Document of The World Bank FOR OFFICIAL USE ONLY

Report No: 87116-BF

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON A

PROPOSED ADDITIONAL GRANT AND RESTRUCTURING

IN THE AMOUNT OF SDR23.20 MILLION (US\$35.95 MILLION EQUIVALENT)

AND

PROPOSED GRANT UNDER THE GLOBAL AGRICULTURAL AND FOOD SECURITY PROGRAM

IN THE AMOUNT OF US\$37.1 MILLION TO BURKINA FASO

FOR THE

AGRICULTURAL PRODUCTIVITY AND FOOD SECURITY PROJECT

June 4, 2014

Agriculture, Irrigation, and Rural Development (AFTA1) Sustainable Development Department Country Department AFCF2 Africa Region

This document is being made publicly available prior to Board consideration. This does not imply a presumed outcome. This document may be updated following Board consideration and the updated document will be made publicly available in accordance with the Bank's policy on Access to Information.

CURRENCY EQUIVALENTS

(Exchange Rates Effective April 30, 2014)

Currency Unit = CFAF CFAF 478 = US\$1 US\$1.55 = SDR 1

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AF Additional Financing

AGETEER Agence d'Exécution des Travaux Eaux et Equipements Rural du Burkina Faso

(Implementation Agency for Water and Rural Equipment)

BF Burkina Faso

CAADP Comprehensive Africa Agriculture Development Program

CCASI Cadre de Concertation des Acteurs du Sous-secteur de l'irrigation (Stakeholders

Consultation Framework for irrigated-Agriculture sub-sector)

CEDEAO Communauté Economique des Etats de l'Afrique de l'Ouest (Economic Community

of West African States)

CFAF CFA Franc

CIC-B Comité Interprofessionnel des Céréales du Burkina Faso (Interprofessional

Committee for Cereals of Burkina Faso)

CLE *Comité Locaux de l'Eau* (Local Water Committees)

CONASUR Conseil National de Secours d'Urgence et de Rehabilitation (National Council for

Emergency Relief and Rehabilitation)

COP-PNSR Comité d'Orientation et de Pilotage du PNSR (PNSR Steering Committee)

CPF Confédération Paysanne du Faso (Confederation of Burkina Faso Agricultural

Producers)

CPS Country Partnership Strategy

CRA Chambre Régionale d'Agriculture (Regional Chamber for Agriculture)
CSLP Cadre Stratégique de Lutte Contre la Pauvreté (Poverty Reduction Strategic

Framework)

CTI-PNSR Comité Technique Interministériel du PNSR (Inter-ministerial Technical Committee)

CUA Commission de l'Unité Africaine (Africa Union Commission)

CVD Comité Villageois de Développement (Village Development Committee)

DGADI Direction Générale des Aménagements et du Développement de l'irrigation (General

Directorate for Hydro-agricultural and Irrigation Development)

DGESS Direction Générale des Statistiques et des Etudes Sectorielles (General Directorate for

Sectorial Studies and Statistics)

DGPA Direction Générale des Productions Animales (General Directorate of Animal

Production)

DGFOMR Direction Générale du Foncier et de l'Organisation du Monde Rural (General

Directorate for Land Administration, Training, and Rural Organization)

DGPER Direction Générale de la Promotion de l'Economie Rurale (General Directorate for

the Promotion of Rural Economy)

DGPV Direction Générale des Productions Végétales (General Directorate for Plant

Production)

DIMA Direction Générale de la Mécanisation et des Intrants Agricoles (Directorate for

Inputs and Agricultural Machinery)

DRRAH Direction Régionale des Ressources Animales et Halieutiques (Regional Directorate

for Livestock and Fisheries)

DREAHA Direction Régionale de l'Eau, des Aménagements Hydrauliques et de

l'Assainissement (Regional Directorate for Water, Hydraulic Development, and

Sanitation)

DREDD Direction Régionale de l'Environnement et du Développement Durable (Regional

