Organization technical capacity building	38,000	IC	Post	May 25, 2015	
13	Study on enhancement of analytical tools for Component 4	58,400	QCBS	Post	May 04, 2016	
14	Study on Pastoral Crisis definition	58,400	QCBS	Post	May 09, 2016	Component 4
15	Study on beneficiary targeting	58,400	QCBS	Post	May 14, 2016	Component 4
16	Inventory of local feed complement possibilities	58,400	QCBS	Post	May 19, 2016	Component 4
17	Assessment of crisis operators (window A)	58,400	QCBS	Post	May 23, 2016	Component 4
18	Preparation of training material for youth and producer organizations	58,400	QCBS	Post	May 28, 2016	Component 4
19	Inventory of vocational training offer	58,800	QCBS	Post	June 02, 2016	Component 4
20	Study of innovative training sessions	58,800	QCBS	Post	June 07, 2016	Component 4
21	Preparation of PIM	11,500	IC	Prior	May 25, 2015	M&E section
22	Preparation of PIM	11,500	IC	Prior	May 25, 2015	Administrative and fiduciary section
23	Communication strategy and action plan	7,600	IC	Post	August 30, 2015	
24	Audit	37,800	QCBS	Prior	August 18, 2015	PPA and Year 2016
25	PCU Technical Director	70,600	IC	Prior	August 30, 2015	Deputy to National Coordinator - pastoralist
26	PCU administrative & financial officer	61,200	IC	Prior	August 30, 2015	
27	PCU Procurement specialist	61,200	IC	Prior	August 30, 2015	
28	Internal auditor	61,200	IC	Prior	September 30, 2015	
29	PCU M&E specialist	61,200	IC	Prior	August 30, 2015	
30	PCU Gender specialist	61,200	IC	Prior	August 30, 2015	
31	PCU communication specialist	61,200	IC	Prior	August 30, 2015	
32	PCU Component 1 specialist	61,200	IC	Prior	August 30, 2015	Animal health
33	PCU Component 2 specialist	61,200	IC	Prior	August 30, 2015	NRM

1	2	3	4	5	6	7
Ref No.	Contract Description	Estimated Amount (USD)	Procurement Method	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
34	PCU Component 3 specialist	61,200	IC	Prior	August 30, 2015	Market development
35	PCU Component 4 specialist	61,200	IC	Prior	August 30, 2015	Pastoral crisis management
36	PCU safeguards specialist	61,200	IC	Prior	August 30, 2015	Environmental & Social
37	PCU Accountant	37,600	IC	Prior	August 30, 2015	
38	PCU Procurement assistant	37,600	IC	Prior	August 30, 2015	
39	PCU Accounting assistant	37,600	IC	Prior	August 30, 2015	
40	Executive assistants (2)	21,200	SSS	Prior	July 08, 2015	
41	Administrative & Financial assistants (3)	28,200	SSS	Prior	August 06, 2015	Sub-regional level
42	M & E Assistants (3)	28,200	SSS	Prior	October 30, 2015	Sub-regional level
43	Executive assistants (3)	28,200	SSS	Prior	July 12, 2015	Sub-regional level
44	PCU Administrative assistants (3)	18,800	SSS	Prior	July 27, 2015	
45	PCU drivers (5)	29,412	SSS	Prior	July 22, 2015	Central and sub-regional levels

Mauritania procurement

76. The Mauritanian Procurement Code is regulated by Law No 2010-044 of July 22, 2010 and its accompanying regulations (several decrees and by-laws issued by the Prime Minister and MAED). This code was developed and reviewed with IDA assistance. In general, it is considered that the country's procurement procedures do not conflict with the Bank Guidelines.

77. A procurement assessment was carried out for the Ministry of Livestock (ME), particularly the N-PCU, anchored in the ME, which will be charged with all project procurement activities. The assessment reviewed the organizational structure for project implementation and the interaction between staff responsible for procurement and other relevant technical units of others ministries that will be benefit from project activities. The ME is a very recent structure created in August 2014¹¹⁴ and has no experience in IDA-specific procurement procedures. However, the PCU, which will be in charge of implementing PRAPS, has gained extensive experience in implementing Bank projects through PDIAIM I and II.¹¹⁵

78. The keys risks for procurement are: (i) inadequate capacity of ME staff in procurement practice and knowledge of Bank procurement policies and procedures, and inadequate capacity of the

¹¹⁴ Decree No.184 of August 21, 2014.

¹¹⁵ *Programme de Développement Intégré de l'Agriculture Irriguée en Mauritanie.*

Ministry's Tender Committee to handle the volume of procurement under the project; (ii) possible delays in the procurement process and poor quality of contract deliverables; and (iii) absence of clear procedure for contracts with amounts below the threshold of the law (US\$33,000). Mitigation measures indicated in the Table A3.13 will be put in place to address such risks.

Mauritania procurement plan for the first 18 months (approved April 10, 2015)

ICB= International Competitive Bidding; LIB= Limited International Bidding; NCB= National Competitive Bidding; Shopping; Community Driven Development Procurement; SSS= Single-Source Selection; Semi-Annual Shopping; IC= Individual Consultant; CQS= Selection Based on the Consultants' Qualifications; LCS= Least-Cost Selection; QCBS= Quality and Cost-Based Selection; FBS= Fixed-Budget Selection; QBS- Quality-Based Selection.

No.	Expense Category	Thresholds (Amount in US\$)	Procurement Method	Prior Review
1.	Works	$C \geq 10,000,000$	ICB	All Contracts
		$< 10,000,000$	NCB	All Contracts $> 5,000,000$ and others on a Case-by-Case basis
		$< 100,000$	Shopping	Case by Case
		No threshold	SSS	All Contracts
2.	Goods and Services (Non Consulting Services)	$C \geq 1,000,000$	ICB	All Contracts
		$< 1,000,000$	NCB	All Contracts $> 500,000$ and others on a Case-by-Case basis
		$< 50,000$	Shopping	Case by Case
		No threshold	SSS	All contracts
3.	Consultant Service (Firms)	No threshold	QCBS, QBS, FBS, LCS	All Contract with estimated value above or equal US\$ 200,000; All financial audit or procurement audit contracts
		$< 300,000$	CQS	All CQS Shortlist Contracts and all Contract with estimated value above or equal US\$ 200,000
		No threshold	SSS	All contracts
	Individual Consultants	No threshold	IC (3 CVs)	All Contract with estimated value above or equal US\$ 100,000; All financial or procurement support contracts
		No threshold	SSS	All contracts
		No threshold	SSS	All contracts

All Terms of Reference are submitted to Bank Prior Review regardless of amount and procurement method.

1. Works

1	2	3	4	5	6	7	8	9
Ref. No	Contract Description	Estimated amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior/Post)	Expected Bid-Opening Date	Comments
1	Construction of vaccination pens	1,000,000	NCB	No	No	Post	February 1, 2016	Number of lots and procurement method to be defined after identification of sites and technical study
2	Creation/Rehabilitation of wells and boreholes	6,137,000	NCB	No	No	Post	November 1, 2016	Same comment as above
3	Construction of mares	400,000	NCB	No	No	Post	May 1, 2016	Same comment as above

1	2	3	4	5	6	7	8	9
Ref. No	Contract Description	Estimated amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior/Post)	Expected Bid-Opening Date	Comments
4	Construction and rehabilitation of Ministry of Livestock offices (DSV) and Health Border Posts	568,000	Shopping	No	No	Post	May 1, 2016	Technical Specifications and Bidding Documents to be prepared ; Number of lots and sites to be determined
5	Opening of firewalls	113,000	NCB	No	No	Post	November 1, 2016	Sites to be determined
6	Land scarification	400,000	NCB	No	No	Post	November 1, 2016	Number of lots and procurement method to be defined after identification of sites and technical study
7	Construction of livestock markets	2,340,000	NCB	No	No	Post	November 1, 2016	Same comment as above
8	Construction and rehabilitation of improved slaughtering areas	1,995,000	NCB	No	No	Post	November 1, 2016	Same comment as above
9	Construction of rest areas	321,000	NCB	No	No	Post	November 1, 2016	Same comment as above
10	Construction of milk collection centers	2,666,000	NCB	No	No	Prior	February 1, 2017	Same comment as above
11	Installation of mini-dairies	700,000	NCB	No	No	Post	February 1, 2017	Same comment as above

2. Goods

1	2	3	4	5	6	7	8	9
Ref. No	Contract Description	Estimated amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior/Post)	Expected Bid-Opening Date	Comments
12	Purchase of vehicles	1,450,000	ICB	No	No	Post	November 1, 2015	3 lots : Lot 1 : 4x4 vehicles Lot 2 : light vehicles Lot3 : motorcycles
2	Acquisition of office supplies	11,000	Shopping	No	No	Post	November 1, 2015	
3	Acquisition of computer equipment and office furniture	190,000	NCB	No	No	Post	November 1, 2015	
4	Sampling equipment for use in the field	18,000	Shopping	No	No	Post	November 1, 2015	Component 1
5	Purchase of a veterinary drug control scheme	60,000	NCB	No	No	Post	May 1, 2016	
6	Acquisition of a cold chain vehicle with fridge and	105,000	NCB	No	No	Post	May 1, 2016	for the transport of vaccines and cold equipment

1	2	3	4	5	6	7	8	9
Ref. No	Contract Description	Estimated amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior/Post)	Expected Bid-Opening Date	Comments
	isothermal containers							
7	Purchase of vaccines against PPR	450,000	ICB	No	No	Post	August 1, 2016	Possibility of combined purchasing with CILSS
8	Identification, inventory and mapping of pastoral areas	1,037,000	ICB	No	No	Prior	February 1, 2016	TOR to be prepared

3. Consultant Services

1	2	3	4	5	6	7
Ref. No.	Mission Description	Estimated amount (USD)	Procurement Method	Bank Review (Prior/Post)	Expected Bid-Opening Date	Comments
1	Drafting of a layout scheme for eco-pastoral areas	140,000	IC	Prior	February 1, 2016	
2	Study for Contingency Plan Preparation	133,000	IC	Post	May 1, 2016	
3	Study of an endogenous system	37,000	IC	Post	November 1, 2016	Component 4
4	Study for the promotion and utilization of local know-how	47,000	IC	Post	November 1, 2016	
5	Identification of conflict areas	20,000	IC	Post	February 1, 2016	
6	Technical Study for mini-dairies and milk collection centers	100,000	CQS	Prior	June 1, 2016	
7	Works' Supervision and Environmental impact of construction/rehabilitation of offices (department services and animal health border posts)	39,000	IC	Post	May 1, 2016	
8	Works' Supervision and Environmental impact of boreholes, wells and mares	457,000	LCS	Prior	February 1, 2017	
9	Works' Supervision and Environmental impact of milk collection centers and mini-dairies	235,000	LCS	Prior	April 1, 2017	
10	Works' Supervision and Environmental impact of vaccination pens, livestock markets, slaughtering and rest areas	395,000	LCS	Prior	May 1, 2016	
11	M&E Specialist	39,000	SSS	Prior	November 1, 2015	
12	Administrative and Financial Officer	39,000	SSS	Prior	November 1, 2015	
13	Procurement Specialist	39,000	SSS	Prior	November 1, 2015	
14	Environmental and Social Safeguard Specialist	29,000	SSS	Prior	November 1, 2015	

1	2	3	4	5	6	7
Ref. No.	Mission Description	Estimated amount (USD)	Procurement Method	Bank Review (Prior/Post)	Expected Bid-Opening Date	Comments
15	Technical Director	45,000	IC	Prior	November 1, 2015	
16	Communication Specialist	29,000	IC	Prior	November 1, 2015	
17	Gender Specialist	29,000	IC	Prior	November 1, 2015	
18	Animal Health Specialist – Component 1	33,000	IC	Prior	November 1, 2015	
19	NRM Specialist – Component 2	33,000	IC	Prior	November 1, 2015	
20	Market Facilitation Access Specialist – Component 1	33,000	IC	Prior	November 1, 2015	
21	Pastoral Crisis Management Specialist – Component 1	33,000	IC	Prior	November 1, 2015	
22	Internal Auditor	33,00	IC	Prior	November 1, 2015	
23	Procurement Assistant	21,000	IC	Prior	November 1, 2015	
24	Accountant	18,000	IC	Prior	November 1, 2015	
25	M&E Assistants in the Regions	126,000	IC	Prior	November 1, 2015	
26	Administrative Assistants in the Regions	76,000	IC	Prior	November 1, 2015	

Niger procurement

79. Procurement activities will be carried out in Niger by the Project Unit under the coordination of the Secretary General (SG) of the Ministry of Livestock. The Ministry of Livestock, under the overall coordination of the SG, will be responsible for all procurement related to the project in Niger and will carry out the following activities in close collaboration with the respective beneficiaries: (i) preparation and updating of the Procurement Plan; (ii) preparation of the bidding documents, draft requests for proposals (RFP), evaluation reports, and contracts in compliance with World Bank procedures; (iii) monitoring the implementation of procurement activities; (iv) developing procurement reports; and (iv) seeking and obtaining approval of national entities and then IDA on procurement documents as required.

80. The procurement activities in the Ministry of Livestock will be supported by the Procurement Directorate (DMP) and the technical directorates in their respective area of competency as well as by the procurement committees in compliance with the Niger Procurement Code.

