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IDA/R2017-0258/1

June 29, 2017

Closing Date: Thursday, July 20, 2017 at 6 p.m.

FROM: Vice President and Corporate Secretary

Burkina Faso - Livestock Sector Development Support Project

Project Appraisal Document

Attached is the Project Appraisal Document regarding a proposed credit to Burkina Faso for a Livestock Sector Development Support Project (IDA/R2017-0258), which is being processed on an absence-of-objection basis.

Distribution:
- Executive Directors and Alternates
- President
- Bank Group Senior Management
- Vice Presidents, Bank, IFC and MIGA
- Directors and Department Heads, Bank, IFC and MIGA

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The World Bank
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Report No: PAD2313

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF EUR 54.9 MILLION
(US$60 MILLION EQUIVALENT)

TO THE

BURKINA FASO

FOR A

BURKINA FASO LIVESTOCK SECTOR DEVELOPMENT SUPPORT PROJECT

June 27, 2017

Agriculture Global Practice
Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2017)

Currency Unit = Euro

US$1 = 0.91424392 EURO

FISCAL YEAR

January 1 - December 31

ABBREVIATIONS AND ACRONYMS

AfDB	:	African Development Bank
AI	:	Artificial Insemination
ASF	:	African Swine Fever
AWD	:	All Wheel Drive
BP	:	Business Plan
CAADP	:	Comprehensive Africa Agriculture Development Program
CAMVET	:	Central procurement unit of veterinary medicines
CAS	:	Country Assistance Strategy
CBPP	:	Contagious Bovine Pleuropneumonia
CEDEAO	:	*Communauté Economique des Etats de l'Afrique de l'Ouest* (Economic Community of West African States - ECOWAS)
CERC	:	Contingency Emergency Response Component
CFAF	:	Francophone Africa Community - Franc
CGIAR	:	Consultative Group on International Agricultural Research
CIRDES	:	*Centre Internationale de Recherche- Développement sur l'Elevage en zone Sub humide (*Center of Internationl Livestock Development-Research in sub-humide Zone)
CNRST	:	*Centre National de la Recherche Scientifique et Technologique* (National Center of Scientific Research and Technology)
CMAP	:	*Centre de Multiplication des Animaux Performants* (Center for Multiplication of Improved Animal Breeds)
COPIL	:	*Comité de Pilotage* (Steering Committee)
CPS	:	Country Partnership Strategy
CSO	:	Civil Society Organization
DAF	:	*Direction Administrative et Financière (*Administrative and Financial Directorate)
DCMEF	:	*Direction de Contrôle des Marchés Publics et des Engagements Financiers* (Directorate of Procurement and Financial Commitments)
DGCOOP	:	*Direction Générale de la Coopération* (Directorate of Cooperation)
DRRHA	:	*Direction Régionale des Ressources Animales et Halieutiques* (Regional Directorate of Animal Resource and Fisheries)
DGEP	:	*Direction des Etudes et de la Planification* (Directorate of Studies and Planning)
DGPA	:	*Direction Générale des Productions Animales* (General Directorate of

		Animal Productions)
DGRH	:	*Direction Générale des Ressources Halieutiques* (General Directorate of Fisheries) (MRAH)
DGS	:	*Direction Générale des Statistiques* (General Directorate of Statistics)
DGESS	:	*Direction Générales des Etudes et Statistiques Sectoriels* (General Directorate of Sectoral Studies and Statistics)
DGSV	:	*Direction Générale des Services Vétérinaires* (General Directorate of Veterinary Services) (MRAH)
DGTCP	:	*Direction Générale du Trésor et de la Comptabilité Publique* (General Directorate General of Treasury and Public Accounting)
ECOWAP	:	Economic Community of West Africa Agriculture Policy
ECOWAS	:	Economic Community of West African States
DMP	:	Directorate of Public Procurement
EIRR	:	Economic Internal Rate of Return
ESIA	:	Environmental and Social Impact Assessment
ESMF	:	Environmental and Social Management Framework
ESMP	:	Environmental and Social Management Plan
FAO	:	Food and Agriculture Organization
FBDES	:	*Fonds Burkinabe de Développement Economique et Social* (Fund for Economic and Social Development)
F CFA	:	Franc of African Financial Community
FIRR	:	Financial Internal Rate of Return
FM	:	Financial Management
FMD	:	Foot and Mouth Disease
FODEL	:	*Fonds de Développement de l'Elevage* (Livestock Development Fund)
FP	:	Focal Point
GAC	:	Grant Approval Committee
GDP	:	Gross Domestic Product
GOBFGRS	:	Government of Burkina Faso Grievance Redress Service
HPAI		Highly Pathogenic Avian Influenza
ICRAF	:	International Council for Research in Agro-forestry
ICT	:	Information Communication and Technology
IEG	:	Independent Evaluation Group
ILRI	:	International Livestock Research Institute
IDA	:	International Development Association
IITA		International Institute fro Tropical Agriculture
IRM	:	Immediate Response Mechanism
LEG	:	Livestock Emergency Guidelines and Standards
LDP	:	Livestock Development Project
LG	:	Local Government
LNE	:	*Laboratoire National de l'Elevage* (National Livestock Laboratory)
MAH	:	*Ministère de l'Agriculture et de l'Hydraulique* (Ministry of Agriculture and Hydraulics)
MDG	:	Millenium Development Goal
MEDD	:	*Ministère de l'Environnement et du Développement Durable* (Ministry of Environment and Sustainable Development)

MG	:	Matching Grant
MoU	:	Memorandum of Understanding
M&E	:	Monitoring and Evaluation
MRAH	:	*Ministère des Ressources Animales et Halieutiques* (Ministry of Animal Resources and Fisheries)
MTR	:	Mid-Term Review
NAIP	:	National Agriculture Investment Program
NC	:	National Coordinator
NCD	:	New Castle Disease
NGO	:	Non-governmental organization
NVS	:	National Veterinary Services
NVP	:	Net Present Value
OIE	:	*Organisation Internationale de la Santé Animale* (World Organization for Animal Health)
PA	:	Productive Alliance
PAD	:	Project Appraisal Document
PADEL-B	:	*Projet d'Appui au Développement de l'Elevage au Burkina Faso* (Burkina Faso Livestock Sector Development Support Project)
PCU	:	Project Coordinating Unit
PDO	:	Project Development Objective
PIM	:	Project Implementation Manual
PFI	:	Partner Financial Institution
PAFASP	:	*Projet d'Appui aux Filières Agro-Sylvo-Pastorales* (Agro-sylvo-pastoral Value Chains Support Project)
PAPISE	:	*Plan d'Actions et Programme d'Investissement du Secteur de l'Elevage* (Livestock Sector Action Plan and Investment Program)
PAPSA	:	*Projet d'Amélioration de la Productivité et de la Sécurité Alimentaire* (Agriculture Productivity Support Project)
PISA	:	*Programme d'Investissements du Secteur Agricole* (Investment Program for the Agriculture Sector)
PNDEL	:	*Politique Nationale de Développement Durable de l'Elevage* (National Policy for Sustainable Livestock Development)
PNDES	:	*Plan National de Développement Economique et Social* (National Economic and Social Development Program)
PNE	:	*Politique Nationale de l'Environnement (*National Environmental Policy)
PO	:	Producer Organizations
PPR	:	*Peste des Petits Ruminants* (Small Ruminants Plague)
PPSD	:	Project Procurement Strategy for Development
PRAPS	:	*Projet Régional d'Appui au Pastoralisme au Sahel* (Regional Project for Support to Pastoralism in the Sahel)
PRAPS-BF	:	*Projet Régional d'Appui au Pastoralisme au Sahel-Burkina Faso* (Regional Project for Support to Pastoralism in the Sahel for Burkina Faso)
PVSRDS	:	Performance of Veterinary Services Rural Development Strategy
RPF	:	Resettlement Policy Framework
SCADD	:	*Stratégie de Croissance Accélérée et de Développement Durable* (Strategy

		for Accelerated Growth and Sustainable Development)
SEP	:	Strategic Economic Partnership
SP	:	Sub-project
SP/CVEL	:	*Secrétariat Permanent en charge de la gestion des Crises et Vulnérabilités en Elevage* (Permanent Secretariat for Livestock Crises and Vulnerabilities)
SCD	:	Systematic Country Diagnostic
SORT	:	Systematic Operations Risk-rating Tool
STEP	:	Systematic Tracking of Exchanges in Procurement
VC	:	Value Chain
VVV	:	*Vulgarisateurs Volontaires Villageois* (Village Volunteer Extension Services Workers)
WBG	:	World Bank Group
WAAPP	:	West Africa Agriculture Productivity Project
WAEMU	:	West African Economic and Monetary Union

Regional Vice President:	Makhtar Diop
Country Director:	Pierre Frank Laporte
Senior Global Practice Director:	Juergen Voegele
Country Manager:	Cheick Fantamady Kante
Practice Manager:	Simeon Kacou Ehui
Task Team Leader(s):	Nicolas Ahouissoussi

BURKINA FASO LIVESTOCK SECTOR DEVELOPMENT SUPPORT PROJECT

TABLE OF CONTENTS

BASIC INFORMATION

Is this a regionally tagged project?	Country(ies)	Financing Instrument
No		Investment Project Financing

[ ] Situations of Urgent Need of Assistance or Capacity Constraints

[ ] Financial Intermediaries

[ ] Series of Projects

Approval Date	Closing Date	Environmental Assessment Category
20-Jul-2017	20-Jul-2022	B - Partial Assessment

Bank/IFC Collaboration	Joint Level
Yes	Complementary or Interdependent project requiring active coordination

Proposed Development Objective(s)

The objectives of the Project are to enhance productivity and commercialization of non-pastoral animal production in selected vhains, and strengthen the country's capacity to respond to severe crises affecting the livestock sector, and to provide immediate and effective response in the event of an Eligible Crisis or Emergency.

Components

Component Name	Cost (US$, millions)
Component 1: Improved Access to Services and Inputs	24.00
Component 2: Livestock Value Chain Development	41.90
Component 3: Crisis Management and Project Coordination	13.00

Organizations

Borrower :	Ministry of Finance
Implementing Agency :	Ministry of Animal Resources

PROJECT FINANCING DATA (US$, Millions)

[✔] Counterpart Funding	[ ] IBRD	[✔] IDA Credit [ ] Crisis Response Window [ ] Regional Projects Window	[ ] IDA Grant [ ] Crisis Response Window [ ] Regional Projects Window	[ ] Trust Funds	[ ] Parallel Financing

Total Project Cost:	Total Financing:	Financing Gap:
78.90	78.90	0.00
	Of Which Bank Financing (IBRD/IDA):	
	60.00	

Financing (in US$, millions)

Financing Source	Amount
Borrower	3.00
IDA-61150	60.00
Borrowing Country's Fin. Intermediary/ies	8.90
LOCAL: BENEFICIARIES	7.00
Total	**78.90**

Expected Disbursements (in US$, millions)

Fiscal Year	2018	2019	2020	2021	2022	2023
Annual	3.50	9.00	14.00	15.00	12.00	6.50
Cumulative	3.50	12.50	26.50	41.50	53.50	60.00

INSTITUTIONAL DATA

Practice Area (Lead)

Agriculture

Contributing Practice Areas

Climate Change

Climate Change and Disaster Screening

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

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

No

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

Yes

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

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

10. Overall	Moderate

COMPLIANCE

Policy

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

[ ] Yes [✔] No

Does the project require any waivers of Bank policies?

[ ] Yes [✔] No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✔	
Natural Habitats OP/BP 4.04		✔
Forests OP/BP 4.36		✔
Pest Management OP 4.09	✔	
Physical Cultural Resources OP/BP 4.11		✔
Indigenous Peoples OP/BP 4.10		✔
Involuntary Resettlement OP/BP 4.12	✔	
Safety of Dams OP/BP 4.37		✔
Projects on International Waterways OP/BP 7.50		✔
Projects in Disputed Areas OP/BP 7.60		✔

Legal Covenants

Financing Source	Sections and Description
	Schedule 2. Section 1(F)(a). Not later than six (6) months after project effectiveness, adopt a specific manual for the management of the CERC Part under Project Part C(1)(c), with terms of reference satisfactory to the Association.

Financing Source	Sections and Description
	Schedule 2. Section 2(B)(4). Not later than six (6) months after the Effective Date, appoint an external

	auditor with qualifications, experience and terms of reference acceptable to the Association.
Financing Source	Sections and Description Schedule 2. Section1(A)(e). Not later than three (3) months after the Effective Date, adopt the Project Implementation Manual including updated administrative, financial, accounting and procurement procedures.
Financing Source	Sections and Description Schedule 2. Section 1(A)(1)(b). Not later than six (6) months after the Effective Date, provide equipment for the DMP meeting room to allow for bid opening sessions.
Financing Source	Sections and Description Schedule 2. Section 1(A)(1)(c). Not later than three (3) months after the Effective Date, provide training, in substance and amount satisfactory to the Association, to the Project's procurement specialist, relevant procurement staff of DMP and DMP tender committee members in the Association's Procurement Regulations.
Financing Source	Sections and Description Schedule 2. Section 1(A)(1)(d). Not later than three (3) months after the Effective Date, hire a financial comptroller, an accountant and an assistant accountant with qualifications, experience and to work under terms of reference acceptable to the Association

Conditions

Financing Source	Type	Description
	Disbursement	Schedule 2. Section IV(B)(1)(i). The Recipient has determined that an Eligible Crisis or Emergency has occurred, has furnished to the Association a request to include said activities in the CERC Part in order to respond to said Eligible Crisis or Emergency.

Financing Source	Type	Description
	Disbursement	Schedule 2. Section IV(B)(b)(ii). The Recipient has prepared and disclosed all safeguards instruments required for said activities, in accordance with the CERC Operations Manual, the Association has approved all such instruments,

Financing Source	Type	Description
	Disbursement	Schedule 2. Section IV (B)(1)(b)(iii). The Recipient's Coordinating Authority has adequate staff and resources,

Financing Source	Type	Description
	Disbursement	Schedule 2. Section IV(B)(1)(a). For payments made prior to the date of this Agreement, except that withdrawals up to an aggregate amount not to exceed € 450,000 (Euros four hundred fifty thousand) may be made for payments made prior to this date but on or after October 20, 2016, for Eligible Expenditures under Category (1).

PROJECT TEAM

Bank Staff

Name	Role	Specialization	Unit
Nicolas Ahouissoussi	Team Leader(ADM Responsible)	Sr. Agriculture Economist	GFA01
Mohamed El Hafedh Hendah	Procurement Specialist(ADM Responsible)	Sr. Procurement Specialist	GGO07
Ngor Sene	Financial Management Specialist	Financial Management Specialist	GGO26
Abdoul Wahabi Seini	Safeguards Specialist	Sr. Social Safeguards Specialist	GSU01
Benjamin Billard	Team Member		GFA01
Christian Berger	Team Member	Sr. Agriculture Economist	GFA01

Elisee Ouedraogo	Team Member	Sr. Agriuclture Economist	GFA01
Francois G. Le Gall	Team Member	Livestock Adviser	GFA01
Juvenal Nzambimana	Team Member		GFA01
Leandre Yameogo	Environmental Specialist	Sr. Environment Safeguards Specialist	GEN07
Martin Maxwell Norman	Team Member	Private Sector Specialist	GTC07
Myriam Mireille Veronique Chaudron	Team Member	Livestock Specialist	GFA07
Remi Kini	Team Member	Sr. Agriculture Economist	GFA01
Salam Hailou	Team Member	Program AssistantS	GFA01
Sossena Tassew	Team Member		GFA01
Suzanne Rayaisse	Team Member	Procurement Assistant	AFMBF

Extended Team

Name	Title	Organization	Location
CATHERINE DEFONTAINE	STC		paris,France
Clarisse Ingabire	Animal Health Officer	FAO	
Jean-Claude Balcet	Consultant, Agricultural Economist		United States
Marc Fantinet	Senior Economist	FAO	Rome,Italy

I. STRATEGIC CONTEXT

A. Country Context

1. Burkina Faso is a landlocked, low-income country with high poverty levels and a predominantly semi-arid climate. The country faces relatively unfriendly agro-ecological conditions, aggravated by climate change and increasing human population pressure. The overall rainfall is not only low (500 mm per year average in the Sahelian zone and 800-1000 mm in the Sudano-Sahelian zone), but also irregular, and poorly distributed and has been showing a downward trend in recent years. In 2014, the per capita gross national income (Atlas method) was US$750 with 45 percent of the population living in poverty. Burkina Faso's current population is estimated at about 18.5 million. With an average annual growth rate of around 3 percent, the population is expected to reach 21.5 million by 2020. The country ranked 181 out of 187 countries on the 2014 UN Human Development Index. Non-income indicators of poverty and welfare, particularly in the areas of education and health, are among the lowest in the world, while most of the Millennium Development Goals (MDG) appear out of reach.

2. **Economic performance improved over the past decade, but has lately slowed down, with a negative impact on poverty.** Over the last 15 years, economic growth averaged about 5.5 percent per year. The country made progress in undertaking structural reforms, adopting sound economic policies, and diversifying its economy with increased cotton and mining production, steady investments and a stable macroeconomic environment. Monetary and exchange rate policy has been well-managed, and, in 2016, inflation was held at about (-1,6) percent. Burkina has a healthy banking sector. The country is also working towards an integrated and open regional economic space through the West African Economic and Monetary Union (WAEMU), the Economic Community of West African States (ECOWAS), and other African partnership initiatives as part of Comprehensive Africa Agriculture Development Program (CAADP). In 2016, the country was ranked 72 out of 176 countries in the world according to the Corruption Perceptions Index[1], one of the best ranking in sub-Saharan Africa; it ranked 146 out of 190 under the Ease of Doing Business Index[2]. The recent fluctuation in gold and cotton prices, combined with the drop in grain production and political instability, have contributed to a slowdown in economic development and have enhanced insecurity. The country also faces increasingly harsh climatic conditions due to the erratic atmospheric weather patterns that have hindered efforts to reduce extreme poverty.

3. **The government adopted a new national program for economic and social development (PNDES) in July, 2016.** From 2011 to 2015, the government's interventions were predicated on the Strategy for Accelerated Growth and Sustained Development (*Stratégie de Croissance Accélérée et Développement Durable*-SCADD). SCADD focused on the promotion of growth poles to support agribusiness and small and medium-sized enterprises with pro-poor programs and critical structural reforms. The PNDES replaced SCADD, when it expired at the end of 2015. PNDES is the current strategic document that lays out the government's vision and

[1] *Corruption Perceptions Index 2016*, Transparency International
[2] *Doing Business 2017, Equal Opportunity for All, Comparing Business Regulations for Domestic Firms in 190 Economies*, a World Bank Flagship Report, 2017.

action plan for the next five years (2016-2021). The document emphasizes the structural transformation of the economy as well as the key role for the agriculture sector as a driver of growth. It comprises three main strategic axes: (i) institutional reform and modernization of the administration*;* (ii) development of human capital; and (iii) promotion of growth sectors for the economy and job creation. The third axis calls for agro-forestry and pastoral sectors, as well as fisheries and wildlife, to become more productive, sustainable and market-oriented. The recently completed Bank's Systematic Country Diagnostic (SCD) acknowledged the SCADD/PNDES thrust as a solid basis for development planning.

4. **The political situation has recently stabilized**. Burkina Faso experienced major political crises in October 2014 and September 2015. The internal unrest associated with these crises was fueled by the unequal distribution of resources and a perceived lack of accountability in the management of public resources. This situation was exacerbated by recent upheavals in neighboring Mali, and the Sahel region in general. Owing to the difficult sub-regional situation, Burkina Faso ended up receiving about 34,000 refugees[3]. In 2015, as the new election period approached, political uncertainty heightened. However, presidential and legislative elections were held successfully on November 29, 2015, giving hope for a more stable political situation. The local government (LG) elections were also held successfully on May 22, 2016.

B. Sectoral and Institutional Context

5. **Eighty percent of the population derives its livelihood from agriculture**. Burkina Faso is primarily an agro-pastoral country. The agricultural sector (crop and animal production) is one of the pillars of the Burkinabe economy. The sector's contribution to Gross Domestic Product (GDP) has declined recently, from 35 percent in 2013 to 32.6 percent in 2016, due to the development of other sectors of the economy, such as mining. However, farming and livestock rearing activities still occupy about 86 percent of Burkina Faso's workforce and constitute the main source of income for the poorest segments of the population. On that account, the government made agriculture a pillar of its 2010 SCADD strategy, reconfirmed under the newly-approved PNDES. The Rural Development Strategy (RDS) adopted in 2003 still governs all public interventions in rural areas, with the following objectives: (i) increase agriculture, pastoral, forestry, wildlife and fisheries production through improved productivity; (ii) raise income through diversification of rural economic activities; (iii) strengthen the link between production and market for all agriculture (plant and animal) value chains; (iv) ensure the sustainable management of natural resources; and (v) improve the economic and social status of women and rural youth.

6. **Livestock represents over a third of agriculture GDP, and contributes to both food and nutrition security, and foreign exchange generation.** Burkina Faso has a comparative advantage in livestock production. At the macroeconomic level, livestock is one of the largest productive sectors because (a) it contributes about 35 percent of the agricultural GDP (2013); (b) its contribution to food and nutrition security is considerable; (c) the national consumption of livestock products is approximately 46 million tons of red meat, 424 million liters of raw milk and 26 million eggs (see Table 1 below[4]); (d) the export value of live animals and hides and

[3] UNHCR, Refugee Global Trends 2015
[4] Study on the Organization and Functioning of Livestock Value Chains in Burkina Faso: Cattle, Small ruminants, Milk and Poultry (chicken and eggs), Project File, August 2016 (in French).

skins, more than compensate the milk and dairy, as well as chicken and egg, imports (see para 7 below), resulting in an overall positive trade balance for livestock products. Livestock importance is also because (i) the sector remains the primary source of cash income (39 percent) for rural households; (ii) it serves as a stock of wealth to cope with climatic and economic shocks in view of its resilience to rebuild or restock quickly after climatic shocks, particularly drought; and (iii) it contributes to the intensification of farming activities as it provides for crop-livestock integration through provision of animal traction and manure for soil fertility.

7. **The domestic demand for meat, dairy products and eggs continues to increase in Burkina Faso and throughout the West Africa sub-region, providing a strong incentive to harness the potential for livestock growth.** The combination of population growth (overall and urban), increase in per capita income and incipient development of a middle class is causing a sharp increase in the demand for animal products in Burkina Faso and across the sub-region. Table 1 below gives the statistics for national production, consumption and surplus (deficit) of red meat, milk, chicken and eggs in 2014 with projections to 2025. For red meat (beef, goat meat) the projected growth in production is expected to exceed the growth in domestic consumption thus leaving a significant surplus for export to the regional market. In contrast, for milk, chicken and eggs, the projections of national consumption would exceed production leaving substantial space for absorption of increase in domestic production. The demand on the sub-regional market is similarly expected to increase substantially providing outlets for potential surpluses that would not be absorbed by the domestic market. Livestock development in Burkina Faso can therefore contribute substantially to increasing exports of animals and substitution for imports of milk, dairy products, chicken and eggs. The large opportunity for production expansion has the potential to contribute greatly to the achievement of sustained economic growth and poverty alleviation.

Table 1: National Production, Consumption, and Surplus/Deficit: Meat, Dairy Products, Chicken and Eggs (2014, 2025)

Commodity	Production		Consumption		Surplus (Deficit)	
	2014	2025	2014	2025	2014	2025
Beef and goat meat (metric tons)	45,725	80,840	43,700	77,100	2,060	3,750
Milk (million liters)	424	749	717	1831	(293)	(333)
Chicken (million units)	134	180	147	200	(13)	(20)
Eggs (millionunits)	26	36	37	51	(11)	(15)

Source: Study on the Organization and Functioning of Livestock Value Chains in Burkina Faso: Cattle, Small ruminants, Milk and Poultry (chicken and eggs), August 2016 (in French).

8. **Burkina Faso enjoys a large livestock population, and three main production systems.** The national herd is estimated at about 9.1 million cattle (of which about 1.0 million are dairy cows), 23.2 million small ruminants, 33.7 million poultry and 2 million pigs[5]. Three main production systems of livestock farming that schematically coexist are: (i) pastoral systems

[5] FAO/Stat and Burkina Faso DGES, 2014.

characterized by the mobility of animals (extensive systems of small ruminants and cattle); (ii) sedentary traditional production systems (under village conditions); and (iii) sedentary improved systems (under modern conditions, mainly peri-urban semi intensive and intensive poultry, pig, dairy production and cattle fattening)[6]. These three systems have very different strengths and weaknesses and require tailored support. Fish farming and beekeeping are of lesser but nevertheless significant importance. Smallholder livestock producers are the main players in livestock production (95 percent). The other players are mostly small livestock enterprises, generally headed by men whose education rarely exceeds the secondary level. Producer Organizations (POs) comprise producers operating in particular value chains (small and large ruminants, milk, poultry, pigs and other non-traditional value chains), on a territorial basis (town, county, and region). Since pastoral systems in Burkina Faso are already supported by PRAPS-BF, this project focuses on non-pastoral production systems, such as sedentary traditional mixed crop-livestock and improved commercial systems. The project activities will also to some extent provide support for diversification of incomes by funding fish farming, beekeeping, etc.

9. **The livestock sector can count on its specific strengths and opportunities to exploit its growth potential**: (i) a significant scope for improvement in productivity, e.g., through improving animal health, livestock rearing conditions (feed supply/forage and animal fattening practices/ facilities) and enhancing the genetic potential of local breeds; (ii) an increasing demand for animal products on the domestic market; (iii) a strong traditional know-how in animal husbandry in general; and (iv) export possibilities offered by the regional market, particularly in neighboring coastal countries (Ghana, Ivory Coast and Benin). Market surveys will be conducted under the project to precisely ascertain the characteristics of the demand for livestock and animal products, both in the domestic market and in the sub-region.

10. **The main constraints impeding livestock development need to be removed**. The following major constraints must be removed in order to exploit the full potential of the livestock sector and capitalize on its comparative advantage (i) Institutional, legislative and regulatory constraints: legal texts governing the sector regulatory framework are often inadequate and/or insufficiently enforced; information systems are extremely undeveloped; and the support services are weak because public funding earmarked for the livestock sector is limited, accounting for only 10 percent of the agricultural sector spending, and only one percent of the entire State budget[7]; (ii) weak organization and low level of expertise and literacy of actors operating in the livestock value chains; (iii) limited access to inputs (feed supplies, and zootechnical and veterinary inputs), and to grazing resources due to the noticeable fluctuations in quantity and quality of pastures, depending on the seasonal pluviometry[8]; (iv) weakness of adaptive research, in particular lack of an adequate breeding program to improve the low genetic potential of local breeds for intensive production systems[9]; (v) insufficient infrastructure, weak

[6] Sedentary traditional production systems are by far the most important nationally in terms of number of animals (about 80 percent), whereas sedentary improved systems are the least important (3 percent). Pastoral systems account for the remainder, or about 17 percent of the national herd. *Source*: Study on Livestock Value Chains, August 2016

[7] Agriculture Public Expenditure Review, 2012.

[8] Regarding feed, the problem is not just access but also production of insufficient quantity to meet animal requirements year-round. In the Sahel, about 60 percent of livestock diets come from grazing. Pastures have to be improved in terms of primary productivity, otherwise enhancing the livestock productivity will still remain a big challenge.

[9] The local breeds are suited for pastoral and agro-pastoral systems as they are well adapted to harsh climatic conditions, and have relatively low feed requirements. With the new improved breeds, suited for more intensive systems, there is the added challenge of meeting feed requirements.

technical support services and lack of access to financial resources; (vi) unsettled land tenure, and land insecurity; and (vii) absence or weakness of national mechanisms for preventing and managing climate-induced and other types of crises; and persistence of domestic and transboundary animal diseases and zoonoses.

11. **Burkina Faso has a comprehensive livestock policy and strategy.** Burkina Faso's livestock policy and strategy orientations are laid out in three main documents: (i) the National Policy for Sustainable Livestock Development (PNDEL, 2010-2025), which is the key document, setting the framework and blueprint for livestock development; (ii) the Action Plan and Investment Program for the Livestock Sector (PAPISE, 2010-2015), developed within the framework of the Livestock, Poverty and Growth (IEPC) initiative under the African Livestock Partnership (ALive) initiative[10]; and (iii) the National Plan for Adaptation to Climate Change in the Livestock Sector (2013). The overall objective of PNDEL is to enhance the contribution of the livestock sector to national economic growth, as well as to food and nutrition security, and, in doing so, improve the living conditions of the Burkinabe population. PNDEL's implementation is organized around four strategic axes, namely: (i) capacity building of sector stakeholders; (ii) security and sustainable management of pastoral resources; (iii) enhanced animal productivity and production; (iv) improved competitiveness and marketing of animal products.