Directorate for Environment and Sustainable Development)

DRASA Direction Régionale de l'Agriculture et de la Sécurité Alimentaire (Regional

Directorate for Agriculture and Food Security)

DVRD Direction de la Vulgarisation et de la Recherche-Développement (Directorate for

Extension and Development Research)

ECOWAS Economic Community of West Africa States

ECOWAP ECOWAS Agricultural Policy

EOP End of Project

ERR Economic Rate of Return

ESIA Environment and Social Impact Assessment

EMSF Environmental and Social Management Framework

ESOP Service et Organisation de Producteurs (Service and Producer Organization

Enterprise)

FAO Food and Agricultural Organization of the United Nations

FY Fiscal Year

GAFSP Global Agriculture and Food Security Program

GAM Gross Additional Margin GDP Gross Domestic Product

GF Guarantee Fund

GoBF Government of Burkina Faso

HIMO Haute Intensité de Main d'oeuvre (High Intensity Manpower Works)

IBRD International Bank for Reconstruction and Development

ICB International Competitive Bidding

ICT Information and Communication Technology IDA International Development Association

IFR Interim Financial report
IPF Investment Project Financing
IPMP Integrated Pest Management Plan

IRR Internal Rate of Return

ISR Implementation Status and Results Report
IFAD International Fund for Agriculture Development

MASA Ministère de l'Agriculture et de la Sécurité Alimentaire (Ministry of Agriculture and

Food Security)

MCA Millennium Challenge Account MDG Millennium Development Goal

MEAHA Ministère de l'Eau, des Aménagements Hydrauliques et de l'Assainissement (Ministry

of Water, Hydraulic Development and Sanitation)

MEDD Ministère de l'Environnement et du Développement Durable (Ministry of

Environment and Sustainable Development)

M&E Monitoring and Evaluation
MIS Market Information Systems

MRAH Ministère des Ressources Animales et Halieutiques (Ministry of Livestock and

Fisheries)

MTR Mid Term Review

NEPAD New Partnership for African Development

NGO Non-Governmental Organization

NPV Net Present Value

PAD Project Appraisal Document

PAFASP Programme d'Appui Aux Filières Agro-Sylvo-Pastorales (Agricultural Diversification

and Market Development Project)

PAGIRE Plan d'Action pour la Gestion Intégrée des Ressources en Eau (Action Plan for

Integrated Management of Water Resources)

PAMESAD Projet d'Appui à la Maitrise de l'Eau pour une Sécurité Alimentaire Durable au

Burkina Faso (Support to Water Management and Sustainable Food Security Project)

PAPSA Projet d'Amélioration de la Productivité et de la Sécurité Alimentaire (Agricultural

Productivity and Food Security Project)

PCU Project Coordination Unit

PDDAA Programme Détaillé pour le Développement de l'Agriculture en Afrique

(Comprehensive Africa Agriculture Development Program)

PDO Project Development Objective

PEP Projet d'Elevage Piscicole (Fish Farming Project)
PIB Produit Intérieur Brut (Gross Domestic Product)

PICOFA Programme d'Investissement Communautaire en Fertilité Agricole (Community

Investment Program for Agricultural Fertility)

PIGEPE Projet d'Irrigation et de Gestion de l'Eau à Petite Echelle (Small-scale Irrigation and

Water Management Project)

PIM Project Implementation Manual

PISA Programme d'Investissement du Secteur de l'Agriculture (Investment Program for

Agriculture, Hydraulics and Fisheries)

PNDEL Politique Nationale de Développement de l'Elevage (National Policy for Sustainable

Development of Livestock)

PNE Politique Nationale de l'Environnement (National Environment Policy)

PNG Politique Nationale Genre (National Gender Policy)

PNGT2 Deuxième Phase du Programme National de Gestion des Terroirs (Community-Based

Rural Development Program, Phase 2)