81. A preliminary assessment of the capacity of the Ministry of Livestock to implement procurement activities of the project was carried out during preparation and will be finalized during appraisal. The assessment reviewed the organizational structure for implementing the project, the procurement capacities of the agencies (past procurement experience, staff in charge of procurement, and tools including manuals, procurement reporting, filing, use of software, and so on) and the interactions between the different agencies involved in the project. The assessment found that: (i) the Ministry of Livestock has the required technical expertise but has no experience recorded in World Bank procurement procedures and (ii) the staff currently in charge of procurement has limited experience in World Bank procurement procedures.

Niger procurement plan for the first 18 months (approved April 10, 2015)

ICB= International Competitive Bidding; LIB= Limited International Bidding; NCB= National Competitive Bidding; Shopping; Community Driven Development Procurement; SSS= Single-Source Selection; Semi-Annual Shopping; IC= Individual Consultant; CQS= Selection Based on the Consultants' Qualifications; LCS= Least-Cost Selection; QCBS= Quality and Cost-Based Selection; FBS= Fixed-Budget Selection; QBS- Quality-Based Selection.

No	Expense Category	Thresholds (Amount in US\$)	Procurement Method	Prior
1	Works	C ≥ 5 000,000	ICB	All Contracts
		50,000= <C < 5 000,000	NCB	none
		C<50,000	Shopping	none
		No threshold	SSS	All Contracts
2	Goods and Services (Non Consulting Services)	C ≥ 500,000	ICB	All Contracts
		50,000= <C < 500,000	NCB	none
		C<50,000	Shopping	none
		No threshold	SSS	≥ 100 000
3	Consultant Services (Firms)	C ≥ 200,000	QCBS, QBS	
		< 200,000	QCBS, FBS, CQS, LCS	
		No threshold	SSS	≥ 100 000
	Individual Consultant	No threshold	IC	All Contracts
		≥ 200,000	IC (Comparison of CVs)	
		≥ 100,000	SSS	
4	Trainings, Workshops and Study Tours	All Contracts	TTL Prior	All Contracts

1. Goods, Works and Non-Consulting Services

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1	Purchase of Vehicles	1,589,200	ICB	No	No	Prior	November 15, 2015	
2	Purchase of Computer Equipment	193,400	NCB	No	No	Post	November 10, 2015	
3	Office Equipment (furniture)	1,115,700	ICB	No	No	Prior	July 17, 2016	
4	Operating Costs of Vehicles (fuel, maintenance...)	584,700	Semi-Annual Shopping	No	No	Post	April 03, 2016	
5	Office Maintenance	90,000	Shopping	No	No	Post	April 03, 2016	
6	Computer Maintenance	50,000	Shopping	No	No	Post	March 03, 2016	
7	Computer Supplies	40,000	Shopping	No	No	Post	February 25, 2016	
8	Purchase of Software	18,200	Shopping	No	No	Post	July 01, 2016	
9	Vehicle Insurance	150,000	NCB	No	No	Post	June 15, 2016	
10	Health Insurance	207,300	Shopping	No	No	Post	February 01, 2016	
11	Office Supplies, Newspapers	13,300	Shopping	No	No	Post	April 01, 2016	
12	Office Equipment	107,800	NCB	No	No	Post	March 05, 2016	
13	Antivirus Software	20,000	Shopping	No	No	Post	January 30, 2016	

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
14	Works	2,730,374	NCB	No	No	Post	October 15, 2015	
15	Small Works	80,000	Shopping	No	No	Post	February 15, 2016	

2. Consultant Services

1	2	3	4	5	6	7
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Bank Review (Prior / Post)	Expected Proposals Submission Date	Comments
1	Procurement Capacity Building	5,000	IC	Post	March 25, 2016	
2	Financial Management Capacity Building	10,000	CQS	Post	March 25, 2016	
3	External Audit	58,800	LCS	Post ¹¹⁶	March 03, 2017	2016-2017
4	Creation of Database	20,000	IC	Post	September 08, 2016	
5	Training in M&E System	30,000	CQS	Post	March 25, 2016	
6	National Technical Assistance	100,000	CQS	Post	February 02, 2017	
7	Elaboration of a strategy and a communication plan	24,000	IC	Post	June 22, 2016	
8	Pastoralism Data Collection	24,000	IC	Post	March 03, 2016	
9	Data Collection on Pastoralism Year 1	24,000	IC	Post	March 03, 2017	NGO
10	Set up of Facilitation and Communication Networks	24,000	CQS	Post	August 30, 2016	
11	Socio-cultural data diagnostic Study	10,000	IC	Post	February 28, 2016	
12	Comprehensive Study on existing pastoralism data	40,000	CQS	Post	January 27, 2016	
13	“Sanitary Mandate” for Pastoral Districts (recruitment of 7 consultants)	688,000	IC	Prior	November 25, 2015	1 consultant per Region
14	Technical Assistance for Data Analysis	40,000	IC	Post	April 04, 2016	
15	Elaboration of an Emergency Plan on CBPP/PPR	30,400	IC	Post	January 30, 2016	
16	Elaboration of Animal Health Communication	10,300	IC	Post	January 30, 2016	
17	Harmonization of regulatory and legislative texts	30,000	IC	Post	July 05, 2016	
18	Signature of 7 Contracts with local media for legal text dissemination	20,000	SSS ¹¹⁷	Post	June 30, 2016	
19	Contract for the organization of pathway users	50,000	CQS	Post	June 30, 2016	Firm

¹¹⁶ TOR and short-list must be Prioried by the Bank. Other process documents will need to be archived for Bank Post Review.

¹¹⁷ TOR and justification must be submitted to the Bank for Prior Review and Process documents need to be archived for Bank Post Needs.

1	2	3	4	5	6	7
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Bank Review (Prior / Post)	Expected Proposals Submission Date	Comments
20	Recruitment of 7 private providers for the organization of pathway users and pastoral and hydraulic infrastructure users (social mobilization)	400,000	QCBS	Post	March 30, 2016	1 private provider per Region
21	Awareness and Training Sessions of Management Committees (livestock markets)	40,000	CQS	Post	June 25, 2017	NGO
22	Training needs' identification for existing Livestock Trade Information Systems (SIM-B)	40,000	IC	Post	March 10, 2017	
23	Structuring and Capacity Building for Producer Organizations and Inter-professions	500,000	QCBS	Post	April 29, 2017	
24	Strengthening of Technical and Management Skills	10,000	IC	Post	April 29, 2017	
25	Set-up of a National Pastoral Crisis Observatory	100,000	LCS	Post	June 30, 2016	
26	Translation of legal texts, communication and training support documents	30,000	IC	Post	March 05, 2017	
27	Assessment and improvement of FOSEL	100,000	IC	Post	June 30, 2017	
28	Local Assessment of Intervention Capacities for local livestock feeding	100,000	IC	Post	May 31, 2016	
29	Support to the set-up of a Supply and Distribution Scheme of animal feed	100,000	IC	Post	June 30, 2016	in case of pastoral crisis
30	Local need Assessment on Income Generating Activities (AGR)	100,000	IC	Post	June 27, 2016	

Senegal procurement

82. MEPA will have overall responsibility for implementing the project. MEPA will ensure the coordination of the project through the PCU (SN-PCU) to be created. Concerning the Implementing Agency, the option retained is a PCU (SN-PCU) inside MEPA. The SN-PCU will work together with the technical directorates of MEPA. In addition, SN-PCU will be managed by a Coordinator who will oversee a team of consultants hired on a full time and competitive basis.

83. The assessment carried out during project preparation showed that the main issues/risks concerning the procurement activities for the project's implementation are: (i) the SN-PCU will not have experience in procurement, particularly in World Bank procedures; (ii) there is no administrative and financial procedures manual; (iii) the need for equipment and/or space to file the documents of the proposed project; and (iv) there is no procurement specialist with sufficient experience in World Bank procedures.

84. The overall coordination of project implementation for Senegal is entrusted to SN-PCU, which will establish with each concerned Directorate of the MEPA and other implementing partners a results-based MoU, delegating responsibility for implementation of specific components of the project to the relevant partner and setting forth the implementation details and the partner's undertaking to assure the efficient implementation of such parts of the project.

Senegal procurement plan for the first 18 months (approved April 10, 2015)

ICB= International Competitive Bidding; LIB= Limited International Bidding; NCB= National Competitive Bidding; Shopping; Community Driven Development Procurement; SSS= Single-Source Selection; Semi-Annual Shopping; IC= Individual Consultant; CQS= Selection Based on the Consultants' Qualifications; LCS= Least-Cost Selection; QCBS= Quality and Cost-Based Selection; FBS= Fixed-Budget Selection; QBS- Quality-Based Selection.

	Procurement Method	Thresholds	Prior Review
1	Goods	≥ 1,000,000 USD	yes
2	Works	≥ 10,000,000 USD	yes
3	Single-Source Selection	All Contracts	yes
4	Consultant Firm Selection	≥ 300,000 USD	yes
5	Individual Consultants Selection	≥ 100,000 USD	Yes with request for Expression of Interest
6	Single Source Selection (Firms and Individual Consultants)	All Contracts	yes

ICB for contracts of an estimated amount above or equal to US\$10 million for works, ICB of US\$1 million per contract for goods and non-consulting services: the first contract for each procurement method regardless of cost, as well as all Single Source Selection (SSS) contracts will be subject to Bank Prior Review.

Consultant Services whose estimated cost is above US \$ 300,000 per contract for firms and US \$ 100,000 per contract for individual consultants: the first contract, for each selection method, regardless of estimated cost and each consultant recruited using the SSS method will be subject to Bank Prior Review.

Short-lists composed entirely of national consultants: short-list of consultants for services estimated to cost less than US \$ 300,000 equivalent per contract may only include national consultants in accordance with the provisions of paragraph 2.7 of World Bank Guidelines on Selection and Employment of Consultants.

1. Goods, Works, and Non Consulting Services

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1	Component 1: Animal Health Improvement							
1.1	Purchase of one 4X4 Vehicle	63,425	NCB	No	Yes	Prior	June 15, 2015	First Contract
1.2	Purchase of Vehicles	874,400	ICB	No	Yes	Prior	October 15, 2015	
1.3	GPS Equipment	15,600	Shopping	No	Yes	Post	October 15, 2015	
1.4	Cold Chain Equipment: Fridges, Freezers, Coolers ...	328,000	NCB	No	Yes	Post	October 15, 2015	Vaccines and border posts
1.5	Computer Equipment and video projectors	45,500	Shopping	No	Yes	Post	October 15, 2015	
1.6	Purchase of lyophilizing equipment for ISRA-production	1,552,950	ICB	No	No	Prior	August 17, 2015	
1.7	Sample and Protection Kits for Border Inspection Posts	1,900	Shopping	No	Yes	Post	December 15, 2015	
1.8	Purchase of Animal Health Data Management Software	20,900	Shopping	No	Yes	Post	January 15, 2016	
1.9	"Sanitary Mandate" for Vaccination against PPR	769,800	NCB	No	Yes	Post	January 15, 2016	
1.10	Analysis of samples (veterinary)	7,500	Shopping	No	Yes	Post	November 16, 2015	

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
1.11	Communication material	5,200	Shopping	No	Yes	Post	January 15, 2016	
1.12	"Sanitary Mandate" for Vaccination against RVF	1,900	Shopping	No	Yes	Post	November 16, 2015	
1.13	Vehicles and Motorcycles Maintenance	269,100	NCB	No	Yes	Post	January 15, 2016	
1.14	Purchase of Animal identification equipment	10,300	Shopping	No	Yes	Post	November 16, 2015	For first 2 years
1.15	Purchase of vaccines against RVF	52,200	NCB	No	Yes	Post	November 16, 2015	
1.16	Purchase of Animal disease Sample Surveillance Kits	59,500	NCB	No	Yes	Post	December 15, 2015	
1.17	Construction/rehabilitation of central and sub-regional offices	116,600	NCB	No	Yes	Prior	December 15, 2015	First Works' Contract
1.18	Construction/rehabilitation of sub-regional services offices, border posts and veterinarian offices	251,600	NCB	No	Yes	Post	January 15, 2016	
1.19	Construction of 30 vaccination pens	481,900	NCB	No	Yes	Post	April 15, 2016	bovine and small ruminants
2	Component 2: Natural Resource Enhancement							
2.1	Purchase of mechanical reapers	80,200	NCB	No	Yes	Post	January 15, 2016	
2.2	Drilling of 5 boreholes	1,400,000	NCB	No	Yes	Post	February 15, 2016	
2.3	Rehabilitation of boreholes	500,400	NCB	No	Yes	Post	February 15, 2016	
3	Component 3: Market Access Facilitation							
3.1	Dairy processing & collecting infrastructure and equipment	405,000	NCB	No	Yes	Post	June 15, 2016	
3.2	Construction / rehabilitation of Livestock Markets	482,533	NCB	No	Yes	Post	April 15, 2016	
3.3	Construction of Slaughtering Areas	198,400	NCB	No	Yes	Post	Mai 16, 2016	
4	Component 4: Pastoral Crisis Management							
4.1	Purchase of Smartphones and Mobile Phones	23,700	Shopping	No	Yes	Post	December 15, 2015	For EWS staff
4.2	Purchase of Servers	60,100	NCB	No	Yes	Post	December 15, 2015	For EWS
4.3	Information/Communication through local radios	14,400	Shopping	No	Yes	Post	As needed	For EWS
5	PURCHASES RELATED TO ALL COMPONENTS							
5.1	Computer Equipment	31,200	Shopping	No	Yes	Post	October 15, 2015	