12. **But institutions in the livestock sector remain weak.** The Ministry for Animal Resources and Fisheries (MRAH) is responsible for the livestock sector, with the following functions: (i) provide support for traditional livestock activities through extension advice and training for producers; (ii) development of pastoral areas, promotion of feed-processing industries, and support to fodder production to spur intensive animal production; (iii) strengthen animal health infrastructure and services; (iv) improve quality control of animal products; (v) provide support to the processing industries of livestock by-products, i.e. food products, hides and skins, and manure of animal origin; and (vi) identify stable and remunerative markets for livestock products. Whilst MRAH staff are sufficient in number, they are insufficiently trained, and lack capacity and resources to perform their duties efficiently. Each livestock value chain has its own professional organizations (PO) starting with POs at field level, associations and unions at provincial and regional level, and federations at the national level. These organizations are meant to represent value chain stakeholders, and deal with the major issues facing their members. However, representativeness and operational capacity are limited. MRAH recognizes that successful implementation of PNDEL must involve both the State and the other stakeholders in the public sector (including relevant ministries and development partners) as well as the private sector (including professional organizations). MRAH directorates and POs will be strengthened under the project which will address key institutional weaknesses and provide support for improved livestock sector management.

C. Higher Level Objectives the Project Contributes to

13. **Linkage with National Development Strategy.** The project supports Burkina Faso's PNDEL that reflects the vision of PNDES that is geared towards promoting "competitive and environmentally sustainable livestock production for which operational value chains are organized based on market conditions, and are contributing to a greater extent to both food security and the improvement of the welfare of the Burkinabe people". PNDES identifies low

[10] The study benefited from the technical and financial support from the Bank and the FAO Investment Centre.

agricultural productivity as a major constraint to the country's economic development. The project's goal of increasing sedentary livestock productivity and developing the associated value chains is consistent with PNDES' analysis for transforming Burkina Faso's agriculture. This goal is complementary to the ongoing Bank-funded PRAPS-BF project's goal, which focuses strictly on pastoral (mobile) systems. The project proposes an integrated approach that simultaneously addresses multiple constraints to unlock the overall potential of the livestock sector, thereby improving the livelihoods of the population.

14. **Alignment with the Bank Group Strategic Goals.** The Country Partnership Strategy (CPS, FY13-16) proposed an integrated World Bank Group (WBG) program of partnership activities that selectively supports PNDEL, with the twin goals of reducing poverty and increasing shared prosperity. Under the Systematic Country Diagnostic (SCD), prepared as a basis for the new Country Partnership Framework (CPF) under preparation, the WBG is working with the country to: (i) accelerate inclusive and sustainable economic growth; (ii) enhance governance for more efficient social service delivery; and (iii) reduce economic, social, and environmental vulnerabilities, while mainstreaming governance and gender. The proposed project is expected to contribute to the WBG strategic goals of ending poverty, and boosting shared prosperity in a sustainable manner. The support to the livestock sector will contribute to increased production, food security, improved livelihoods, as well as reduced vulnerability for the poorest sections of society. The project will also reach out to other members of society through production and income gains, as well as job creation. As such, the project will not only increase value added at both PO and agri-business levels through making value chains inclusive for smallholders through productive alliances/ partnerships, but will also promote shared prosperity across various actors in the targeted value chains and production systems while also including women and youth.

II. PROJECT DEVELOPMENT OBJECTIVE

A. PDO

15. The project development objectives are to enhance productivity and commercialization of non-pastoral animal production in selected value chains, and strengthen the country's capacity to respond to severe crises affecting the livestock sector, and to provide immediate and effective response in the event of an Eligible Crisis or Emergency.

16. The project will have countrywide coverage. It will focus on the main livestock commodity value chains, including meat (cattle and small ruminants), as well as milk and poultry (meat and eggs). Commercially attractive businesses and value chains such as pork production, apiculture and aquaculture may also qualify for project support to promote diversification.

17. The PDO is aligned with the government's vision of sustainable livestock development, as laid out in PNDEL. It reflects a vision, geared towards promoting competitive and environmentally sustainable livestock production for which operational value chains are organized based on market conditions, and which contribute to a greater extent to both food security and welfare improvement for the Burkinabe people. This vision is complementary to the goal of the Bank-funded PRAPS project. The proposed project will concentrate on the sedentary systems, which are left out by PRAPS due to its strict focus on pastoral (mobile)

systems.

B. Project Beneficiaries

18. **The proposed project is expected to benefit at least 300,000 producers of whom 30 percent will be women and 20 percent youth.** Producers expected to benefit from the project assets and services are mainly livestock-rearing households, to be reached through vaccination campaigns and other project-related interventions under Component 1. Beneficiaries also include small and medium scale private livestock operators and enterprises who will receive matching grants for their sub-projects under Component 2. Other beneficiaries will be (i) staff of livestock support services, including staff belonging to the public veterinary services and livestock research and extension services, NGOs, and private service providers (including private veterinarians) involved in the targeted livestock value chains in the project areas. On the production side, beneficiaries will comprise (i) other livestock producers who are not directly involved in project activities but will benefit from improved control of animal diseases; (ii) value chain stakeholders (buyers and processors) who will benefit from the increased demand for inputs and supply of livestock products; (iii) inputs providers, including feed and veterinary medicines suppliers; (iv) local commercial banks and micro-finance institutions, which will partner with the project-supported productive alliances; and (v) livestock POs and their apex structures. Vulnerable groups, particularly women and youth, will receive special attention, and the project impact on these groups will be closely monitored.

C. PDO-Level Results Indicators

19. Progress toward the achievement of the PDO will be measured by the following results indicators:

a) Percentage increase of the yields produced by targeted beneficiaries among selected value chains
b) Incremental sales in targeted value chains (aggregated over all the targeted value chains)[11](percentage)
c) Time to reach 50 percent of the targeted beneficiaries as foreseen in the inclusive crisis intervention plans (weeks)
d) Farmers reached with assets and services (of which 30 percent women and 20 percent youth) (number)
e) Beneficiary satisfaction rate for services provided by the project for the livestock sector (including female beneficiaries) (percentage)

III. PROJECT DESCRIPTION

A. Project Approach

20. **Overall project approach.** PADEL-B is structured as an Investment Project Financing (IPF) with an IDA credit in the amount of US$60 million and counterpart contribution from government, Partner Financial Institutions (PFIs) and beneficiaries for US$18.9 million for a total project cost of US$78.9 million, over five years to support selected sedentary livestock

[11] Rate of increase of sales in targeted value chains; this indicator will be measured for every targeted value chain. However, only the overall average value of the targeted value chains will be reported.

value chains (cattle, small ruminants, poultry and milk, as well as value chains such as hogs, fish farming and beekeeping/honey production that can promote diversification). The project will support livestock development activities all along the selected value chains from production to market as these activities are recognized to have the potential to provide significant beneficial spillover effects for Burkina Faso's population in general. The project will build on existing experience from ongoing projects such as Agro-sylvo-pastoral Value Chain Project (PAFASP) and Agriculture Productivity Support Project (PAPSA) and closely work with the stakeholders in the selected value chains, i.e., the government, the private sector, POs, etc. PADEL-B is expected to help consolidate value chains and incentive frameworks, serving as a platform for multiple actors to promote sustainable actions that support sedentary livestock. This support is fully aligned with Burkina Faso's priorities as presented in PNDEL and other national strategic documents.

21. **Key problems addressed.** The project will approach problems in an integrated fashion for each selected value chain, and across value chains whenever possible. It will address the key problems facing Burkina Faso's sedentary livestock sector, including: (i) weak productivity of sedentary production systems caused by inadequate access to services and essential inputs (such as veterinary services, animal nutrition, improved breeding stock) and related advisory services tailored to producers' circumstances; (ii) poor access to markets and low investment level due to a lack of production and processing facilities, market information and credit resources; and (iii) increasing vulnerability owing to increased risks (climate change, animal diseases including zoonotic diseases, economic hazards, conflicts, and insecurity). Land security issue is being taken care of under other initiatives such as the ongoing Agrarian and Land Reform.

22. **Complementarity between PADEL-B and PRAPS-BF.** The PRAPS is a regional operation currently being implemented in six Sahel countries (including Burkina Faso, through the PRAPS-Burkina Faso [BF]) to support improved productivity, sustainability, and resilience of pastoral livelihoods, as prioritized in the Nouakchott Declaration on Pastoralism (2013)[12]. The PRAPS-BF is meant to foster rapid progress in the development of pastoral activities, contribute to increasing the economic weight of the livestock sub-sector, and sustainably raise the incomes of pastoral and agro-pastoral groups. It will achieve these goals through activities aimed at animal health improvement, natural resource management (essentially rangeland and water), market access facilitation, and pastoral crisis management. It is active in the six regions of Burkina Faso bordering Mali and Niger. The PADEL-B is designed to complement PRAPS-BF, focusing on sedentary livestock systems, instead of mobile ruminant herding. Beyond the different geographical boundaries and beneficiaries targeted by the two projects, both projects will support the development of complementary animal health activities, feed production and supplementation, access to market information, as well as livestock sector crisis management. Pooling of technical expertise and sharing of managerial capacities at central and field levels will not only ensure a sector wide approach within MRAH, but also guarantee that project activities do not over-lap.

23. **Gender mainstreaming.** There are more women (52 percent) than men (48 percent) active in Burkina Faso's agricultural sector. The role of women in ensuring food security in rural

[12] Pastoralism is the extensive, mobile rearing of livestock on communal rangelands, which is the prevailing livelihood and production system practiced in the world's arid and semi-arid lands, notably in the Sahel.

households is indeed crucial. Women are more engaged in small livestock (poultry, sheep and goats, etc.) production while men mainly operate in the cattle sub-sector. Generally, women are more engaged in the informal sector in a variety of livestock-related income-generating activities aimed at meeting their families' needs. Recent studies have shown that women operate mostly in the areas of milk production and marketing, breeding of short cycle species, and in relatively lighter activities like honey production. Challenges faced by women in Burkina Faso's livestock sector include access to fewer assets such as tools and equipment, as well as having to split their time between productive and household activities. Livestock rearing technologies that can save time and enhance nutrition are crucial for both enhancing production and improving maternal and child nutrition. The project will mainstream support for activities geared towards women.

24. **Support to nutrition improvement.** Animal protein is an important aspect of a balanced human diet, particularly during the early years. Livestock products are important to the poor not only because they contribute to their economic welfare, but also because they play an important role in assuring overall human development outcomes. Animals provide nutrients and micro-nutrients that would otherwise be scarce or non-existent in local diets. Increasing the share of animal foods in the caloric intake of the poor in Burkina Faso, as in many other low-income countries and particularly those in the Sahelian region, can have many positive nutritional benefits. As such, promoting livestock production has the potential to positively affect human nutrition in Burkina Faso's rural areas. Evidence suggests that support for livestock development often translates into nutritional benefits for target communities, and that the ownership of various livestock species by rural families increases consumption of foods from animal origin, and improves children's nutritional status. PADEL-B will support sedentary livestock development, hence providing a basis for promoting sound nutritional practices among rural beneficiaries, particularly women and children.

25. **Climate-smart development.** The livestock sector is subject to climate change threats in Burkina Faso because of the following negative factors: (i) gradual depletion of water sources and water points; (ii) infestation of animals and pastures by vectors causing diseases such as trypanosomiasis and African swine fever; and (iii) natural disasters such as floods and drought, which are more likely in the Northern region. The project will address these constraints. Evidence suggests that the intensive production systems to be promoted by the project, have less greenhouse gas (GHG) impact per unit produced than that by the traditional systems. The more intensive systems can, in fact contribute to mitigating -- and in certain instances reversing -- the adverse environmental impact of traditional husbandry methods. Furthermore, the project will train small-scale producers as effective agents of environmentally sound practices. Building environmental resilience in close liaison with livestock producers is a core dimension of PRAPS, and it will be emulated by PADEL-B.

26. **Public good and private sector development.** The project focuses, in part, on the provision of public goods (such as animal health, genetic improvement, forage seeds, and related advisory services, as well as crisis management), which will increase the productivity of sedentary production systems. Better provision of these public goods will help in expanding business opportunities for the private sector in the livestock value chains selected. The project will also finance private entrepreneurs' productive investment initiatives (sub-projects). The project design acknowledges the important role played by the private sector in the delivery of veterinary services by financially supporting private animal health service providers who are

investing in these private initiatives through the "veterinary mandate". The project builds on the critical role of the private sector in the booming domestic and cross-border animal trade in the sub-region. It will strengthen the capacities of the multi-stakeholder inter-professional associations, and improve the vertical and horizontal integration of the value chains. The project will enhance market efficiency by supporting market information systems (where they exist) into second-generation systems, geared toward meeting specific needs of the private sector, especially of producers and traders (including exporters). It will finance small-scale and medium-scale private rural livestock facilities, such as milk collection units and small-scale dairy processing units, operated by cooperative enterprises and producers' associations (including women's associations). Although the project does not finance large-scale meat production and processing infrastructure or industrial dairy units, the International Finance Corporation (IFC) was consulted during preparation to explore such investment possibilities. In some cases, IFC is already supporting private companies in the development of target value chains, notably in the dairy sub-sector near the urban centers such as Ouagadougou.

27. **Crisis management as normality[13].** The Sahel, of which Burkina Faso is an integral part, is an environment where severe climatic variability, characterized by highly scattered and unpredictable rainfall over time and space, and droughts which are unpredictable but expected at periodic intervals, is the norm rather than the exception. In the livestock sector, the importance of cattle movement and sub-regional trade is gradually leading to increased disease outbreaks and possible sanitary crisis (such as the 2015 avian flu outbreak in Burkina Faso). Although the costs of dealing with emergencies are far higher, funds have been more readily available to respond to the emergencies unleashed by natural disasters and sanitary crises rather than to prepare for and mitigate the negative impact of such disasters. The project, together with PRAPS-BF, assumes crisis management as the norm. It is no longer a matter of "if" rather of "when" a crisis will emerge and the project will therefore support Burkina Faso's livestock sector to be in a sufficient state of readiness to confront disasters and crises by financing the establishment of a country-wide Immediate Response Mechanism (IRM), with minimum start-up resources for immediate response to emergencies and with the capacity to continue responding to the emergency as required. The Burkina Faso IRM will be able to combine project-specific Contingency Emergency Response Components in the event of an Eligible Crisis or Emergency. Both PRAPS-BF and the Transport and Urban Infrastructure Development Project contain similar contingency emergency response funds.

B. Project Components

Component 1: Improved access to livestock services and inputs (IDA -US$24.0 million)

28. The component's objective is to enhance livestock productivity in selected value chains through improved access of producers to animal health services and inputs, and institutional strengthening of MRAH's operational capacity to efficiently carry out its core responsibilities. It comprises three sub-components: (i) access to animal health services; (ii) access to quality inputs; and (iii) institutional strengthening.

[13] Such recognition was one of the fundamentals for launching the World Bank Sahel Initiative in 2013.

29. **Sub-component 1.1: Improving livestock producers' access to animal health services (US$11.0 million).** The sub-component will build on the results from the World Organization for Animal Health (OIE) evaluation of Performance of Veterinary Services (PVS) to enhance the long-term capacity of the country to sustainably reduce livestock mortality and other losses caused by animal diseases, thereby contributing to increased livestock productivity. To this end, Sub-component 1.1 will improve farmers' access to efficient animal health services provided by both public and private veterinary services under their respective responsibilities (including the "sanitary mandate" for private veterinarians)[14], as part of two sets of activities complementing PRAPS-BF's activities: (i) enhanced animal disease prevention and control capacities; and (ii) strengthened disease surveillance and animal health information system.

30. Sub-component 1.1 will contribute towards the reduction of the burden caused by major trans-boundary animal diseases to smallholder farmers within sedentary livestock systems, to complement the efforts deployed by PRAPS-BF in pastoral systems. Contagious Bovine Pleuropneumonia (CBPP), Foot and Mouth Disease (FMD) in cattle and Fowl Pox in poultry, as well as *Peste des Petits Ruminants* (PPR) have been given priority due to their particularly severe impact on livelihoods. In this regard, the project will finance: (i) vaccines purchase and delivery, as well as vaccination campaigns; and (ii) the implementation of a mass communication and sensitization campaign to reach out to all targeted beneficiaries; (iii) conducting studies on disease prevalence through the National Livestock Laboratory (LNE); (iv) rehabilitation of one regional laboratory (Bobo-Dioulasso) to deconcentrate some of the LNE's activities currently being carried out in Ouagadougou ; (v) strengthening LNE capacities to assess and advise on anti-microbial-resistance and drugs residues; (vi) providing technical assistance to the General Directorate of Veterinary Services (DGSV) to develop animal disease control strategies prioritizing FMD, New Castle Disease (NCD) and Fowl Pox and disseminate along with updated sheep and goat plague (PPR) and contagious bovine pleuropneumonia control strategies to field veterinarians; and (vii) strengthening of national veterinary services, specifically of surveillance systems to ensure early reporting, notification and effective response to disease outbreaks, with particular focus on African Swine Fever (ASF), Highly Pathogenic Avian Influenza (HPAI) and FMD. In addition, the project aims to strengthen the surveillance system by focusing on ASF, FMD, and HPAI thus maintaining high vigilance to ensure early reporting, notification and effective response to any outbreaks.

31. **Sub-component 1.2: Improving livestock producers' access to quality inputs to raise better livestock (IDA-US$1.8 million).** Sub-component 1.2 will improve the productivity of targeted sedentary livestock value chains by increasing the availability of and access to high quality inputs for the benefit of producers. The sub-component will also cover improved animal nutrition and access to genetic materials. The project will specifically: (i) enhance animal feed quality control by developing feed quality standards and animal nutrition guidelines, intended to be used by feed producers; (ii) facilitate the production and distribution of certified and improved forage seeds; (iii) strengthen the national genetic improvement program by distributing high performance bulls to selected farmers for breeding purposes; (iv) boost Artificial Insemination (AI) services by upgrading the facilities and equipment of the *Centre de Multiplication des Animaux Performants* (CMAP); and (iv) support the development and implementation of the

[14] As part of the "sanitary mandate", private veterinarians are entrusted by the State with the delivery of public services (essential vaccinations), as recommended by the OIE PVS tool (2009).

regulatory and institutional framework for animal genetic resources. The project will also support the introduction of improved fingerlings to promote the production of sustainable fish ponds through the supervision of the General Directorate of Fisheries (DGRH).

32. **Sub-component 1.3: Institutional strengthening (US$11.2 million).** Sub-component 1.3 will contribute to (a) building immediate and long-term human, technical, organizational and institutional capacity of MRAH to allow this ministry to carry out effectively its core responsibilities of sector and policy analysis, monitoring and evaluation (M&E), and coordination; and (b) support the implementation of the national extension strategy. To achieve its objectives, the sub-component will have a five-fold intervention: (i) development and dissemination of technical guidelines for selected value chains intended to be used by developers of productive alliances; (ii) transfer of new farming techniques and technologies through demonstrations; (iii) student training at veterinary schools abroad as well as specialized training for MRAH's staff, with specific attention to female staff; (iv) preparation of quality standards and labels for livestock products and supporting awareness campaigns for local animal products; and (v) rehabilitation of livestock infrastructure such as veterinary posts and fish and livestock markets. The project will also support the establishment of a central procurement unit of veterinary medicines (CAMVET) to fight counterfeit veterinary drugs through the financing of a central building for CAMVET storage rooms and related equipment to tackle the problem of counterfeit veterinary drugs.

Component 2: Livestock Value Chains Development - US$41.9 million (IDA-US$26 million; US$7.0 million from Beneficiaries; US$8.9 million from PFIs)

33. The component will strengthen the efficiency and competitiveness of selected livestock value chains (beef, small ruminants, milk, poultry and pig, as well as honey and aquaculture) to enhance production and meet the demand of national and regional markets while generating higher incomes for value chains actors and creating employment opportunities. The component will provide support for private sector development in the livestock sector, through (i) enhancing the sector's private investment climate; and (ii) providing resources to livestock investors in the form of matching grants.

34. **Sub-component 2.1: Enhancing the investment climate in the livestock sector (IDA-US$3.5 million).** Sub-component 2.1 will create an enabling environment in which stakeholders and investors (producers, buyers, input suppliers, transporters, processors and financial institutions) in targeted value chains can build efficient and sustainable business relationships through their professional organizations. The sub-component will finance studies, workshops, training, technical assistance and consulting services, in support of the following activities: (i) *knowledge development*: preparation of value chain production and market surveys to characterize supply and demand, map out operators and analyze strengths/ weaknesses of value chain participants; (ii) *facilitation of business exchanges and dialogue:* organization of business platforms, fora and roundtables to facilitate business deals between value chain stakeholders; preparation of strategic business plans for targeted value chains; strengthening of unions/federations and inter-professional bodies so that they can take over responsibilities for these activities following the project completion; (iii) *promotion of livestock products*: participation in international livestock trade fairs, commercial tests, support for certification and norm compliance with international trade regulations and processes for specific products, etc.;

and (iv) *access to financial services*: analysis of supply and demand of financial services for livestock, mobilization of Partner Financial Institutions (PFIs), signing of multi-year Memorandum of Understanding (MoU) between the project and PFIs including capacity building of PFI staff in credit appraisal and risk analysis, development of financial products tailored to livestock investors, promotion of innovations and best practices for credit delivery, as well as strengthening of environmental, social and climate risk assessment in loan appraisal processes.

35. **Sub-component 2.2: Support to investment sub-projects – US$38.4 million (IDA-US$22.5 million; US$7.0 from beneficiaries; and US$8.9 million from PFIs).** Sub-component 2.2 will provide financial resources to support private investors in the livestock sectors for both (i) large investment initiatives in partnership between different business partners ("productive alliance-PA sub-projects") bringing together POs and other partners upstream and downstream of production; the number of individual partners in a PA will be typically about 20 individuals; and (ii) small investment initiatives ("micro-investment sub-project"), typically in support of a single individual investor each. The sub-component will support two main groups of activities: (i) selection, preparation, appraisal and M&E of investment sub-projects SPs; and (ii) co-financing of investment SPs.

36. *SP selection, preparation, appraisal and M&E*. The project will finance consulting services, training and workshops to facilitate the emergence of eligible SP ideas, provide training in participatory methods and software for preparing and analyzing Business Plans (BPs), including environmental and social screening, verification of technical and financial norms, bio-security and waste management, overall quality control, etc.; support the preparation and pre-negotiation of BPs with potentially interested PFIs; perform ex-ante review and environmental screening of SPs before their submission to the grant approval committees; establish and support the arrangements for the SP selection and approval process; monitor and assess the impact of approved SPs; and establish a reference database by value chain and production systems.

37. *SP Matching Grant co-financing.* The project will provide co-financing for the implementation of SPs in the form of matching grants (MGs) with two windows respectively for (i) Productive Alliance SPs: the project will fund about 80 PA SPs over five years at an average cost of US$350,000 each, through MGs covering up to 60 percent of eligible expenditures; funding by PFIs (30 percent) and provision of individual contribution funding from the SP producers in cash (10 percent) will be conditions of MG disbursement; support will be provided as part of PA preparation to access funding from PFIs; and (ii) individual micro-projects: the project will fund MGs for a total of about 1,200 micro SPs of average size of US$3,000 each; the MG will amount to maximum of 60 percent of eligible expenditures and up to 70 percent for women, with individual contributions amounting to a minimum of 40 percent and 30 percent for women; bank credit will not be required for MG disbursement. The aggregation of the micro-projects and enlarging of the partnership base are expected to lay the foundation for creating additional PAs. SP eligible expenditures will include (i) the required capacity building of SP investors, and implementation support for each SP to ensure successful outcomes; and (ii) equipment, small-scale civil works, live animals, inputs, and local consultancies as spelled out in the BPs. Consideration will be given to set favorable ("affirmative action") conditions in favor of women in the form of softer conditions for awarding MGs. The eligibility and selection criteria, as well as the procedures for appraising and approving MGs, will be detailed in the Project Implementation Manual (PIM).

Component 3: Crisis Management and Project Coordination – US$13.0 million (IDA US$10.0 million; US$3.0 million from the government)

38. The objective of this component is not only to strengthen mechanisms for preventing and responding to severe crisis and emergencies in the livestock sector, but also to strengthen project coordination capacities within the MRAH. It includes two sub-components: (i) crisis management; and (ii) project management.

39. **Sub-component 3.1: Crisis management – US$3.1 million (IDA US$2.4 million; US$0.7 million from the government)**. Sub-component 3.1 aims to support (i) *the operationalization of the Permanent Secretariat in charge of Crises and Vulnerabilities Management (SP/CVEL[15]):* the project will provide the SP/CVEL with operational means (computer hardware and software, office furniture, vehicles, etc.), training, and resources for specialized studies and communications; and (ii) *the development of crisis management tools:* the sub-component will organize operational fora at different geographic scales (local, national, and contribution to regional fora), and establish a specific M&E mechanism as well as an Contingency Emergency Response Component (CERC). The project will ensure full collaboration with PRAPS-BF, which contributes to the management of pastoral crises under SP/CVEL. Crisis response plans will be developed with a view to reaching the most vulnerable members in affected community (including youth, women and elderly people) as a priority.

40. The project's CERC will have an initial financial allocation equivalent to US$2.0 million (jointly provided by IDA resources -US$1.5 million, i.e. 75 percent- and government resources -US$0.5 million, i.e. 25 percent) so that it is immediately operational in the event of a severe crisis affecting the livestock sector[16]. In the event of a crisis having a major impact on sedentary animal production and/or project value chains, the government may request the World Bank to reallocate project funds to cover some costs of emergency response and recovery. Detailed operational guidelines acceptable to the World Bank for implementing the project CERC will be prepared during the first six months of project implementation. All expenditures under the project's specific CERC will be in accordance with paragraph 11, 12 and 13 of the World Bank OP 10.00 (Investment Project Financing). They will be appraised and reviewed for acceptance 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 re-construction. In case an eligible crisis does not materialize, the earmarked fund to the CERC would be reallocated to other project activities.

41. **Sub-component 3.2: Project coordination – US$9.9 million (IDA-US$7.6 million; US$2.3 million from the government)**. Sub-component 3.2 focuses on all aspects related to project management and coordination activities, essentially the operations of the Project Coordinating Unit (PCU) set-up to be established as a sharing arrangement with the PRAPS-BF/PCU. It also supports the steering committee meetings. The sub-component will fund *inter alia* all PCU activities required for management of IDA funds and procurement of IDA-funded goods and services as well as project M&E including safeguard mitigation measures in

[15] SP/CVEL was created by Article 20 of Decree No.2016-298/PRES/PM/MRAH dated April 29, 2016 regarding the organization of the MRAH; its mandate is defined by ministerial Arrêté, and covers all crises in the livestock sector (including sanitary crises, crises induced by natural disasters, and market crises).

[16] The PRAPS-BF has already developed an IRM dedicated to pastoral crisis, also managed by MRAH (SP/CVEL)

accordance with agreed upon procedures. It will support the PCU set-up through provision of operational means (computers, software, office furniture, vehicles, etc.) and training, as well as some equipment support to the regional directorates of the MRAH. In addition, budget will be allocated for data generation in the livestock sector in Burkina Faso, knowledge management, advocacy for livestock sector financing, and communication. Activities under this sub-component will be geared to benefit women and youth in every aspect possible.

C. Project Cost and Financing

Table 2: Project Costs and Financing

Project Components/ Sub-components	Project Costs	IDA Financing	% IDA Financing	Beneficiaries	PFIs	Government
	(US$M)	(US$ M)	%	(US$M)	(US$M)	(US$M)
1. Improved Access to Services and Inputs	**24.0**	**24.0**	**40%**	**0**	**0**	**0**
1.1 Access to animal health services	11.0	11.0	18%	0	0	0
1.2 Access to quality inputs	1.8	1.8	3%	0	0	0
1.3 Institutional strengthening	11.2	11.2	19%	0	0	0
2. Livestock Value Chain Development	**41.9**	**26.0**	**43%**	**7.0**	**8.9**	**0.0**
2.1 Enhancing the investment environment	3.5	3.5	6%	0	0	0
2.2 Support to sub-projects	38.4	22.5	37%	7.0	8.9	0
3. Crisis Management and Project Coordination	**13.0**	**10.0**	**17%**	**0**	**0**	**3.0**
3.1 Crisis management	3.1	2.4	4%	0	0	0.7
3.2 Project coordination	9.9	7.6	13%	0	0	2.3
Total Project Costs	**78.9**	**60.0**	**100%**	**7.0**	**8.9**	**3.0**

D. Lessons Learned and Reflected in the Project Design

42. The project design reflects the current international consensus on livestock development and draws on the specific operational experiences from IDA-financed projects, implemented in Burkina Faso and in other countries, as well as on lessons from Bank reviews and other external review initiatives. The project design is predicated on the lessons arising from the following significant projects: (i) the IDA-financed Burkina Faso PAFASP (P081567), which supports value chains, in particular the development of the cattle and poultry value chains; (ii) the IDA-financed PRAPS-BF (P147674): this project is the current project’s twin focusing on pastoralism (i.e., mobile herding systems); (iii) the West Africa Agriculture Productivity Project for Burkina Faso (WAAPP-BF, P117148); (iv) the recently approved Cameroon Livestock Sector Development Project (PADEL, P154908); and (v) the pioneering Colombia Productive Alliance Project (FY 2004). The project design also draws from reviews by the Bank’s Independent Evaluation Group (IEG), and OIE as part of the evaluation of PVS pathway, as well as by the International Livestock Research Institute (ILRI).