PNSFMR Politique Nationale de Sécurisation Foncière en Milieu Rural (National Policy for

Secured Rural Land Tenure)

PNSR Programme National du Secteur Rural (National Rural Sector Program)

PP Project Paper

PPMP Pests and Pesticides Management Plan

PRIA Programme Régional d'Investissement Agricole de la CEDEAO/NEPAD

(ECOWAS/NEPAD Regional Agriculture Investment Program)

PRP Projet Riz Pluvial (Rainfed Rice Project)

PTF Partenaires Techniques et Financiers (Technical and Financial Partners)

QBS Quality Based Selection

QCBS Quality and Cost Based Selection

RAP Resettlement Action Plan

RGPH Recensement Général de la Population de l'Habitat (General Census of Population

and Housing)

RPF Resettlement Policy framework

RVP Regional Vice-President

SCADD Stratégie de Croissance Accélérée et de Développement Durable (Strategy for

Accelerated Growth and Sustainable Development)

SC Steering Committee
SDR Special Drawing Rights
SIL Specific Investment Loan

SNAT Schéma National d'Aménagement du Territoire (National Scheme for Land Planning)
SNDDAI Stratégie Nationale de Développement Durable de l'Agriculture Irriguée (National

Strategy for Sustainable Development of Irrigated Agriculture)

SNSA Stratégie Nationale de Sécurité Alimentaire (National Strategy for Food Security)
SONAGESS Société Nationale de Gestion des Stocks de Sécurité (National Society for Food

Security Stock Management)

SONATER Société Nationale de l'Aménagement des Terres et de l'Equipement Rural (National

Society for Land Development and Rural Equipment)

SP/CPSA Secrétariat Permanent de la Coordination des Politiques Sectorielles Agricoles

(Permanent Secretariat for the Coordination of Agricultural Sectoral Policies)

SPAI Sous-Produits Agro-Industriels (Agro-industrial by-products)

SSS Single Source Selection

TMC Technical Monitoring Committee

UEMOA Union Economique et Monétaire Ouest Africain (West African Economic and

Monetary Union)

UNDP United Nations Development Program

USAID U.S. Agency for International Development WAAPP West Africa Agricultural Productivity Program

WB World Bank

WECARD West and Central Africa Council for Agriculture Research and Development

WFP World Food Program

Yr. Year

Vice President: Makhtar Diop Country Director: Ousmane Diagana Sector Director: Jamal Saghir

Country Manager: Mercy Miyang Tembon Sector Manager: Martien van Nieuwkoop

Task Team Leader: Elisée Ouédraogo

BURKINA FASO

ADDITIONAL FINANCING FOR AGRICULTURAL PRODUCTIVITY AND FOOD SECURITY PROJECT

Table of Contents

I.	INTRODUCTION	1
II.	BACKGROUND AND RATIONAL FOR ADDITIONAL FINANCING	1
A.	Strategic alignment	2
B.	Objective, design, and scope of the original project	3
C.	Project implementation performance to date	4
D.	Lessons learned from the success and challenges in PAPSA implementation: 2010-2013	6
E.	Rationale for the additional financing	7
III.	PROPOSED CHANGES	8
A.	Proposed objectives and key performance indicators	9
B.	Revised Results Framework and results Indicators for AF Phase	9
C.	Extension of project closing date	10
D.	Lifting outstanding partial disbursement conditions and reallocation of proceeds	10
E.	Project intervention area	11
F.	Proposed components description	12
G.	Implementation Arrangements	15
IV.	APPRAISAL SUMMARY	16
A.	Project design and Implementation arrangements	16
B.	Economic and financial analysis	16
C.	The rationale for public provision of project services	17
D.	Value added of World Bank involvement	17
E.	Safeguards policies triggered	17
F.	Financial management	17
G.	Procurement	18
H.	Closing dates	18
I.	Development impact of the Additional Financing	18
J.	Policy exceptions and readiness	19
Ann	nex 1 Operational Risk Assessment Framework (ORAF)	20
Ann	nex 2: Revised Results Framework and Monitoring Indicators	26