1	2	3	4	5	6	7	8	9
Ref. No.	Contract Description	Estimated Amount (USD)	Procurement Method	Pre-qualification (yes/no)	Domestic Preference (yes/no)	Bank Review (Prior / Post)	Expected Bid-Opening Date	Comments
5.2	Communication Equipment	9,400	Shopping	No	Yes	Post	October 15, 2015	
5.3	Office Furniture	19,800	Shopping	No	Yes	Prior	October 15, 2015	1 st contract
5.4	Air Conditioning Units	26,100	Shopping	No	Yes	Post	October 15, 2015	
5.5	Power Generators	31,300	Shopping	No	Yes	Post	December 15, 2015	

2. Consultant Services

1	2	3	4	5	6	7
Ref. No.	Description of Assignment	Estimated Cost (USD)	Selection Method	Review by Bank (Prior / Post)	Expected Proposals Submission Date	Comments
1	Consultant for Laboratory Staff Training	10,000	IC	Post	December 15, 2015	
2	Consultant for Regional and Local Staff Training	16,500	IC	Post	October 15, 2015	
3	Firm for Producer Organizations' Capacity Building	93,900	QCBS	Post	February 15, 2016	
4	Consultant for elaboration of a Vulnerability Study	30,000	IC	Post	December 15, 2015	
5	Elaboration of pastoral crisis training modules	50,000	IC	Post	February 15, 2016	
6	Training of 50 local Staff	9,600	IC	Post	January 15, 2016	
7	Training consultant for SECNSA Staff	10,000	IC	Post	November 16, 2015	
8	Training of 2 agents for Datacenter Maintenance	10,000	IC	Post	December 15, 2015	
9	Publication and Dissemination of legal documents on anti-theft of livestock	19,200	IC	Post	February 15, 2016	
10	Training on Accounting and Financial Management Software	31,300	IC	Post	December 15, 2015	
11	Training Consultant on Accounting and Financial Management Software	75,000	IC	Post	January 15, 2016	
12	Consultant to strengthen MEPA Accounting and Financial Management skills	21,200	IC	Post	January 15, 2016	
13	Baseline Study	31,712	IC	Post	February 15, 2016	
14	External Auditor	19,300	QCBS	Prior	October 15, 2015	

Procurement mitigation measures

85. To address the various risks identified at both the project and country levels, the mitigation measures described in Table A3.16 will be implemented.

Table A3.16: Procurement mitigation measures for CILSS and PRAPS participating countries

Agency/ Country	Implementing agency	Procurement mitigation measures	By when
CILSS	CILSS	The recruitment of a procurement specialist with strong knowledge of Bank procurement procedures	No later than 1 month after effectiveness
	R-PCU, CILSS, and IUCN	The PIM must describe in detail the procurement procedures and set up a formal complaint mechanism, acceptable to IDA	Adoption of the PIM acceptable to IDA is a condition of effectiveness
CILSS and participating countries	Bank procurement team	Annual procurement post review to be carried out by Bank procurement team	Annually
	PCU teams	Prepare Procurement Plan for first 18 months of project and then ensure that it is regularly updated, at least once per year or as needed	Done at negotiations
	PCU teams and IAs	Prepare the administrative, procurement, and financial part of the PIM to ensure appropriate implementation of activities in line with the Bank's general framework related to the project. The manual should describe procurement rules applicable to the project and a clear accountability system and responsibilities for decision making.	By effectiveness
	IAs	Hire appropriate procurement specialists (and if appropriate assistants) who will be positioned inside the project unit(s) and will be responsible for the overall procurement activities	No later than 1 month after effectiveness
Burkina Faso	MRA	Outsource the implementation of construction activities through MOD	6 months after effectiveness
	MRA / WB	Train the DMP and the tender committee in Bank procurement procedures with external training courses	3 months after effectiveness
	MRA	Equip the DMP meeting room for bid opening session	6 months after effectiveness
	MRA	Set-up in the PCU an acceptable filing system	Needs to be described in the PIM
Chad	SG of Ministry of Livestock	Increase Procurement Unit (<i>Service de Passation des Marchés</i>) with two additional staff	No later than 1 month after effectiveness
	PCU and SG / Ministry of Livestock	Participation in procurement workshops at the specialized regional procurement training centers	As needed during the life of the project
	PCU	Short-term technical assistance in procurement by consultants as necessary	As needed during the life of the project
	PCU (external auditors)	Annual technical and financial audits specific to procurement	At least twice each year during project implementation
Mali	PCU/ Procurement consultant	Training of DFM staff (at least three agents) on Bank procurement procedures in specialized institutions (ICP in Bamako or ISADE and CESAG in Dakar, Senegal).	No later than 3 months after first disbursement of Project Preparation Advance (PPA)
	PCU	Hands-on training and coaching through technical support from the procurement consultant of the Ministry of Basic Education, who is a seasoned procurement specialist familiar with Bank procedures	

Agency/ Country	Implementing agency	Procurement mitigation measures	By when
	PCU/IDA	Hands-on training of identified high-level staff within the MDR on Bank procurement procedures	During PPA implementation
	Procurement Specialist/PCU	Capacity building for the high-level project staff involved in the procurement decision-making process and tender committee members on procurement focusing on: procurement planning, preparation of bidding documents, evaluation of bids or proposals, and procurement document filing	No later than 3 months after effectiveness and throughout the project life
	IDA	Complex contracts or contracts with high amounts will be submitted to Bank prior review	Throughout the project life
	DGMP-DS/ARM-DS	The Control Body (DGMP) and the Regulation Authority (ARMDS) will have to play their role to ensure good governance and limit the opportunities for undue influence by anyone	Throughout the project life
	PCU/MDR	All interactions related to the procurement responsibility must be concordant with the institutional arrangements agreed upon with the Borrower	Throughout the project life
	PCU	Close monitoring of procurement plans on a monthly basis and closely monitor and exercise quality control on all aspects of the procurement process, including evaluation, selection, and award	Throughout the project life
	PCU	Provision of adequate space and equipment for filing and archiving in order to better keep procurement documents and reports. Train staff responsible for the archives in data management.	No later than 3 months within the project effectiveness
Mauritania	PCU	Select a specialized firm to assist the project for all procurement activities during the first two year of project implementation	During the 24 months following project effectiveness
	PCU	Train MoL staff and staff of other ministries involved in project implementation on procurement procedures	During the 12 months following project effectiveness
Niger	PCU	Appointing qualified procurement assistants to be located at the central (and if needed at sub-national) level to fully support the team in all procurement activities related to the project	During implementation (as needed)
	PCU/Bank procurement Team	A workshop will be organized at the beginning of the project to train/update all key stakeholders involved in procurement on World Bank procurement procedures and policies.	At project launch and thereafter as needed
Senegal	PCU	Recruit a consultant for the development of an administrative, procurement, accounting, and financial procedures manual	Before effectiveness
	PCU	Find enough space and purchase equipment to file archives of SN-PCU	Before effectiveness
	PCU/Bank procurement Team	Train the staff and technical experts involved in project implementation in World Bank basic procurement procedures	At project launch and thereafter as needed

ENVIRONMENTAL AND SOCIAL (INCLUDING SAFEGUARDS)

86. The Environmental Assessment category for PRAPS is category B. A Regional ESMF and a Regional RPF have been prepared by CILSS using information from each country; these regional documents cover all beneficiaries to address the potential environmental and social impacts of activities in all six countries. A potential impact of PRAPS investments might be to upset the social livelihood balance in a community, which could be the source of social conflicts. These impacts will be carefully identified, monitored, and addressed.

87. PRAPS will finance only small-scale activities in the six countries involved. The environmental and social impacts of these activities are expected to be minor and manageable. CILSS will work with the six country governments to improve the exchange of environmental assessments and other related information on activities with trans-boundary impacts, in line with regional policies and World Bank safeguards policies.

88. The project will improve natural resource management through a wide range of activities, and particularly through Component 2, which aims to enhance the sustainable management and secure access by pastoral and agro-pastoral communities to natural resources (essentially water and pasture) with trans-boundary significance. Activities under Component 1 on animal health will help to preserve the natural capital of these countries, which is the basis of their economic development.

89. As pastoralism combines the productive use of natural resources, various activities have been designed, beyond the application of safeguard measures, to ensure the sustainable management of these resources, promote soil conservation, manage water resources, preserve biodiversity and productive ecosystems, and disseminate best practices for adaptation to climate variability.

90. The capacity of the six beneficiary countries varies in terms of environmental management from one country to another. Some countries have relatively well-developed environmental management systems, including functional ministries and agencies, sufficient staffing, and an adequate regulatory framework, whereas others are still struggling with recently established institutions, understaffing and lack of capacity, and incomplete legal frameworks (missing important elements such as executive regulations, annexes, and so on).

91. The project's implementation arrangements are however intended to ensure a minimum level of coherence across all six countries. CILSS will have overall operational management responsibility from a technical viewpoint. CILSS has the necessary technical knowledge and expertise in environmental and social issues in the region and as such has the technical capacity to identify and flag any safeguard concerns related to the implementation of safeguards instruments for national-level investments, should any concerns arise during project implementation. The project also envisages regional training activities to be coordinated and supported by CILSS and other competent bodies, and training in safeguard policies will be among those activities

92. A Safeguards Focal Point has been nominated by each country during the early stages of preparation to oversee the development of the country-specific safeguard documents, liaise with local consultants, provide the necessary inputs, and coordinate the organization of the necessary consultations with key concerned stakeholders and the in-country disclosure of the safeguards

instruments. The Focal Points have a mandate during implementation to ensure compliance with the project's environmental and social safeguards instruments.

Environmental Safeguards

93. The Project is classified as category B project due to the fact that potential environmental and social impacts may arise, despite the important natural resource management benefits, but these impacts are expected to be local, site-specific, and easily manageable. Those impacts are also expected to be largely outweighed by the proposed improved governance of critical natural resources. Environmental Assessment OP/BP 4.01 is triggered and, as noted, a Regional ESMF has been prepared, given that the exact activities and their respective sites have not yet been identified. The Regional ESMF outlines the principles and procedures to screen, assess, manage, and monitor the implementation of the environmental and social mitigation measures. It includes annexes on pest management plans for which specific measures will be further elaborated during project implementation, once specific activities are finalized. The Regional ESMF has country-specific sections clarifying: (i) the environmental and social context in the targeted areas of intervention of the project in each country; (ii) the policy context as well as the institutional and legal frameworks; (iii) the environmental impact assessment system in the country, including the review and approval mechanism; (iv) an evaluation of the environmental institutional capacities in the country; and (v) an estimate of the budget needed to implement the framework.

94. Each country conducted its own consultations and validated its own national document. These documents define uniform screening mechanisms and monitoring procedures for identification and management of potential adverse environmental and social impacts, and provide grievance redress mechanism with guidance on the reception, recording, handling, and reporting of complaints that may be encountered during project implementation.

95. It is anticipated that Components 1, 2, and 3 may trigger Environmental Assessments (OP/BP 4.01) and/or Involuntary Resettlements (OP/BP 4). Table A3.17 summarizes the safeguard policies triggered by the project.

Table A3.17: Safeguard policies triggered by PRAPS

Safeguard policies triggered by the project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Natural Habitats (OP/BP 4.04)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pest Management (OP 4.09)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Physical Cultural Resource (OP 4.11)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Involuntary Resettlement (OP/BP 4.12)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Indigenous Peoples (OP 4.10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Forests (OP/BP 4.36)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Safety of Dams (OP/BP 4.37)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects in Disputed Areas (OP/BP/GP 7.60)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Projects on International Waterways (OP/BP/GP 7.50)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

96. *Disclosure of safeguard documents.* During preparation, the Borrowers engaged in a consultative process with national and local stakeholders. The concerns of stakeholders have been addressed in the ESMF and RPF. All of the Borrowers' assessments (ESMF and RPF) are

completed and have been disclosed in the six countries involved and at the InfoShop prior to appraisal. The project complies with all relevant World Bank safeguard and national policies, and has met the requirements of the World Bank's Disclosure Policy.

MONITORING AND EVALUATION

Objective

97. M&E in PRAPS has been developed as: (i) a tool for results-based management, to ensure that data and information on the project's progress—or lack of progress—toward the outcomes under the PDO feed into management and that corrective measures can be taken in time if necessary; (ii) a framework for accountability¹¹⁸ for progress toward national and regional development objectives attributable to interventions and actions of the regional institution CILSS and national governments implementing PRAPS; (iii) an approach to monitor performance of participating countries in PRAPS to ensure a certain level of regional performance and more or less even contributions from the six countries to regional objectives; and (iv) a platform for communicating the project's results and the benefits generated for pastoralists and agro-pastoralists. M&E is also designed to meet the World Bank's routine reporting requirements (specifically, the six-monthly progress report, Implementation Status and Results (ISR) report, which is developed for each country and publicly disclosed), and data and information requirements for the mid-term review.

Context and Capacity

98. Fulfilling these M&E objectives in the pastoral context of West and Central Africa is a daunting task for several reasons. Government capacity to plan, execute, monitor, and evaluate projects can often be weak, and the highly mobile population of anticipated beneficiaries for the proposed project is spread across a vast target area that spans administrative units and national borders and possesses little administrative infrastructure. Signs of weak capacity include (but are not limited to) incomplete datasets, field-level data that are not validated, missing information, inconsistent reporting, and the delivery of data and information that are never subsequently reported or used in making decisions or formulating policy. Table A3.18 presents an assessment of M&E capacity in the six participating countries. Capacity assessments for each country, with action points for improvement, are presented later in this annex.