43. The major lessons drawn from the various projects and reviews are as follows. *Regarding sub-projects and matching grants:* (i) the PAFASP has demonstrated how MGs can contribute to improving productivity of cattle and poultry farms, while giving incentives to producers and processors to invest in environmental impact mitigation and food safety technologies; and (ii) the

Colombia Productive Alliance has pointed to the same benefits but has also identified the bottlenecks in organizing producers into groups or cooperatives, such as a lack of understanding of POs' added-value, and the difficulty of establishing reliable "Productive Alliances" (PAs) through contractual agreements between stakeholders along the value-chains. *Regarding value chain development:* the PADEL-B design drew on the IEG review of the Bank's experience in the agriculture and agri-business sectors. This review identified the following critical activities for improving supply chain competitiveness: (i) the importance of supporting production; (ii) the need for strong marketing and market infrastructure; and (iii) the importance of technical assistance, in particular, to support production in quantity and quality while improving access to markets and credit to consolidate the investment provided. Experience with projects supporting PAs in Latin America has highlighted that PAs should take the following actions to overcome producer market barriers: (a) involve PFIs, such as commercial banks, from the beginning of investment initiatives (sub-projects), and work with buyers to sustain and scale up activities when project funding comes to an end; and (b) emphasize the value chains in which the producer/ buyer partnerships operate to remove constraints and help roll out the partnership model. The project also draws on the early lessons of PRAPS-BF concerning crisis management and the benefits of having some initial funding, deposited in a CERC (referred to within PRAPS-BF as an "Contingency Emergency Response" under PRAPS-BF sub-component 4.2), and on the lessons of the WAAPP regarding adoption of new technologies and the benefit of having demonstration kits. Regarding animal health activities, Burkina Faso has engaged in the OIE PVS pathway, a global program set up by the OIE for sustainable improvement of National Veterinary Services (NVSs) toward compliance with international standards. The PVS pathway reviews provide objective and harmonized qualitative and quantitative elements helping to identify priorities and guide investments. Regarding nutrition, ILRI has produced evidence that livestock development is typically accompanied by significant nutritional benefits especially for the poorer segment of the population. The OIE PVS and ILRI recommendations have also been used to inform project design.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

44. Responsibility for project implementation, including management of environmental and social risks, will rest with MRAH. Implementation will take place over five years, covering the whole country. The project's five-year duration is set to allow a realistic timeframe for implementation. Indeed, drawing from earlier experiences with similar projects, it is particularly important to allocate sufficient time not only for the activities envisaged as part of the strengthening of services under Component 1 to ensure achievement of the planned outcomes (i.e., improving service delivery, capacity building, etc.), but also, and prominently, for the development of sustained PA in the livestock sector under Component 2.

45. Details regarding PADEL-B's organizational arrangements are presented in Annex 2. PADEL-B's organization will be governed by Decree N° 2007-777/PRES/PM/MEF of November 22, 2007, as a Category B[17] project. PADEL-B's governance structure will be

[17] B Category project in Burkina means project for which the PCU's staff are recruited on a competitive basis, as opposed to an A Category project for PCU's staff are appointed by the line ministry.

modeled after PRAPS-BF's structure, including a Steering Committee- *Comité de Pilotage* (COPIL) and a Technical Committee (CT), meeting at regular intervals, with all necessary representative membership. COPIL will be chaired by the Secretary General of MRAH, and serve as a guidance body. It will approve PADEL-B's Annual Work Plans and Budgets as well as its progress reports. The CT will be the responsible body to monitor project implementation; it will be chaired by PADEL-B's National Coordinator (NC), and comprise all relevant technical stakeholders. At local level, the existing regional agricultural project coordination committees will be involved in PADEL-B's implementation and contribute to field progress assessment. The project implementation mechanism will comprise a PCU, based in Ouagadougou, and field correspondents based in MRAH's regional directorates. In addition, it will involve Focal Points (FP) in MRAH's central directorates, as well as in the Ministries in charge of Environment and Social Affairs, to facilitate project implementation, including adherence to environmental and social safeguards.

46. The PADEL-B/PCU will be fully mainstreamed into the MRAH structure as advocated by authorities. It will come under the MRAH's General Secretariat alongside PRAPS-BF/PCU. PADEL-B/PCU will be set up as part of a sharing arrangement with existing PRAPS-BF/PCU. The two project teams will operate in close synergy and will be housed in the same building. The two PCUs combined are expected to be the precursor of what will be called "sector PCUs", which, as agreed in principle with the government, will serve on-going and future projects in given sectors. PADEL-B/PCU will work in close coordination with MRAH's technical directorates at central and regional levels to execute and monitor project implementation. The National Coordinator who will head the PCU will be competitively recruited and remunerated using IDA resources; his/her signature will be required to commit project financing. S/he will be assisted by a team of high caliber, competitively-recruited consultants, covering all technical or administrative functions deemed critical for proper project implementation and management. The project management cross-cutting functions, including the fiduciary functions, will be pooled and the project technical expertise will be shared between the two projects to the extent possible[18].

47. At the technical level, PRAPS-BF's current expertise[19] will be complemented to cover additional PADEL-B's needs, including experts in animal health, animal production, livestock value chains and rural finance. The animal health expert will be shared by the two projects. Regarding cross-cutting project management functions, the pooling will include: (i) *financial management:* a joint Administrative and Financial Officer, a joint Financial Comptroller, as well as an Accountant with an accounting assistant for each project; (ii) *auditing:* the internal audit function will be shared with the pooling of the internal auditor and the two projects will possibly use the services of the same external audit firm; (iii) *procurement:* a joint Procurement Officer, and a Procurement Assistant for each project; (iv) *M&E:* a joint part-time M&E consultant to support MRAH's General Directorate for Statistics (DGS), and an M&E Officer for each project, as well as a team of 11 field staff to cover all 13 regions[20] where the project will be operating; (v)

[18] In order to achieve this, the PRAPS-BF will be re-classified from A to Category B and the TORs of certain current PRAPS-BF/PCU staff will be revised accordingly.
[19] Which includes an Assistant to the National Coordinator (or Technical Director), a Natural Resource Management Expert and a Crisis Management Expert.
[20] Eleven field stall will cover all 13 administrative regions as some regions will be combined together for the purpose of project management (i.e., Cascades et Hauts-Bassins, and Centre et Plateau Central). Since PRAPS-BF already has field units in three

information technology, communications, gender, social safeguards and environmental safeguards: an expert in each of these fields, shared by both projects. All above staff positions will be funded by IDA, either under existing PRAPS-BF arrangements, or under new PADEL-B arrangements. For administrative simplification, shared PCU staff at central and field level will have joint TORs and funding source will come from one project and will not be split[21]. Support staff at central and regional levels will be financed by the national counterpart funding.

48. At MRAH's central level, relevant technical directorates will appoint FP to support implementation of PADEL-B's activities to complement existing FP covering PRAPS-BF's activities. The PADEL-B/PCU will sign partnerships or technical agreements with these technical directorates to carry out PADEL-B activities within their respective mandates. At the regional level, PADEL-B and PRAPS-BF joint field staff will serve the purpose of collecting data, monitoring and reporting project activities all over the national territory. Field staff will be located in the Regional Directorates of MRAH.

49. The Project Implementation Manual (PIM) will be adopted before project effectiveness as a compendium of procedures for the PADEL-B's operational implementation, encompassing the administrative, fiduciary, M&E, procurement and social and environmental safeguards procedures. It will include detailed TORs for all PADEL-B/PCU staff. A specific manual for the management of the CERC will be prepared and validated no later than six months after the project effectiveness; it will draw from the PRAPS-BF manual.

B. Results Monitoring and Evaluation

50. The Results Framework (RF) defines the performance indicators for key project activities. A robust M&E system will be implemented to provide high-quality information, and allow the Bank to react immediately in the event of any issues that may arise. The PCU will be in charge of M&E activities and compliance with the agreed reporting requirements. The M&E system will be designed to link technical and financial data regarding project progress. It will serve as a mechanism to assess project results and as a day-to-day management tool. It will support project supervision by ensuring that baseline and follow-up surveys and data collection for the key performance indicators are available and regularly updated.

51. M&E reports will be issued every six months for physical implementation and results monitoring. Semi-annual and annual reports will be circulated among sector ministries and development partners involved. Semi-annual joint implementation support missions with representatives from the Bank, and the Government of Burkina Faso will assess the status of key project outcomes and ensure compliance with legal agreements. A Mid-Term Review (MTR) will be conducted no later than three years after the first disbursement. A final independent evaluation will be conducted in the last semester of project implementation to assess overall achievement of expected project results.

52. The M&E manual will provide details with regard to the definition of the results framework, the methodology and the instruments to be used for data collection, the institutional

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regions, additional staff financed by PADEL-B will be only eight (8).

[21] Staff funding will be supported either by PRAPS-BF or PADEL-B, depending on positions, as detailed in Annex 1. Drawing on respective IDA credit amounts, approximately two-thirds of the pooled staff will be financed by PADEL-B, and one third by PRAPS-BF

arrangements for M&E functions (identification of actors and definition of their respective responsibilities), the Grievance Redress Mechanisms (GRM), and the mechanism to be used for disseminating information. It will inform a communications strategy that will be developed and implemented by the PCU. A baseline survey will be conducted during the first year of the project to verify the baseline data and targets presented in the Results Framework. M&E arrangements will pool some M&E functions and activities together with PRAPS-BF. An M&E specialist will be placed in the PCU who will be responsible for all M&E activities of the PADEL-B project. A network of 11 M&E field experts[22] will support both PADEL-B and PRAPS-BF M&E activities. The institutional scheme provided in PADEL-B will allow both projects to cover the 13 administrative regions of Burkina Faso[23], and facilitate data collection. PADEL-B will use the same M&E software (TOMMONITORING) as PRAPS-BF. Moreover, an M&E mechanism will be set up to monitor emergency-response activities. Finally, a part-time technical assistant will support MRAH's DGS for the development of a livestock database.

C. Sustainability

53. Sustainability considerations, including exit strategies, have been integrated into all project components. The project will facilitate access and delivery of livestock services that equitably serve the needs of all producers and private investors. It will ameliorate the resilience of sedentary livestock activities, including through a focus on value chains that are most relevant for poor farmers. Under the value chain business activities, any productive asset, equipment or infrastructure, financed through the sub-projects under Component 2, will be accompanied by approved well-conceived business plans clearly indicating the arrangements and division of responsibilities regarding operation, management and maintenance. This should lay the foundation for sustainability of these business plans. The project will give priority to investment in promoting climate resilience, such as (i) climate smart technologies and practices including sustainable land/ landscape management, waste management systems to minimize greenhouse gas emissions, pollution and dissemination of pathogens, and (ii) renewable energy supply (bio and solar energy) systems.

54. The project will invest in strengthening the capacities of both public and private institutions. Public institutions, in particular, MRAH's technical departments (including the Permanent Secretariat in charge of crisis management), will be strengthened through staff training, and more efficient linkages will be developed under Component 1 and Component 3 to ensure that the performance of public livestock services is closely monitored through an effective use of Information, Communication and Technology (ICT) tools (Monitoring Information System-MIS). These activities will help ensure that project results continue to be beneficial to the country at large. The project also intends to support the capacity of private entities (livestock-rearing households and their organizations, livestock traders and processors, service providers, etc.) to ensure that access and quality of service delivery is sustained and the entities can continue their economic ventures beyond the project lifespan. The enhanced capacity of local NGOs and service providers, and business-based dialogue platforms, developed through all project components, should enable the beneficiaries to continue pursuing the negotiation and

[22] Three (3) officers are already in place and financed by PRAPS-BF. They are based in Bobo-Dioulasso, Dori and Fada N'Gourma.
[23] Two regions will be merged: Centre with Plateau Central, and Cascades with Hauts Bassins.

mediation processes between various actors in the value chains after the project ends. The continued implementation of these processes is particularly important to sustain the productive partnerships, established under the Productive Alliances between POs, agro-processors, traders and Financial Institutions (PFIs).

D. Role of Partners

55. The project will rely on several strategic development partners, active in Burkina Faso, to support and sustain its interventions, *inter alia*:

a) *Private veterinarians* as part of their Veterinary Mandates for the project activities regarding animal health under Sub-component 1.1. The private veterinarians will be key partners to undertake passive and active surveillance of the targeted diseases and related vaccinations, as well as routine veterinary services;

b) *Food and Agriculture Organization (FAO) and OIE* will also provide support regarding prevention and control of animal diseases, notably within the framework of the PPR eradication at global level, as well as questions pertaining to forage and seed production;

c) *Research institutes and national universities:* Research institutes such as National Center for Scientific Research and Technology (CNRST), the Center for International Livestock Development-Research in sub-humid Zone (CIRDES) and the national universities have research-development programs on livestock systems. The Project will use their results to reinforce the capacities of the technicians and livestock producers for innovative production systems as well as materials and equipment, contributing to improvement of livestock productivity. These entities could also be solicited for the implementation of selected activities such as breeding stock and animal feed.

d) *International Livestock Research Institute* (ILRI): This entity, headquartered in Nairobi, deals with livestock research and development, and has on-going programs in most West-African countries. The project will seek opportunities to enlist ILRI’s support for technologies and expertise to improve cattle health, nutrition and productivity (including that for milk production);

e) *Partner Financial Institutions* (PFIs): the PFIs will contribute to the funding of sub-projects since they are key partners because agreement regarding their funding will be a condition of release of the Matching Grants. The involvement of PFIs will be the key for sustainability of sub-project activities since promoters will continue seeking their assistance to pursue their business ventures;

f) *International Finance Corporation* (IFC): IFC has a strong interest in investing in livestock since under the project Productive Alliance approach large private investment operations can potentially be developed. Local banks are seeking credit lines and/or guarantee funds to help them co-finance the sub-projects of Productive Alliance;

g) *NGOs and private sector organizations*: Small and large development-oriented NGOs in Burkina Faso’s livestock sector will be enlisted by the project to assist in the delivery of livestock services and inputs, and facilitate access to markets. The business partnerships of producers with traders and processors, as part of the Productive Alliances, will also be a key to set the stage for success of the sub-projects; and

56. The aforementioned partners already participate in specific livestock development projects. PADEL-B will seek to coordinate with these projects through the existing Permanent Secretary for Agriculture Sector Policy Coordination (SP/CPSA) mechanism at local level (see paragraph 44).

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

57. The risks associated with project implementation are summarized in the Systematic Operation Risk-Rating Tool (SORT) –Table 3 below.

Table 3 - Systematic Operations Risk- Rating Tool (SORT)

Risk Category	Rating
1. Political and Governance	Moderate
2. Macro-economic	Substantial
3. Sector Strategies and Policies	Low
4. Technical Design of Project or Program	Low
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Low
9. Other[24]	Moderate
OVERALL	**Moderate**

58. The main general risks associated with project implementation are rated respectively as Moderate and Substantial. These risks are four-pronged:

a) *Political and governance.* The political and governance risk is rated Moderate. Following the overturn of the government in October, 2014, and with a transitional government and local governments in place, the elections (presidential and legislative) took place on November 29, 2015 without any adverse incidents. These successful elections were expected to lay the foundation for the country to get back on track toward a fully stabilized political situation. The newly-elected officials and their administrations have had sufficient time up to now to fully take on their responsibilities, and, despite some sporadic violence in the northern part of the country, the overall situation has in fact stabilized.

b) *Macro-economic situation*. The macro-economic risk is rated Substantial. The main risk concerns the limited fiscal room that the government is facing which affects the government ability to timely avail project counterpart funding. Despite the stated commitment of the current government to comply with counterpart funding requirements, the experience from other projects has shown that significant delays have occurred.

[24] Risk related primarily to the availability of funding by Partner Financial Institutions (PFIs).

Measures taken to mitigate the risk of project implementation delays, include allocating counterpart funds only to activities that are not at the core of the project and will not delay project execution.

c) *Institutional capacity for implementation*. The institutional capacity risk is rated Substantial. Executing agencies still exhibit significant capacity constraints to implement externally-funded projects. This is the case of MRAH services which will be used for project execution. This project will rely on the existing institutional arrangement and coordination mechanism being used by PRAPS-BF and other agricultural projects in Burkina. The two PCUs will combine efforts to mitigate the capacity constraints of the executing agencies. In addition, the project will have a strong focus on training, including on-the-job training, to reinforce the PCUs capacity

d) *Fiduciary*. The fiduciary risk is rated Substantial. Although MRAH has shown significant ability to stick to the project preparation schedule, it still has limited Bank project management experience particularly in the fiduciary management areas. In this context, the PCU will be given the authority and capacity to coordinate all project activities. Certain activities, particularly fiduciary, will be pooled with the existing PRAPS-BF/PCU.

59. Other risks are rated as Low, except for environmental and social risks and the risks related to the availability of funding on the part of PFIs. These risks are rated as Moderate. Regarding environmental and social risks, Burkina Faso has well-developed sector strategies and policies that fit adequately within its overall development strategy. The project design is the result of a participatory exercise that has brought together all stakeholders, and is based on solid technical assumptions, developed with local and international partners. Due consideration has been given to the project's environmental and social aspects, notably regarding natural resource and environment degradation. The main elements in this latter area are related to manure and waste management (production and post-harvest stages), natural resource use efficiency (feed conversion ratios, water use efficiency), and possibly pasture degradation. These aspects have received the required attention as part of project design. Regarding the risk related to the availability of commercial funding, commercial banks and other financial institutions indicated during project preparation that they were well disposed to extend funding to the livestock sector. However, evidence suggests that they have channeled few resources to the sector thus far. Therefore, the associated risk is still considered Moderate. The Project will provide training to PFIs and a high level of subsidy of around 60 percent of costs as matching grants for the sub-projects to give incentives to the PFIs to lend, and at the same time mitigating the associated risk.

VI. APPRAISAL SUMMARY

A. Economic and Financial (if applicable) Analysis

Development Impact – Expected Benefits and Costs

60. The project is expected to: (i) improve the livelihoods of targeted beneficiaries, including small producers, involved in selected livestock systems and animal value chains; (ii) create employment at both farm and industry level, including through engaging youth and women in profitable livestock activities; helping youth to look for opportunities in the country will reduce the often perilous temptation to find alternatives by migrating to other countries; (iii) increase tax

revenues for the government, from greater economic activities in the formal livestock sector; and (iv) reduce the trade balance deficit by enhancing exports of certain animal products such as hides and skins, and curbing imports of other animal products such as eggs and milk.

61. **Financial analysis.** The project financial analysis was carried out to assess: (i) the incentive and wherewithal of targeted producers and other value chain operators to participate in the project, based on the profitability of their sub-projects and particularly, the amount of cash income they will generate to cover immediate expenditures; and (ii) the level of risk of the proposed financial arrangements for supporting investment sub-projects , i.e., mix of promoters' capital contribution, project matching grant funding, and short- and medium-term credit. For that purpose, several typical productions, marketing, input supply, trade and processing sub-project models were prepared, based on the project-supported technical options at prevailing costs. The models were used to estimate the multi-annual cash flow projections before and after financing through the matching grants and short- and medium-term credit. Several iterations were made to test various project-sponsored technology and investment options to determine those typical models that show best profitability prospects based on their financial internal rates of return and incremental incomes. These models should attract small producers, value chain actors, and PFIs; they should be used by producers to negotiate co-financing possibilities as part of the envisaged PAs.

62. **Economic analysis**. The project will generate the following direct and indirect economic benefits: (i) enhanced production of targeted livestock products; (ii) increased income for participating livestock producers and value chain actors, hence improved food security and nutrition at the household level, and reduction in vulnerability to external shocks, notably climate change and rising food prices; (iii) reduced transaction costs and post-harvest losses; (iv) enhanced market/business opportunities and economies of scale benefiting all actors of the targeted value chains with increased value added accruing to producers and, enhanced bargaining power, understanding of markets, and management capacity among smallholders/PA promoters; (v) foreign exchange savings through reduced imports (mainly for eggs and milk) and increased exports of certain animal products; and (vi) incremental on- and off-farm employment and improved livelihoods and social stability in the project's intervention areas, including a positive impact on participating women and youth as the focus on this group is mainstreamed into all relevant project activities.

63. The economic analysis was conducted for a 25-year period. On the cost side, prices and benefit streams computed under the financial analysis were: assigned economic values by applying conversion factors for each category of costs, eliminating taxes and transfers (e.g., credit), and considering incremental costs after the project implementation period for infrastructure maintenance that were not included in the typical financial budgets. On the benefit side, the economic benefits considered in the analysis were the tangible benefits to be derived from the implementation of project-funded sub-projects that can be quantified in monetary terms. Benefits derived from activities, such as capacity building activities and improved animal health services, are difficult to be quantified in economic terms and were not taken into account. Therefore, the economic analysis is conservative because it accounts for all the project costs, with only a portion of the benefits arising from project implementation. The project would yield an Economic Internal Rate of Return (EIRR) of 17 percent and a Net Present Value (NPV) of US$32 million (at a 6 percent social discount rate), excluding component 1 and Sub-Component

3.1 (crisis response) costs for which benefits are difficult to quantify, and taking into account half of the project coordination costs. This assumes a substantial failure rate of 25 percent for financed sub-projects. The project is, therefore, highly profitable from an economic standpoint. Considering all project costs (including component 1 and sub-component 3.1), the EIRR would still establish at 8 percent. The sensitivity analysis, taking into account increases in costs and reductions in benefits, is very robust. The EIRR would still yield 13 percent if benefits were reduced by 30 percent or lagged by two years.

Rationale for public sector provision/ financing

64. The project will support the modernization of livestock production and processing activities, the intensification of animal production systems, and the build-up of the targeted value chains. It will enhance the capacity of core public services to support this process. In this regard, project support includes organizational development of advisory services and institutional building of core services such as veterinary services, epidemic-surveillance and early detection systems, and crisis management. The project will also provide training to technical professionals directly involved in project management. These trained professionals are expected to continue assisting in the development of the sector after the end of the project.

Value added of Bank's support

65. The project's aim is to increase the overall productivity of the livestock production systems, and to support the upgrade of livestock commodity value chains, thereby increasing their competitiveness. Existing government and donor interventions are currently too scattered and limited in scope. For these reasons, they have failed to create the conditions needed to structurally improve and promote the emergence of leading value chains that will help Burkina Faso take advantage of the dynamic and rapidly growing regional and domestic markets. The proposed project will help initiate these new types of market-oriented and competitive livestock enterprises.

66. By virtue of its strong presence and engagement in Burkina Faso, and along with relevant experience in sub-Saharan Africa, the Bank has the convening power to aggregate the knowledge and efforts to unlock Burkina Faso's livestock potential as envisaged under PNDEL. In close complementarity with PRAPS-BF and private on-farm investments, IDA financing will support the much-needed strengthening of public sector services. IFC will play an important role in engaging the private sector and creating investment opportunities to leverage public funds. Therefore, as part of the support to productive alliances, the project will provide real opportunities for leveraging private partnerships between various actors of the value chains. The development partners have expressed interest in collaborating closely with the Bank particularly in support of PNDEL.

B. Technical

67. The technical feasibility of the program is anchored on the following elements:

a) The selection of approaches and activities have been tested and used by other Bank-financed projects. Two examples: the IDA-financed PAFASP, which supports the development of productive alliances, particularly in the cattle and poultry sub-sectors; and the WAAPP, which supports the adoption and dissemination of released technologies, including those related to the livestock sector.

b) The experience of PRAPS-BF in dealing with animal health enhancement as well as livestock sector crisis management in Burkina Faso since 2015, including MRAH's skills development and capacity building to implement IDA-financed projects

c) The use of the value chain development and productive partnership approaches, notably the Strategic Economic Partnerships (SEP), in each value chain as framework in which value chain actors will operate; and the PA in which value chain actors will build direct and sustainable commercial/business relations to implement viable investment sub-projects.

d) The findings of various livestock value chain analyses carried out by the government in recent years to formulate its livestock development policy and action plan PNDEL, 2010-2025 and PAPISE, 2010-2015, in operational terms and competitiveness of value chains, gender and youth dimensions, etc. For animal health, the project design draws on the PVS assessment done by OIE.

e) The involvement of international organizations and other service providers such as Consultative Group on International Agricultural Research (CGIAR) centers (ILRI and International Institute of Tropical Agriculture (IITA) in implementing key activities; in addition, national and international NGOs (e.g., the Dutch Development Organization-SNV) will be contracted; these entities will link up and extend the activities of local NGOs, beneficiary organizations and public services.

68. Based on the above approaches and partnerships, the project is predicated to tackle specific associated risks and proposed mitigation measures on the following technical elements: (i) *animal health*: livestock species are exposed to epizootic diseases transmitted within Burkina Faso, and from foreign countries due to weak surveillance systems; the project will strengthen the epidemic surveillance system to better prevent and overcome possible outbreaks; (ii) *climate change*: supporting livestock production may increase greenhouse gas emissions and other negative climate change effects that may hinder economic activities and livelihoods; specific mitigation/adaptation measures to minimize greenhouse gas emissions, pollution, and dissemination of pathogens will be developed during project implementation; (iii) *animal feed*: this is currently a binding constraint, especially for intensive and semi-intensive systems; relatively simple existing techniques to increase feed resources for all systems will be identified, further developed, and disseminated as part of project implementation; (iv) *natural resources and environmental management*: the main elements are related to manure and waste management (production and post-harvest stages), natural resource use efficiency (feed conversion ratios, water use efficiency), and possibly pasture degradation; the project will address these issues as a part of both Technical Components 1 and 2; and (v) *statistics and M&E*: a lack of reliable data may prevent sound project follow-up and limit information on project performance; the project will improve data collection as part of the M&E activities; a comprehensive MIS will be established during project implementation to guide data collection and use.

C. Financial Management

69. A Financial Management (FM) assessment of MRAH was carried out as part of project preparation. The assessment complied with the Financial Management Manual for Bank-Financed Investment Operations, updated on February 4, 2015, as well as the Bank's Financial Management Assessment and Risk Rating Principles. Its objective was to determine whether MRAH had adequate FM arrangements in place to ensure that project funds would be used appropriately for the intended purposes, with close attention to considerations of economy and efficiency.

70. The overall FM risk rating for the project is assessed as **moderate** and the financial management arrangements meet the Bank's minimum requirements under OP/BP10.00. The requirements are that MRAH performs, *inter alia*, the following key activities: (i) record accurately all transactions and balances; (ii) prepare regular and reliable financial statements; (iii) maintain and safeguard the project's assets; and (iv) make auditing arrangements, acceptable to the Bank. To that effect, the government has decided that the PADEL-B/PCU will share financial management resources with the ongoing PRAPS-BF/PCU, particularly office facilities and equipment, accounting software, and staff services. The FM arrangements already in place include an Administrative, Financial and Accounting Procedures Manual, an accounting software, a Finance and Administration Officer, and an Internal Auditor. The following measures have been added as dated covenants in order to reinforce the internal control environment, and ensure adequate segregation of duties: a Financial Comptroller who will verify the compliance of each activity (procurement, contract, payment, etc.) to policies, regulations and rules applicable to the PADEL-B; an Accountant solely dedicated to PADEL-B; and a Financial Assistant. The project can start implementation with the existing FM arrangements and capacity. The added measures: FM comptroller, FM staff dedicated to PADEL-B and FM assistant can be put in place during project implementation (3 months after Effectiveness).

D. Procurement

71. A procurement assessment was conducted as part of project preparation. It shows that: (i) the Directorate of Public Procurement (DMP) has recently recruited new staff; (ii) both the existing and new staff have limited qualifications, insufficient procurement skills, and inadequate experience in Bank procurement procedures; (iii) DMP is located in a small office space, with limited office furniture and equipment; (iv) tender committee members are 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. The 2015 PRAPS-BF assessment found a similar situation. It is to be noted that the proposed project will be the first project implemented by MRAH in Burkina Faso under the Bank's New Procurement Framework. The assessment has rated the procurement risk as Substantial. Mitigation measures are included in Table 4 of Annex 2.