Annex 3. Project costs	33
Annex 4. Water reservoirs identified in the Sahel, Center South and Center-East Regions	34
Annex 5. Gender mainstreaming in PAPSA activities	37
Annex 6. Economic and Financial Analysis	39
Annex 7: Detailed Description of Continuing, Modified, or New Project Activities of the AF Phase	44
Annex 8: Project Implementation Performance of Parent Project	50
Annex 9. Financial Management, Procurement and Safeguards	53
Annex 10. The Warrantage scheme description	57
Annex 11: Map	58

PROJECT PAPER DATA SHEET

Basic Information -	- Additional Financing (AF)						
Country Director: Ousmane Diagana Country Manager: Mercy Miyang Tembon Sector Director: Jamal Saghir Sector Manager: Martien van Nieuwkoop Team Leader: Elisée Ouédraogo Project ID: P149305 Expected Effectiveness Date: 11/01/2014 Lending Instrument: Investment Project Financing (IPF) Additional Financing Type: Scale-Up	Sector: General agriculture, fishing and forestry Sector (60 percent); Irrigation and drainage (20 percent); Animal Production (10 percent) Theme: 100 percent Global food crisis response						
Basic Informa	tion - Original Project						
Project ID: P114236 Project Name: Agricultural Productivity an Food Security Lending Instrument: SIL [] Loan [] Credit [Other: Proposed terms: Standard	Environmental category: B - Partial Assessment Expected Closing Date: 6/30/2018 Joint IFC: Joint Level: [] Guarantee []						
	cing Plan (US-\$m)						
Source	Total Amount (US\$ m)						
Total Project Cost Co-financing by beneficiaries Global Agriculture and Food Security BORROWER/RECIPIENT Total Bank Financing IBRD IDA: New Recommitted	79.39 4.13 37.10 2.21 35.95 - 34.37 1.58						

Client Information

Recipient: Government of Burkina Faso

Responsible Agency: Ministry of Agriculture and Food Security

Contact Person: Gisèle Tapsoba / Maré

Coordonnatrice Nationale du PAPSA

03 B.P 7005, Ouagadougou 03, Burkina Faso

226-50375093

e-mail: giselemare@yahoo.fr

AF Estimated Disbursements (Bank FY/US-\$m)											
FY	FY15	FY16	FY 17	FY 18							
Annual	20.00	20.00	20.00	13.05							
Cumulative	20.00	40.00	60.00	73.05							

Project Development Objective and Description

Original project development objective: "to improve the capacity of poor producers to increase food production and to ensure improved availability of food products in rural markets".

Revised project development objective: The PDO remains unchanged with the Additional Financing (AF).

Project description

Component 1 Improving food production: The component aims to secure and increase crop production, as well as facilitate access to fishery resources and promote livestock production.

Component 2: Component 2. Improving the availability of food products: This component aims at strengthening the capacities of stakeholders to manage the variability of food supplies at local and national levels.

Component 3 Institutional development and capacity building PCU. This component aims at reinforcing capacities of institutions directly involved in the project implementation as well as project coordination, M&E, procurement and financial management.