Table A3.18: Assessment of M&E capacity

Country	1. Availability of key data	2. Routine data collection	3. Quality of data	4. Government capacity	5. Use of data and information
Burkina Faso	2	2	2	3	1
Chad	1	1	1	2	1
Mali	1	1	1	2	1
Mauritania	1	1	1	2	1
Niger	2	3	2	3	2
Senegal	2	2	2	2	2

Note: Rating scale: 1 = lowest, 5 = highest. Additional details on individual country assessments later in this annex.

¹¹⁸ Accountability in the Results Framework is against the short- and medium-term outcomes of the project. Accountability for the activities and outputs is captured in the ESMF.

Design of Results Framework

99. The peculiarities of the pastoral sector and weak capacity have been taken into account in designing M&E for PRAPS, especially with regard to the number and selection of indicators, the data sources, and the methodologies used to collect data. The main instrument for M&E in the PRAPS is the Results Framework (Annex 1), which is common to all of the PRAPS countries and will be reported in the ISRs. It consists of the PDO statement and 6 “SMART”¹¹⁹ PDO indicators and 7 “SMART” intermediate indicators. Core indicators of the World Bank are included too, such as the core indicator on direct project beneficiaries and the core sector indicator on land administration and management-related sustainable land management practices. All indicators are disaggregated by country, with further disaggregation as necessary: by type of disease for the indicator on diseases (CBPP/PPR), and by sex (percent female) for the core indicator on direct project beneficiaries. All indicators have baselines and targets listed, as well as the frequency for data collection, the data sources, the methodology for calculating baseline and progress values of indicators, and responsibilities for data collection. Sources of data can vary by country, and data quality assurance mechanism will be put in place with CILSS. For some countries, baselines for indicators are derived from a variety of sources (such as key informant interviews, one-off field surveys by donors) and must be verified and updated as soon as possible by the first year of data collection. The Results Framework also has a column for defining indicators and entering remarks. Table A3.16 presents details on the aspects of the indicators discussed here.

M&E Arrangements

100. M&E will be undertaken at two levels for PRAPS: (i) at the regional level by CILSS (and CRSA for Component 1) and (ii) by the six participating countries. CILSS has overall responsibility for coordinating the M&E function of PRAPS and will ensure that data and information from all countries are produced on time and are of sufficient and necessary quality. The Results Framework indicates whether the designated M&E units in the six countries have the delegated responsibility to collect data on PRAPS indicators or whether that responsibility rests with CILSS. CILSS will provide overall coordination for the M&E function based on one M&E manual describing the requirements for all countries and the regional level. CILSS will design and implement data collection efforts that are best done at the regional level, and it will provide technical backstopping on M&E to the participating countries, put a data quality assurance mechanism in place, collect data on its own, and encourage cross-country learning. Table A3.20 presents an overview of the various data collection activities and data sources, including responsibilities for data collection and coordination.

M&E Activities

101. M&E activities for PRAPS will: (i) generate information on the project’s progress; (ii) analyze and aggregate data generated at the regional, national, and local levels; and (iii) document and disseminate key lessons to users and stakeholders across Sahelian countries together with the communication function of PRAPS. The CILSS will receive evaluation and progress reports from all of the countries and will be able to share results and best practices across the Sahel. The project-level M&E will draw on and strengthen national and regional systems to monitor results and needs across the Sahel, as per the Sahel Initiative and consistent with the CILSS mandate. PRAPS will

¹¹⁹ SMART: specific, measurable, achievable and attributable, relevant, and time-bound.

put special emphasis on mapping project interventions and results through geocoding of activities and overlay with key development indicators. This information will be accessible through platforms along the lines of the Mapping for Results initiative.

Mid-term Review

102. A gender assessment study will be undertaken at project mid-term review to help adjust the activities and improve monitoring related to gender. Because very little official data is available to set up baselines and targets for PDO indicator one (prevalence of two regional priority animal diseases), the figures indicated in the Results Framework must be reviewed and improved at project mid-term, using epidemiological data collected during the first three years, to better reflect the epidemiological situation of the six countries.

Table A3.19: PDO indicators and their significance and use, description and methodology and data sources

Indicator ^{120,121}	Significance/use of information	Description	Methodology and data source(s)
Component 1: Improve animal health (bovines, camels, small ruminants)			
PDO indicator one: Prevalence of two regional priority animal diseases (herd prevalence of contagious bovine pleuropneumonia [CBPP-%] and post-vaccinal seroprevalence of <i>peste des petits ruminants</i> [PPR-%])	Indicator measures level of priority animal diseases that spread across borders due to transhumance in the Sahel region. It measures three aspects of improved access to animal health services, i.e., incidence and prevalence of two regional priority animal diseases and quality of the vaccines. In case of poor quality vaccines, prevalence/incidence will not be reduced despite an increased coverage.	Medium-term indicator at regional and national level of two priority diseases—disaggregated by disease	Calculation based on active surveillance = surveillance based on sample-based survey in general animal population using blood samples. Passive surveillance = surveillance based on reports from livestock owners or herders of sick and dead animals and estimation of level of incidence (numerator). Prevalence and total population based on census of animals in the six countries or projections based on census or other comparable data and information to national-level estimates of number of animals (denominator). Very little official data is available to set up baselines and targets: figures indicated in the Results Framework must be reviewed and improved at project mid-term using epidemiological data collected during the first 3 years to better reflect the epidemiological situation of the 6 countries.
Component 2: Improve management of natural resources			
PDO indicator two: Land area where sustainable land management (SLM) practices have been adopted as a result of the project (ha).	Indicator measures SLM practices in areas that have been opened up due to improved water supply and increased access to pastoralists and agro-pastoralists across countries. It considers the potential for areas improved under the project to be protected from overgrazing and overuse because SLM practices are adopted. Adoption of SLM practices aims to ensure the productivity and carrying capacity of rangelands (and in some cases even improve it) across the targeted zones, including trans-boundary areas.	Core sector indicator for Land administration and management and medium-term indicator. Sustainable SLM practices in a pastoral context are defined as per OPCS guidelines and can include land use regimes, agronomic and vegetative measures, and structural measures.	Estimation of land area under SLM practices based on field-based survey based on semi-structured interviews with pastoralists and agro-pastoralists on change in behavior related to use of their rangelands in targeted zones of the project.
PDO indicator three: Average distance between functional water points accessible to pastoralists and agro-pastoralists in targeted zones.	Indicator measures access to a functional water supply for animals for pastoralists and agro-pastoralists, including in trans-boundary areas. For sedentary target beneficiaries, an appropriate indicator would identify share of the target beneficiaries with access to water points within a certain distance. In the case of transhumant pastoralists and agro-pastoralists this would only be applicable part of the year.	Medium-term indicator. Distance is defined as direct distance and not walking distance. In some cases difference between direct distance and walking distance can be substantial. Functional water points are defined as water points with daily production (at least a few cubic meters). Access is defined in terms of actual animal consumption (payment, local customs, etc.).	Calculation of the average distance is based on the water point network mapped and geo-referenced within the targeted zones and estimation of total areas in targeted zones. Assessment of functionality of and access to water points is based on semi-structured interviews, direct observation, and technical inspection of water points.

¹²⁰ Core indicator on direct project beneficiaries is not included in this table but in the Results Framework.

¹²¹ All PDO and intermediate indicators will be disaggregated by country.

Indicator ^{120,121}	Significance/use of information	Description	Methodology and data source(s)
Component 3: enhance access to markets			
PDO indicator four: Animals sold at markets rehabilitated and constructed as a result of the project	Indicator relates to access to markets.	Short-term indicator and proxy for the medium-term outcome share of pastoralists and agro-pastoralists with access to local/markets. Local/markets are defined as the first commercial markets in the livestock value chain, i.e., markets with a physical presence where pastoralists and agro-pastoralists sell live animals to traders and middlemen in exchange for cash (but not to other pastoralists and agro-pastoralists). These markets are self-managed.	Account based on market information systems based on records of sales in the targeted markets and adjusted and validated by field-based market survey and estimate of annual sales.
Component 4: improve management of pastoral crisis			
PDO indicator five: Time when 50% of target beneficiaries have been reached with interventions as foreseen in the intervention plan (weeks).	Indicator relates to efficiency (time to respond) and effectiveness (share of target beneficiaries reached) in response to pastoral crisis or emergency.	Medium-term indicator. Response time is defined from the day of the first alert from the early warning system (starting point has to be defined clearly) to the time 50% of the target beneficiaries as defined in the intervention plan have reached (ending point has to be defined clearly).	Calculation of the laps of time is based on the reports of National Food Security Agency (or <i>Commissariat à la Sécurité Alimentaire</i>), which is the agency in charge of delivering on the government-endorsed contingency plan.

Table A3.20: Data and data sources

Component	Data, information	Data source
1. Animal health	<p>Herd prevalence of CBPP Post-vaccinal seroprevalence of PPR</p> <p>Vaccinations for CBPP, PPR</p> <p>Functionality of veterinary health posts</p>	<ul style="list-style-type: none"> • Sample-based, based on blood samples from living animals and reports from pastoralists and agro-pastoralists (active and passive surveillance; active surveillance is based on sample-based survey in general animal population using blood samples; passive surveillance is based on reports from livestock owners or herders of sick and dead animals) <ul style="list-style-type: none"> - Nation-wide • Sample-based review of certificates, blood samples? <ul style="list-style-type: none"> - Nation-wide • Technical inspection by experts <ul style="list-style-type: none"> - Targeted zones
2. Natural resource management	<p>Area under SLM practices</p> <p>Average distance between functional water points accessible to pastoralists and agro-pastoralists</p> <p>Area under joint management</p>	<ul style="list-style-type: none"> • Direct observation • Semi-structured interviews • Review of signed agreements • Geo-referenced maps <ul style="list-style-type: none"> - Targeted zones • Geo-referenced maps • Semi-structured interviews • Direct observation/technical inspection of water points <ul style="list-style-type: none"> - Targeted zones • Direct observation • Semi-structured interviews • Review of signed agreements • Geo-referenced maps <ul style="list-style-type: none"> - Lac zone
3. Market access	<p>Animals sold at markets constructed and rehabilitated as a result of the Project</p> <p>Markets operational</p>	<ul style="list-style-type: none"> • Daily records of animals sold (administrative record) • Semi-structured interviews (verification of estimates from administrative records) • Direct observation (verification of estimates from administrative records) <ul style="list-style-type: none"> - Targeted zones • Technical inspection by market experts
4. Crisis management	<p>In pastoral crisis, time to reach 50% of the targeted beneficiaries as foreseen in the inclusive intervention plan</p> <p>Time between request from government to making funds available to respond to an eligible pastoral crisis</p>	<ul style="list-style-type: none"> • Reports by national institutions responsible for response to pastoral crisis. • Funding request (letter) from government to respond to pastoral crisis • Bank statements from national banks

Annex 4: Implementation Support Plan

AFRICA: REGIONAL SAHEL PASTORALISM SUPPORT PROJECT

Strategy and Approach for Implementation Support

1. The strategy for supporting project implementation will focus on successfully mitigating the risks identified at various levels and supporting the risk management proposed in the SORT; it will consist of: (i) implementation support missions carried out jointly with FAO when technical needs arise and (ii) technical assistance in areas of weaknesses and where new approaches/procedures have been introduced.
2. **Implementation support missions.** The supervision strategy will use a number of instruments to review progress and respond to implementation issues; including:
 - a. *Joint Review and Implementation Support (JRIS) Missions:* The World Bank Task Team will conduct semi-annual review and implementation support missions to review overall PRAPS implementation performance and progress toward the achievement of the PDO. Support from technical partners, such as FAO, will be sought when needed.
 - b. *Mid-term review (MTR):* An MTR will be carried out mid-way in the implementation phase. It will include a comprehensive assessment of the progress in achieving PRAPS objectives as laid out in the Results Framework. The MTR will also serve as a platform for revisiting design issues that may require adjustments to ensure satisfactory achievement of the project's objective.
 - c. *Other reviews:* Each year, the World Bank and the Ministry of Finance in each country will consider the need for additional analytical, advisory, and knowledge sharing activities and/or third-party reviews. Third-party reviews will be especially useful for follow-up of PRAPS activities in areas affected by conflict. Such reviews will be planned for over and above the semi-annual JRIS missions.
 - d. *Implementation completion:* At the close of the project, each government, CILSS, and the World Bank will carry out separate implementation completion reviews to assess the success of the project and draw lessons from its implementation.
3. **PRAPS Task Team set up.** Arrangements made at preparation phase will be maintained during implementation support involving a regional Task Team Leader (TTL) based in Washington and country-based Co-TTLs in PRAPS countries, to the extent possible. The regional TTL will be supported by two Operational Officers, one based in Washington and one in the field. This arrangement will enhance interaction with PRAPS countries and improve monitoring of progress. Available FAO-CP budget will be considered for FAO support to project supervision, as FAO was a key partner in project implementation. The Bank is also seeking possible Trust Fund budget to strengthen supervision activities on top of the Bank budget.
4. **Objective of implementation support mission.** The implementation support and oversight missions would have the combined aim of reviewing the quality of implementation, providing solutions to implementation problems, and assessing the likelihood of achieving the PDO. More specifically, they would: (i) review implementation progress by component, including institutional development aspects; (ii) provide solutions to implementation problems as they arise; (iii) review with the PCU the action plan and disbursement programs for the next six months; (iv)

review the project's fiduciary aspects, including disbursement and procurement; (v) verify compliance of project activities with the Bank's environmental and social safeguard policies; (vi) review case studies and survey results to measure results indicators to determine progress toward the PDO against the targets set within the Results Framework and the quality of implementation; and (vii) review the quality of capacity-building activities, which are crucial for an effective implementation of the program. The missions would combine some field visits (whenever feasible, taking the security situation into account); field-based focus group discussions and interactive workshops with stakeholders for feedback; and regional workshops as well as national workshops to highlight implementation issues, pick up emerging implementation lessons, and share mission recommendations, including agreements on actions moving forward. It will also include reviews of quarterly/annual reports and various studies.