72. Procurement for works, goods, non-consulting and consulting services for the project will be carried out in accordance with Bank procedures (see details in Annex 2). The Borrower has prepared a Project Procurement Strategy for Development (PPSD), and submitted to the Bank for review. The PPSD (including procurement plan) indicates, *inter alia,* whether or not: (i) the

national and international environment is favorable for the procurement of goods intended for project implementation; (ii) the national market is able to meet the needs of works, computer equipment, office equipment and furniture as well as office supplies, which will be purchased according to the relevant approved procedures; (iii) the same applies to the market for consultant services; and (iv) the contracts are open to the sub-regional and international market for specific supplies and services that may require the participation of companies, located overseas. It is to be noted that MRAH, through PRAPS-BF, has experience in managing these types of markets, and therefore, has sound knowledge of the national, sub-regional and international market. The Procurement Plan, including its updates, will include for each contract: (i) a brief description of the activities/ contracts; (ii) the selection methods to be applied; (iii) the cost estimates; (iv) time frame and schedules; (v) the Bank's review requirements; (vi) any other relevant procurement information. The Procurement Plan covering the first 18 months of project implementation was prepared and approved on May 10, 2017. Any updates of the Procurement Plan will be submitted to the Bank for approval.

73. The PIM will define the required project's internal organization (including staffing arrangements) and implementation procedures for procurement activities. It will include, *inter alia*, all the relevant procedures for calling for bids, selecting consultants, and awarding contracts. The project monitoring arrangements for procurement will be specified. PADEL-B/PCU will pool procurement resources, including staffing resources, with PRAPS-BF/PCU.

E. Social (including Safeguards)

74. The project will support improvements in livestock health and productivity, and generate increased employment and income in the target areas, which is expected to deliver significant social benefits and have a positive impact on the livelihoods of the population of these areas. The results of the social and environmental audit of the first phase of the PAFASP, completed in 2015, have been used to inform the project design and the preparation of safeguard instruments. Additional social analyses were carried out during project preparation, and the results were used to further inform and fine-tune the project design.

75. There are no indigenous people living in the project area, and therefore, the project does not trigger OP 4.10. The project is Category B and triggers the Involuntary Resettlement Safeguard Policy (OP 4.12). The project will adopt a framework approach to handle social safeguards. As part of this approach, an Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF) were prepared, approved and disclosed respectively on February 20, 2017 and March 1, 2017. This is justified since the project may have some adverse social impacts. However, the potentially adverse social impact of project activities on human population in general, and on vulnerable social groups are likely to be limited and reversible. There is a risk of possible influx of workers in certain areas due to the project high-labor demands. However, it is not expected that the proposed activities entail major resettlement issues such as the relocation of dwellings. The proposed activities may cause limited temporary displacements, but rarely permanent resettlements. The potential negative social impact of sub-project activities under Component 2 are expected to be site- specific and localized; they will be mitigated or avoided entirely. In this regard, sub-projects will be selected during project implementation following a bottom-up approach, based on strict eligibility and

selection criteria. Their precise characteristics are not predetermined. As such, the sub-project feasibility studies, required to inform the selection process, will include social assessment to identify potential constraints, and design measures to mitigate potential adverse impact. All SP sites will be screened for involuntary resettlement, based on the RPF, and, as needed, special social impact assessments and Resettlement Action Plans (RAPs) may be prepared in consultation with affected people. The Borrower has prepared the RPF in line with OP/BP4.12, which has been reviewed by the Bank, consulted upon and disclosed in Burkina Faso on February 9, 2017 and at the Infoshop on March 1, 2017.

76. The implementation of many project activities will require behavioral changes, notably changes in currently-held attitudes and beliefs regarding animal husbandry and health practices. For this reason, social communication campaigns will be financed to provide information, and to educate and train producers and other actors in social issues in the livestock sector, and get them apprised of the Bank's social safeguard procedures. The materials and format to be used in these campaigns will be adapted to ensure that they are culturally relevant and understandable for the beneficiaries, and to promote the inclusion of women, youth and other vulnerable groups.

77. **Citizen engagement**. The project design, preparation, and implementation have been informed by citizen engagement. Consultations with stakeholders have been, and will continue to be carried out throughout the project cycle. Three main approaches will be used: (i) *collaboration*: representatives of civil society organizations (CSOs) who are already members of the COPIL will echo the voices of the beneficiaries and participate in the decision making process for implementation of project activities; (ii) *collecting, recording and reporting on inputs from citizens:* beneficiaries' feedback on project implementation (effectiveness, inclusiveness, quality, delivery and targeting) will be obtained periodically during supervision missions and during the evaluation of project achievements through focus group discussions and satisfaction surveys. The information gathered will be used to improve project implementation and address issues raised by the beneficiaries for better results forward; and (iii) *citizen-led monitoring:* CSOs and communities will be involved in Bank supervision missions as well as in joint evaluation of project results upon completion of the project. Recurrent consultations with civil society and direct beneficiaries will be part of the project M&E strategy. The preparation and implementation of safeguards instruments has been and will be part of the consultation process. Citizen engagement and beneficiary feedback will be monitored through the measurement of beneficiaries' satisfaction in relation to project interventions.

F. Environment (including Safeguards)

78. The project is rated as Environmental Assessment Category B, requiring a partial environmental assessment. The following environmental safeguard policies are triggered: Environmental Assessment (OP/BP 4.01) and Pest Management (OP4.09). The Category B is predicated on the fact that project physical activities will be site-specific and their potentially adverse environmental impact is expected to be moderate and reversible under appropriate mitigation measures. The project activities will cover several agro-ecological areas as part of its nationwide coverage of sedentary livestock activities. Specific, environmental mitigation measures, based on the most appropriate environmental management practices tailored to local circumstances, will therefore be required.

79. As is the case of social safeguards, the project has adopted a framework approach to deal with environmental matters. This is justified since exact locations for a substantial number of project activities, particularly those of the sub-projects that may have environmental potential adverse impact, have not yet been determined with certainty. Therefore, an Environmental and Social Management Framework (ESMF) has been prepared in line with OP/BP4.01. This ESMF also includes specific chapters on physical cultural resources as a preventive measure in case of chance finds (only small scale excavations are anticipated) and Pest Management in compliance with OP4.09. The potential use of chemical products (e.g., the supply of drugs) is expected to be on a small scale, thus easily manageable to comply with OP/BP4.09. The ESMF describes the procedures and processes to be followed in preparing and disclosing site-specific safeguard instruments (Environmental and Social Impact Assessment-ESIA, including an Environmental and Social Management Plan-ESMP), as may be required, as soon as the exact locations and scope of sub-project activities are known. Before the corresponding activity starts, any specific ESIA, including the corresponding ESMP, prepared in accordance with the screening result, will be approved in consultation with all the stakeholders. The ESMF will cover issues such as (i) hygiene and safety conditions; (ii) safe handling and disposal of veterinary medical wastes and waste management such as for manure; and (iii) the emergency response to outbreaks of animal diseases (in scenarios where a large number of animals need to be destroyed as part of the emergency response program, the project should consider taking necessary measures). The ESMF was reviewed, consulted upon, and made publicly available in Burkina Faso on February 9, 2017. It was uploaded at the World Bank's website on February 20, 2017.

G. Greenhouse Gas Accounting

80. Climate change adaptation and enhancement of resilience in the agricultural sector remain priorities for Burkina Faso, as conveyed in the National Adaptation Plan (PNA) for Climate Change (June 2015). The entire country has a tropical climate with a dry moisture regime. The dominant soil type is Low Activity Clay. As a step in managing and ultimately reducing emissions, the Bank adopted a corporate mandate to quantify the greenhouse gas (GHG) mitigation potential of its projects. For that purpose, it uses the EX-ACT tool. For the proposed project, the net carbon balance quantifies GHGs emitted or sequestered as a result of the project compared to the without-project scenario.

81. **Results**. Over the project duration of 20 years (including 5 years for Project's activities implementation, and 15 years for capitalization of its effects), the project constitutes a carbon emission of 85,688 tCO2-eq, equivalent to 4,284 tCO2-eq per year. However, the emissions intensity for milk and cattle meat would decline in with-project scenario from 13 to 8 kg CO2-eq/kg production, and from 10 to 8 kg CO2-eq/kg production, respectively (see Annex 5) compared to without-project scenario.

H. World Bank Grievance Redress

82. 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 WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project-affected

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

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY : Burkina Faso
Livestock Sector Development Support Project

Project Development Objectives

The objectives of the Project are to enhance productivity and commercialization of non-pastoral animal production in selected vhains, and strengthen the country's capacity to respond to severe crises affecting the livestock sector, and to provide immediate and effective response in the event of an Eligible Crisis or Emergency.

Project Development Objective Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Percentage increase of yields produced by targeted beneficiaries among selected value chains		Percentage	0.00	20.00	Annual	Progress report, annual PADEL-B report, Household Survey, Technical & economic monitoring	PADEL-B as well as M&E function of PCU, Sub-project promoters
Description: This indicator measures the percentage increase of yields produced by targeted beneficiaries among selected value chains. To measure it, targeted beneficiaries will include the beneficiaries who received kits and training under Component 1, and all the beneficiaries of the sub-projects, funded under Component 2. Selected value chains are cattle, small ruminants, poultry and milk. This indicator will be calculated by measuring the following sub-categories: Number of eggs per hen per cycle; Liters of milk/cow/cycle; Weight productivity of cattle, i.e., live weight (small ruminants); and Weight productivity of cattle, i.e. live weight (beef cattle).							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Incremental sales in targeted value chains (aggregated over all the targeted value chains)		Percentage	0.00	30.00	Annual	Progress report, annual PADEL-B report, Household Survey, Technical & economic monitoring	PADEL-B as well as M&E function of PCU, Sub-project promoters

Description: This indicator measures the average increase in the value of sales in targeted value chains (cattle, small ruminants, poultry and milk). For each targeted value chain, the increase in the value of sales is calculated as the ratio of the value of incremental sales during the reporting year (the total value of sales by direct beneficiaries during the reporting year minus the total value of sales in the baseline year), and the value of sales at baseline. To measure this indicator, targeted beneficiaries will be the beneficiaries who received kits and training under Component 1, and all the beneficiaries of the sub-projects, funded under Component 2.

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Time to reach 50% of the targeted beneficiaries as foreseen in the inclusive intervention plan		Weeks	52.00	30.00	Annual	Review of reports by national institutions responsible for response to pastoral crisis	SP-CVEL S&E of PCU CNSA DRRA

Description: This indicator relates to efficiency (time to respond) and effectiveness (share of target beneficiaries reached) in response to a crisis or emergency. This is a 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 when 50% of the target beneficiaries, as defined in the intervention plan, have been reached (ending point has to be defined clearly).

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Farmers reached with agricultural assets or services	✔	Number	0.00	300000.00	Annual	Progress report, annual PADEL-B report, Household Survey	PADEL-B as well as M&E function of PCU
Farmers reached with agricultural assets or services - Female	✔	Number	0.00	90000.00	Annual	Progress report, annual PADEL-B report, Household Survey	PADEL-B as well as M&E function of PCU
Farmers reached with agricultural assets or services - Youth		Number	0.00	60000.00	Annual	Progress report, annual PADEL-B report, Household Survey	PADEL-B as well as M&E function of PCU
Description:							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Beneficiary satisfaction rate with services provided by the project for the livestock sector		Percentage	0.00	65.00	At mid-term and end of project	External Satisfaction Survey Progress report, Annual PADEL-B report	PADEL-B as well as M&E function of PCU
Beneficiary satisfaction rate with services provided by the project for the livestock sector - Female		Percentage	0.00	65.00	At mid-term and end of project	External Satisfaction Survey, Progress report, Annual PADEL-B report	PADEL-B as well as M&E function of PCU

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection

Description: This indicator measures the percentage of beneficiaries who expressed satisfaction with the services, provided in the project areas, based on formal surveys. It is expected that a survey to measure this indicator be carried out twice during the project life. The sample size should be representative of the total number of beneficiaries. This indicator requires two types of supplemental data: (1) number of targeted beneficiaries, satisfied with the quality of services, and (2) targeted beneficiaries of services and assets. This is a core indicator. It will be measured at mid-term and at the end of the project.

Intermediate Results Indicators

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Prevalence of two priority diseases (herd prevalence of contagious bovine pleuropneumonia (CBPP) and post-vaccinal seroprevalence of small ruminant plague (PPR) - CBPP		Percentage	80.00	40.00	Annual	Passive surveillance	Testing labors and veterinary services

Description: This indicator measures the level of two priority animal diseases in the project area. It measures three aspects of improved access to animal health services, i.e., incidence and prevalence of two priority animal diseases, and quality of the vaccines. In case of poor quality vaccines, prevalence/incidence will not be reduced despite an increased coverage. This is a medium-term indicator of two priority diseases—disaggregated by disease. Calculation is 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).

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Prevalence of two priority diseases (herd prevalence of contagious bovine pleuropneumonia (CBPP) and post-vaccinal seroprevalence of small ruminant plague (PPR) - PPR		Percentage	30.00	60.00	Annual	Passive surveillance	Testing labors and veterinary services
Description: This indicator measures the level of two priority animal diseases in the project area. It measures three aspects of improved access to animal health services, i.e., incidence and prevalence of two priority animal diseases, and quality of the vaccines. In case of poor quality vaccines, prevalence/incidence will not be reduced despite an increased coverage. This is a medium-term indicator of two priority diseases—disaggregated by disease. Calculation is 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 Burkina Faso or projections based on census or other comparable data and information to estimates of number of animals (denominator).							
Name: Number of poultry vaccinated against fowl pox		Number	0.00	12000000.00	Annual	Progress reports produced by DGSV	DGSV M&E function of PCU
Description: This indicator measures the number of poultry, vaccinated against fowl pox. The baseline is zero, as the Government of Burkina Faso has never launched any vaccination campaign against fowl pox.An output indicator.							
Name: Farmers adopting improved agricultural	✔	Number	0.00	40000.00	Annual	Progress report, annual PADEL-B report	PADEL-B as well as M&E function of

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
technology							PCU
Description:							
Name: Number of micro-projects funded (of which % female and % youth)		Number	0.00	1200.00	Annual	Progress report, annual PADEL-B report Executing agency of component 2 activities	PADEL-B as well as M&E function of PCU
Number of micro-projects funded (of which % female and % youth) - Female		Number	0.00	360.00	Annual	Progress report, annual PADEL-B report Executing agency of component 2 activities	PADEL-B as well as M&E function of PCU
Number of micro-projects funded (of which % female and % youth) - Youth		Number	0.00	240.00	Annual	Progress report, annual PADEL-B report Executing agency of component 2 activities	PADEL-B as well as M&E function of PCU

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Description: This indicator measures the number of micro-project funded. Micro-projects refer to individual producers (only one beneficiary), average size of 1 to 3 million F CFA, no bank financing.							
Name: Sub-projects under Productive Alliances funded		Number	0.00	80.00	Annual	Progress report, annual PADEL-B report Executing agency of component 2 activities	PADEL-B as well as M&E function of PCU
Description: This indicator measures the number of sub-projects the PAs funded.This intermediate results indicator is divided into two sub-indicators: (a) Number of PAs sub-projects funded: PAs sub-projects are partnerships between different actors (producers, processors, buyers, Partner Financial Institutions). Average size: 200 million F CFA. Producers are organized into Producers' Organizations (POs). Recourse to Bank financing. About 20 to 30 individual partners. (b) Volume of loans granted by Partner Financial Institutions: This indicator measures the volume of loans granted by Partner Financial Institutions (PFIs), meaning the credit effectively disbursed. PFIs may include: (i) commercial banks; (ii) large micro-finance institutions networks; (iii) national development fund such as the Burkinabe Fund for Economic and Social Development (FBDES), the Livestock Development Fund (FODEL); the Small and Medium Scale Financing and Promotion Agency (AFP/PME); and (iv) non-banking financial institutions such as leasing companies and risk funds.							
Name: Volume of loans granted by Partner Financial Institutions		Number	0.00	4380000000.00	Annual	Progress report, annual PADEL-B report Executing agency of component 2 activities	PADEL-B as well as M&E function of PCU
Description: This measures the amount of loans received from the PFIs for funding PA SP.							

Indicator Name	Core	Unit of Measure	Baseline	End Target	Frequency	Data Source/Methodology	Responsibility for Data Collection
Name: Time between request from government to making funds available to respond to an eligible crisis		Weeks	52.00	12.00	Annual	Surveys conducted by an independent consultant	PCU
Description: This indicator measures the accessibility to and efficiency of the mechanism, put in place by the project to make funds available to the government in a timely manner in case of an eligible crisis.							

Target Values

Project Development Objective Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Percentage increase of yields produced by targeted beneficiaries among selected value chains	0.00	0.00	0.00	5.00	10.00	20.00	20.00
Incremental sales in targeted value chains (aggregated over all the targeted value chains)	0.00	0.00	0.00	10.00	20.00	30.00	30.00
Time to reach 50% of the targeted beneficiaries as foreseen in the inclusive intervention plan	52.00	52.00	45.00	40.00	35.00	30.00	30.00
Farmers reached with agricultural assets or services	0.00	0.00	30000.00	138000.00	282000.00	300000.00	300000.00
Farmers reached with agricultural assets or services - Female	0.00	0.00	9000.00	41400.00	84600.00	90000.00	90000.00
Farmers reached with agricultural assets or services - Youth	0.00	0.00	6000.00	27600.00	56400.00	60000.00	60000.00
Beneficiary satisfaction rate with services provided by the project for the livestock sector	0.00			50.00		65.00	65.00
Beneficiary satisfaction rate with services provided by the project for the livestock	0.00			50.00		65.00	65.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
sector - Female							

Intermediate Results Indicators

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
Prevalence of two priority diseases (herd prevalence of contagious bovine pleuropneumonia (CBPP) and post-vaccinal seroprevalence of small ruminant plague (PPR) - CBPP	80.00	80.00	60.00	50.00	45.00	40.00	40.00
Prevalence of two priority diseases (herd prevalence of contagious bovine pleuropneumonia (CBPP) and post-vaccinal seroprevalence of small ruminant plague (PPR) - PPR	30.00	30.00	40.00	45.00	50.00	60.00	60.00
Number of poultry vaccinated against fowl pox	0.00	0.00	2000000.00	5000000.00	8000000.00	12000000.00	12000000.00
Farmers adopting improved agricultural technology	0.00	0.00	10000.00	20000.00	30000.00	40000.00	40000.00
Number of micro-projects funded (of which % female and % youth)	0.00	0.00	100.00	400.00	800.00	1200.00	1200.00
Number of micro-projects funded (of which % female and % youth) - Female	0.00	0.00	30.00	120.00	240.00	360.00	360.00
Number of micro-projects funded (of	0.00	0.00	20.00	80.00	160.00	240.00	240.00

Indicator Name	Baseline	YR1	YR2	YR3	YR4	YR5	End Target
which % female and % youth) - Youth							
Sub-projects under Productive Alliances funded	0.00	0.00	15.00	40.00	70.00	80.00	80.00
Volume of loans granted by Partner Financial Institutions	0.00	0.00	821000000.00	2190000000.00	3833000000.00	4380000000.00	4380000000.00
Time between request from government to making funds available to respond to an eligible crisis	52.00	52.00	12.00	12.00	12.00	12.00	12.00

ANNEX 1: DETAILED PROJECT DESCRIPTION

Component 1: Improvement of Access to Livestock Inputs and Services (US$24 million from IDA)

1. In Burkina Faso, livestock plays an important role in food security and nutrition, poverty reduction, employment and income generation, as well as in the national economy through export earnings. Livestock population[25] is predominantly made up of poultry (36 million), small ruminants (21 million) and cattle (9 million), and distributed between two livestock productions systems, i.e. traditional and improved. Traditional livestock systems are mostly extensive (pastoral and sedentary), characterized by limited access to livestock services and inputs. Improved systems characterized as either semi-intensive or intensive, are those dominated by dairy, feedlots, poultry and swine productions, and where producers have invested in infrastructure, labor and inputs.

2. Despite the large potential of the livestock sector in Burkina Faso, the sector has been underperforming mainly because of: (i) limited access to productive assets and resources (land, capital, infrastructure, high-performing animal breeds); (ii) limited both livestock services and improved inputs (animal health services, animal feed), and (iii) limited access to technologies and advisory services.

3. Component 1 has been proposed to support the Government of Burkina Faso in tackling the challenges mentioned above with the help of targeted investments to improve the productivity of dominant sedentary livestock value chains by enhancing producers' access to essential livestock inputs and the provision of technical support services. Expected outcomes of the Component 1 are: (i) reduced morbidity and mortality rates in poultry, small ruminants and cattle; (ii) increased number of farmers accessing improved animal feeds and breeds as well as technologies and advisory services. To achieve these outcomes, the component will primarily focus its interventions in three areas: (i) improving access to animal health services; (ii) improving access to high quality inputs; and (iii) institutional support.

A. Sub-component 1.1: Improving livestock' producers access to animal health services (US$11 million)

4. The limited human and financial resources as well as weak capacities of both public and private veterinary services in the country are the main factors limiting producers' adequate access to animal health advisory services. Strengthening veterinary services' capacities will help control priority animal diseases as well as other reproductive livestock diseases. This sub-component proposes a set of interventions that will be implemented to achieve the two main objectives of (i) enhanced prevention and control of animal diseases; and (ii) improved animal disease surveillance and public health.

5. **Enhanced prevention and control of priority animal diseases.** The project will provide support for the following activities:

[25] *Annuaire des Statistiques* (Statistical Book, 2014)

a) Support to conduct disease investigations to determine the frequency and occurrence including the disease prevalence and distribution, risk factors and risk maps of FMD, NCD and Fowl Pox. (This activity will be coordinated by the national livestock laboratory (LNE).

b) Support to the formulation and dissemination of control strategies for major animal diseases. The project will finance the recruitment of highly qualified consultants to guide the formulation process of FMD, NCD and Fowl Pox control strategies. Also, the existing control strategies of PPR and CBPP will be updated and disseminated to all veterinarians in the field in association with PRAPS-BF.

c) Support to vaccination campaigns, with high priority to PPR. The project will finance acquisition and delivery of 15 million doses of Fowl Pox vaccines, 10 million doses of PPR vaccines and 5 million doses of CBPP vaccines. A "smart vaccination" strategy will be followed, meaning that vaccination campaigns will (i) focus on high risks areas, based on the epidemiological situation, past history of exposure and natural immunity; (ii) pay due attention to the cold chain; (iii) recruit competent vaccinators; and (iv) undertake sero-monitoring post-vaccination to control vaccination efficacy and efficiency. The PPR eradication program will be coordinated by the DGSV, and regional and districts teams will be set up to oversee its implementation. Furthermore, the vaccination protocol for PPR (vaccination coverage and framework) will be revised regularly to reflect the epidemiological disease situation, delivered according to evidence-based geographical disease risk, and will also make arrangements to include private veterinarians in vaccination campaigns under the provision of sanitary mandates. PPR and CBPP vaccinations will be carried out in only seven regions (the remaining six regions are already covered by PRAPS-BF[26]). It is to be noted that the Burkina Faso vaccination program for PPR will be part of the PPR global eradication strategy under the responsibility of FAO and OIE.

Box 1: Producers' Contribution to Vaccinations

Currently, farmers in Burkina Faso are paying for vaccination. The cost is announced at the beginning of each vaccination campaign, as this activity is jointly implemented by public and private veterinarians under specific terms and agreement such as sanitary mandate.

In order to support the roll-out of vaccination campaigns for Fowl Pox, and to mobilize farmers to join the eradication program for PPR, the project proposes to support the logistics for vaccination by paying a small subsidy under the sanitary mandate scheme, based on an assessment study of the real cost for vaccination, to be conducted under the project.

d) Based on the results of the FMD virus characterization and vaccines matching, supported under this project, the project will finance vaccines acquisition for FMD (50,000 doses) for especially targeting intensive and semi-intensive dairy farms.

e) Support to the acquisition of vaccination supplies such as needles, syringes, kits for VVV[27], vaccination books, as well as cold chain equipment (solar fridges, ice packs).

[26] PRAPS: an ongoing World Bank project, titled, "Regional Support Project to Pastoralism in the Sahel", which is being implemented in the pastoral areas of Burkina Faso

[27] VVV: Vulgarisateurs *Volontaires Villageois* (Village Volunteer Extension Services Workers)

f) Mass sensitization, information and communication to reach farmers, as a pre-condition to successful implementation of the vaccination campaigns. The project will, therefore, provide funding for the development, production and multiplication of communication materials (for Fowl Pox and NCD) and multiplication of communication materials for PPR and PPCB (already produced by PRAPS-BF) as well as launching of communication campaigns to sensitize farmers on the benefits of vaccination, timeline and other vaccination pre-requisites. These campaigns will build on experiences and best practices from local NGOs, and will involve farmers' associations and lead farmers.

g) Support to the development of the Vaccine Overhauling Unit[28] for poultry vaccines at LNE; and support to conduct a feasibility study for the establishment of a national vaccines production unit.

h) Support to the evaluation of vaccination cost, and identification of incentives for the private sector collaboration.

6. **Improved animal diseases surveillance systems and public health.** The project will provide support for the following activities:

a) *Passive surveillance:* (i) computerize and harmonize disease reporting systems by developing an internet-based information system and a toll-free number; (ii) support to the operationalization of epidemiological surveillance networks through training in risk assessments and GIS; (iii) enhance regional laboratories' diagnostic capacities by financing the acquisition of laboratory supplies and reagents (targeting Banfora, Dédougou, Bobo Dioulasso, Dori, Tenkodogo, and Ouahigouya laboratories) and by rehabilitating the regional laboratory of Bobo Dioulasso.

b) *Active surveillance*: (i) support to the identification and management of fish and bee diseases; (ii) support to active disease surveillance and implementation of biosecurity measures for FMD, HPAI and ASF; and (iii) FMD virus characterization and vaccines matching by supporting the collection and transfer of samples to reference laboratories.

c) *Food safety and public health:* (i) Brucellosis and tuberculosis screening in intensive and semi-intensive farms of the dominant milk sheds, and supporting farmers through gradual removal of animals that test positive; (ii) study the Antimicrobial Resistance through technical assistance to build the national capacity; (iii) build the national laboratory capacity to test drug residues by sending one laboratory technician to be trained abroad, supporting the acquisition of reagents (standards), sample collection and analysis; (iv) support for quality control of livestock products inspections.

d) *Operationalization of honey and bee surveillance plan* by funding samples collection and their analysis.

7. **Overall implementation arrangements:** Sub-component 1.1 implementation will be coordinated by the DGSV, and supported by the Center for Village Poultry Promotion (CPAVI) and deconcentrated entities. Regions, provinces and district authorities will be

[28] The current procured poultry vaccines come in high doses (around 1000), which causes a loss of vaccines as most of the flocks to be vaccinated have less than 50-100 chickens. The acquisition of an overhauling machine will allow the country to produce and package reduced doses.

involved in the planning, supervision and monitoring of vaccination programs. The project will also facilitate the inclusion of private veterinarians in launching the vaccination campaigns. Local veterinarians based at veterinary posts and quarantine stations, and private clinics will be involved in all activities regarding animal surveillance, communication, and sensitization of farmers. Special attention will be given to different farmers' organizations and cooperatives to channel the information regarding disease prevention, control and food safety measures.

B. Sub-component 1.2: Improving access to high quality inputs (IDA US$1.8 million)

8. The main objective of this sub-component is to improve key parameters of targeted livestock productivity by increasing the availability of and access to high quality inputs by livestock producers. This sub-component will be organized around two interventions: (i) improved animal nutrition and (ii) animal genetic improvement.

9. **Improved animal nutrition.** Some of the major challenges that hinder livestock development in Burkina Faso include: (i) limited access to animal feeds; (ii) a lack of feeds conservation technologies; (iii) gaps in the knowledge about a well-balanced diet; and (iv) sub-standard industrial feeds such as concentrates. The project proposes to: a) enhance farmers' knowledge of animal nutrition by developing and disseminating animal nutrition ratios for selected value chains (dairy, swine, red meat and poultry); b) support the enforcement of quality standards for industrial animal feeds; and (iii) support the production and distribution of 60,000 kg of certified forage seeds (cowpeas, sorghum, maize, soya) to targeted livestock small-scale producers (around 4,000 producers) per annum, with the expectation that this will serve as demonstration for a much larger number of producers.

10. **Animal genetic improvement.** The project will finance interventions, aimed at enhancing access to improved animal genetic resources (enhance the capacity of the CMAP Station, enhance both public and private artificial insemination services, support to policy and institutional framework for the management of genetic resources).

11. The above mentioned objectives will be achieved by financing: (i) the introduction and distribution of 30 highly performing bulls (Azawak breed) among 10 selected farmers for the purpose of natural mating[29], in addition to 20 breeding boars, 3,000 fingerlings and support to their maintenance; (ii) installation of a new liquid nitrogen plant and acquisition of three distribution tanks, (iii) re-habilitation of the bull station; (iv) training of CMAP technicians in semen collection; (v) support to AI campaigns through acquisition of 7,000 doses of synchronization hormones and two echography equipment; and (vi) support to the development and implementation of the regulatory and institutional framework for animal genetic resources.