	Safeguard and Exception to Policies											
Safeguard policies trigg												
Environmental Assessr	ment (OP/BP 4.01)	[X]Yes [] No										
Natural Habitats (OP/E	SP 4.04)	[]Yes [X] No										
Forests (OP/BP 4.36)		[]Yes [X] No										
Pest Management (OP	[X]Yes [] No											
Physical Cultural Reso	[]Yes [X] No											
Indigenous Peoples (O	[]Yes [X] No											
Involuntary Resettleme		[X] Yes [] No										
Safety of Dams (OP/B)	, and the second	[]Yes [X] No										
	al Waterways (OP/BP 7.50)	[]Yes [X] No										
Projects in Disputed A	reas (OP/BP 7.60)	[]Yes [X] No										
	cy waiver sought from the Board (or MD if RETF	[]Yes [X] No										
operation is RVP appro	*	[]Yes [] No										
	by Bank Management? (Only applies to Board	[]Yes [X] No										
approved operations)		[]Yes []No										
	e any exception to Bank policy?											
Has this been approved	by Bank Management?											
	Conditions and Legal Covenants											
Financing Agreement	Description of Condition/Covenant	Date Due										
Reference												
SCHEDIH E 2	The Recipient shall within four (4) months of the											
SCHEDULE 2,	*											
Section I, A(2)												
	Coordination Unit through the addition of: (a) one (1) civil works engineer (specialist of											
	irrigation development); (b) one (1) agronomist											
	specialist of crop and livestock development; (c)	March 27, 2015										
	one (1) specialist in charge of marketing	IVIAICII 41, 2013										
	infrastructure and the warehouse receipt system											
	("warrantage"); (d) one (1) fisheries/aquaculture											
	expert; (e) one (1) monitoring and evaluation											
	specialist; 1 (one) environmental and social											
	expert; and (f) one (1) procurement specialist.											
	expert, and (1) one (1) producing the specialist.											

I. INTRODUCTION

- 1. This Project Paper seeks the approval of the Executive Directors to provide Additional Financing (AF) to the Government of Burkina Faso (GoBF) in the amount of US\$73.05 million, with IDA contributing US\$35.95 million and the Global Agriculture and Food Security Program (GAFSP) US\$37.10 million for the Agriculture Productivity and Food Security Project. The proposed Additional Financing also seeks to restructure the parent project in order to operationalize a number of recommendations from the mid-term review that was concluded in July 2013 and to extend the closing date to June 30, 2018.
- 2. The proposed Additional Financing (AF) would help finance the costs associated with the scaling up of activities under the Agricultural Productivity and Food Security Project (henceforth referred to by its French acronym PAPSA), with a view to expand the reach and impact of the Project's Development Objective (PDO). The AF will enhance the project impact by expanding its coverage to a larger group of beneficiaries in project-targeted agriculture, livestock, fisheries and forestry value chains and help increase food security in food deficit areas covered by the project.
- 3. The proposed AF would help finance the costs associated with a scale up of ongoing project activities, and to support the adoption of high performing technological packages by poor households in order to enhance the development impact and effectiveness of the project. This will be done by complementing and expanding: (a) crop production infrastructure through an additional 3,000 ha of lowland development, 2,000 ha of small scale irrigation, an additional 5,000 ha of soil conservation and water harvesting measures, and 3,000 compost pits for soil restoration; (b) animal production through the construction of 5,000 fattening units for cattle and sheep fattening, 800 km of corridors to facilitate animal access to water resources, local poultry development through improved dissemination of adapted habitat, vaccination and genetic improvement, cattle artificial insemination, and milk collection and processing; (c) fish farming through the construction of a fish hatchery station, the rehabilitation of a fish farm station, the development of 26 weighing centers and the development of fish farming around water reservoirs; (d) post-harvest management and the marketing of food products through an additional construction of 50 community warehouses to support the "Warrantage" warehouse receipt system (details on the "Warrantage" scheme is provided in Annex 10) for 500 farmers' organizations, sustainable management of multifunctional platforms acquired under the project, and market information system; and (e) technical and institutional capacity building for public agents, farmers and farmers' organizations, irrigation farmer committees, the use of ICT for improved targeting of project beneficiaries and M&E system, as well as for the Ministry of Agriculture and Food Security to implement strategies related to exit options for input subsidy and the promotion of the "Warrantage" system.
- 4. In a letter dated December 10, 2013 the GoBF requests the Association to allocate additional IDA resources for the PAPSA.