5. **Technical Assistance.** Implementation support will include technical support from the World Bank, FAO, and possibly other bilateral/multilateral agencies for critical aspects of the project, for ensuring proper financial management / procurement, as well as for monitoring social and environmental safeguards. The objective of the technical support would be to help the project teams to internalize good practices and to resolve implementation bottlenecks as they are identified during JRIS missions. Technical assistance will include training workshops to develop core resource teams within implementing units and project teams; helping to finalize manuals; and reviewing and advising on terms of reference for required studies and technical support missions.

Implementation Support Plan

6. **Technical support.** Some of the investments contemplated under the project are relatively complex from a technical standpoint, especially in terms of ensuring that the activities to be funded actually result in expected efficiency improvements. In addition to the Bank's core supervision team, the FAO Investment Center, OIE, as well as a number of consultants may be mobilized periodically to provide technical assistance to implementing agencies in the form of hands-on training and mentoring.

7. **Focus of support.** The first two years of implementation would see more technical support, and later the focus would change to more routine monitoring of progress, trouble-shooting, and assessments based on the Results Framework. The implementation support missions to each country will be on a semi-annual basis, followed by regional workshops to discuss and exchange views on progress and challenges for each country. The support missions will be complemented by regular short visits by individual specialists to follow up on specific thematic issues as needed.

8. **Fiduciary support.** Fiduciary teams based in each of the six World Bank country offices (procurement and financial specialists) will closely supervise the project's fiduciary management. They will participate in the twice-yearly implementation support missions, facilitate capacity building for the project's fiduciary, and at least once a year the procurement staff will organize a post review of procurement activities.

9. During implementation support missions, the project *financial management* specialist based in the country office will review the FM systems, including capacity for continued adequacy; evaluate the quality of the budgets and implementing agencies' adherence thereto; review the cycle of transaction recording until the final end of report generation; evaluate the internal control

environment, including the internal audit function; review IFRs and/or annual Financial Statements; follow up on ageing of the advance to the Designated Account; follow up on both internal and external audit reports; and periodically assess the project's compliance with the FM manual as well as the financial agreement.

10. On the *procurement front* the Bank will provide implementation support to the client through a combination of prior and post reviews, procurement training to project staff and relevant implementing agencies, and periodic assessment of the project's compliance with the procurement manual. Implementation support missions will be geared toward: (i) reviewing procurement documents; (ii) providing detailed guidance on the Bank's Procurement Guidelines; and (iii) monitoring procurement progress against the detailed Procurement Plan. Following the recommendations of the fiduciary assessments of the Implementing Agencies, and in addition to the prior review supervision to be carried out from Bank offices, the semi-annual supervision missions will include field visits, of which at least one mission will involve post review of procurement actions.

11. **Safeguards.** The Bank specialists in Social and Environmental Safeguards based in Washington will have responsibility for supervising safeguard activities. Each year, they will conduct supervision of the project's safeguard activities, participate in regional meetings to discuss findings, and draft action plans to improve implementation.

12. **Main focus of implementation.** Table A4.1 summarizes the main focus of implementation during the life of the project.

Table A4.1: Main focus of implementation

Time	Focus	Skills Needed
First 12 months	<ul style="list-style-type: none"> • Project start up • Support to implementation activities (sensitization, community consultations and planning, institution building, strengthening implementation capacity including M&E) • Support to finalization of IRM-OM manuals • Guidance on applying safeguard instruments • Development of impact evaluation methodology and oversight of baseline survey • Procurement, FM, M&E and safeguards training of staff at all levels • Establishing coordination mechanisms with complementary projects 	<ul style="list-style-type: none"> • TTL+ Operations Officer + Co-TTLs • Livestock • NRM • Market Access • Pastoral Crisis Management • FM • Procurement • Environment • Social Development. • Communications • M&E
12-48 months	<ul style="list-style-type: none"> • Monitoring implementation performance including progress • Review strength of grassroots institutions, quality of participatory processes, and capacity building initiatives • Review of annual work plans and disbursement schedule • Review quality of quarterly/annual reports, data and various produced studies • Assess quality of implementation process and data collected • Review of audit reports and IFR • Review adequacy of the FM system and compliance with financial management covenants • Assess quality of safeguards instruments as they are applied 	<ul style="list-style-type: none"> • TTL+ Operations Officer + Co-TTLs • Livestock • NRM • Market Access • Pastoral Crisis Management • FM • Procurement • Environment • Social Development. • Communications • M&E

13. Skills Mix Required

Table A4.2 summarizes the proposed skill mix and number of staff weeks during project implementation. It is anticipated that this will change over time as demand increases.

Table A4.2: Proposed skill mix

Skills Needed	Number of staff weeks	Number of trips	Comments
TTL	20	4	Washington-based
Livestock Specialist (Seconded)	n/a	2	Washington-based
NRM Specialist (Seconded)	n/a	2	Washington-based
Market Access Specialist	10	2	Washington-based
Pastoral Crisis Management Specialist (Consultant)	n/a	2	Washington-based
Operations Officer	10	2	Washington-based
Co-TTLs	36	18	Country Office-based and Washington-based
Procurement Specialists	6	2	Country Office-based
FM Specialists	6	2	Country Office-based
Environmental Safeguard Specialist	2	2	Washington-based
Social Safeguard Specialist	2	2	Washington-based
M&E Specialist	4	2	Washington-based
Communication Specialist	6	18	Country Office-based
Gender Specialist	4	2	Washington-based
Conflict & fragility Specialist (TF funded)	n/a	2	Washington-based

14. Role of other partners. The role of partners and their expected inputs are summarized in Table A4.3.

Table A4.3: Role of Partners

Name	Institution/Country	Role
Commissioners	ECOWAS and WAEMU	Chair the Regional Steering Committee
Executive Secretary	CILSS	Project coordination at regional level Ensure achievement of overall PDO
Executive director of CRSA - Director General of OIE	CRSA and OIE	Project coordination of Component 1 (animal health) at regional level by delegation from CILSS Ensure achievement of PDO indicator for Component 1
Project Coordinators	Each PRAPS Country	Project level Coordination at National levels Ensure achievement of PDO at National level
Country representatives	FAO	Contribute to project supervision
Director, investment center		Ensure provision of skills mix to support quality of project implementation
Coordinators of Bank projects (Sahel Initiative) and other development partners in pastoral related projects in PRAPS countries	Mainly World Bank-AfDB/AFD/Belgian Cooperation/EU/USAID/Swiss Cooperation	Ensure synergies and complementarities Contribute to project supervision Ensure that each PRAPS country will set up a mechanism to implement joint action plans to reduce duplication of efforts and promote shared vision

Annex 5: Economic and Financial Analysis (EFA)
Regional Sahel Pastoralism Support Project (P147674)

I- Foreword

1. This Annex presents the economic and financial analysis (EFA) of the World Bank–funded Regional Sahel Pastoralism Support Project (PRAPS). This EFA emphasizes the prominence of the livestock sub-sector for the economy of the Sahel Region (section III) and demonstrates—through a comprehensive literature review—that the investments proposed by the project are economically justified (sections IV and V). The EFA describes in some detail the methodology for calculating the project’s internal rate of return (IRR) and net present value (NPV). Results are presented in section X for the baseline scenario and section XI for the sensitivity analysis.

II- Overview

2. The project development objective (PDO) is to “improve access to essential productive assets, services, and markets for pastoralists and agro-pastoralists in selected trans-border areas and transhumance axes across six Sahelian countries, and strengthen country capacity to respond promptly and effectively to pastoral crises or emergencies.” To achieve this PDO, the project will invest in a number of activities, implemented across five components: (i) Animal Health Improvement; (ii) Natural Resource Management Enhancement; (iii) Market Access Facilitation; (iv) Pastoral Crisis Management; and (v) Project Management and Institutional Support.

3. Project interventions should result in a number of measurable impacts, such as: (i) a decreased prevalence of two regional priority animal diseases (CBPP and PPR); (ii) an increase in the land area where sustainable land management practices have been adopted; (iii) a decrease in severe conflicts over access to grazing; (iv) an increased volume of animals sold in markets constructed and rehabilitated as a result of the Project; (v) a decrease in the average distance between functional water points accessible to pastoralists and agro-pastoralists in targeted zones; and (vi) a reduction in the time taken during a pastoral crisis to reach 50 percent of the targeted beneficiaries. These outcomes constitute the initial accomplishments that set the stage for building the resilience of pastoralists in the ASALs of Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal—i.e. to support pastoral populations to anticipate, manage, adapt to, cope with, and recover from crises and risks to livelihoods.

4. Given the important linkages between resilience and the preservation of capital assets in pastoral areas, primarily livestock, this EFA mainly uses livestock herd dynamics models (using the EcoRum interface of the CIRAD/ALIVE LSIPT toolkit), supported by cost-benefit analysis, to assess the overall viability of the proposed project, through the calculation of IRRs and NPVs for PRAPS. The project will also create a number of positive externalities, such as institutional strengthening, enhanced capacities of stakeholders, natural resource protection, and biodiversity conservation. These benefits are not fully quantified due to the difficulty of attributing a monetary value to their contribution to the PDO. This methodology has been used effectively in the EFAs of other World Bank–funded projects supporting pastoral livelihoods, such as RPLRP (in Ethiopia, Kenya, and Uganda) and the Zambia Livestock Development and Animal Health Project (ZLDAHP).

5. The results indicate that the project is economically justified. Under current assumptions, IRRs in the six countries are in the order of 18.9–23.5 percent and the NPVs are on the order of US\$16–44 million. The project is sensitive to changes in some of the model’s variables (animal mortality rates and off-take), confirming that sustainable investments in support of better animal nutrition, water access, and health are key to the proposed project’s success.

III- Economics of pastoralism in PRAPS countries

6. The Sahel is inhabited by over 20 million pastoralists, whose livelihoods have traditionally depended on livestock-related activities that include commercial pastoralism, traditional pastoralism, mixed farming (agro-pastoralism), and ex-pastoralism (destitute pastoralists who have moved or dropped out of pastoralism and live from petty income-earning activities).¹²²

7. Livestock represent a major economic and social value for Sahel and its people. Endowed with favorable conditions for extensive animal production, Sahel has a livestock population averaging 60 million cattle and 160 million small ruminants, of which 70–90 percent are reared under the transhumant pastoral system.¹²³ The livestock sub-sector contributes about 40 percent of the countries’ agricultural GDPs. The region is a net exporter of livestock and meat products towards coastal West Africa, particularly the fast-growing urban centers and consumption basins of Ivory Coast, Ghana, and Nigeria. FAO reports¹²⁴ that the “Sahel share” of cattle and small-ruminant production (as a percentage of total production of West Africa) averaged 45 percent over 1985–2005.

Table A5.1: Contribution of the livestock sub-sector to GDP and agricultural GDP

	Burkina Faso	Chad	Mali	Mauritania	Niger	Senegal
Contribution to GDP	20%	13%	11%	15%	13%	4%
Contribution to agric. GDP	40%	35%	30%	80%	40%	24%

Source: FAO (2014).

8. In Burkina Faso, where more than 70 percent of the country’s cattle are kept in transhumant livestock production systems,¹²⁵ the livestock sub-sector accounted for about 20 percent of total GDP in 2001–08 and for about 40 percent of agricultural GDP. Extensive pastoral systems supply 90 percent of the exported meat, milk, and ruminants.¹²⁶ Exports in 2011 were estimated at 1.7 million ruminants, valued at FCFA 96 billion.

9. Pastoral farming also plays a key role in Chad’s economy. Livestock account for 12.8 percent of total GDP and over 35 percent of agricultural GDP. The sector is the main livelihood and source of income for 40 percent of the rural population, and the total herd is estimated at more than 7 million cattle and 8 million sheep and goats.¹²⁷ The country is the largest producer of

¹²² Catley, A., J. Lind, and I. Scoones (eds.) (2013), *Pastoralism and Development in Africa, Dynamic Change at the Margins* (London: Routledge and Earthscan).

¹²³ OECD (2008).

¹²⁴ In OECD (2008).

¹²⁵ FAO (2005).

¹²⁶ FAO (2014a).

¹²⁷ FAO (2014b).

livestock and meat in Central Africa, and its exports of livestock and meat amount to FCFA 110 billion per year, representing nearly 85 percent of non-oil exports in 2011.¹²⁸

10. In Mali, livestock accounts for more than 30 percent of agricultural GDP and about 11 percent of national GDP. In conjunction with agriculture, livestock production contributes 80 percent of the income of the population in pastoral areas.¹²⁹ In 2012, the livestock population was estimated at 9.7 million cattle, 13 million sheep, and 18.2 million goats. Official statistics estimate that 207,000 cattle, 360,000 sheep, and 340,000 goats were exported in 2012, mainly toward Senegal, Côte d'Ivoire, and Guinea-Conakry.¹³⁰

11. In Mauritania, where livestock contributes 14.8 percent of GDP and about 80 percent of agricultural GDP, agriculture (including livestock production) is the main livelihood for 60 percent of the rural population.¹³¹ In 2010, the total livestock population was estimated at 17.6 million head (81 percent small ruminants, 10 percent cattle, and 8 percent camels).