12. **Overall implementation arrangements:** Implementation of sub-component 1.2 will be coordinated by the General Directorate of Animal Productions (DGPA), and the General Directorate of Fisheries (DGRH). They will be assisted by the CMAP for the implementation and delivery of AI services. Arrangements will be made between the national institute of

[29] Commonly known as "*station de monte*" for rural farmers who cannot access and/or do not want alI services. Azawak breed (imported from Niger) has been distributed in Burkina Faso, supported by various projects with good results and acceptance by farmers who cannot manage an exotic breed.

agricultural research (INERA) and the main seeds producers for the production of basic and certified forage seeds respectively. Insemination kits will be acquired through a 50/50 matching grant, whereby beneficiaries will be required to provide their own cash contribution. Collaboration will be sought with the Bank-funded WAAPP project.

C. <u>Sub-component 1.3</u>: Institutional support (US$11.2 million)

13. The main objective of this sub-component is to strengthen operational capacity of the MRAH's to carry out and efficiently deliver its core responsibilities of sector analysis, sector monitoring, evaluation and coordination, as well as support for the development of selected value chains. Under the sub-component, the project will finance the operationalization of the national extension strategy and capacity building.

14. **Operationalization of the national extension strategy**. The project will provide support to strengthen the extension and advisory services for good animal husbandry practices (animal health, genetic improvement, animal nutrition and herd management) through: (i) development and dissemination of technical references for selected value chains to be used by developers of productive alliances; and (ii) development and transfer of new farming techniques and technologies with demonstrations kits[30] including 500 kits for veterinarians and climate-smart technologies such as Biogas installation (1,000 biogas to be installed through a 75/25 matching grants) and support to demonstration activities.

15. **Capacity building**: The project will strengthen MRAH's staff capacity with special attention to the female staff. The following capacity-building activities will be supported: (i) meeting MRAH's training needs to increase the Ministry's pool of specialized staff able to handle the development of selected value chains, by sending 20 students to undertake a 5-year training course at the Veterinary School of Dakar; by sending 12 staff abroad (preferably within the region unless not available) to pursue Master's degree in both animal production and animal health in poultry, dairy, red meat, fisheries, apiculture, and livestock economics and management; (ii) improvement of MRAH's zootechnical support services, including the provision of training and logistical support to the field staff that includes acquisition of 150 motorcycles and eight vehicles and their running costs; (iii) development of food-safety norms for livestock products, quality standards, labels and their reinforcement, and support to awareness campaigns for local animal products; (iv) establishment of the CAMVET by setting up necessary infrastructure and adequate equipment; (v) rehabilitation of three animal market infrastructures (Bobo, Yaouba, Di); and construction and equipment provision for selected 35 veterinary posts.

16. **Overall implementation arrangements:** The implementation of the sub-component 1.3 will be coordinated by the General Directorate of Sectoral Studies and Statistics (DGESS) supported by relevant technical directorates.

<u>Component 2</u>: Support to Livestock Value Chains Development - US$41.9 million *(US$26 million IDA; US$7 million beneficiaries; US$8.9 million PFIs)*

[30] Forage kit (4 boxes, 1 cart, phosphate); Bee-keeping kit (3 Kenyan hives, 3 hive, medium raises frame, personal protecting equipment, smoker, gloves, boots, 3 queens);

17. This component aims to strengthen the efficiency and competitiveness of selected livestock value chains (pig, poultry, beef, small ruminants, milk, honey, and aquaculture) to increase production for meeting the national and regional markets demand while generating higher incomes for value chains actors as well as employment opportunities. The component will support the modernization of livestock systems and value chains to achieve economies of scale by enhancing the investment framework and the provision of direct investment support to both value chain actors, regrouped along PAs, and small livestock farmers. Productive alliances are formed by producers together with downstream actors (collectors, buyers, processing units, transporters) and upstream actors (animal feed factories or animal breed producers) that share common challenges and opportunities and are willing to strengthen their business partnership, through a joint vision for development and investment plans. PAs will build on existing localized value chains, and may be led by a group of producers or a downstream actor (particularly for a value chain involved in processing milk, meat or other such commodity) or by an upstream agent. The project will support the investment sub-projects of PAs through a combination of matching grant and enhanced access to adapted value chain finance services. The selection criteria and mechanisms for appraising sub-projects/business plans, and approving MGs will be detailed in the PIM. The component comprises two sub-components: (i) Enhancing the investment framework and strategic economic partnerships; and (ii) Support to Productive Alliances sub-projects/business plans.

A. <u>Sub-component 2.1</u>: Enhancing the investment framework - US$3.5 million

18. The aim of this sub-component is to create an enabling environment in which value chains actors (producers, buyers, input suppliers, transporters, processors, and financial institutions) would build more direct and sustainable commercial and business relationships, promote productive alliances (PAs) and establish SEP to lay the ground for successful PAs. To achieve that aim, it is key to understand the following: (i) how the various value chains function; (ii) what are the bottlenecks and the main opportunities; (iii) mapping out and assessing the needs and capacities of value chain actors; (iv) facilitating the emergence of PAs that have potential for success to the benefits of all parties involved; (v) supporting mechanisms to build capacities of concerned stakeholders; (vi) enhancing the trust between actors in order to improve their business relationships. The project will also explore new avenues for the financing of value chains through mobilizing PFIs that would co-finance the PAs sub-projects (and possibly individual micro-projects) under the sub-component 2.2, using their own resources at their own risk with the aim of ensuring sustainability of the financing scheme. This approach acknowledges that matching grants alone are not suitable for business financing and market development, and should be considered only as a part of the phasing-out strategy of the project. The PFIs will benefit by expanding their client base and enhancing their livestock sector businesses.

19. Activities will include: (i) information, sensitization and communication, targeting potential promoters of PAs in the production basins; (ii) improving knowledge of actors about supply and demand in targeted value chains through technical surveys and studies of various value chains; (iii) connecting the demand and supply through establishing a national

dialog platform for livestock, institutional strengthening of inter-professional bodies and unions/federations of value chain actors, exchange of knowledge between PAs, promotion of livestock products, and signing of Strategic Economic Partnership Agreements between major players of the targeted value chains; and (iv) mobilization of PFIs.

20. **Information, sensitization and communication**. Communication will be centered on explaining the logic and approach of Component 2, the PA concept, and how the project could support it. Activities will include: (i) development of information and communication materials adapted to various media (including rural community radios) by specialized consultants, and editing and printing of the materials; (ii) organization of workshops in the 26 identified production basins in collaboration with potential PAs initiators and value chain actors to facilitate the emergence of eligible PA sub-project ideas; (iii) radio broadcasts in local languages in the production basins, particularly during the first two years, and identification of PA promoters; and (iv) support to broader communication about the project through various media (radio, television, internet, newsletters, national press, etc.) throughout the project life.

21. **Improving knowledge about actors, supply and demand in targeted value chains**. Initial value chain surveys, focusing on priority value chains (meat, milk, poultry) and other value chains that will contribute to diversification (aquaculture, honey, pig) have already been conducted[31] while designing the project to characterize the supply and demand, analyze the potential for development, identify bottlenecks, map out value chain actors, and the economics and value added re-grouping by the value chains. Further, discussion and validation workshops with the stakeholders will be organized. Upon project effectiveness, these initial value chain assessments will be complemented by studies focusing on value chain actors and existing local value chains/informal productive alliances to (i) better characterize and localize them; (ii) analyze their strengths and weaknesses;(iii) inform the baseline for Component 2; (iv) provide project management with useful knowledge to adequately assess the PA SP proposals and draw useful conclusions for project implementation. These activities will be implemented as the project becomes effective. The project would also support various marketing and technical studies including, market tests for new products, and surveys for identifying business opportunities. These activities will be implemented progressively, as recommended by the above-mentioned value chains' actors and as needed during the project implementation, taking into account themes and priorities, emerging from funded PA sub-projects.

22. **Linking demand and supply**. A large number of activities are envisaged to improve linkages between demand and supply and actors in targeted value chains, including: (i) establishment of a national dialog platform between the government and livestock stakeholders for bringing together various inter-professional bodies; (ii) support to products and/or value chain round tables; (iii) capacity building and institutional strengthening of inter-professional bodies and unions/federations of value chain actors; (iv) knowledge exchange activities between financed PA sub-projects' initiators; (v) livestock product promotion activities including support to livestock fairs, and to certification and norm compliance processes; and (vi) signing Strategic Economic Partnership Agreements (SEPAs)

[31] With pre-financing from the PRAPS Burkina

between major players in the targeted value chains in order to facilitate business deals and implementation of the PA sub-projects.

23. **A** ***National Dialogue Platform***. This platform between the government and livestock stakeholders will be established to bring together all inter-professional bodies and value chain stakeholders, including signatories of SEPs and PFIs. Such a platform is envisaged by law but is currently lacking. When established, the platform will address themes and issues that are common to several value chains and inter-professional bodies, and ways they can be dealt with at national level. The project will support workshops and discussion processes, leading to policy formulation and practical recommendations that would have positive impacts on both the development of the sector and the implementation of SEPs and PA's sub-projects. The platform is not meant to be transformed into a full-fledged institution. The MRAH will initially play the role of the platform's secretariat, which is later expected to be taken over by dynamic inter-professional bodies. At a lower level, the product or value chain round tables will be supported and implemented by the respective existing inter-professional bodies that are often well-structured but lacking in resources to organize consultations at regional/county level.

24. ***Capacity building and institutional strengthening of inter-professional bodies and value chain actors' unions/federations***. Activities supported by the project will be complementary to those funded by other sources. They will focus on improving the operational and financial capacities of inter-professions and unions/federations to offer better services to their members and efficiently participate in SEPs and PAs implementation. Main activities would include: (i) diagnosis of existing institutions, and identification of critical capacity building needs in the first year of the project; (ii) support to the preparation of long-term business plans including scenarios for organization, income generating activities and resource mobilization (from members and external parties) to sustain such plans (some institutions already have strategic plans that need updating); and (iii) contribution to implementing these business plans including support to operational costs, setting up management and reporting information systems, and the development and implementation of communication tools.

25. ***Knowledge exchange and dissemination***. The project will support exchange sessions between PAs initiators or clusters of PAs, associated representatives of inter-professional bodies at regional, departmental and commune level. The aim is to enhance mutual learning, identification of key constraints and successes, and draw lessons for feedback and decision-making at the inter-professional and national level. The knowledge exchange sessions could eventually transform into local level dialogue or innovation platforms. In the same vein, the project will also organize a limited number of overseas study tours in the region for stakeholders to visit similar livestock value chain development projects that include mobilization of PFIs component and a productive alliance, or some other equivalent concept. Tour participants would mainly include representatives of inter-professional bodies and unions/federations of value chains' actors, as well as a few government staff.

26. ***Product promotion***. During the PA sub-projects' implementation, vital livestock products' promotion and marketing activities geared to national, regional, and international markets will be undertaken. These activities may include: (i) contribution to the organization

of the Livestock National Fair (together with government counterpart funding); (ii) participation in specialized fairs at regional and international levels; (iii) support to the certification process (local poultry) and to the export norm compliance process (for honey); and (iv) various communication activities to support national livestock production such as promotional days and media campaigns.

27. ***Strategic Economic Partnerships Agreements (SEPs)***. The project will support workshops and facilitation for elaboration and signing of SEPs between major players of the targeted value chains, particularly unions/federations of producers, large buyers and input suppliers to create an enabling investment environment, and to facilitate business deals and successful implementation of the PA sub-projects. Scopes of such SEPs go beyond one value chain or a single PA. SEPs would deal with issues and themes that are common to several value chains and inter-professional bodies (such as affordable animal feed, access to quality breeds, and access to large national and regional markets). Joint elaboration of SEPs would allow main stakeholders to develop a shared vision on the way forward on common issues, reconcile their different points of view, and come up with concrete actions for each party involved. It will also facilitate dialogue with the government/MRAH on key issues of livestock development (including fiscal, regulatory and incitation measures and policies). SEPs agreements could span a few years and documented. In some cases, a SEP may include: (a) an agreement on product quality and characteristics (such as size, content, and packaging); (b) quantity to be produced or bought; (c) delivery, payment modalities, and price determination criteria; and (d) commitment of each party with regards to investment to be made, quality improvement, technical support, and monitoring and reporting. Monitoring of SEPs' implementation will be the responsibility of each signing partner, and will be facilitated by MRAH through the project. It was estimated that at least seven SEPs could be signed and supported during the project.

28. **Mobilization of partner financial institutions (PFIs)**. Given the envisaged financing scheme of PA's sub-projects (see Sub-component 2.2), in which PFIs[32] will play a central role, adequate mobilization of PFIs is needed. This activity is in addition to improving the capacity and creditworthiness of PAs initiators through assisting the elaboration of bankable sub-projects/BPs, building their capacities, and mitigating the PFIs' credit risk through the matching grants. To that aim, upon effectiveness the project will support "preparatory activities", such as: (i) in-depth study of the current availability and actual demand of financial services for livestock, identification of potential PFIs and analysis of opportunities and constraints to partnerships (a study has been carried out during the design phase); (ii) organization of high-level meeting to inform national financial institutions about the project, its approach to co-finance PAs sub-projects, the role expected from PFIs, and envisaged support to PFIs under the project to secure their participation. This introductory meeting will be followed by technical meetings with potentially interested PFIs; (iii) preparation and negotiation of Memorandum of Understanding (MoU) with PFIs, determining commitments of each party, and support to be provided by the project as well as contribution (in kind or

[32] PFIs may include: (i) commercial banks; (ii) large micro-finance institutions networks; (iii) national development fund such as the Burkinabe Fund for Economic and Social development (FBDES), the Livestock Development Fund (FODEL), the Small and Medium Scale Financing and Promotion Agency (AFP/PME); (iv) non-banking financial institutions such as leasing companies and risk funds.

cash) from the PFIs; and (iv) preparation of guidelines for short- and medium-term credit disbursement by PFIs, along with the MG.

29. The project will co-finance the implementation of negotiated MoUs with each PFI. A previously conducted assessment of existing national financial institutions indicated that several have their own financial resources, and were interested in participating in the project to co-finance PAs sub-projects. However, capacity building is needed due to their lack of experience in agriculture and livestock financing. MoUs are likely to cover activities such as capacity building of PFIs' staff in agricultural credit appraisal, risk analysis, and credit monitoring; development of financial products adapted to the needs of target groups through specialized technical assistance and participatory workshops; introducing delivery innovations and best practices; market assessments; strengthening environmental, social and climate risk assessment in loan appraisal processes; and, support to operational capacity for credit appraisal and delivery. It is estimated that up to six PFIs would be participating in the project. Limited, yet targeted support may also be provided to the National Micro-Finance Association (that acts as the knowledge exchange and information role for its members). The project will organize regular reviews with concerned stakeholders to monitor the implementation of each signed MoU, and adjust the implementation aspects as needed.

B. Sub-component 2.2: Support to investment sub-projects - US$38.4 *(US$22.5 million IDA; US$7.0 million beneficiaries; US$8.9 million PFIs)*

30. This sub-component will support the implementation and co-financing of viable investment sub-projects (SPs), promoted by Productive Alliances (PAs) and small livestock farmers. It will comprise two main groups of activities: (i) Support to the selection, preparation, appraisal and monitoring of investments sub-projects; and (ii) Co-financing investment sub-projects.

Support to selection, preparation, appraisal and monitoring of investment sub-projects - US$2.9 million *(US$2.9 million IDA)*

31. **Training of trainers in participatory elaboration of business plans**. Productive alliance SP proposals will be based on multi-year business plans (BPs), demonstrating the technical, organizational, commercial, financial and economic feasibility and viability of the SPs, assessing their risks and social and environmental impact, and proposing mitigation measures and implementation modalities.

Box 2: Productive Partnerships

Productive Alliances (PAs) are business partnerships bringing together organized producers and other investors either upstream or downstream of production (input suppliers, collectors/buyers, processors, transporters, agro-processors and animal breeders) who have developed joint Business Plans (BPs), reflecting their common interests and vision as basis to implement investment initiatives (or "sub-projects (SPs)".) PA leadership can be assumed by the producers' group or any of the other member investors in a position to take the lead. The PA typically specifies: (i) investments to be made in production by individual members and their contribution to common investments; (ii) marketing arrangements with specific roles assigned to PA members, including product characteristics, quality and quantity to be produced and traded by each member, prices and price determination criteria, delivery and payment modalities; and (iii) financial and organizational arrangements. SP approval requires close screening to ensure that SPs are financially and economically viable. The screening ensures that SPs meet social and environmental safeguards, i.e., they do not generate negative externalities, and if they do, adequate measures are considered to mitigate the negative impact. SPs are funded by a combination of SP investors' own contributions (minimum 10 percent), a Matching Grant (MG) from project resources (up to a maximum amount of 60 percent), and short- to medium-term working capital and investment loans extended by Partner Financial Institutions (PFIs). Eligible investment expenditures for MG funding cover both investment items, additional working capital requirements for the first production cycles, and training and capacity building as well operating support, as identified in the BPs.

Elaboration of such BPs is the primary responsibility of the PA initiators. They will be assisted in this task by the main service provider, supporting the implementation of Sub-component 2.2 (likely *Maison de l'entreprise du Burkina Faso*") and individual consultants or local NGOs. The main service provider may sub-contract the activity. The quality and realism of BPs is important in preparation as they would make up an important criterion during credit appraisal by PFIs. Thus, it is essential that all BPs are prepared using a harmonized methodology, and that all the consultants use the same software following a participatory, simple, and iterative approach. It would allow full appropriation of each SP proposal by their initiators, including awareness of financial commitments and risks from their side. Thus, the project will support training of concerned staff on a participatory business plan preparation methodology and software, such as Rural-Invest developed by FAO, through training-of-trainers (ToT) approach. Participants will include staff from MRAH, the main service provider entity, and PFIs. Training will cover key elements for BP preparation and appraisal such as market and organizational issues, technology and risks, environment and social aspects, interpretation of financial results, and include practical examples and case studies.

32. **Dissemination of the BP preparation methodology and software in regions**. National trainers belonging to the initial group of trainees under ToT will be awarded certificates upon successful completion of their training after which they will provide the same training to the field staff, located in regions and departments. Similarly, participants in the local training will include staff from MRAH offices and PFIs.

33. **Thematic training of field technicians**. Such training would aim at equipping staff of the contracted service providers and members of committees participating in SP/BP appraisal with adequate knowledge of important themes for preparing, appraising and assisting successful implementation of SP/BPs. As such, their training topics will include: operationalizing the PA concept; social and environmental screening requirements in conformity with the existing legal framework and in adherence with procedures described in the PIM; production and financial norms and parameters to utilize in BP preparation and review by livestock type; bio-security, waste management, appropriate use of pesticides and animal drugs; quality control and norms, and possibly other topics.

34. **Workshops for PA initiators**. Participatory workshops will be organized for providing strictly practical training to the initiators of PA sub-projects before they embark on preparing a full BP for submission for possible funding. The workshops will explain the PA concept, using concrete examples of the items that would be eligible for funding through the MG and credit. The aim of these workshops is to reduce the number of non-eligible SP proposals.

35. **Collecting PA sub-project ideas**. PA sub-project ideas will be submitted to the project through filled and signed forms by their initiators. Such SP ideas will be collected through different channels: (i) call for proposals following the information and sensitization campaigns and radio broadcasts in production basins (see Sub-component 2.1); (ii) SP ideas emanating from the assessment and characterization studies of value chain actors at local level (see Sub-component 2.1); and (iii) ideas collected through the above-mentioned participatory workshops for PA initiators.

36. **Selection of PA promotors and SP ideas**. Requests for support to SP ideas will be examined by the Project Monitoring and Approval Committees (PMAC) that exist in each region, established earlier under PAFASP. These committees include staff of deconcentrated offices of concerned ministries as well as representatives of value chain actors, through the inter-professional bodies. The committees will be tasked with reviewing the eligibility of the PA initiators and SP ideas against the criteria defined in the PIM, and authorizing the organizational audit/diagnosis of PA initiators who presented eligible SP ideas.

37. **Organizational audit/diagnosis of PA initiators**. Specialized consultants will be hired to carry out an organizational audit/diagnosis of PA initiators who submitted eligible requests. The audit will verify the existence of field activities and membership, assess the strengths and weaknesses of the members composing the PA and their organization, their business inter-relations and their organizational, technical and financial capacity to implement the envisaged sub-projects. This step aims at eliminating requests, which clearly show weak institutional capacity, modifying or resizing the SP ideas if necessary, and defining the capacity building needs that should be addressed in the BP to ensure successful implementation of the sub-projects. The audit report will be shared with both SP initiators and the Grant Committee, established by the project at national level. Based on the conclusion of the audit, this Committee will decide on the next step, authorizing use of project funds to assist the detailed BP elaboration.

38. **Support to business plan preparation and review**. As indicated earlier, BPs will be prepared under an iterative and participatory process with full involvement of the PA sub-project initiators in defining the technical, organizational, commercial and financial assumptions, particularly with regards to their level and type of contribution (share in the SP costs, for which items, etc.), and the kind of envisaged loan, requested from PFIs.

39. **Discussion of BPs with PFIs, and pre-negotiation of loans**. Once prepared, BPs need to be discussed in detail with PFIs that would contribute to their financing, testing various options and loans conditions, depending on appraisal criteria and risk assessments from the PFI side. Such process will be facilitated by the project through organizing workshops to discuss batch of BPs with potentially interested PFIs. This will lead to agreements-in-principle to fund BPs from PFIs before the BPs are submitted to the Project Approval Committee for decision on the proposed MGs.

40. **Review of SPs/BPs and approval of Matching Grants**. An independent review of proposed SPs/BPs will be carried out by oversight agents (independent certified consultants, hired by the project). Reports and recommendations of these independent reviewers will be submitted to the Grant Approval Committee GAC), along with the proposed SP/BP file, with the aim to increase transparency in the review process, enhance quality at entry of SP/BP proposals and to avoid elite capture. Considering the estimated limited number of SPs/BPs that would be funded under the project (about 80, indicatively), the GAC will meet a few times a year, as needed. The project will support local costs for holding the committee sessions. Although the Committee would approve-in-principle the MGs, the disbursement of MGs will be progressive (by tranches) and conditioned by extension of loans by PFIS. For SP/BP, which need a social and environmental screening, according to the law and/or the

PIM, provision has been made to carry out such screenings as necessary. Approval of the MG will be subject to a positive recommendation from such screenings.

41. **Monitoring of funded SP/BPs by inter-professional bodies and MRAH**. Implementation support to each SP/BP will be assured by specialized consultants, chosen by SP initiators themselves, and cost of such assistance will be integrated in the SP/BP. The project will support monitoring of such service providers and, more generally, of the performance and results of the funded SP/BPs through MRAH staff and representatives of inter-professional bodies at department and local level.

42. **National supervision**. Given the innovative approach of the Component 2, regular supervision missions will be fielded, at least once a year. Representatives of MRAH, central directorates of the Ministry of Finance (International Cooperation Directorate) and of inter-professional bodies will participate in the missions. Recommendations will be submitted to the Project Coordinator as well as to the Steering Committee.

43. **Ex-post evaluation of funded SPs/BPs**. The project will support carrying out ex-post impact evaluation of funded SPs/BPs by local consultants after minimum of two years of implementation. These evaluation studies will draw on the technical monitoring and financial data, collected by the beneficiaries themselves with the assistance of the specialized consultants supporting each SP implementation (see above). They will analyze the organizational, financial and social results and impact of each SP/BP and propose actions to sustain them. Such evaluation will contribute to the production of references by PA type (see below).

44. **Technical and financial monitoring of SPs/BPs and production of references**. As part of the learning and knowledge management system of the project, a system will be established to produce technical and financial data by PA type, production system and value chain "references", using data generated from monitoring the funded SPs/BPs. Specialized consultants will support the establishment of the reference production system.

Co-financing investment sub-projects (US$36.2 million of which US$20.3 IDA financing)

45. **Co-financing Productive Alliances' SPs/BPs** (US$30.3 million of which US$16.7 million IDA). Indicatively, about 80 SPs would be supported over five years, with an average cost of about Fcfa 200 million, i.e. around US$350,000. SPs' total costs would range from Fcfa 50 to 500 million. Models of typical PA SPs were elaborated for each value chain to come up with such an estimate.

46. SPs/BPs will be funded by a combination of: (i) own resources from the SP initiators; (ii) a MG from the project resources (max 60 percent of total costs, and Fcfa 250 million per SP); and (iii) short- to medium-term working capital and investment loans extended by PFIs. A minimum cash contribution will be required from the SPs' initiators (minimum 10% and indicatively up to 20%). The minimum contribution from the SPs' initiators will increase with the SP costs, and the MG share will be decreased accordingly. The credit element will represent at a minimum 30 percent of the SP costs. MGs will not be disbursed until the loans from one or several PFI(s) are granted. Under the proposed funding scheme, the ultimate decision to finance each SP/BP will thus remain with the PFIs. The indicative financing plan is presented in Table 1 below.

Table 1: Indicative financing plan of PA sub-projects

PA sub-project total costs	Financing plan (%)			Maximum MG (FCFA million)
	Matching Grant (MG)	Initiator's own resources	Credit	
50-100	60%	10%	30%	60
100-250	55%	15%	30%	138
250-500	50%	20%	30%	250

47. Capacity building needs of SP's initiators, and direct local technical support needs will be identified, costed and duly reflected in the SP/BP to ensure successful implementation of the SP., The multi-year cash flow analysis presented in the BP should demonstrate that the proposed SP is able to meet the proposed loans reimbursement schedule while generating net income that is attractive enough for the SPs' initiators.

48. MGs will finance both investment items (works, goods, capacity building and technical support linked to each SP) and additional working capital requirements for the first cycles of production, as identified in the BP. These will cover both investment made at collective level and at the level of individual participants in the PA. Investment may cover production items such as inputs, live animals, animal feed, small-scale processing, waste management systems to minimize greenhouse gas emissions, pollution and dissemination of pathogens, and renewable energy (bio and solar energy).

49. MGs may be used as a guarantee to secure the loans extended by PFIs to cover the investment costs minus the SP's initiators' contribution. Under such approach, the MG would be put in a deposit account located in the PFI extending the loans, in the name of the beneficiaries, and would be disbursed progressively, following adequate re-payment of the loans, as per the loan schedules. The MG would thus become an incentive to loan re-payment and strengthen the cash flow of the SP. Such an option is preferred by some potential PFIs in the country as MGs tend to lessen borrowers' responsibilities[33].

50. Eligibility criteria for MGs will be developed in the PIM and may include:

(a) A positive assessment of the PA SP's initiator capacities to implement the project as demonstrated through the organizational audit report;
(b) A financially and technically sound BP detailing the investment costs and financing; the operational and general costs; technologies considered; targeted markets and input/output price assumptions; organizational and capacity building needs and proposed activities; detailed arrangements for implementation; environmental and social impact and risks and mitigation measures; a multi-annual cash projection (before and after financing through the grant, the initiators' own resources, and the loans) and a profitability analysis (comparing "with project" and "without project" situations); key indicators such as generated employment (equivalent number of

[33] Similar schemes were successfully implemented in several micro-enterprise and SME development projects (notably in Rwanda). It was also proposed under the recently approved Cameroon Livestock Development Project (PRODEL), funded by IDA.

person-year in "with project" situation), Financial Internal Rate of Return (FIRR), Net Present Value (NPV) return on capital, and profitability (benefits before and after tax on sales);

(c) Evidence of supply and buying arrangements between members of the PA (producers, input suppliers, agri-businesses) as demonstrated through the organizational audit, the BP and other instruments such as contracts. The MGs should be used to match existing demand of buyers and not be based on market forecasts or speculation;

(d) Assurance that the SP does not generate negative externalities or have potential adverse effects on the environment and public health and that adequate mitigation measures were considered in the BP, as evident by the screening carried out during the SP appraisal process where applicable; and

(e) Successful pre-negotiation of the BP with one or several PFIs that expressed interest in co-financing it through short-and-medium term working capital and investment loans.