II. BACKGROUND AND RATIONAL FOR ADDITIONAL FINANCING

5. Burkina Faso's economy is based on the rural sector which employed about 86 percent of the labor force in 2006 (National Population Census, 2006) and accounted for an average of 34.5 percent of the Gross Domestic Product (GDP) between 2004 and 2012. The rural sector accounts for nearly 61.5 percent of the monetary income of farming households. The household income structure is dominated by crop production (67 percent), followed by livestock production (31 percent). Forestry production only accounts for 2 percent of rural households incomes. Burkina Faso has expanded its exports which benefitted from a boom in the mining sector since 2009-2010, with gold

overtaking cotton as the leading export. These exports, however, remain highly variable and are concentrated on a limited number of commodities and the country remains dependent on global commodity prices.

- 6. **Burkina Faso faced difficult years in 2012 and 2013, confronting food shocks and refugee crises.** An inflow of Malian refugees in 2012 put strong fiscal pressure on Burkina's budget. The GoBF responded in 2012 by allocating close to US\$10 million to pay for food and schools for the Malian refugees. In relation to the food crisis, government had spent close to U\$130 million in 2012 and US\$64 million in 2013 to help feed the vulnerable population. So far, close to 50,000 tons of food have been sold or distributed to the rural population by two key Government agencies, SONAGESS and CONASUR, together with international aid agencies like WFP. Major famine has been averted, although there have been execution bottlenecks.
- 7. There is a crucial need for productivity-led growth in the agricultural sector considering the country's existing demographic dynamics, its vulnerability arising from the Sahelian environment, its precarious food security situation and its exposure to market shocks. While the country has spent on average 10 percent of its budget in the agricultural sector since 2004, in line with its Maputo commitment, further investments are required to make agriculture a leading sector for growth and economic diversification. Particular emphasis will need to be placed on: (i) securing land use and land rights to provide stronger incentives for long term investments in value-added production; (ii) promoting productivity-enhancing farm level interventions, including more effective technology transfer and skills development programs, a better integration of land-fertilizer-water management and scaled up investments in irrigation and water harvesting; (iii) tackling beyond-the-farm-gate constraints related to logistics, marketing and product transformation and (iv) attracting private sector investment to increase the production of higher value products, to boost agro-processing and create remunerative jobs.
- 8. **Country agro-pastoral potential**. Burkina Faso can build on its substantial agro-pastoral potential to achieve a faster and more sustainable rural sector growth. The country is endowed with nine million ha of farmland, of which less than half (46 percent) were under cultivation in 2008. The potential for irrigated land is estimated at 233,500 ha, but only about 12 percent of this potential is currently being utilized. There are more than 1,200 water bodies (dams, lakes and ponds) that can provide, on a yearly basis, up to **five billion cubic meters of surface water**. The country has also a large number of pastoral areas, village level pasture zones, transhumance corridors and various agroecological areas suitable for diversified development of the livestock sector, as well as an important potential for biodiversity production and conservation.

A. Strategic alignment

9. Country Strategic Policy Framework. The Accelerated Growth and Sustainable Development Strategy (SCADD 2011-2015) defines Burkina Faso's broader rural sector strategic framework. The corresponding rural sector policies and programs are specified in the 2003 Rural Development Strategy (SDR) and the 2011 National Rural Sector Program (PNSR). Because of the importance of water management and food security issues, the country has also developed strategies to accelerate the development of irrigated lands (National Strategy for the Development of Sustainable Irrigated Agriculture (SNDDAI), redefined the State's role and rationalized investments in the water sector (Integrated Water Resource Management Plan-PAGIRE, 2003) and strengthened the strategy for food security (National Food Security Strategy-SNSA, 2003). Specific policies exist for the environment (National Policy on Environment-PNE), land tenure (National Policy on Land Tenure Security in Rural Areas-PNSFMR, 2007) and livestock (National Sustainable Livestock Development Policy-PNDEL).