12. Livestock production in Niger accounts for 40 percent of agricultural GDP and almost 13 percent of total GDP.¹³² Livestock rearing is practiced by more than 85 percent of the active population. The country has one of the greatest herd of cattle and small ruminants in West Africa, totaling over 31 million head.

13. Lastly, livestock rearing is the main economic activity in Senegal's pastoral areas. The International Monetary Fund reports that the livestock sector contributed 4 percent of national GDP and 24 percent of agricultural GDP. In 2010, Senegal's herd was estimated at 14.7 million head (23 percent cattle and 70 percent small ruminants).¹³³

IV- Economic rationale for Bank-funded investments in the pastoral areas of the Sahel

14. The public interventions proposed by the project have a strong economic rationale. The project will invest in marginal areas that historically were under-resourced (or supported through humanitarian assistance programs) and lay outside the development mainstream. In these areas, a large proportion of pastoral and agro-pastoral households remain in low-asset poverty traps and are vulnerable to drought and conflict. Poverty is indeed more prevalent in drylands. Some reports highlight that about 75 percent of Africa's poor people (making less than US\$1.25 per day) live in countries where at least one-quarter of the population resides in dryland zones.¹³⁴ The draft World Bank report, "Enhancing the Resilience of Drylands in Sub-Saharan Africa," drawing on data from the Africa Risk Capacity group and Save the Children, shows that in areas where the proportion of livestock-dependent people is extremely high, poverty rates are in the range of 70–90 percent.

15. Official Development Assistance has also "traditionally" been directed toward (and diverted by) emergency responses rather than preparedness and mitigation. Recent studies showed that late humanitarian response has cost billions of dollars, which is significantly more than the

¹²⁸ World Bank (2014).

¹²⁹ FAO (2014).

¹³⁰ World Bank (2014).

¹³¹ FAO (2014).

¹³² FAO (2014c); World Bank (2014).

¹³³ FAO (2014d).

¹³⁴ World Bank (2013), Concept Note for "Economics of Resilience in the Dry-lands of Sub-Saharan Africa," Economic and Sector Work.

cost of building resilience over 20 years (when the benefits of increased resilience are incorporated, these findings are only more pronounced).¹³⁵

16. The literature¹³⁶ indicates that the costs of disease morbidity and mortality are high, both for pastoralists (financial costs) and society (economic costs). For example: in the Sahel, where 95 percent of animal disease control costs are paid by the pastoralists themselves, with marginal support from public veterinary services, the losses of cattle and small ruminants from animal diseases during a crisis could reduce agricultural GDP by 20 percent.¹³⁷ The same study finds that when animal diseases prevent livestock from being exported to demanding markets, the resulting “missed opportunities” could be valued at US\$11 million per year, and the impossibility of exporting animals ultimately oversupplies the local market and contributes to lower market prices. OIE has shown that prevention yields desirable economic results: an investment of €14.6 million to control CBPP could forestall €30 million in losses from morbidity and mortality, leading to a net benefit of €15.4 million.¹³⁸

17. The trade in animal products within the region, largely driven by cross-border pastoralism, represents a compelling opportunity for regional integration. The interdependence between Sahelian countries (that have a comparative advantage in supplying meat and animal products) and those of the coast (providing cereals during certain periods of the year) strengthens the ties between people, societies, and economies. In the long run, integration offers an opportunity for peace, social union, and stability and makes conflict more costly and less probable (doubling trade between two countries is reported to lower the risk of conflict between them by about 17 percent).¹³⁹

V- Economics of resilience and pastoralism: A literature review

18. Like the RPLRP in East Africa,¹⁴⁰ the proposed project will finance a set of mixed activities that will constitute the first steps of a development pathway for building pastoral societies’ resilience to shocks, especially to drought and animal diseases. A number of studies on the economics of resilience and pastoralism, performed mainly in the context of the drylands in the Horn of Africa, provide valuable insights about “where” and “how” PRAPS investments should be made to achieve cost-effective interventions that promote resilience.

19. For example, research in Ethiopia and Kenya¹⁴¹ demonstrates that a late humanitarian response can cost US\$3–20 billion more than resilience-building activities over 20 years; that investing in commercial destocking of animals as an early response measure for pastoralists is highly cost-effective (every dollar spent avoids US\$138 of aid/losses in Kenya and US\$270 in Ethiopia); investing in specific livestock interventions (such as veterinary care and livestock feeding) and water interventions (better storage and wells) can yield benefits up to US\$27 for every

¹³⁵ Cabot Venton et al. (2012), “The Economics of Resilience: Lessons from Kenya and Ethiopia.”

¹³⁶ See, for example, OIE (2007), “Economic Analysis: Prevention versus Outbreak Costs” (Paris); Pradère, J.P., M. Kané, and Y. Lundy (2008), “Conséquences économiques des maladies animales, l’exemple du Mali” (Académie d’Agriculture de France, Paris); and Fadiga, M., C. Jost, and J. Ihedioha (2013), “Financial Costs of Disease Burden, Morbidity and Mortality from Priority Livestock Diseases in Nigeria: Disease Burden and Cost-benefit Analysis of Targeted Interventions,” ILRI Research Report No. 33 (International Livestock Research Institute, Nairobi).

¹³⁷ Pradère, Kané, and Lundy (2008), cited previously.

¹³⁸ OIE (2007).

¹³⁹ Schiff and Winters (1998); World Bank (2000).

¹⁴⁰ Approved by the Board of the World Bank in 2014.

¹⁴¹ “The Economics of Resilience: Lessons from Kenya and Ethiopia.”

dollar spent.¹⁴² Other studies report that the benefit-cost ratio of destocking interventions in terms of aid and investment averages 41:1,¹⁴³ whereas the benefit-cost ratio of supplementary cattle feeding during drought was 1.6:1, with relatively solid results against changes in feed prices increases.¹⁴⁴

20. Other research¹⁴⁵ finds that a number of investments are necessary to transform the pastoralist sector into a more resilient economic system. These investments could potentially be focused at promoting: (i) commercial pastoralism (which is characterized by higher off-take rates than traditional pastoralism), (ii) natural resources management and, (iii) economic diversification. All of these have demonstrated high potential for increasing the welfare of individuals and communities in ASALs. The literature demonstrates that most of non-pastoralist livelihoods in ASALs yield lower incomes than pastoralism, with the exception of urban livelihoods and irrigated farming. In some cases (low implementation cost scenario), irrigation investments in pastoralist regions appear to be capable of yielding high rates of return (15 percent in Ethiopia and 70-80 percent in Kenya). However, these returns drop precipitously in the medium and high implementation cost scenarios, with IRRs averaging 10 percent in the former and 2-7 percent in the latter. Analysis of investments in irrigation have been shown to have limited ability to enhance resilience, with investments having the potential to profitably absorb only three percent of the estimated pastoralist population in Ethiopia in 2020.

21. The *ex-ante* EFA for RPLRP estimated that the project IRR would lie between 17 and 19 percent, according to the country. Similarly, the *ex-post* economic analysis of projects funded by the *Agence Française de Développement* (AFD) in Chad suggests that investments securing access to natural resources (such as designing, building and rehabilitating water resources access facilities; demarcating and legalizing traditional livestock migration routes with provisions that ensure access to key water points and grazing areas etc.) have yielded desirable economic returns. Using herd growth projection models, the economic analysis showed IRR above 10 percent (IRAM, 2004¹⁴⁶).

22. Finally, the forthcoming World Bank report about the “Economics of resilience in the drylands of Sub-Saharan Africa” (to be delivered in FY15) will propose a framework of analysis that can further assess the relative effectiveness of resilience policies, thus potentially informing the suitability and cost-effectiveness of alternative investments. The economic and sector work will provide the likely cost of the investments needed at the national and regional levels to reduce vulnerability to desirable levels and provide some insights about how to balance investments across livestock and non-livestock sectors.

¹⁴² The analysis is approached first from a bottom-up perspective, relying heavily on data generated through Household Economy Analysis (HEA). HEA is a livelihoods-based framework for analysing the way people obtain access to the things they need to survive and prosper. It was designed to help determine people’s food and non-food needs in response to an event such as drought, and is built up based on household level evidence. The analysis is also approached from a top-down perspective, using national level data on the cost of drought.

¹⁴³ Tufts (2007).

¹⁴⁴ Tufts (2008).

¹⁴⁵ Headey, D., A.S. Taffesse, and Liangzhi You (2012), “Enhancing Resilience in the Horn of Africa: An Exploration into Alternative Investment Options” (International Food Policy Research Institute, Washington, DC).

¹⁴⁶ Bonnet, B., Banzhaf, M., Giraud P.N., Mahamat, I., 2004, *Analyse des Impacts économiques, sociaux et environnementaux des projets d’hydraulique pastorale financés par l’AFD au Tchad*, IRAM.

VI- Identification of benefits

23. Activities financed under PRAPS are expected to generate three main benefit streams: **(i) private (pastoralist)-level benefits**, such as increased herd growth, accrued production of livestock and livestock products and increased livestock productivity due to increased parturition rate, increased animal live weight, decreased livestock mortality and morbidity. Other direct project benefits include improved incomes and assets, which in turn generates additional social benefits in the form of increased food security and nutrition; **(ii) public benefits at national and regional levels**, such as reduced trans-boundary animal diseases, strengthened capacity of public services and institutions including participating ministries and regional economic community such as the Interstates Committee for Drought Control in the Sahel (CILSS) or other regional institutions (e.g. Pastoral Organizations); **(iii) more global benefits**, such as natural resources protection, enhanced bio-diversity and resilience to climate change risks. Other economic benefits, arising from improved animal productivity and health, include spill-over effects on consumers through relatively lower meat prices as supply increases, less health related illnesses through investments in strong value chains and food safety, and veterinary drug and feed suppliers who would expect higher demand for their services.

VII- Methodology and assumptions for the evaluation of project benefits

24. **Measuring resilience to shocks.** FAO has developed a conceptual framework and tested practical methods for measuring household resilience to food insecurity (see Alinovi, L., Mane, E., Romano, D.)¹⁴⁷. The resilience framework looks at the root causes of household vulnerability and highlights factors that make households resilient to food security shocks and stresses. These factors include: (i) income and access to food, (ii) assets (such as livestock), (iii) social safety nets such as food assistance and social security, (iv) access to basic services such as water and health care, (v) households' adaptive capacity which is linked to education and diversity of income sources; and (vi) the stability of all these factors over time. In addition to a better access to basic services, this project will have a significant impact on livestock assets, incomes and diversity of income sources. Livestock herd projection models will be used to assess the stability of these factors over time.

25. **Herd projection models.** Livestock production is the dominant livelihood and economic activity in the targeted areas of the project. Consequently, the quantification of benefits from extensive livestock activities is at the centre of the project's EFA. Herd growth projection models for the main animal breeds populations¹⁴⁸ (*Zebu* and *Azawak* cattle, *Peulh* sheeps and *Sahel* goats) found in Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal have been designed to estimate the “with project” and “without project” situations for a typical household over a 20-years period. The herd growth projection model uses the “EcoRum” interface of the LSIPT module (a toolkit developed by CIRAD¹⁴⁹ and ILRI¹⁵⁰ under the ALIVE program) for simulating bio-economic performances of herds of tropical domestic ruminants in pastoral systems. Demographic

¹⁴⁷ Alinovi, L., E. Mane, and D. Romano (2010), “Measuring Household Resilience to Food Insecurity: An Application to Palestinian Households,” in *Agricultural Survey Methods*, edited by Benedetti et al. (New York: John Wiley). A number of other FAO/EU papers reflect some applications of these frameworks in Kenya, Somalia, Sudan, and South Sudan.

¹⁴⁸ Camels were not considered in the analysis, due to (i) their capacity of being resilient in times of shocks and (ii) PRAPS investments mainly targeting cattle and small ruminants.

¹⁴⁹ French Agricultural Research Centre for International Development

¹⁵⁰ International Livestock Research Institute

projections are critical for assessing the livestock asset depletion through time (*livestock asset stability*). From the projections, it is possible to calculate equivalent meat production and, from this output, derive incremental economic benefits streams (*incomes stability*).

26. **Herd composition per targeted household.** While it is almost impossible to reflect in the analysis the diversity of livestock holdings within each wealth group category (very poor, poor, middle and better-off) in all the ASALs of Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal, the analysis attempted to model the typical livestock holdings per targeted household and per country. Based on the data reported in FEWS-NET & USAID’s “Livelihoods Profiles”, table A5.2 describes the average wealth characteristics by household used in the analysis.

Table A5.2: Wealth characteristics per household (HH) in the PRAPS

	Burkina Faso 1/	Chad 2/	Mali 3/	Mauritania 4/	Niger 5/	Senegal 6/
Goats/ HH	5	8	5	10	5	6
Sheep/ HH	5	5	2	10	2	5
Cattle/ HH	5	5	5	3	5	5
TLU eq. 7/	4.5	4.8	4.2	4.1	4.2	4.6

Source:

1/ “Livelihood Zoning and Profiling Report” (USAID and FEWS, 2010) (data from Zone 8).

2/ “Rapid Livelihood Zone Profile” (USAID and FEWS, 2011) (data from Zone 7).

3/ “Livelihood Zoning and Profiling Report (USAID and FEWS, 2010) (data from Zone 4).

4/ “Mauritania Livelihood Profiles” (USAID and FEWS, 2005) (data from Zone 4).

5/ Given the absence of precise livestock assets data in the “Niger Livelihood profiles,” data from Mali were used.

6/ Ejlersen, M., J. Poole, and K. Marshall (2012), International Livestock Institute.