51. **Co-financing individual micro-projects (US$5.9 million of which US$3.6 million IDA financing)**. The project will also support another financing window for smaller projects, initiated by individual small livestock producers. Indicatively, about 1,200 micro-projects (MPs) will be funded over five years. MPs will be funded by a MG capped at 60 percent of the MP costs and the own contribution of the MP initiator, which may include credit extended by PFIs and/or micro-finance institutions. Women would be eligible to MG up to 70 percent of MP costs and eligible expenditures as an affirmative action to support these deprived target groups. For example, the MG might be coupled with credit, extended by the FODEL. The maximum MP costs eligible for matching grant (MG) financing will be set at F CFA 3 million per MP (about US$5,000 per MP), i.e., a maximum MG of F CFA 1.8 million per MP. Local consultants will prepare simplified sub-projects/BPs for each MP. MPs and proposed MG proposals will be reviewed by the existing project approval committees at regional level, in which representatives of producers and civil societies currently participate. The project will support the committee sessions and ex-ante review of MP proposals, as for PA sub-projects. This MP financing window is considered as a pathway for smallholders to later qualify and participate in larger PA sub-projects. It will build on successful experience of PAFASP, which funded such individual MPs.

Component 3: Crisis Management and Project Coordination – US$13 million (IDA US$10 million and government contribution equivalent to US$3 million)

52. The objective of this component is not only to strengthen mechanisms for preventing and responding to severe crisis and emergencies in the livestock sector, but also to strengthen project coordination capacities within the MRAH. The budget for Component 3 draws on an IDA envelope equivalent to US$9.7 million, supplemented by a government contribution equivalent to US$3.0million. Within this budget, the CERC will be allocated an initial amount of US$1.5 million from IDA resources, supplemented by additional counterpart funds equivalent to US$0.5 million.

A. Sub-component 3.1: Crisis management – US$3.1 million (IDA-US$2.4 million; US$0.7 million from the government)

53. Sub-component 3.1 aims to support: (i) the operationalization of the SP/CVEL[34] through the provision of critical equipment (computers, software, office furniture, vehicles, etc.), training, resources to undertake various studies, as well as communication facilities; and (ii) the development of crisis management tools, such as operational fora at different geographic scales (local, national, and contribution to regional fora), a specific M&E mechanism for crisis situations, and a CERC. Since PRAPS-BF already contributes to the management of pastoral crisis, the two projects (PRAPS-BF and PADEL-B) will join efforts and ensure full collaboration with SP/CVEL. The medium-term outcome to be achieved is reduction in the time required during a pastoral crisis to reach 50 percent of the targeted beneficiaries, foreseen in the inclusive intervention plan. Crisis response plans will be developed with a view to reaching the most vulnerable members in affected communities (including youth, women and elder people).

54. This Sub-component focuses on strengthening crisis preparedness and response mechanisms through:

a) Operationalization of SP/CVEL

- Provision of operational means and equipment to the Permanent Secretariat, including vehicles (one all-wheel drive (AWD) and one liaison vehicle), office furniture and information technology equipment (computers, software, etc.)
- Development of an operational action plan to address crisis and vulnerabilities in the livestock sector
- Conducting thematic studies on the risks and vulnerabilities in livestock farming
- Strengthening through training various actors involved in crisis management including ToT
- Development of market information systems (including information collection and dissemination) for poultry (SIM-Poultry) and fisheries (SIM-Fish), as a complement to PRAPS-BF support for livestock (SIM-livestock);
- Improving the legal and regulatory framework for crisis management in the livestock sector (notably, crisis resulting from natural disasters such as drought or floods, in addition to sanitary and commercial/market crisis), including support for the preparation of legal texts and their dissemination;
- Support to the production of a quarterly newsletter for livestock sector crisis prevention, preparedness and management in Burkina Faso (including training of support staff)

b) Implementation of crisis management tools

- Support for setting-up and operating with consultative groups including all partners involved in crisis preparedness and management not only at different geographical scales: local scale in each of the 13 regions of the country, but also at national scale, and participation to supra-national consultations in West Africa and the Sahel

[34] SP/CVEL was created by Article 20 of Decree No.2016-298/PRES/PM/MRAH dated April 29, 2016 regarding the organization of the MRAH; its mandate has been defined by ministerial Arrêté, and covers all crises in the livestock sector (including sanitary crisis, crisis induced by natural disasters, and market crisis.); its mandate has been all crises in the livestock sector (including natural disasters)

- Establishment of a specific mechanism to monitor and evaluate crisis management in the livestock sector
- Establishment of a CERC to be activated when severe crisis strikes in Burkina Faso

55. The CERC will be established and managed in accordance with the provisions of World Bank policy OP/BP 10.00 (Financing of Investment Projects) paragraphs 11, 12 and 13; it will be complemented by government resources. The CERC will be allocated an initial amount equivalent to US$2.0 million (including US$1.5 million from PADEL-B IDA resources, supplemented by additional counterpart funds equivalent to US$0.5 million), to immediately avail financial resources to cover initial expenses in the event of a serious crisis. This will allow for rapid re-allocation of project proceeds in the event of a natural or man-made disaster or crisis that has caused or is likely to imminently cause a major adverse economic and/or social impact. Critical initial expenses may, for example, be geared at procuring a detailed analysis of actual needs in the field, without waiting for a financial re-structuring of project components. In case an eligible crisis does not happen, the earmarked funds to the CERC will be reallocated to other project activities.

56. The project's CERC may be triggered only when the government has to officially declare an emergency, or provide a statement of the facts justifying the request for activation of the use of emergency funding. The government may request the Bank to re-allocate project funds to this particular component to support response and re-construction in declared emergencies.

57. If the Bank agrees with the determination of the disaster and associated response needs, this component would allow the government to request the Bank to re-categorize and re-allocate financing from other project components to cover emergency response and recovery costs. Disbursements would be made against a list of critical goods or procurement of works and consultant services, required to support immediate response and recovery needs.

58. A specific Emergency Response Operations Manual will apply to this CERC component, detailing: financial management (FM); procurement; withdrawal documentation requirements for eligible expenditures; environmental and social safeguard management frameworks; a list of goods and services; other necessary implementation agreements; preparation of necessary terms of reference and specifying resources to be allocated to an entity (Coordinating Authority) to be responsible for coordinating and implementing the CERC; specific activities and eligible expenditure (Emergency Expenditures), which may be included in the CERC, and any specific procedures to be followed for such inclusion.

59. Detailed operational guidelines, deemed acceptable by the World Bank for the implementation of the CERC, will be developed within six months after the start of project implementation; drawing from PRAPS-BF experience[35], these guidelines will include (i) a specific manual of operation for the CERC to be added to the PIM, containing the above provisions; (ii) a contingency plan in response to eligible crisis; and (iii) a corresponding emergency procurement plan. All expenditures under this fund will be incurred in accordance with paragraph 12 of OP 10.00 of the World Bank (Financing of Investment Projects), and will be evaluated, reviewed and deemed acceptable by the World Bank prior to any

[35] The PRAPS-BF has already developed an IRF, dedicated to pastoral crisis, also managed by MRAH (SP/CVEL).

disbursement. Disbursements will be made against an approved list of goods, works and services to mitigate crisis, based on the response and recovery measures.

60. Should a severe crisis strike the livestock sector (such as natural disaster, large sanitary or commercial crisis), causing a major impact on sedentary animal production and/or project value chains covered by the project, the government may request the World Bank to use IDA resources pre-allocated to the CERC and to re-allocate project funds from other components to support mitigation, response, recovery and re-construction measures. In the long term, when each of the many World Bank-financed investment projects from all sectors in Burkina Faso introduce this type of CERC, it may be possible to pool some of the resources of these projects for a joint response to a serious crisis affecting the national economy, as part of a country-wide multi-sector IRM. In this regard, the government will be encouraged to create a countrywide IRM Operational Manual that would streamline implementing arrangements, procurement, safeguards, and other aspects through a centralized coordinating authority.

61. *Collaboration with PRAPS-BF under Sub-Component 3*.1: prior to the establishment of SP/CVEL, it was expected that the *Direction Generale des Aménagements Pastoraux* (DGEAP) would be the lead structure for PRAPS-BF activities and that the PCU would recruit a national expert in "pastoral crisis management" for the entire project duration. As PADEL-B will also contribute to crisis management in the livestock sector, the two projects will work together and collaborate with key institutions involved, notably: (i) the Executive Secretariat of National Council for Food Security (SE-CNSA) for the preparation of contingency plans; (ii) the ministry in charge of decentralization as regards support to municipalities; (iii) the Early Warning System (EWS) (iv) professional organizations for setting up monitoring networks; (v) FAO and specialized NGOs such as Doctors without Frontier-Belgium (VFS-B) for livestock emergency guidelines and standards (LEGS) training purposes.

62. PRAPS-BF also set-up an Immediate Response Fund to be activated in the case of severe pastoral crisis. With the addition of PADEL-B, the MRAH will manage two funds targeted at different beneficiaries[36]. However, the funds are meant to be utilized simultaneously, with identical or very similar operating mechanisms, under the aegis of the same administrative entity. The SP/CVEL clearly appears as the specialized entity within the MRAH that has necessary crisis management ability, and can coordinate the means of PRAPS-BF and PADEL-B in situations of crisis.

B. <u>Sub-component 3.2</u>: Project coordination – US$9.9 million (IDA-US$7.6 million; US$2.3 million from the government)

63. This sub-component focuses on all aspects related to project management and coordination of PADEL-B activities, including steering committee meetings, M&E system, knowledge generation and management, communication, procurement and management of IDA funds, and the monitoring of safeguard mitigation measures in accordance with agreed upon procedures. As such, the activities under the sub-component will strengthen the capacities of the PCU through operational means (computers, software, office furniture,

[36] The IRF set-up by PRAPS-BF is intended for severe pastoral crises, and the other IRF set-up by PADEL-B is intended to be used
for other major crises in the livestock sector.

vehicles, etc.) and training, and will also assist the regional directorates of the MRAH with some equipment. A budget will be allocated for livestock data generation in Burkina Faso for the establishment of a full-fledged national database in the livestock sector, knowledge management, advocacy for livestock sector financing and communication activities. This sub-component's activities will benefit women in every aspect, to the extent possible.

a) Institutional support

- Support to MRAH's M&E system, from the field to various general directorates, including the provision of equipment;
- Operational support for meetings of MRAH's consultative bodies;
- Strengthening internal/external communication and advocacy towards various target audiences

b) Critical staff for the Project Coordination Unit

The PCU will operate under the administrative authority of the Secretary General of MRAH, and will benefit from the following expertise, either independently or in conjunction with the PCU of PRAPS-BF (see Table 2 below on the pooling of staff resources from the two PCUs):

- One National Coordinator, supported by two (2) secretaries
- One Administrative and Financial Officer, one (1) Financial Comptroller, one (1) Accountant and one (1) Assistant
- One Internal Auditor (in addition to the recruitment of an external audit firm)
- One Procurement Officer and one (1) Assistant
- One Monitoring and Evaluation Officer, one (1) part-time M&E expert to support the DGESS (General Directorate for Statistics at MRAH), and a network of 11 M&E Field Officers covering the 13 administrative regions of Burkina Faso
- One Communication Officer
- One Gender Specialist
- One Environmental Safeguards Specialist
- One Social Safeguards Specialist
- One Animal Health Expert
- One Crisis Management Expert
- One Rural Finance Expert
- One Zootechnician (Animal Production Expert)
- One Animal Products Value Chains Expert
- Support staff (drivers, liaison officers, guards)

64. The pooling of cross-cutting project management functions will include: (i) *financial management:* a joint Administrative and Financial Officer, a joint Financial Comptroller, as well as an Accountant with an Accounting Assistant for each project; (ii) *auditing:* the internal audit function will be shared with the pooling of the Internal Auditor, and the two projects will possibly use the services of the same external audit firm; iii) *procurement:* a joint Procurement Officer and a Procurement Assistant for each project; (iv) *M&E:* a joint part-time M&E Consultant to support MRAH's General Directorate for Statistics, and an M&E Officer for each project, as well as a team of 11 field staff to cover all 13 regions[37]

[37] Eleven (11) field stall will cover all 13 administrative regions as some regions will be combined together for the purpose of

covered by the project; (v) *information technology, communications, gender, social safeguards and environmental safeguards:* an expert in each of these fields, shared by both projects. All the above staff positions will be funded by the IDA Credit, either under existing PRAPS-BF arrangements, or under new PADEL-B arrangements; for administrative simplification, shared PCU staff at central and field level will have joint TORs but will be financially supported by a single source[38]. Support staff at central and regional levels will be covered by the national counterpart funding.

65. At the technical level, PRAPS-BF's current expertise[39] will be complemented to cover additional PADEL-B's needs, including experts in animal health, animal production, livestock value chains and rural finance; the Animal Health Expert will be shared by the two projects. PADEL-B/PCU staff will commit themselves fully to the activities described in their own TORs. At MRAH's central level, relevant technical directorates will appoint FP to support implementation of PADEL-B's activities to complement existing FP covering PRAPS-BF's activities. In addition, PADEL-B/PCU will sign partnership agreements with these technical directorates to carry out PADEL-B activities within their mandates. At the regional level, PADEL-B and PRAPS-BF joint field staff will serve the purpose of data collection, monitoring and reporting project activities throughout the national territory. Field staff will be located in the Regional Directorates of MRAH.

66. Lastly, the PADEL-B will draw upon a Technical Assistance Pool[40] (in the form of man-months), to provide ad hoc support to the MRAH in the implementation of PADEL-B activities, as required.

67. The PCU will carry out the following activities:

a) PCU capacity development through operational means (computers, software, office equipment, furniture and vehicles[41]) and a training plan for the staff of other support offices;
b) Capacity development of MRAH's Regional Directorates through the addition of 11 field staff, with operational means (computers, software, office equipment, furniture, one (1) motorbike per field officer), and a staff training plan;
c) Operational support to PADEL-B steering bodies (Steering Committee, and Technical Committee) in the development of operational manuals, project launch and M&E activities;
d) Expenses for cross-cutting functions, such as communication and gender mainstreaming in all activities, environmental and social safeguard measures, and for conducting critical studies;
e) Supervision costs, including external audits, implementation support missions, mid-term review and final evaluation;

project management (i.e. Cascades et Hauts-Bassins, and Centre et Plateau Central). Since PRAPS-BF already has field units in three (3) regions, additional staff, financed by PADEL-B will be only eight (8).

[38] Staff funding will be supported either by PRAPS-BF or PADEL-B, depending on positions, as detailed in Table 2. Drawing on respective IDA credits, approximately two-thirds of the pooled staff will be financed by PADEL-B, and one third by PRAPS-BF

[39] Which includes an Assistant to the National Coordinator (or Technical Director), a Natural Resource Management Expert and a Crisis Management Expert.

[40] Estimated to 50 man-months over the life of PADEL-B, which would provide 10 man-months annually (on average) to meet specific expertise needs during project implementation

[41] One liaison vehicle, one station wagon, two double cabin 4x4 pickup trucks and one motorbike at central level

f) General operating expenses of the PCU, including rental of premises pending the construction of an additional floor to the building that PRAPS-BF has already planned to build

68. **Budget:** The budget for Component 3 draws on an IDA envelope equivalent to US$9.7 million, supplemented by a government contribution equivalent to US$3.0 million. The Immediate Response Fund will be allocated an initial amount of US$ 1.5 million from IDA resources, and supplemented by national counterpart funds in an amount equivalent to US$0.5 million. Government counterpart funds will be made available to finance activities pertaining to the project, such as those directly related to public governance in the livestock sector, and others designed to support PADEL-B implementation (e.g. regular meetings of the project governance entities). The Financial Agreement will include specific provisions on the commitment made by the Burkina Faso authorities on the amount, periodicity of payment and use of these funds, which will also be subject to periodic supervision by the World Bank.

Table 2: Staff combination of PADEL-B/PCU and PRAPS-BF/PCU under the authority of MRAH General Secretariat

FUNCTIONS	PCU staff for PRAPS-BF (100% IDA financing by PRAPS-BF)	Joint staff shared by the two projects (* means IDA financing through PADEL-B, and ** means IDA financing through PRAPS-BF)	PCU staff for PADEL-B (100% IDA financing by PADEL-B)
MANAGEMENT	-1 National Coordinator, and secretary -1 Assistant National Coordinator, and secretary		-1 National Coordinator, and 2 secretaries
COORDINATION OF TECHNICAL COMPONENTS	-1 Natural Resource Management Expert -1 Crisis Management Expert	-1 Animal Health Expert *	-1 Rural Finance Expert -1 Animal Production Expert (zoo technician) -1 Value Chain Expert (Animal Products)
COORDINATION OF CROSS-CUTTING FUNCTIONS		-1 Communication Specialist ** -1 Information Technology Expert * -1 Gender Specialist ** -1 Social Safeguard Specialist ** -1 Environmental Safeguard Specialist *	
FINANCIAL MANGEMENT & CONTROL	-1 Accountant, and 1 Assistant	-1 Administrative and Financial Expert (RAF) * -1 Financial Comptroller *	-1 Accountant, and 1 Assistant
AUDITS		-1 Internal Auditor * -1 External Auditor recruited by each project – not part of the PCUs)	
PROCUREMENT	-1 Procurement Assistant	-1 *responsable de la Passation des Marchés* (PROC) **	-1 Procurement Assistant
MONITORING & EVALUATION	-1 Monitoring & Evaluation Expert (RSE)	-1 part-time Technical Assistant for DGS * -8 M&E field staff * -3 M&E field staff (Fada, Dori, Bobo)**	-1 Monitoring & Evaluation Expert (RSE)

ANNEX 2: IMPLEMENTATION ARRANGEMENTS

A. Project Institutional and Implementation Arrangements

1. The Borrower will be represented by the Ministry of Economy and Finance. Overall responsibility for project implementation, including management of environmental and social risks, will be delegated to the Ministry of Animal and Fisheries Resources (MRAH). Implementation of the project will take place for five years over the country's national territory. The project duration is set to allow a realistic implementation timeframe. Drawing from earlier experiences with similar projects, it is particularly important to allocate sufficient time not only for the activities envisaged as part of the strengthening of services under Component 1 to ensure achievement of the planned outcomes (i.e. improving service delivery, capacity building), but most importantly the time it will take for the development of sustained Productive Alliances in the livestock sector under Component 2.

2. Details regarding PADEL-B's organizational arrangements are presented in Annex 2. PADEL-B's organization will be governed by Decree N° 2007-775/PRES/PM/MEF of November 22, 2007, as a Category B project. PADEL-B's governance structure will be modeled after PRAPS-BF's structure, including COPIL CT, meeting at regular intervals, with all necessary representative membership. COPIL will serve as a guidance body and approve the Annual Work Plans and Budgets (AWPBs), as well as PADEL-B's progress reports; the CT, comprising all relevant technical stakeholders, will be the responsible body to monitor project implementation. The COPIL will meet at least twice a year under the chairmanship of the Secretary General of MRAH, while the CT will hold one meeting per quarter under the chairmanship of the CN. At local level, the existing regional agricultural project coordination committees will be involved in PADEL-B's implementation and will contribute to the assessment of field progress.

3. PADEL-B Steering Committee: As in the case of PRAPS-BF, this committee will serve as the project's orientation and steering body. PRAPS-BF and PADEL-B will share the same Steering Committee. It is chaired by the SG/MRAH, and includes the representatives of the Ministry of Animal and Fish Resources (SG, Cabinet, SP/CVEL, PCU, DGSV, DGPA, DGESS, DAF, DMP, DCMEF, FODEL and DRRAH), the Ministry of Economics and Finance (DGCOOP, DGEP, DGTCP), the Ministry in charge of the Environment, the Ministry in charge of Agriculture, the Ministry in charge of Territorial Administration, Decentralization and Internal Security, local and regional authorities, representatives of projects and programs in the livestock sector, POs (including inter-professional bodies) and major NGOs operating in the livestock sector; FAO and the World Bank may participate as observers. The frequency of meetings is at least twice a year.

4. PADEL-B Technical Committee: As in the case of PRAPS-BF, this committee will serve as the monitoring body for project implementation. It will be chaired by the PADEL-B National Coordinator, and will comprise representatives of implementing agencies (SP/CVEL, DGSV, DGEAP, DGPA, etc.), representatives of POs in the livestock sector (including inter-professional bodies), representatives of other livestock support projects, scientific research institutes, as well as other contractual service providers. The frequency of meetings is at least once per quarter.

5. The project implementation mechanism will comprise a Project Coordination Unit (PCU) based in Ouagadougou, and field correspondents based in MRAH's regional directorates. In addition, it will involve Focal Points in MRAH's central directorates, as well as in the

Ministries in charge of Environment and Social Affairs, to facilitate the implementation of the project's technical activities, as well as environmental and social safeguards.

6. PADEL-B's PCU will be fully mainstreamed into the MRAH structure as advocated by authorities. It will come under the MRAH's General Secretariat alongside PRAPS-BF's PCU. PADEL-B's PCU will be set up as part of a sharing arrangement with the PCU of PRAPS-BF. The two project teams will operate in close synergy. The two PCUs combined are expected to be the precursor of what will be called ''sector PCUs", which have been agreed in principle with the government to serve on-going and future projects in given sectors. PADEL-B's PCU will work in close coordination with MRAH's technical directorates at central and regional level to execute and monitor project implementation. The main functions of the PCU will be:

- Steer and coordinate PADEL-B activities in accordance with the provisions of the Financing Agreement regarding the management and use of IDA resources, as well as national procedures
- Provide support to the MRAH and other partners involved in implementing the project activities.

7. The National Coordinator, who will head the PCU, will be competitively recruited and remunerated using IDA resources; his/her signature will be required to commit project financing. S/he will be assisted by a team of high caliber, competitively-recruited consultants, covering all technical or administrative functions deemed critical for proper project implementation and management. The project management cross-cutting functions, including the fiduciary functions, will be pooled and the project's technical expertise will be shared between the two projects, to the extent possible[42].

8. At the technical level, PRAPS-BF's current expertise[43] will be complemented to cover additional PADEL-B's needs, including experts in animal health, animal production, livestock value chains and rural finance. The Animal Health Expert will be shared by the two projects. Regarding cross-cutting project management functions, the pooling will include: (i) *financial management:* a joint Administrative and Financial Officer, a joint Financial Comptroller, as well as an Accountant with an Accounting Assistant for each project; (ii) *auditing:* the internal audit function will be shared with the pooling of the Internal Auditor, and the two projects will possibly use the services of the same external audit firm; (iii) *procurement:* a joint Procurement Officer and a Procurement Assistant for each project; an M&E Officer for each project, as well as a team of 11 field staff to cover all 13 regions, covered by the project ; (v) *information technology, communication, gender, social safeguards and environmental safeguards:* an expert in each of these fields shared by both projects. All above staff positions will be funded by the IDA Credit, either under existing PRAPS-BF arrangements or under new PADEL-B arrangements; for administrative simplification, shared PCU staff at central and field level will have joint TORs but will be financially supported by a single source[44]. Support staff at central and regional levels will be financed by the national counterpart funding.

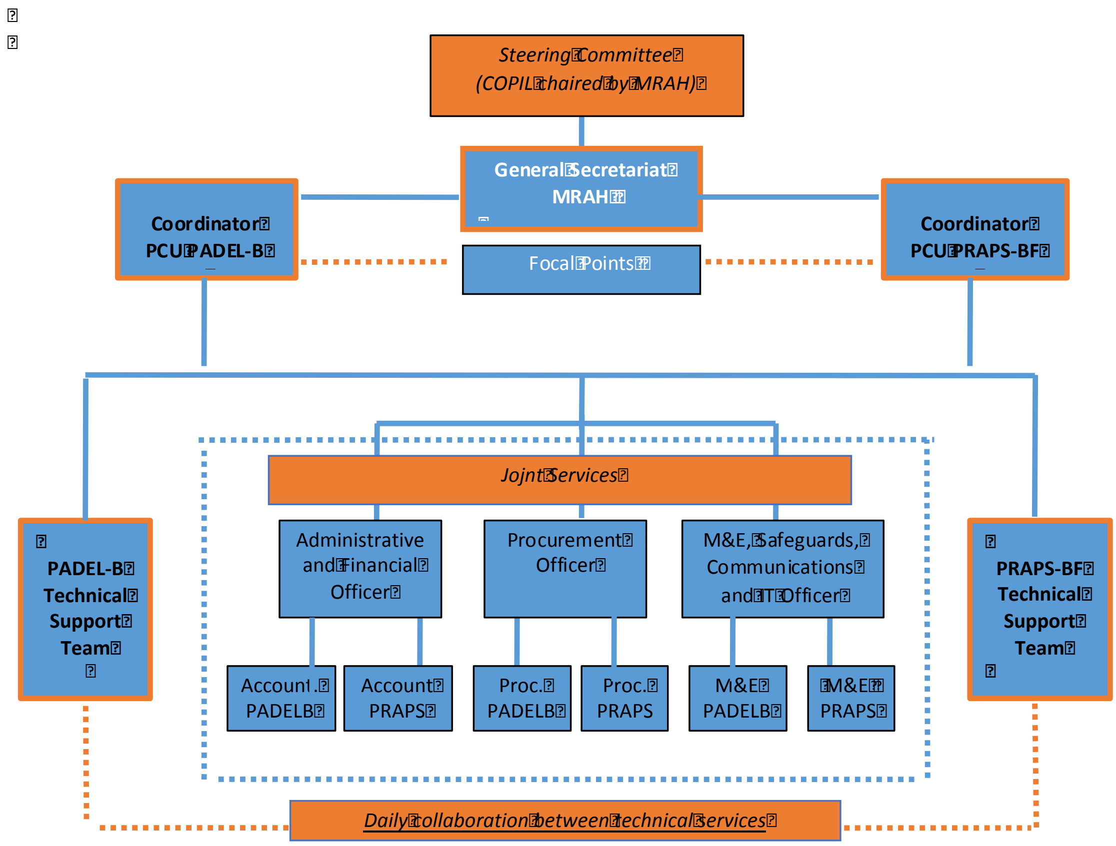
[42] In order to achieve this, the PRAPS-BF will be re-classified to Category B and the TORs of certain UCP PRAPS-BF/PCU staff will be revised accordingly.
[43] Which includes an assistant to the National Coordinator (or technical director), a natural resource management expert and a crisis management expert.
[44] Staff funding will be supported either by PRAPS-BF or PADEL-B, depending on positions, as detailed in Annex 1. Drawing on respective IDA credits, approximately two-thirds of the pooled staff will be financed by PADEL-B, and one third by PRAPS-BF.

9. At MRAH's central level, relevant technical directorates will appoint Focal Points to support implementation of both PADEL-B's and PRAPS-BF's activities. The PADEL-B/PCU will sign partnership or technical agreements with these technical directorates to carry out PADEL-B activities within their mandates. At the regional level, PADEL-B and PRAPS-BF joint field staff will assume responsibilities for data collection, monitoring and reporting project activities throughout the national territory. The field staff will be located in the Regional Directorates of MRAH.

10. *The Project Implementation Manual (PIM)* will be adopted before project effectiveness, as a compendium of procedures for the PADEL-B's operational implementation, encompassing the administrative, fiduciary, M&E, procurement and social & environmental safeguards procedures. It will include detailed TORs for all PADEL-B/PCU staff. A specific manual for the management of the CERC will be prepared and validated no later than six months after project effectiveness.

11. *Support missions for PADEL-B implementation:* Under the fiduciary responsibilities of the World Bank and in accordance with the provisions of the project Financing Agreement, periodic missions will be fielded to support project implementation (at least twice a year), and video and/or audio-conferences will be held on a regular basis for the purpose of PADEL-B monitoring and assessment. Implementation support missions will prepare Aide-Memoires.

Figure 1: PADEL-B Organizational Structure



B. Financial management (FM) arrangements

12. The Administrative and Financial Officer will have the overall responsibility for the financial management. The FM activities include (i) planning and budgeting, (ii) accounting, (iii) managing flow of funds, (iv) monitoring and controlling financial transactions of the

Project Designated Account, (v) providing quarterly Interim Financial Reports and annual Financial Statements, and (vi) making necessary arrangements for the audit of the annual Financial Statements.

13. ***Internal control system***. The internal control system comprises (i) a steering committee to oversee the project activities; (i) a Project Implementation Manual including updated Administrative, Financial, Procurement and Accounting Procedures, which will be adopted before project effectiveness; (iii) the project will recruit a Financial Comptroller who will verify the compliance of each activity (procurement, contract, payment to policies, regulations and rules applicable to the PADEL-B.

14. The existing Internal Audit Function of the PCU-PRAPS-BF will include the PADEL-B in its scope. The PCU-PADEL-B will furnish to the Bank, no later than 45 days following the end of each semester, a copy of the internal control review report, which summarizes key findings of the reviews, completed during the semester and a follow-up of previous recommendations.

15. ***Planning and budgeting***. The PCU-PADEL-B will prepare a detailed annual work plan and budget (AWPB), which need to be approved by the COPIL. The PCU-PADEL-B will submit the approved AWPB to the Bank, for comments, before the start of the next calendar year.

16. ***Accounting***. As agreed by the Borrower and the Bank, the PRAPS and PADEL-B will share the same FM staff. An additional Accountant and an Assistant Accountant will be recruited to reinforce the existing FM team comprising a Finance and Administration Officer, and an Accountant.