7/ TLU = Tropical livestock unit: Camels = 1.0; Cattle = 0.7; Sheep and goats = 0.1 (FAO).

Note: Camels were not taken into account when defining wealth characteristics per household, explaining TLU differences between some countries (e.g., between Mauritania and Senegal).

27. **With and without project scenarios.** Efforts were made to carefully assume the “without project” conditions (counterfactual) and forecast the “with project” situation for Sahel conditions. For both scenarios, cattle and small-ruminants production parameters, such as average annual mortality rates, parturition and prolificacy rates, average annual off-take rates or live weights, together with herd structure and demographic parameters, were estimated. Official data, however, is very sparsely documented in most of the countries. To fill the “knowledge gap”, consultations were made with national livestock specialists and FAO experts during project preparation. Data from the “*Initiative Elevage Pauvreté et Croissance*” (IEPC, 2005) in Burkina Faso and Mauritania were a key information source. Assumptions were also triangulated with data sets found in publications from CIRAD (Lesnoff *et al.*, 2007¹⁵¹, 2009¹⁵², 2011¹⁵³, 2012¹⁵⁴), CGIAR/ILRI (Ejlertsen *et al.*, 2012)¹⁵⁵ and FAO (Otte and Chilonda, 2002)¹⁵⁶.

28. In both scenarios, the probability of droughts and rain failures to happen is assumed to be one every five years. This assumption is based on the retrospective analysis of droughts that have

¹⁵¹ Lesnoff M., Saley A., Adamou K., N’Djaffa H., 2007, *Enquête démographique 2006 sur le cheptel domestique au Niger: sites de Fakara, de Gabi et de Zermou*, CIRAD, ILRI.

¹⁵² Lesnoff, M., 2009, *Annual natural demographic rates in small ruminants’ herds extensively managed in Senegal*, Technical Note, CIRAD.

¹⁵³ Ba.A., Lesnoff.M, Pocard-Chappuis R., Moulin CH., 2011, *Demographic dynamics and off-take of cattle herds in southern Mali*, CIRAD.

¹⁵⁴ Lesnoff M., Corniaux C., Hiernaux P., 2012, *Sensitivity analysis of the recovery dynamics of a cattle population following drought in the Sahel region*, Ecological Modelling 232, p.28-39

¹⁵⁵ Ejlersen, M., Poole, J. and Marshall, K. 2012. *Sustainable management of globally significant endemic ruminant livestock in West Africa: Estimate of livestock demographic parameters in Senegal*. ILRI Research Report 29. Nairobi: International Livestock Research Institute.

¹⁵⁶ “Systematic Review of Cattle and Small Ruminants Productions Systems in Sub-Saharan Africa”.

occurred in the Sahel during the past 40 years¹⁵⁷. In the “**without project**” situation, droughts contribute to modest herd growth-rates, due to low reproductive efficiency including low conception and calving rates and long calving intervals, increased calf and adult mortality rates, but also lead to low animal prices, pastoral households selling weak and unhealthy animals in order to buy staple cereals. A literature review carried out by CIRAD (2012) reported that the proportion of the population size decline averaged 20 to 80 percent during drought periods in the Sahel¹⁵⁸. In the “**with project**” situation, the analysis will assume that all PRAPS activities will *combine* to build pastoral and agro-pastoral communities’ resilience, that would translate into: (i) an increased herd growth-rate, due to a reduction of animal mortality rates and increased animal parturition/calving rates *during and after droughts*, due to improved access to natural resources for grazing and water, access to drought-tolerant fodder and animal health services, (ii) higher animal prices during droughts due to improved average live weight for each animal class of age, early off-take of animal and production of well-finished animals. In both scenarios, a compensatory growth period was assumed (zero off-taking of cattle females) to reflect the coping strategies of pastoralists after drought years (Lesnoff *et al.*, 2012).

29. **Project beneficiaries.** Incremental benefits at the household level, as provided by the EcoRum module, were extrapolated at the total number of beneficiaries in each country (table A5.3). Assumptions with regard to beneficiaries are linked to the Results Framework: (i) the project will target a total of 2,070,000 beneficiaries; (ii) beneficiaries will accrue incrementally over the project years and, (iii) beneficiaries would start to augment from year 2 onwards.

Table A5.3: Beneficiaries targeted by PRAPS (linked with the Results Framework)

	Burkina Faso	Chad	Mali	Mauritania	Niger	Senegal
Direct beneficiaries ('000s)	200	400	440	400	400	230

30. **Alternative livelihoods activities (Window B under component 4)** are not known *ex-ante*, since they will arise from the beneficiary participatory planning processes. For this reason, a full quantitative evaluation of economic and financial benefits of component 4 activities cannot be easily done at the *ex-ante* level because it has not been possible to predict precisely: (i) which investment activities will be pursued by the beneficiaries and (ii) the cost of investment packages (assets, equipment and material, working capital requirements etc.). Financial analysis, however, will be systematically done when assessing the most appropriate diversification micro-projects.

VIII- Prices

31. In Burkina Faso, local prices (in real terms) were obtained through the National Livestock Market Information System (LMIS) managed by the Directorate of Statistics of the Ministry of Agriculture, Animal Resources and Fisheries. No LMIS or no recent livestock prices data being

¹⁵⁷ Major crisis occurred in the Sahel in 1972-73; 1984-85; 1996-97; 2004-05 and 2011-12. Rain failures can happen more frequently every 2/3 years (based on discussions with CILSS).

¹⁵⁸ Lesnoff M., Corniaux C., Hiernaux P., 2012. *Sensitivity analysis of the recovery dynamics of a cattle population following drought in the Sahel region*, Ecological Modelling 232, p.28-39

available in Chad, Mali, Mauritania, Niger and Senegal, local prices (in real terms) were retrieved from FAO statistics (FAOSTAT portal).

32. During modelling, a particular focus was put on collecting, and distinguishing between, average livestock prices “with” and “without” a drought. Specific efforts were made to assess the average animal price variability over a significant period of time (reviewing prices over a 5-10 years period) so as to capture animal prices during a shock, such as a light or severe drought.

33. Because of data shortages, more particularly for computing parity prices in the six PRAPS countries for the multiple project outputs, it was assumed that market prices (more particularly those of the various animals) would reflect economic prices.

IX- Project costs

34. Total project costs were provided by the COSTAB tool on the basis of detailed cost tables prepared for each PRAPS component in Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal¹⁵⁹. Costs related to CILSS coordination activities were added in the country-level costs since they contribute to the smooth implementation of all regional and national activities. Economic prices were generated by the algorithm of COSTAB that removed all taxes, duties and inflation effects (the economic analysis being carried out in constant prices).

X- Results (baseline scenario)

35. **IRR and NPV of the project.** Using the LSIPT model, and under the herd modeling assumptions, livestock productivity gains were translated into quantitative benefits by placing a price value on the incremental outputs. Incremental benefit streams were calculated in each of the six countries in constant USD currency. The total incremental benefit stream (net of project costs) was used to calculate the IRRs and NPVs, over a 20-years period. An opportunity cost of capital of 12 percent was used to calculate the NPVs (as assumed in other EFAs for Bank-funded projects in the Sahel region¹⁶⁰).

36. **Results** show satisfactory IRRs (table A5.4) and positive NPVs, but given the relative scarcity of good baseline data in the 6 countries at the time of preparation, the *ex-ante* results should be considered as indicative, rather than final. The analysis could be re-run during implementation, using more accurate and updated data (such as those being currently collected by CIRAD in the Sahel region).

¹⁵⁹ COSTAB for Burkina Faso was not available at the time of finalization of this draft analysis (i.e. end February 2015). Economic costs were approximated using Mali and Senegal budgets. The analysis for these two countries will be revisited at appraisal, when COSTABs are available.

¹⁶⁰ For example, see the EFA of the Senegal River Basin Climate Change Resilience Development Project (MWRD, Mauritania, Senegal, Mali, Guinea, 2013) and that of the agro-sylvo-pastoral exports and market development project (PRODEX, Niger, 2013)

Table A5.4: Baseline results of the analysis

Country	NPV @12 percent (in US\$ 000s)	Rate of return (20 years)
Burkina Faso	15,952	18.9%
Chad	32,001	21.0%
Mali	36,387	22.2%
Mauritania	35,973	23.5%
Niger	43,823	21.7%
Senegal	20,354	20.0%

XI- Sensitivity analysis

37. **Variables affecting the project returns.** Through a deterministic approach, the analysis tested the robustness of results against some disturbances in the main variables of the model (covering both drought and normal years). These key variables include (i) mortality rates, (ii) parturition rates, (iii) off-take rates and, (iv) animal prices.

38. **Scenario of the sensitivity analysis.** The sensitivity analysis tested the impact of (i) a 2 to 5 percent increase in cattle, goat and sheep's mortality rates, (ii) a 5 to 10 percent decrease in cattle, goat and sheep's parturition rates, (iii) a 2 to 5 percent increase in cattle, goat and sheep's off-take rates and, (iv) a 10 to 15 percent decrease in animal prices. Results are presented in table A5.5a and A5.5b.

39. **Results.** The sensitivity analysis shows that the project's profitability appears to be more sensitive to disturbances in animal mortality and off-taking strategies. While these two parameters always affect strongly the dynamics of animal populations, these results confirm that sustainable investments towards animal nutrition, water access and health, all contributing to decreased mortality during normal and drought years, are key to project success. Reducing mortality contributes to maintain livestock assets, reduce the recovery time of the population after a climate shock and ultimately contribute to build pastoralists' resilience.

Table A5.5a. Results of the sensitivity analysis measured by impact on IRR (Burkina Faso, Chad, and Mali)

Scenario	Burkina Faso /1	Chad	Mali
Baseline	18.9%	21%	22.2%
With changes in mortality rates (all other variables being fixed)			
+2 % in mortality rates	16.8%	19.3%	20.1%
+5 % in mortality rates	13.3%	16.5%	16.7%
With changes in parturition rates (all other variables being fixed)			
-5 % in parturition rate	18%	20.1%	21.3%
-10 % in parturition rate	17%	19.1%	20.4%
With changes in off-take rates (all other variables being fixed)			
+2 % in off-take rates	16.6%	18.7%	20.6%
+5 % in off-take rates	12.1%	14.6%	17%
With changes in animal prices during shocks			
-10 % in animal prices	15.6%	17.5%	18.8%
-15 % in animal prices	13.6%	15.5%	16.8%

1/ Results to be revised at appraisal.

**Table A5.5b. Results of the sensitivity analysis measured by impact on IRR
(Mauritania, Niger, and Senegal)**

Scenario	Mauritania	Niger	Senegal
Baseline	23.5%	21.7%	20.0%
With changes in mortality rates (all other variables being fixed)			
+2 % in mortality rates	21.3%	19.5%	17.1%
+5 % in mortality rates	17.9%	15.9%	12.4%
With changes in parturition rates (all other variables being fixed)			
-5 % in parturition rate	22.5%	20.6%	19.2%
-10 % in parturition rate	21.6%	19.6%	18.4%
With changes in off-take rates (all other variables being fixed)			
+2 % in off-take rates	21.4%	19%	18.6%
+5 % in off-take rates	18%	14.1%	16.8%
With changes in animal prices during shocks			
-10 % in animal prices	21.4%	18.6%	18.5%
-15 % in animal prices	20.2%	16.9%	17.8%

XII- Modeling assumptions

Table A5.6a. Modeling assumptions in Burkina Faso, Chad, Mali and Niger

Without project												
Parameters	Normal year (without drought)						Drought year					
	Cattle		Goats		Sheeps		Cattle		Goats		Sheeps	
	Femelle	male	Femelle	male	Femelle	male	Femelle	male	Femelle	male	Femelle	male
Reproduction												
Parturition rate	0.57-0.6	N/A	1.15-1.17	N/A	1.06	N/A	0.46-0.48	N/A	0.92-0.94	N/A	0.85	N/A
Prolificacy rate	1.00	N/A	1.06	N/A	1.06	N/A	1.0	N/A	1.1	N/A	1.1	N/A
% female at birth	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A
Mortality												
Juvenile	15%	15%	28%	28%	25%	25%	30%	30%	54-56%	54-56%	50%	50%
Sub-adults	7%	7%	6%	6%	7%	7%	14%	14%	10-12%	10-12%	14%	14%
Adults	6%	6%	6%	6%	7%	7%	12%	12%	10-12%	10-12%	14%	14%
Off-take												
Juvenile	0%	0%	3%	9%	2%	5%	0%	0%	3%	9%	2%	5%
Sub-adults	0%	3-4%	4%	9%	3%	12%	0%	6-8%	8%	18-19%	6%	24-25%
Adults	4-8%	5%	7%	1%	6%	1%	20-40%	25%	35%	5%	30%	5%
With project												
Reproduction												
Parturition rate	0.58-0.61	N/A	1.18	N/A	1.07	N/A	0.47-0.49	N/A	0.94	N/A	0.86	N/A
Prolificacy rate	1.00	N/A	1.06	N/A	1.06	N/A	1.0	N/A	1.1	N/A	1.1	N/A
% female at birth	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A
Mortality												
Juvenile	13-14%	14%	27%	27%	24%	24%	26-28%	28%	54-55%	54-55%	48%	48%
Sub-adults	5-6%	6%	5%	5%	6%	6%	10-12%	12%	10-11%	10-11%	12%	12%
Adults	4-5%	5%	5%	5%	6%	6%	8-10%	10%	10-11%	10-11%	12%	12%
Off-take												
Juvenile	0%	0%	5%	11%	5%	10%	0%	0%	5%	11%	5%	10%
Sub-adults	2-3%	6%	6%	9%	5%	10%	4-6%	12-18%	12-18%	18%	10%	20-30%
Adults	4%	5%	7%	1%	6%	1%	20%	25%	35%	5%	30%	5%

Table A5.6b. Modeling assumptions in Mauritania and Senegal

Without project												
	Normal year (without drought)						Drought year					
	Cattle		Goats		Sheeps		Cattle		Goats		Sheeps	
Parameters	Femelle	male	Femelle	male	Femelle	male	Femelle	male	Femelle	male	Femelle	male
Reproduction												
Parturition rate	0.46-0.6	N/A	0.9-1.15	N/A	0.85-1.01	N/A	0.37-0.48	N/A	0.72-0.9	N/A	0.68-0.81	N/A
Prolificacy rate	1.00	N/A	1-1.25	N/A	1	N/A	1.0	N/A	1-1.25	N/A	1.1	N/A
% female at birth	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A	50.0	N/A	0.5	N/A
Mortality												
Juvenile	15-20%	15-20%	18-28%	20-28%	25-28%	25-32%	30-40%	30-40%	36-56%	40-56%	50-56%	50-64%
Sub-adults	8%	8%	6-18%	6-20%	8%	8%	16%	16%	12-36%	12-40%	16%	16%
Adults	8%	8%	6-14%	6-14%	8%	8%	16%	16%	12-28%	12-28%	16%	16%
Off-take												
Juvenile	0%	0%	0-8%	0%	0%	0-4%	0%	0%	0-8%	0%	0%	0%
Sub-adults	0-4%	4-10%	2-7%	29-39%	2-7%	16-50%	0-8%	8-20%	4-14%	58-78%	4-14%	32-75%
Adults	4-8%	10-11%	7-13%	2%	7-13%	1-13%	8-16%	22%	26%	4%	26%	2-26%
With project												
Reproduction												
Parturition rate	0.47-0.61	N/A	1-1.16	N/A	0.86-1.02	N/A	0.5-0.62	N/A	0.73-0.93	N/A	0.69-0.82	N/A
Prolificacy rate	1.00	N/A	1-1.25	N/A	1.1	N/A	1.0	N/A	1.3	N/A	1.1	N/A
% female at birth	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A	0.5	N/A
Mortality												
Juvenile	13-18%	13-18%	17-27%	19-27%	26%	30%	26-36%	26-36%	34-54%	38-54%	52%	60%
Sub-adults	7%	7%	7-17%	5-19%	7%	7%	14%	14%	14-34%	10-38%	14%	14%
Adults	7%	7%	5-13%	5-13%	7%	7%	14%	14%	10-26%	10-26%	14%	14%
Off-take												
Juvenile	0%	0%	0-5%	0-10%	0-3%	0-6%	0%	0%	5%	10%	0-3%	0-6%
Sub-adults	3-6%	8-13%	6-13%	37-39%	9-14%	21-34%	6-12%	16-26%	12-26%	78%	18-28%	42-68%
Adults	4-8%	10-13%	7-13%	2%	9-13%	17%	8-16%	20-26%	14-26%	2-4%	18-26%	34%

Annex 6: Bibliographic References

1. Alfaroukh, I.O., Avella, N., Grimaud, P. *La politique sectorielle du pastoralisme au Tchad : quelles orientations ?* Actes de colloque, N'Djamena, tchad, 1-3 mars 2011, 179 p.
2. Alliance Globale pour la Résilience, Sahel et Afrique de l'Ouest, *Feuille de route* adoptée le 9 avril 2013, 28 p.
3. Azzarri, C., E. Cross, B. Haile, and A. Zezza (2014). *Does Livestock Ownership Affect Animal Source Foods Consumption and Child Nutritional Status? Evidence from Rural Uganda*. Policy Research Working Paper No. WPS 7111 (World Bank, Washington, DC).
4. Calistus N. Ngonghala, Mateusz M. Plucinski, Megan B. Murray, Paul E. Farmer, Christopher B. Barrett, Donald C. Keenan and Matthew H. Bonds, *Poverty, disease and the ecology of complex systems*. PLOS Biology, volume 12, issue 4 (April 2014)
5. Christopher B. Barrett, Michael R. Carter. *The Economics of Poverty Traps and Persistent Poverty: Empirical and Policy Implications*. The Journal of Development Studies (2013)
6. Christopher B. Barrett, Michael R. Carter and Peter D. Little. *Understanding and reducing persistent poverty in Africa*. (London: Routledge, 2007)
7. Ickowicz, A. et al., *Crop–livestock production systems in the Sahel – increasing resilience for adaptation to climate change and preserving food security*, 34 p.
8. Touré, I., Ickowicz, A., Wane, A., Garba, I., Gerber, P. (éditeurs), *Atlas des évolutions des systèmes pastoraux au Sahel*, FAO et CIRAD, 2012, 32p.
9. Ancey V., Ickowicz A., Touré I., Wane A., Diop A.T., 2009. *La vulnérabilité pastorale au Sahel : portée et limite des systèmes d'alerte basés sur des indicateurs* In : L'élevage, richesse des pauvres : Stratégies d'éleveurs et organisations sociales face aux risques dans les pays du Sud, Versailles : Ed. Quae, pp. 117-132
10. CEDEAO, CSAO/OCDE, 2008. *Elevage et marché régional au Sahel et en Afrique de l'Ouest. Potentialités et défis*, Editions Club du Sahel et de l'Afrique de l'Ouest/OCDE, 162 p.
11. De Cao G., Ickowicz A., Touré I., Gerber P., 2008. *An information and early warning system designed for sahelian pastoral systems: the example of SIPSA implementation in Senegal*, Journal of Agriculture and Environment for International Development, 102 (1/2): pp.141-159
12. Downie, K., *A Review of Good Practice and Lessons Learned in Programming for ASAL Populations in the Horn of Africa*, UNICEF ESARO, 2011.
13. Steinfeld, H., Gerber P., Wassenaar T., Castel C., Rosales M., Haan de C., 2006. *Livestock's long shadow: environmental issues and options*, FAO, 390 p.
14. OIE – World Organization for Animal Health. *Aquatic Animal Health Code*
15. OIE - World Organization for Animal Health. *Terrestrial Code*
16. OIE - World Organization for Animal Health. *PVS Pathway reports / performance of veterinary services for each participating country*

17. OIE - *Feasibility study for a programme to improve veterinary governance and the control of priority transboundary animal diseases in West Africa* (Sept 2013)
18. OIE - *Economic analysis, Prevention versus outbreak costs*, 2007
19. OXFAM, *Quelles leçons tirées? Un bilan de la réponse à la crise alimentaire 2012 au Sahel pour construire la résilience*, 16 avril 2013, 46 p.
20. Brooks, N., *Changement climatique, sécheresse et pastoralisme au sahel* - Note de discussion pour l'Initiative Mondiale sur le Pastoralisme Durable, préparée par Nick Brooks. Novembre 2006, 12 p.
21. Bourbouze, A., Lhoste, P., Marty, A., Toutain, B. *Problématique des zones pastorales, Etudes sur la lutte contre la désertification dans les projets de développement*, CSFD/AFD, 2011, 12 p.
22. Union Africaine, département de l'économie rurale et de l'agriculture, *Cadre stratégique pour le pastoralisme en Afrique : sécuriser, protéger et améliorer les vies, les moyens de subsistance et les droits des communautés pastorales*, 2013, 56 p.
23. Club du Sahel, Déclaration de N'Djamena - *Elevage pastoral, une contribution durable au développement et à la sécurité des espaces saharo-sahéliens*, colloque régional et conférence ministérielle, 27-29 mai 2013, 9p.
24. Pratt, J., Legall, F., De Haan, C. *Investing in pastoralism : sustainable natural resource use in Arid Africa and the Middle East*, World Bank Technical paper n°365, June 1997, 174 p.
25. ECOWAS, CSAO, *Livestock and Regional Market in the Sahel and West Africa: Potentials and Challenges*, ECOWAS, CSAO, 2008, 150 p.
26. IIED, *Modern and Mobile: The Future of Livestock Production in Africa's Drylands*, October 2009, 88 p.
27. Toutain, B., Marty A., Bourgeot A., Ickowicz A. & Lhoste P. *Pastoralisme en zone sèche. Le cas de l'Afrique subsaharienne*. Les dossiers thématiques du CSFD. N°9. Février 2012. CSFD/Agropolis International, Montpellier, France. 60 p.
28. FAO, ILRI, AU-IBAR (2013). *Investing in African Livestock: Business Opportunities in 2030–2050* (Rome)
29. De Haan, Dubern, Garancher, and Quintero (2014). *Pastoralism Development in the Sahel: A Road to Stability?* (World Bank, Washington DC, processed)
30. OECD (2010). *Sahelian Climate: Past, Current, Projections* (Paris).
31. World Bank (2013). *Turn Down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience*. Report No. 2 (Washington, DC)
32. UNDP, WFP, FWES-NET, Oxfam, FAO, and World Bank. Interim Strategy Note, Niger (2011). *Evaluation rapide de l'impact de la crise pastorale 2009–2010 sur la décapitalisation du cheptel et les moyens de subsistance des populations pastorales et agro-pastorales du Niger*
33. Lesnoff, M., C. Corniaux, and P. Hiernaux. (2012). *Sensitivity Analysis of the Recovery Dynamics of a Cattle Population Following Drought in the Sahel Region*. Ecological Modeling 232: 28–39.

34. Hesse, C., S. Anderson, L. Cotula, J. Skinner, and C. Toulmin (2013). *Managing the Boom and Bust: Supporting Climate Resilient Livelihoods in the Sahel*. IIED Issues Paper (International Institute for Environment and Development, London)
35. International Crisis Group (2014). *Afrique Centrale: Les Défis Sécuritaires du Pastoralisme*. Report No. 215 (Brussels)
36. Aklilu, Y., and A. Catley (2010), *Mind the Gap, Commercialization, Livelihoods, and Wealth Disparity in Pastoralist Areas of Ethiopia* (Feinstein International Center and DFID, Medford).
37. N.E. Tambi, W.O. Maina and C. Ndi (2006), *An estimation of the economic impact of contagious bovine pleurpneumoniae in Africa*
38. World Bank (2011), *Africa's Future and the World Bank's Support to It* (Washington, DC)
39. World Bank report, *Enhancing the Resilience of Drylands in Sub-Saharan Africa* (in preparation - draft)
40. Krätli, S., M. Monimart, B. Jallo, J. Swift, and C. Hesse (2013), *Evaluation et capitalisation de 20 ans d'interventions du Groupe AFD portant sur le secteur de l'hydraulique pastorale au Tchad* (International Institute for Environment and Development, London).
41. Catley, A., J. Lind, and I. Scoones (eds.) (2013), *Pastoralism and Development in Africa, Dynamic Change at the Margins* (London: Routledge and Earthscan)
42. Cabot Venton et al. (2012), *The Economics of Resilience: Lessons from Kenya and Ethiopia*
43. Chuan Liao, Christopher B. Barrett and Karim-Aly S. Kassam. *Does Diversification Translate into Improved Livelihoods? Evidence from Pastoral Households in the Altay and Tianshan Mountains of Xinjiang, China*. Development and Change (2014)
44. Pradère, J.P., Kané, M., Lundy Y., 2008, *Conséquences économiques des maladies animales, l'exemple du Mali*, Académie d'Agriculture de France (2008)
45. Fadiga, M., Jost, C. and Ihedioha, J. *Financial costs of disease burden, morbidity and mortality from priority livestock diseases in Nigeria: Disease burden and cost-benefit analysis of targeted interventions*. ILRI Research Report 33. Nairobi, Kenya: ILRI (2013)
46. IFPRI, *Enhancing Resilience in the Horn of Africa, an Exploration into Alternative Investment Options* (2012)
47. Bonnet, B., Banzhaf, M., Giraud P.N., Mahamat, I. *Analyse des Impacts économiques, sociaux et environnementaux des projets d'hydraulique pastorale financés par l'AFD au Tchad*, IRAM (2004)
48. Alinovi, L., Mane, E. and Romano, D. *Measuring Household Resilience to Food Insecurity: an Application to Palestinian Households*, in *Agricultural Survey Methods*, by Benedetti et al. (eds.), John Wiley & Sons, April 2010
49. Lesnoff M., Saley A., Adamou K., N'Djaffa H. *Enquête démographique 2006 sur le cheptel domestique au Niger: sites de Fakara, de Gabi et de Zermou*, CIRAD, ILRI (2007)

50. Lesnoff. M. *Annual natural demographic rates in small ruminants' herds extensively managed in Senegal*, Technical Note, CIRAD (2009)
51. Ba.A, Lesnoff.M, Pocard-Chappuis R., Moulin CH. *Demographic dynamics and off-take of cattle herds in southern Mali*, CIRAD (2011)
52. Lesnoff M., Corniaux C., Hiernaux P. *Sensitivity analysis of the recovery dynamics of a cattle population following drought in the Sahel region*, Ecological Modelling 232, p.28-39 (2012)
53. Ejlertsen, M., Poole, J. and Marshall, K. *Sustainable management of globally significant endemic ruminant livestock in West Africa: Estimate of livestock demographic parameters in Senegal*. ILRI Research Report 29. Nairobi: International Livestock Research Institute (2012)
54. Ejlertsen et al. *Systematic Review of Cattle and Small Ruminants Productions Systems in Sub-Saharan Africa* (2012)

Annex 7: Maps of PRAPS intervention areas

AFRICA: REGIONAL SAHEL PASTORALISM SUPPORT PROJECT