17. The SYSCOHADA, assigned accounting system in West African Francophone countries, will be applicable. The existing multi-project accounting software (TOMPRO) will be customized to host the book-keeping of PADE-L-B.

18. ***Financial reporting.*** Every quarter, the PCU-PADEL-B will submit an Interim Financial Report (IFR) to the Bank within 45 days after the end of the calendar quarter period. The IFRs should provide sufficient pertinent information for a reader to establish whether (i) funds disbursed to the project are being used for the intended purpose, (ii) project implementation is on track, and (iii) budgeted costs will not be exceeded. PCU-PADEL-B will use the IFR format of the ongoing IDA funded projects.

19. The report may include:

- An introductory narrative discussion of project developments and progress during the period, to provide context to (or other explanations of) the financial information reported;
- A Sources and Uses of Funds Statement, both cumulatively and for the period covered by the report, showing separately funds, provided under the Project (IDA, Recipient);
- A Uses of Funds by Components Statement, cumulatively and for the period covered by the report;
- The designated account reconciliation, including bank statements and general ledger of the bank account;
- Disbursement forecasts of the upcoming six months;
- Explanation of variances between the actual and planned activities and budget.

20. Annually, the PCU-PADEL-B will prepare Project Annual Financial Statements, which will comply with the accounting system of the *Organisation pour l'Harmonisation en*

Afrique du Droit des Affaires (OHADA) (SYSCOHADA) and World Bank requirements. Annual Financial Statements may comprise:

- Project presentation and project developments and progress during the year, to provide context to (or other explanations of) the financial information reported;
- A Statement of Sources and Uses of Funds which recognizes all cash receipts, cash payments and cash balances;
- A Statement of Commitments;
- Accounting policies adopted and explanatory notes,
- A Management Assertion that project funds have been expended for the intended purposes as specified in the relevant financing agreements.

21. ***Auditing.*** The PCU-PADEL-B will submit Audited Project Financial Statements (PFS) satisfactory to the World Bank every year within six (6) months after closure of the fiscal year.

22. A single opinion on the Audited Project Financial Statements in compliance with International Federation of Accountant (IFAC) will be required. In addition, a Management Letter will be required, containing auditor observations and comments, and recommendations for improvement in accounting records, systems, controls and compliance with financial covenants in the Financial Agreement.

23. The PCU-PADEL-B will recruit an auditor acceptable to the Bank six (6) months after the project effective date.

24. ***Disclosure of the audited financial statements***. According to the Bank policy on Access to Information, the audited financial statements should be made available to the public. The Bank will make the annual audited financial statements public, and the PCU-PADEL-B will communicate to the Bank the justification that it did make the annual audited financial statements public.

Disbursements arrangements

25. Disbursements under the PADEL-B project will be carried out in accordance with the provisions of the IDA Disbursement Guidelines (World Bank Disbursement Guidelines for Projects, dated May 1, 2006), the Disbursement Letter and the Financing Agreement.

26. ***Disbursement procedures and methods:*** Disbursements under the project would be transactions-based. In addition to making advances to the Designated Account, other disbursement methods (reimbursement, direct payment and special commitment) will be available for use under the project. Further instructions on disbursement and details of the operations of the Withdrawal Applications will be outlined in the disbursement letter.

27. ***Designated account:*** The PCU-PADEL-B will open and manage a designated account at the Central Bank of West African Countries “BCEAO” in F CFA (Franc of African Financial Community) and a transaction account in F CFA in a commercial bank acceptable to IDA.

28. ***Designated account replenishment and documentation***: The designated account will be replenished through the submission of withdrawal applications. Replenishment (requests for reimbursement) and reporting on the use of advances will be accompanied by a Statement of Expenditure and records required by the Bank for specific expenditures in the Disbursement Letter. All supporting documentation will be retained at the UCP-PADEL-B, and must be made available for periodic review by Bank’ missions and external auditors.

Figure 2: Funds Flow Chart

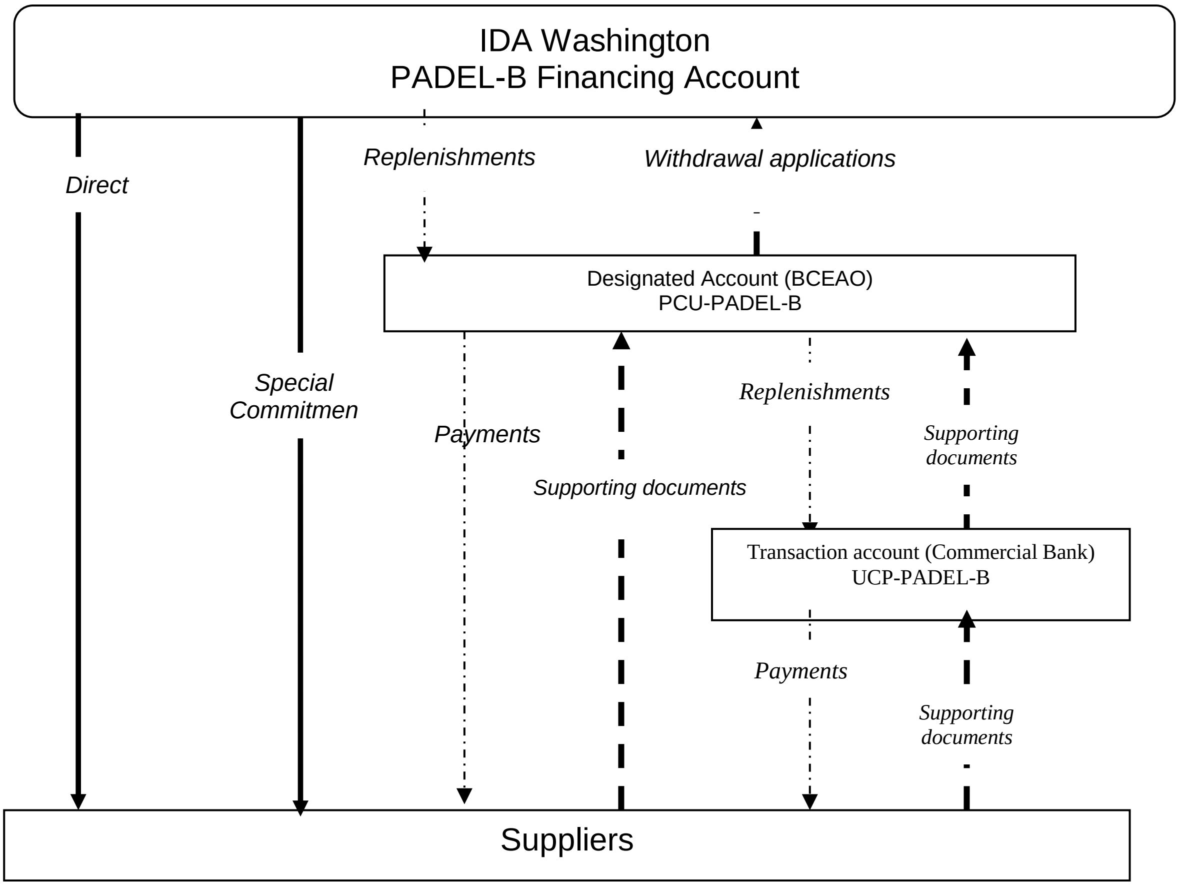


Table 1: Summary of Shared FM Implementation Arrangements of the PRAPS-BF and PADEL-B

Pilar	Description	UCP-PADEL-B	UCP-PRAPS-BF
Internal control system	Steering Committee	X	X
	Project Implementation Manual	X	X
	Administrative, Financial, and Accounting Procedures Manual	X	
	Financial Comptroller	X	
	Internal Audit	X	
Budget	Work Plan and Budget	X	X
Funds flow	Designated Account	X	X
Accounting	Finance and Administration Officer	X	
	Accountant Assistant	X	
	Accountant	X	X
	Accounting Software	X	
Audit	External auditor[45]	X	X

[45] The Bank team and the Borrower team agree that the PCU-PADEL-B will share the same external audit firm with the PCU-PRAPS-BF.

Implementation Support Plan

29. Based on the outcome of the FM risk assessment, the following Implementation Support Plan is proposed whose objective is to ensure that the project maintains a satisfactory financial management system throughout the project's life.

Table 2: Implementation Support Plan

FM Activity	Frequency
Desk reviews	
Interim financial reports review	Quarterly
Audit report review of the program	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 (Implementation Support Mission)	One per year
Monitoring of actions taken on issues highlighted in audit reports, auditors' management letters, internal audit and other reports	As needed
Transaction reviews	As needed
Capacity building support	
FM training sessions	During implementation and as and when needed

D. Procurement

30. **Procurement rules and procedures**. Procurement for works, goods, non-consulting and consulting services for the project will be carried out in accordance with the procedures specified in the "World Bank Procurement Regulations for IPF Borrowers", dated July, 2016 (Procurement Regulations) and the "World Bank's Anti-Corruption Guidelines: Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants" (revised as of July 1, 2016), as well as the provisions stipulated in the Financing Agreement.

31. All goods, works and non-consulting services will be procured in accordance with the requirements set forth or referred to in the Section VI - Approved Selection Methods: Goods, Works and Non-Consulting Services of the Procurement Regulations, the consulting services will be procured in accordance with the requirements set forth or referred to in the Section VII - Approved Selection Methods: Consulting Services of the Procurement Regulations, the Project Procurement Strategy for Development (PPSD), and Procurement Plan, approved by the World Bank. The Procurement Plan, including its updates, shall include for each contract (i) a brief description of the activities/contracts; (ii) selection methods to be applied; (iii) cost estimates; (iv) time schedules; (v) the Bank's review requirements; (vi) any other relevant procurement information. The Procurement Plan covering the first 18 months of the project implementation was prepared and approved on May 10, 2017. Any updates of the Procurement Plan will be submitted for the Bank's approval. The Recipient shall use the Bank's online procurement planning and tracking tools (STEP) to prepare, clear and update its Procurement Plans and conduct all procurement transactions.

32. When procurement is done on the national market, as agreed in the Procurement Plan, the country's own procurement procedures may be used with the requirements set forth or

referred to in the paragraphs 5.3 to 5.6 related to National Procurement Procedures. For Burkina Faso, the requirements for national open competitive procurement include the following:

Table 3: Requirements and Actions for National Open Competitive Procurement

Requirements	Actions
Open advertising of the procurement opportunity at the national level.	No action needed
The procurement is open to eligible firms from any country.	No action needed
The request for bids/request for proposals will require that Bidders/Proposers submitting Bids/Proposals present signed acceptance at the time of bidding to be incorporated in any resulting contracts, confirming application of, and compliance with, the Bank's Anti-Corruption Guidelines, including without limitation the Bank's right to sanction and the Bank's inspection and audit rights.	The form elaborated by OPCS, and attached, must be added to each contract agreement with bidders/consultants.
Contracts with appropriate allocation of responsibilities, risks, and liabilities	No action needed
Publication of contract award information	No action needed
Rights for the Bank to review procurement documentation and activities	The requirement should be included in the Procurement Plan.
An effective complaints mechanism	The PIM must develop an effective complaints mechanism in line with UEMOA guidelines.
Maintenance of records of the Procurement Process	The PIM must spell out the practical modalities and the appropriate documentation to archive.

33. **Procurement risk assessment and mitigating measures**. MRAH will be responsible for project implementation. Procurement activities will be shared with PRAPS-BF. The procurement specialist (PS) for that project will be responsible for PADEL-B procurement activities and s/he will undergo further training on procurement regulations; a procurement assistant will be hired to assist him/her on procurement project activities.

34. A procurement assessment was conducted as part of project preparation. It shows that: (i) DMP has recently recruited new staff; (ii) the existing staff have limited qualifications, limited procurement skills, and insufficient experience in Bank procurement procedures; (iii) DMP is located in a small office space, with limited office furniture and equipment; (iv) tender committee members are 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. It was the same situation during PRAPS-BF assessment. It is to be noted that the proposed project will be the very first project to be implemented by MRAH in Burkina Faso under the Bank's New Procurement Framework. The assessment has rated the procurement risk as Moderate to the extent that the above constraints are mitigated.

35. The Client team was informed to the obligation to prepare and submit to Bank review a PPSD. The PPSD (including procurement plan) indicate *inter alia,* whether or not: (i) the national and international environment is favorable for the procurement of goods intended for the implementation of the project; (ii) the national market is able to meet the needs of works, computer equipment, office equipment and furniture as well as office consumables, which

will be purchased according to the relevant procedures; (iii) the same applies to the market for consultant services; and (iv) the contracts are open to the sub-regional and international market for specific supplies and services that may require the participation of companies located at the international level. It is to be noted that MRAH through PRAPS-BF does enjoy experience in managing these types of markets and, therefore, has clear knowledge of the national, sub-regional and international markets.

36. The following procurement mitigation measures are proposed, based on the PPSD and procurement risk assessment:

Table 4: Procurement Mitigation Measures

Implementing agency	Procurement mitigation measures	By when
MRAH	Outsource the implementation of construction activities through MOD	According to the PPSD and PP schedule
MRAH / WB	Train the PS, DMP and the tender committee in the Bank's New Procurement Framework	Three months after Effectiveness
MRAH	Equip the DMP meeting room for bid opening session	Six months after Effectiveness
MRAH	Set-up an acceptable filing system in the PCU and DMP	Needs to be described in the PIM
MRAH	Elaborate and submit a Project Implementation Manual, with Procurement section, for IDA approval	Three months after Effectiveness

37. **Oversight and monitoring arrangements for procurement.** A PIM will be prepared based on PRAPS-BF PIM, and will be submitted to the Bank for review. It will define the project's internal organization and its implementation procedures. It will include, amongst other things, all the relevant procedures for calling for bids, selecting consultants, and awarding contracts. The project monitoring arrangements for procurement will be specified. Detailed procurement documentation (i.e. PPSD) may be referenced as such and retained in the project files. The detailed 18-month procurement plan, once agreed with the Borrower, will be uploaded on the World Bank website.

E. Monitoring and Evaluation (M&E)

Objective

38. M&E is essential for a results-based approach to program management. Starting as a key component of the project design, M&E remains incorporated into all facets of the project cycle until its completion. The M&E system will enable the PADEL-B management team to clearly demonstrate to the key stakeholders whether the project is achieving the stated goal, outcomes and outputs in accordance with the targeted timeframe.

39. Therefore, the M&E systems should provide the means to robustly analyze the relevant data and information, and monitor the performance of the project in order to:

- Monitor the project outcome indicators as reflected in the Results Framework;
- Comprehensively track the implementation of the Annual Work Plan and Budget (inputs, activities and outputs), using mainly the set of indicators (or milestones), outlined under each component and sub-component at frequent intervals;
- Establish a process to alert PADEL-B managers to any problem in project implementation, and provide the basis for making the necessary adjustments;

- Outline the flow of data and information from the project sites through various stakeholders, both for the use of the general public and to inform decision-making;
- Provide a framework for accountability[46] for progress toward development objectives, attributable to interventions and actions of the PADEL-B PCU, anchored to the General Secretariat of the MRAH;
- Serve as a platform for communicating project's results and the benefits generated for farmers;
- Meet the World Bank's routine reporting requirements (i.e., the six-monthly progress report, Implementation Status and Results (ISR) report, which is publicly disclosed) and data and information requirements for the mid-term review.

Context and capacity

40. Fulfilling these M&E objectives in Burkina Faso is a daunting task for several reasons. Government capacity to plan, execute, monitor, and evaluate projects is weak. 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 6 below presents an assessment of M&E capacity in Burkina Faso[47].

Table 5: Assessment of M&E capacity

Country	Availability of key data	Routine data collection	Quality of data	Government capacity	Use of data and information
Burkina Faso	2	2	2	3	1

Note: Rating scale: 1 = lowest, 5 = highest.

Design of Results Framework

41. The main instrument for M&E in the PADEL-B project is the Results Framework (Annex 1), which will be reported in the ISRs. It consists of the PDO statement and is organized around five "SMART[48]" PDO-level indicators and six SMART intermediate results areas indicators, structured around the three components of the project. Core indicators of the World Bank are included too, such as the core indicator on farmers reached with assets and services and the core indicator on beneficiary satisfaction rate with services provided by the project. Indicators are disaggregated as necessary; by type of disease for the indicator on diseases (CBPP/PPR/fowl pox virus), and by sex (percent female) for the two core indicators on farmers reached with assets and services and on beneficiary satisfaction rate. 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. However, to ensure the validity of the baseline data and targets, a baseline survey will be conducted during the first year of the project.

M&E arrangements

42. The M&E Unit in the PCU will have the overall responsibility for project monitoring and evaluation, including collection and processing of information necessary for tracking

[46] 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.
[47] Based on the M&E capacity assessment, presented in the PRAPS project document.
[48] SMART: specific, measurable, achievable and attributable, relevant and time-bound.

project results. All implementing entities will participate in data collection, compilation, analysis and reporting of progress.

43. The project will support an efficient M&E system that will contribute to an adequate strategic planning and monitoring of the project. An M&E Specialist will be responsible for all M&E activities of the PADEL-B project. In particular, he/she will ensure that data and information are produced timely, are sufficient, and of necessary quality.

44. M&E arrangements will pool some M&E functions and activities together with PRAPS-BF. An M&E Specialist will be placed in the PCU who will be responsible for all M&E activities of the PADEL-B project. A network of eleven (11) M&E field experts[49] will be set up to support both PADEL-B and PRAPS-BF M&E activities. The institutional scheme provided for in PADEL-B will allow both projects to cover the 13 administrative regions of Burkina Faso[50] and to facilitate data collection (see Table 7 below). Five M&E field experts will cover seven regions and work on PADEL-B M&E activities, while the remaining six M&E field experts will cover six regions and work on M&E activities for PADEL-B[51] and PRAPS-BF. PADEL-B will use the same M&E software (TOMMONITORING) as PRAPS-BF. Moreover, an M&E mechanism will be set up to monitor emergency-response activities. Finally, a Technical Assistant will support the DGS to develop a livestock database.

Table 6: M&E arrangements for PADEL-B and PRAPS-BF

#	Regions	PADEL-B	PRAPS-BF	Comments
1	Boucle du Mouhoun	X	X	ToR[52]s will cover both projects
2	Cascades	X	X	ToRs will cover both projects
3	Centre	X		
4	Centre-Est	X		
5	Centre-Nord	X		
6	Centre-Ouest	X		
7	Centre-Sud	X		
8	Est	X	X	ToRs will cover both projects
9	Hauts-Bassins	X	X	ToRs will cover both projects
10	Nord	X	X	ToRs will cover both projects
11	Plateau Central	X		
12	Sahel	X	X	ToRs will cover both projects
13	Sud-Ouest	X		

M&E Activities

45. M&E activities for the PADEL-B project will: (i) generate information on the project's progress; and (ii) analyze and aggregate data, generated at the national and local levels. The M&E field experts will collect data in each of the regions under their respective responsibility and will produce regular monitoring reports. They will be under the direct supervision of the Senior M&E Officer, based at the DGRAH.

46. The Senior M&E Officer will be responsible for all the project M&E activities to be conducted. Specifically, the responsibilities of this officer, who will be located in the PCU, will include, among others, ascertaining the quality of the data produced, and that of the semi-

[49] Three officers are already financed by PRAPS-BF. They are based in Bobo-Dioulasso, Dori and Fada N'Gourma.
[50] Two regions will be merged: Centre with Plateau Central, and Cascades with Hauts Bassins.
[51] In this mechanism, PADEL-B will finance eight (8) M&E field officers.
[52] TORs for PRAPS-BF will be revised to ensure common arrangement with PADEL-B.

annual and annual progress reports to be submitted to the Project Coordinator and the World Bank, and to complete the project's Results Framework.

47. The progress reports will not only track progress of the Results Framework indicators but also Key Performance Indicators (KPI), including input, output and process indicators. Project baseline and end of project surveys will be conducted as part of the M&E.

Table 7: Indicator Description

Indicator name	Definition (indicator definition, etc.)
Project Development Objective Indicators	
Indicator One: Percentage increase in yields, produced by targeted beneficiaries among selected value chains	This indicator measures the percentage increase of yields produced by targeted beneficiaries among selected value chains. To measure this indicator, targeted beneficiaries will include the beneficiaries who received kits and training under Component 1, and all the beneficiaries of the sub-projects, funded under Component 2. Selected value chains are cattle, small ruminants, poultry and milk. This indicator will be calculated by measuring the following sub-categories: Number of eggs per hen per cycle; Liters of milk/cow/cycle; Weight productivity of cattle, i.e., live weight (small ruminants); and Weight productivity of cattle, i.e. live weight (beef cattle).
Indicator Two: Incremental sales in targeted value chains (aggregated over all the targeted value chains)	This indicator measures the average increase in the value of sales in targeted value chains (cattle, small ruminants, poultry and milk). For each targeted value chain, the increase in the value of sales is calculated as the ratio of the value of incremental sales during the reporting year (the total value of sales by direct beneficiaries during the reporting year minus the total value of sales in the baseline year), and the value of sales at baseline. To measure this indicator, targeted beneficiaries will be the beneficiaries who received kits and training under Component 1, and all the beneficiaries of the sub-projects, funded under Component 2.
Indicator Three: Time to reach 50% of the targeted beneficiaries as foreseen in the inclusive intervention plan	This indicator relates to efficiency (time to respond) and effectiveness (share of target beneficiaries reached) in response to a crisis or emergency. This is a 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 when 50% of the target beneficiaries, as defined in the intervention plan, have been reached (ending point has to be defined clearly).
Indicator Four: Farmers reached with agricultural assets and services (of which 30% female and 20% of youth) X 1000	This indicator measures the number of livestock households and small livestock operators and enterprises in target areas who were provided with agricultural assets or services by the project. The baseline value for this indicator is zero. This is an outcome indicator. The percentage of female and youth (15-35 years old), reached with assets and services, will be measured by taking into account beneficiaries having received kits and training under Component 1, and beneficiaries of the activities, supporting private investment under Component 2. This is a core indicator.
Indicator Five: Beneficiary satisfaction rate with services provided by the project for the livestock sector (%of which female %)	This indicator measures the percentage of beneficiaries who expressed satisfaction with the services, provided in the project areas, based on formal surveys. It is expected that a survey to measure this indicator be carried out twice during the project life. The sample size should be representative of the total number of beneficiaries. This indicator requires two types of supplemental data: (1) number of targeted beneficiaries, satisfied with the quality of services, and (2) targeted beneficiaries of services and assets.

	This is a core indicator. It will be measured at mid-term and at the end of the project.
Intermediate Results Indicators	
Component 1: Improvement of access to services and inputs	
Intermediate Results Indicator One: Prevalence of two priority diseases (herd prevalence of contagious bovine pleuropneumonia (CBPP) and post-vaccinal seroprevalence of small ruminant plague (PPR)	This indicator measures the level of two priority animal diseases in the project area. It measures three aspects of improved access to animal health services, i.e., incidence and prevalence of two priority animal diseases, and quality of the vaccines. In case of poor quality vaccines, prevalence/incidence will not be reduced despite an increased coverage. This is a medium-term indicator of two priority diseases—disaggregated by disease. Calculation is 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 Burkina Faso or projections based on census or other comparable data and information to estimates of number of animals (denominator).
Intermediate Results Indicator Two: Number of poultry, vaccinated against fowl pox	This indicator measures the number of poultry, vaccinated against fowl pox. The baseline is zero, as the Government of Burkina Faso has never launched any vaccination campaign against fowl pox. An output indicator.
Intermediate Results Indicator Three: Farmers adopting improved agricultural technology	Number of farmers adopting improved agricultural technology, where the term "technology" includes a change in practices compared to currently used practices or technologies (seed preparation, planting time, feeding schedule, feeding ingredients, post-harvest, storage, processing, etc.). In PADEL-B, these improved technologies include artificial insemination, demonstration kits (crop residue grinder for animal food, bio-digesters, improved hives, and use of improved forage seeds) An outcome indicator. A core indicator.
Component 2: Livestock Value Chain Development	
Intermediate Results Indicator One: Number of micro-projects funded (targeting 30% female and 20% youth)	This indicator measures the number of micro-project funded. Micro-projects refer to individual producers (only one beneficiary), average size of 1 to 3 million CFA, no bank financing.
Intermediate Results Indicator Two: Sub-projects funded under Productive Alliances	This indicator measures the number of sub-projects the PAs funded. This intermediate results indicator is divided into two sub-indicators: (a) Number of PAs sub-projects funded: PAs sub-projects are partnerships between different actors (producers, processors, buyers, Partner Financial Institutions). Average size: 200 million F CFA. Producers are organized

	into Producers' Organizations (POs). Recourse to Bank financing. About 20 to 30 individual partners. (b) Volume of loans granted by Partner Financial Institutions: This indicator measures the volume of loans granted by Partner Financial Institutions (PFIs), meaning the credit effectively disbursed. PFIs may include: (i) commercial banks; (ii) large micro-finance institutions networks; (iii) national development fund such as the Burkinabe Fund for Economic and Social Development (FBDES), the Livestock Development Fund (FODEL); the Small and Medium Scale Financing and Promotion Agency (AFP/PME); and (iv) non-banking financial institutions such as leasing companies and risk funds. PA are based on partnerships established around joint BPs, between (i) formally organized producers (producers' organizations) or individual promoters, and (ii) other value chain participants downstream of production (collectors, buyers, processors, transporters) and/or upstream of production (feed factories and animal breeders).
Component 3: Crisis management and project coordination	
Intermediate Results Indicator One: Time between request from government to the time making funds available to respond to an eligible crisis	This indicator measures the accessibility to and efficiency of the mechanism, put in place by the project to make funds available to the government in a timely manner in case of an eligible crisis.

ANNEX 3: IMPLEMENTATION SUPPORT PLAN

A. 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. The approach entails close monitoring of the project's technical design and implementation, as well as governance, fiduciary, and safeguard issues. 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**. One of the biggest implementation challenges identified is MRAH's overall low capacity. To respond to this challenge, and to ensure that project resources are being used effectively to achieve the PDO, the supervision strategy will use a number of instruments to review progress and respond to implementation issues, including:

a) *Implementation Support (IS) Missions*: The World Bank Task Team will conduct semi-annual review and implementation support missions to review Livestock Development Project (LDP) implementation performance and progress toward the achievement of the PDO. Given the overall design and scope of the project, a multi-disciplinary team comprised of technical specialists, along with fiduciary, environmental, social, and operations specialists will be needed to support the Government of Burkina Faso in implementing the project. Support from technical partners, such as FAO, will be sought when needed. The first implementation support mission will take place as soon as possible after effectiveness to provide start-up support through direct and timely feedback on the quality of implementation plans and their likely soundness and acceptability;

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 LDP 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 Bank and the Ministry of Finance 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 LDP activities in areas affected by conflict. Such reviews will be planned for over and above the semi-annual IS missions; and

d) *Implementation completion*: At the close of the project, the Bank will carry out an implementation completion review to assess the success of the project and draw lessons from its implementation.

3. **Objective of implementation support missions**. 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 will: (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, 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.

4. **Technical assistance**. Implementation support will include technical support from the 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 remove implementation bottlenecks as they are identified during IS 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

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

6. **Focus of support**. The first two years of implementation will see more technical support. Thereafter, the focus will shift to more routine monitoring of progress, trouble-shooting, and assessments based on the Results Framework. The support missions will be complemented by regular short visits by individual specialists to follow up on specific thematic issues as needed.

7. **Financial support**. The project Financial Management Specialist, based in the country office, will review the FM systems, including their continued adequacy; evaluate the quality of the budgets and implementing agencies' adherence to these budgets; review the cycle of transaction recording through to final report generation; evaluate the internal audit function; review IFRs and/or annual Financial Statements; follow up on the advances 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. Table 1 summarizes the implementation support plan.

Table 1: FM implementation support plan

FM Activity	Frequency
Desk reviews	
Interim financial reports review	Quarterly
Audit report review of the program	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 (Implementation Support Mission)	One per year
Monitoring of actions taken on issues, highlighted in audit reports, auditors' management letters, internal audit and other reports	As needed
Transaction reviews	As needed
Capacity-building support	
FM training sessions	During implementation and as and when needed

8. **Procurement support.** On the procurement front, the Bank will provide implementation support to the client through a combination of prior and ex-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. Based on the recommendations of the fiduciary assessments of the Implementing Agencies, and in addition to the prior review supervision to be carried out from the Bank office, the semi-annual supervision missions will include field visits, of which at least one mission will involve ex-post review of procurement activities.

9. **Safeguards**. The Bank specialists in Social and Environmental Safeguards, based in Ouagadougou, will have responsibility for supervising safeguard activities. They will conduct supervision of the project's safeguard activities at least once a year, participate in regional meetings to discuss findings, and draft action plans to improve implementation.

10. **Main focus of implementation support**. Table 2 summarizes the main focus of implementation support during the project's implementation period.

Table 2: Main implementation support activities

Time	Focus	Skills needed
First 12 months	• Project start up • Support to implementation activities (sensitization, council/community consultations and planning, capacity building, strengthening implementation capacity including M&E) • 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 project • Support to preparation of CERC manual	• TTL+ operation officer + co-TTL • Livestock • NRM • Market access • Livestock crisis management • Financial management • Procurement • Environment • Concertation mechanisms facilitation • Communication • Monitoring and evaluation
12-48 months	• Monitoring implementation performance, including progress • Review of annual work plans and disbursement schedule • Review strength of councils and cooperatives, quality of participatory process and capacity building activities • Review quality of quarterly/annual reports, data and various produced studies • Assess quality of implementation process • Assess quality of M&E system (including quality of 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 and their application	• TTL+ operation officer + co-TTL • Livestock • NRM • Market access • Livestock crisis management • Financial management • Procurement • Environment • Concertation mechanisms facilitation • Communication • Monitoring and evaluation

Table 3: Skill-mix required for the proposed project (per year)

Skills Needed	Staff Weeks	Number of Trips	Comments
Team Leader	15		CO based
Livestock Specialist (Co-TTL)	12	2	DC based
NRM Specialist	6	2	Consultant
Value Chain Specialist	6	2	Consultant
Operations Officer	10		CO based
Procurement Specialist	6		CO based
Financial Management Specialist	6		CO based
Environmental Safeguard Specialist	6		CO based
Social Safeguard Specialist	6		CO based
M&E Specialist	6	2	Consultant
Communication Specialist	4		CO based
Gender Specialist	2	1	DC based
Conflict and Fragility Specialist	2	1	DC based

B. Role of Development Partners

11. The project was prepared in close collaboration with other development partners, including FAO and bilateral donors. These partners will not finance any of the proposed activities, because they have their own complementary operations, but the PCU within MRAH will ensure that collaboration and information sharing will occur systematically during implementation of the proposed LDP. Partners will also be invited to join implementation missions when and if so they desire. The PCU will encourage the establishment of a task force of development partners involved in the targeted areas, and to meet on a regular basis to monitor the matrix of interventions and action plan.

12. The project has been designed to support critical activities that were identified in the targeted value chains and areas but are not supported by other partners. This flexible and pragmatic design will enable the project to build on initiatives supported by other partners (which focus on a complementary set of activities). In turn, this is expected to foster synergies and create a framework for more integrated livestock development, in line with the project's objectives and thematic emphasis. Table 4 below provides some additional detail on the development partners cooperating with the LDP and the roles they are expected to play.

Table 4: Role of Development Partners in PADEL-B

Name	Institution/Country	Role
Development partners involved in livestock or NRM projects	AFD, SNV, AfDB	-Ensure synergies and complementarities -Contribute to project supervision
Representatives of ILRI and ICRAF	CGIAR	Provide support for technology transfer
Country representatives, Director, Investment Center	FAO	-Contribute to project supervision -Ensure provision of skills mix to support quality of project implementation
Coordinators of Bank projects (PRAPS, WAAPP, PAFASP, etc.)	World Bank Group	-Ensure synergies and complementarities -Contribute to project supervision

ANNEX 4: ECONOMIC AND FINANCIAL ANALYSIS

1. This Annex presents the economic and financial analyses that was conducted to assess the impact and viability of various activities of the proposed project. The approach differs across these activities. Indeed, some activities, and related investments are already well identified in scope, nature, and costs, as well as potential benefits (e.g., Component 1 focusing on animal production services particularly in improved animal health). But most project benefits will be derived from Productive Alliance sub-projects (SPs) (see below), which will be strictly demand-driven. Forecasting and quantifying benefits derived from the latter is more difficult. Indicative Productive Alliances SP models were thus developed to present a range of likely investments in the targeted supply chains that promoters might propose for project financing.

2. This section aims at addressing the following three main questions[53:]

a) What is project's development impact? This is the main question underlying the approach to cost-benefit analysis. It requires careful consideration of expected stream of project benefits and costs, as part of an explicit causal framework, linking project activities to targeted outcomes;

b) Which one is more appropriate vehicle: public sector provision or financing? This question probes the rationale for public involvement with respect to financing and/or implementation, and should explicitly consider alternative modes of provision; and

c) What is the Bank's value added? This question seeks to determine the benefit from the Bank staff involvement and whether the proposed project maximizes the development impact of staff effort.

Project development impact and economic benefits

3. The project will have tangible socio-economic benefits, which can be quantified either in monetary or physical terms, *inter alia*: (i) increased incomes of direct and indirect beneficiaries; (ii) generation of additional employment at both farm level and down the value chain; (iv) reduction in the trade balance deficit through import substitution (notably for milk and eggs) and increased exports (notably cattle); and (v) increased fiscal revenues, resulting from increased turnover of agri-business enterprises, involved in the project-supported strategic economic partnerships. Some of these tangible benefits can be precisely calculated; others were estimated, for instance those accruing from the implementation of sub-projects under Component 2. Indeed, sub-project activities are demand-driven, and it is not possible to specify precisely what they might turn to be. The project will also have other benefits of a less tangible nature, such as increase in the capacity of POs, greater share of benefits accruing to producers, enhancement of food security, and reduction in the vulnerability to external shocks (notably climate change and rising food prices), reduction in production, post-harvest and marketing risks, etc. These benefits, are less amenable to quantification, but they can be considerable, and have the potential to play a major role in reducing inequities and tensions, and enhancing social stability and prosperity in the project intervention areas. The economic and financial analysis

[53] As recommended by the Operational Policy and Bank Procedure (OP/BP) 10.00 on Investment Project Financing and the Guidance Note on Economic and Financial Analysis World Bank, Investment Project Financing Economic Analysis Guidance Note, OPSPQ, 9 April 2013.

took into consideration only the tangible benefits (either precisely specified or estimated, based on given hypotheses). The results of the analysis are, therefore, purposely conservative.

Financial analyses

4. Financial analyses were carried out for PAs to assess: (i) the overall attractiveness of the proposed typical PA business plans in targeted value chains, for both producers and other value chain participants, in terms of the total monetary income likely to accrue to them; (ii) the possibility for targeted producers and other value chain economic actors to actually participate, based on the amount of cash income they are likely to receive especially in view of their cash needs when they are yet to reach full production and economies of scale; and (ii) the risk of the proposed financial arrangements for supporting project-sponsored investment SPs, for both PFIs and SP promoter, which will be a mix of individual contribution, matching grant, and short- and medium-term credit.

Typical productive alliance models in targeted value chains (Component 2)

5. Eight models for typical PAs SP were prepared taking into consideration pre-determined technical, organizational and market, as well as cost and pricing hypotheses. The models were developed on the basis of tested investment options, production technologies and accounting for PA size (membership number). The PA models are the following: (i) semi-extensive traditional poultry (*poulet bicyclette*); (ii) semi-intensive improved poultry production; (iii) egg production; (iv) pig breeding, fattening and processing; (v) cow milk production and processing; (vi) improved small-scale meat processing; (vii) fish farming; and (viii) modern bee-keeping, and honey production and processing.

6. The models encompass improved production, storage and processing methods, joint procurement of inputs and advisory services (notably veterinary services, and technical and management support), and joint planning and marketing (sometimes sale) of production to generate economies of scale, to the benefit of the membership of the Productive Alliance. Models include the investments at the level of individual PA member (whether producer, processor, input supplier), as well as joint/ collective investments as necessary.

7. Investment costs, as well as direct operating and overhead costs, were analyzed in detail. The unit costs considered took into account the costs of civil works, production buildings and warehouses; animal production, processing, transport, office, laboratory and other equipment; energy (electricity, gas, oil, charcoal); skilled and unskilled labor as needed; input purchase and output sale; transport from farm gate to storage and processing units, and *vice versa*; maintenance of equipment and buildings; insurance, communication and advertisement costs; and different types of taxes levied on imports, VAT, etc. The farm gate prices of animal feed, improved breeds, and animal traction, construction of livestock sheds and storage infrastructure, and hired labor were estimated. Output prices considered in the analysis take into account inter-annual and intra-annual variation in prices. Self-consumption was also estimated in order to estimate cash income.

8. The financing plan for investment costs (including the capacity building and technical assistance costs that were integral part of each SP) was assumed to be as follows: (i) a cash contribution of the PA promoters of minimum 10 percent of total investment costs and up to 20 percent of investment costs for larger SPs; (ii) a project matching grant (financed through IDA

resources) ranging from 65 percent to 55 percent of total investment costs; and (iii) a Medium Term (MT) credit granted by PFIs at market rate (12% per year[54], covering about 30 percent of total investment costs[55], and assumed to be repaid over 3 (to maximum 7) years through equal yearly installments.

9. For each model, the working capital requirements were also estimated, taking into account the direct production costs for the first cycles of production and the general costs for the first year in "with project" situation. It was assumed that it would be funded by: the SP promoters' own resources (10 percent of total as a minimum); a Short Term (ST) credit granted by the PFI, covering about 30 percent of the working capital requirement (at an annual interest rate of 14 percent); and a project matching grant covering 55 percent to 65 percent of the working capital requirement, depending on total amount needed as in the case of investment costs. Models integrate multi-annual cash flow projections (before and after financing through own resources of the promoters, the matching grant and short- and medium-term credit) that would be used to negotiate PFIs' co-financing as well as to verify the return to investors. The projections were conducted for 16- year period.

10. For each model, the following data has been used: (i) detailed investment costs and financing by funding source (own resources of PA promoters, MG, credit from PFIs) and estimation of amortization; (ii) presentation of technical assumptions (for instance for animal, parameters such as parturition rate, mortality at various ages, average daily weight gain, etc.), main input and output prices assumptions and of financial plan (interest rate for MT investment credit and ST credit for working capital requirements); (iv) calculation of gross margin per 'block of production'[56], detailing income/cash sales of products/by-products and direct operating costs, depending on activity level (including labor, energy, etc.); (v) production pattern (evolution of the number of blocks of production, by block type and per year); (vi) estimate of general expenses per year that don't depend on the activity level (management, administration, insurance, general supply, communication and advertisement costs); (vii) calculation of cash flow -before and after financing- multiplying the gross margin of each block per the production pattern and deducting investment costs, general expenses, and replacement of investments; and estimate of the FIRR, NPV (at a 6 percent per year discount rate) and return on investment (in number of years at full production); (viii) calculation of profit and loss account and profitability ratio (net benefits on sales); and (ix) estimation of production costs of the main product.

11. Considering the limited number, small size/membership and weaknesses of existing livestock producers' POs, and the needed trust between members of each productive alliance models, models generally assume a limited membership per PA.

[54] In case national development funds are involved, they are lent at lower rates (6 to 8 percent per year), and often for longer period than that by commercial banks and micro-finance networks.

[55] According to the preliminary envisaged financing scheme of SPs/BPs (see Annex 2). An option would be that the MG serve as a collateral for granting an MT credit, covering full investment costs minus the cash contribution of the PA's initiators. In such case, the MG would be progressively disbursed to the benefit of the PA member, only after satisfactory re-payment of each MT credit instalment.

[56] "Block of production" is defined as a sub-part of the considered economic activity that, per unit of production and per production cycle, would generate the same direct income/ cash income and incur the same costs/expenses, whatever the year of analysis. As an example, for the pig breeding/fattening model, five blocks were defined: (i) sow over 6 months of production (first four reproduction cycles); (ii) sow (fifth reproduction cycle with reform) over 6 months of production; (iii) boar over 6 months of production (first four reproduction cycles); (ii) boar over 6 months of production (fifth reproduction cycle with reform); and (v) pigs over 5.5 months of fattening.

12. **Results and recommendations.** Most models show good profitability prospects, which should attract small producers, value chain actors and PFIs. Financial internal rates of return and incremental incomes appear attractive in all modeled situations.

13. *Example: Local poultry productive alliance model (poulet bicyclette)*. This model assumes a PA formed by 22 associates of which 20 small poultry producers, one slightly larger producer that would specialize in egg production, and one processor (roasting poultry); that all have been producing for a number of years and want to increase their production, processing and selling capacity for the benefits of all associates. The main product *poulet bicyclette* is highly demanded in the national and sub-regional markets, and the demand is in constant rise. It is assumed that producers have a strategic partnership with an animal feed distributor to secure supply and ensure quality of provided animal feed. In the current "without project" situation, the 20 small producers have small (50 m2) poultry house and produce their own chicks separately, the larger one has a bigger poultry house (300 m2), and the processor has only one roasting/selling site. Investments "with project" would consist of: increasing the production capacity of the small producers (from 1,500 to 5,000 chickens per year each with an additional equipped 100 m2 poultry house); specializing the larger producer into producing chicks for other members of the PA (with a larger poultry house and mini-hatcheries of 12,000 eggs capacity); equipping the processor with four new roasting/selling sites; common planning of the production of chicks and chickens, slaughter and sale of chickens; and joint negotiation of input supply and prices (notably animal feed, technical support and veterinary services). Investment costs (including professional services such as technical and managerial training and technical assistance) and working capital requirements to be eligible for the MG were estimated at respectively Fcfa 188 and 40 million, i.e. total SP costs of F CFA 228 million; according to the envisaged financing plan (see annex 2), the MG would therefore be capped at 55 percent of the SP costs. Considering realistic technical and input and output prices assumptions, the investment shows to be quite profitable in "with project" situation: it yields an FIRR of 84 percent and FNPV of F CFA 1,056 million over 16 years; the return to investment is very fast (below two years); the profitability ratio is high (19 percent); repayment of the MT credit can be made over 4 years; and the average yearly cash flow after financing, as from year 2 (F CFA118 million for all associates), shows a substantial increase in income, as compared to the 'without project' situation, even with a quite short re-payment period of the MT credit. Comparing "with project" and "without project" situations, the additional benefit stream (before financing) yields an EIRR of 52 percent and an ENPV of F CFA 696 million.

14. Results of the financial analysis of the typical SP models must be taken with caution as they are based on assumptions that need to be tailored to the situation of each PA in the targeted production basins. For this reason, rigorous, iterative and participatory methodologies for the preparation and financial analysis of SPs/BPs (such as Rural Invest developed by FAO) will be adopted under Component 2 (funding for training-of-trainers has been set aside for this purpose), and a set of criteria including quality, realism and profitability of presented BPs will be used during the appraisal process for selecting viable SPs/BPs eligible for funding.

15. Such methodology/criteria should notably include: a) the use of sound technical, costs and price assumptions; b) estimation of total and cash production costs and expenses and gross margins per sub-activity/block of production, taking into account self-consumption and self-produced inputs and labor; c) calculation of multi-year cash flows before and after financing

(matching grant, MT and ST loans); d) checking years with negative cash flow after financing that should necessarily be covered by additional funding source (either promoters' own resources, and/or higher matching grant and/or higher ST loan); d) return on investments (number of years at full production to recover the investment cost); e) profitability analysis comparing "with project" and "without project" situations; f) calculation of investment and financing (including grant and loans amount) per beneficiary; g) risk analysis; and h) sensitivity analyses, testing the impact of the variation of key assumptions on the financial results; etc. Also, accurate and adapted monitoring of results from funded SPs/BPs will be essential to ensure that the LDP delivers its intended results and impact, as can be learnt from the PAFASP and PAPSA implementation.

Economic analysis

16. A cost-benefit analysis was conducted to assess the economic viability of the proposed project from the overall national economy standpoint.

17. **Main features.** The analysis was conducted over a 25-year period in constant 2016 prices. Financial prices and costs and benefit streams were transformed into economic values applying conversion factors for each category of costs, eliminating taxes and transfers (notably interest charges from short- and medium-term credit in PA models), and taking into account incremental costs after the project implementation period. Detailed calculations of economic benefits, investment costs and economic cash flows generated by components are on file.

18. **Economic benefits considered in the analysis**. Quantified economic benefits considered in the analysis are those derived from economic benefit streams from the implementation of funded productive alliance SPs/BPs. Improved animal health services, particularly improved vaccination coverage against the CBPP and the PPR, would translate into reduced mortality and morbidity and thus a progressively increased size and value of the national bovine and small ruminant herds and increased net sales, depending on offtake and production costs assumptions. However, this impact could not be modelled with sufficient accuracy to be considered.

19. Benefits from funded productive alliances SPs/BPs (Component 2). Overall the project targets to fund about 80 SPs/BPs over five years. Due to the demand-driven approach of the project, it is not possible to predict how many SPs/BPs of each productive alliance (PA) type would be funded. As national and regional demand for local poultry is on a constant rise, this PA model was considered as a good example to generate a typical net yearly return profile as compared to investment, which can be summarized in Table 1 as follows:

Table 1: Typical additional economic cash flow profile generated by a PA SP/BP, as compared to its investment costs

Year	Value	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	EIRR	ENPV a/
SP costs (Fcfa million)	228																		
Additional cash flow before financing (Fcfa million)		-191	100	100	105	105	69	105	105	105	105	7	105	105	105	105	108	52%	696
in percentage of investment costs		*-84%*	*44%*	*44%*	*46%*	*46%*	*30%*	*46%*	*46%*	*46%*	*46%*	*3%*	*46%*	*46%*	*46%*	*46%*	*47%*		

a/ at the social discount rate of 6% per year.

20. To be on the safe side, it was assumed that one fourth (25 percent) of the funded SPs/BPs would fail, i.e. would not generate any additional benefit. Aggregation of economic benefit streams from the successful SPs/BPs also took into account their progressive implementation as of year 2.

21. **Results.** Excluding Component 1 and Sub-component 3.1 (crisis response) costs, for which no benefits could be quantified, and taking into account two thirds of the project coordination (Sub-component 3.2) costs, the project would yield an Economic Internal Rate of Return (EIRR) of 17 percent and a Net Present Value (NPV) of US$32 million (at a 6 percent social discount rate[57]) although assuming a quite substantial failure rate for financed SPs/BPs (see above). The project is, therefore, highly profitable from an economic standpoint. Considering all project costs (also including Component 1, Sub-component 3.1 and all Sub-component 3.2 costs), the EIRR would still establish at 8 percent.

22. **Sensitivity analyses**. Sensitivity analyses have been carried out to test two scenarios: (i) the base case, excluding Component 1 and Sub-component 3.1 costs and taking into account half of the project coordination costs (a share corresponding to Component 2 in total project costs); (ii) a variant taking into account all project costs.

23. **Base case**. This scenario only considers the net benefits derived from Component 2 (Productive Alliances sub-projects) while taking into account Component 2 costs and half of Sub-component 3.2 costs, as indicated above. The sensitivity analysis indicates a very strong resilience to increases in costs and reductions in benefits. The EIRR would yield 13 percent if benefits were reduced by 30 percent or lagged by two years. In the extreme case of benefits being reduced by 50 percent, the EIRR would still yield 7 percent. A summary of the sensitivity analysis made under this scenario is presented in Table 2a below.

Table 2a: Summary of Sensitivity Analysis - Base case a/

	Base case	Increase in costs			Benefit increase		Reduction of benefits				Benefits lagged by	
		+10%	+20%	+50%	10%	+20%	-10%	-20%	-30%	-50%	1 year	2 years
EIRR	**17%**	16%	14%	11%	18%	19%	15%	14%	13%	7%	15%	13%
NPV (FCFA Million)	18,629	17,062	15,494	10,792	22,060	25,490	15,199	11,768	10,739	1,477	16,687	14,856
NPV (US$ Million)	32.1	29.4	26.7	18.6	38.0	43.9	26.2	20.3	18.5	2.5	28.8	25.6

a/ excluding component 1 and sub-component 3.1 (response to crises) costs, and accounting for half of project cordination and management costs.

24. **Scenario with all project costs**. This scenario considers all project costs while only benefits from Component 2 were accounted for. The EIRR and the NPV would be respectively 8 percent and US$9 million. Even under this very conservative scenario, the sensitivity analysis shows a good resilience to increases in costs and reduction in benefits. The EIRR would still yield 5 percent, i.e. be close to the value of the social discount rate if benefits would be reduced by 30 percent. If benefits would be lagged by two years, the EIRR would still establish at 7 percent above the social discount rate. A summary of the sensitivity analysis made under this scenario is presented in Table 2b below.

[57] As recommended by the World Bank Chief Economist for project economic analysis (see the Note published in January, 2016).

Table 2b: Summary of Sensitivity Analysis - Variant a/												
	Variant	Increase in costs			Benefit increase		Reduction of benefits				Benefits lagged by	
		+10%	+20%	+50%	10%	+20%	-10%	-20%	-30%	-50%	1 an	2 ans
EIRR	**8%**	7%	6%	3%	9%	10%	7%	5%	5%	0%	7%	7%
NPV (FCFA Million)	5,257	2,352	-553	-9,267	8,687	12,118	1,826	-1,604	-2,633	-11,895	3,315	1,483
NPV (US$ Million)	9.1	4.1	-1.0	-16.0	15.0	20.9	3.1	-2.8	-4.5	-20.5	5.7	2.6
a/ taking into account all project costs.												

25. **Sensitivity analyses**. Sensitivity analyses have been carried out to test two scenarios: (i) the base case, excluding costs under Component 1 and Sub-component 3.2 , and taking into account two thirds of the project coordination costs; (ii) a variant taking into account all project costs.

26. **Physical output and risks**. The risk of having large supply responses with negative effects on producer prices, hence producer incomes, has been assessed as low for the commodities targeted by the project. In fact, the project's interventions are expected to more than offset any potential negative effects that reduced retail prices may have on producer prices. The expected reduction in transaction costs and an increased value added will be achieved as a result of productivity gains and processing activities, increased level of output, improved quality and economies of scale (the latter also has a direct impact on transaction costs), and direct linkages established between PA members themselves and between PA members and formal, large input suppliers/traders/agri-businesses through strategic economic partnerships.

27. **Fiscal impact**. In the short term, the fiscal impact of the project will be neutral, given that the government's contribution to project costs is limited (equivalent to about US$3 million over five years). In the medium to long term, however, the potential positive fiscal impact of the project might be substantial, mainly due to: (i) increased output, income and employment, resulting in increased tax revenues; and (ii) multiplier effects due to increased economic activities in targeted production basins, resulting in sustained demand for goods and services, which is expected to generate additional income and employment opportunities.

Rationale for public sector provision/financing

28. The PADEL-B would address a number of market failures: a) the difficulties of small livestock producers and value chain actors and of their organizations to access investment financing, and the inability of commercial banks and micro-finance institutions networks to provide adapted medium term lending and value chain financing products (to finance bulking and marketing of production); b) the weak links between small producers and formal, large agri-businesses/traders/input suppliers in the targeted value chains; and c) deficiencies in the improved breeds and animal production inputs market. The project plays a re-distribution role as it targets some value chains that have a large potential for poverty reduction (notably poultry, small ruminants, bee keeping), and those groups, which are somewhat excluded in many ways from financial and commercial markets. The project perfectly fits into the policy agenda promoted by the government, aiming at transforming agriculture --in a wide sense including animal production-- into a sustainable and commercial business. Therefore, public intervention is fully justified to: (i) promote value chain platforms; (ii) establish strategic economic partnership and support productive alliances between value chain actors to overcome market barriers; (iii) support the modernization of selected (sedentary) livestock production, marketing and

processing systems, including access to improved technologies (improved genetic material, certified fodder seeds, mechanization services, organized bulking, marketing and processing, and product quality enhancement; (iv) kick-start and co-finance sub-projects through a matching grant, combined with enhanced access to short-and-medium term credit granted by PFIs; and (v) support reforms and modernization of the livestock sector as well as key investment and adaptive research in the targeted value chains. The proposed LDP as an Investment Project Financing (IPF) is an appropriate instrument to achieve the PDO and the project's intermediate results.

Value added of World Bank's support

29. The project is well-aligned with the priority themes of the current CPS 2013-2016 and the recently approved SCD. It is also aligned with IFC's agri-business strategy in sub-Saharan Africa. Ultimately, the project will contribute to the World Bank's ambitious twin goals of ending extreme poverty and promoting shared prosperity and growth.

30. Beyond these World Bank-centered arguments, the project has significant added value from the government and the development community stand point. Beyond financing, the added value arises mainly from the Bank's and FAO's[58] technical input, based on international experience in similar value chain development projects and support to productive alliances, introduction of an innovative financing mechanism through combining matching grant and medium-term credit (an evolution from the "classic" productive community-driven-development projects), support to raising the capacity of small producers and value chain actors during implementation through training-of trainers methodologies (notably for the ex-ante preparation and financial analysis of SPs/BPs), knowledge-sharing and communication. Such valuable technical support will complement and aim at strengthening national sources of expertise and business advisory services for small livestock producers and their organizations, leading to an increased development impact of the project in ways that go beyond what could be realized by exclusive reliance on the government's own institutions or the existing national consulting firms.

31. The Bank' support also provides real opportunities for establishing Public-Private Partnerships (PPP) to support value chains development, thanks due to the Bank's convening power, which brought producers' associations, value chain actors' unions, agri-businesses and potential PFIs to the same discussion table during design phase of the project. This convening function will be pursued during project implementation and formalized through the establishment of SEPs, setting up a national platform for livestock stakeholders across all value chains, and strengthening existing producers' and value chains actors' unions/federations and value chain concertation mechanisms.

[58] FAO actively participated in the technical design of the project under the FAO/World Bank Cooperative Program.

ANNEX 5: GREENHOUSE GAS ACCOUNTING

1. **Corporate mandate**. The World Bank has adopted, in its 2012 Environment Strategy, a corporate mandate to conduct greenhouse gas (GHG) emissions accounting for investment lending in relevant sectors. The ex-ante quantification of GHG emissions is an important step in managing and ultimately reducing GHG emission, and is becoming a common practice for many international financial institutions.

2. **Methodology.** To estimate the impact of agricultural investment lending on GHG emission and carbon sequestration, the World Bank has adopted the Ex-Ante Carbon-balance Tool (EX-ACT), which was developed by the Food and Agriculture Organization of the United Nations (FAO) in 2010. EX-ACT allows the assessment of a project's net carbon-balance, defined as the net balance of CO_2 equivalent GHG that were emitted or sequestered as a result of project implementation compared to a without project scenario. EX-ACT estimates the carbon stock changes (emissions or sinks), expressed in equivalent tons of CO_2 per hectare and year.

3. **Project boundary**

a) Head numbers of livestock and technical mitigation options will change during project implementation. Table 1 below presents the details.

Table 1: Livestock management

Livestock categories	Head number (mean per year)			Technical mitigation option (%)								
				Feeding Practices			Specific Agents			Breeding		
	Start	Without	With	Start	Without	With	Start	Without	With	Start	Without	With
Dairy cattle	6,363	9,518	11,338	30	30	50	0	0	5	1	1	1
Other cattle	2,727	6,697	8,091	10	10	15	0	0	0	0	0	0

b) Yield of milk will increase from 110 kg/animal/year (without project) to 180 kg/animal/year (with project). Yield of cattle meat will increase from 113 kg/animal/year (without project) to 135 kg/animal/year (with project), as shown in Table 2 below.

Table 2: Livestock yield

	Without project	With project
Dairy cattle (kg/an/yr)	110	180
Other cattle (kg/an/yr)	113	135

4. **Data sources.** The primary data source was *Annuaire Statistiques*, 2014.

5. **Key assumptions.** The project region, the whole country, has tropical climate with dry moisture regime. The dominant soil type is Low Activity Clay. The project implementation phase is 5 years and the capitalization phase is assumed to be 15 years. The 20-year implementation period is standard in the use of EX-ACT.

6. **Results.** The net carbon balance quantifies GHGs emitted or sequestered as a result of the project compared to the "without project" scenario. Over the project duration of 20 years, the project constitutes a carbon emission of 85,688 tCO_2-eq, equivalent to 4,284 tCO_2-eq per year. However, compared with "without project" scenario, the emissions intensity for milk and cattle meat would decline in "with project" scenario from 13 to 8 kg CO2-eq/kg production and from 10 to 8 kg CO2-eq / kg production, respectively.

Table 3: Results of the ex-ante GHG analysis

	Over the economic project lifetime (tCO2 eq)			**Annual average (tCO2 eq/year)**		
Project activities	**GHG emissions of "without project" scenario (1)**	**Gross emissions of "with project scenario (2)**	**Net GHG emissions (2-1)**	**GHG emissions of "without project" scenario (3)**	**Gross emissions of "with project" scenario (4)**	**Net GHG emissions (4-3)**
Livestock management	424,821	501,685	76,864	21,241	25,084	3,843
Energy consumption, and building construction	0	8,824	8,824	0	441	441
Total	424,821	510,509	85,688	21,241	25,525	4,284

Table 4: GHG emissions intensity

	Without project	With project
Milk (kg CO2-eq/kg milk)	13	8
Cattle meat (kg CO2-eq/kg meat)	10	8

ANNEX 6: BIBLIOGRAPHIC REFERENCES

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Annex 7: Map of Burkina Faso