- 10. SCADD focuses on achieving a 10 percent per year economic growth through increased private sector investment. For the agricultural sector, objectives set out in the SCADD are: (i) to establish a suitable institutional and regulatory framework to attract investments in irrigation; (ii) to adopt agricultural land development and use policies that promote the use of already established and newly developed irrigation, as well as small private and community irrigation schemes; and (iii) to promote domestic value addition in production and marketing.
- 11. **Rural sector strategic and operational framework.** PNSR is the strategic and operational framework for implementing the SCADD's vision for rural development. PNSR has integrated all relevant strategies, policies and plans for food security and irrigation development into an updated and more coherent approach, based particularly on the strategies and programs developed under: (i) the SNSA which specifically aims at supporting the MDG1 goal of halving hunger by 2015; (ii) the SNDDAI (irrigation strategy) which intends to boost access to irrigation water as a mean to increasing and securing agricultural production; and (iii) the PAGIRE (water resources management plan) which deals with water management.
- 12. **Link with existing strategies, policies and programs:** The SCADD model, as indicated above, combines promotion of growth poles and support for agribusiness and small and medium-sized enterprises with pro-poor programs and critical structural reforms. The National Program for the Rural Sector (PNSR) is therefore the operationalization of the SCADD in the rural sector. The PNSR consists of the following five pillars: (i) Pillar 1 Improving food security and sovereignty; (ii) Pillar 2 Increased incomes for the rural population; (iii) Pillar 3 Sustainable development of natural resources; (iv) Pillar 4 Improved access to drinking water and living environment; and (v) Pillar 5 Development of partnerships between rural stakeholders. The proposed AF focuses on pillars 1, 2 and sub-programs 3.2, 3.3 and 3.4 of PNSR.
- 13. **A Country Partnership Strategy (CPS), discussed on September 19, 2013** by the Board, lays out how the World Bank Group will support the GoBF's SCADD. The SCADD and the CPS have identified the agriculture sector and related interventions in rural development as a major source of growth for the country with high potential for shared prosperity and poverty reduction.
- 14. The AF is aligned with the following strategic objectives and outcomes of the CPS, including: (i) outcome 1.3 which aims to "reduce infrastructure deficits (Energy, Roads, ICT) and set up more effective value chains" under Strategic Objective 1; and (ii) outcome 3.2 which aims to "enhance food security" under Strategic Objective 3 concerning "reduced social, economic, and environmental vulnerabilities". The implementation of the project will complement and promote synergies with other Bank supported rural sector projects, including the Agricultural Diversification and Market Development Project (PAFASP) to address competitiveness of selected agricultural subsectors that target both national and regional markets especially onion, cattle/beef and poultry; the West Africa Agricultural Productivity Program (WAAPP) which promotes the generation and dissemination of agricultural technologies with special attention to improved crop variety seeds, onion and tomatoes; the Bagré Growth Pole Project (BagrePole) which aims at increasing economic activity to promote an increase in private investment, employment generation, and agricultural production, and the Community Based Rural Development Program (PNGT2- Phase 3) to address rural land tenure issues on developed lowlands and irrigated perimeters.

B. Objective, design, and scope of the original project

15. The original Project for US\$40 million in IDA grant was approved by the WB Board on December 10, 2009 and became effective on July 10, 2010. The project Development Objective (PDO) is "to improve the capacity of poor producers to increase food production and to ensure improved availability of food products in rural markets". The Project is financing the adoption of

improved agricultural productivity technologies and supports the improvement of food products for poor household farmers. Project investments would promote food security and farmers' resilience to climate variability under the Sahelian conditions, and address poverty with an inclusive approach and a focus on small and poor farmers.

16. The PDO of the original project will remain unchanged under this AF. The original Project comprises the following three components: <u>Component 1</u>: Improvement of food production (total US\$32.3 million, IDA financing: US\$26.7 million). <u>Component 2</u>: Improving the availability of food products (total: US\$6.7 million, IDA financing: US\$5.4 million). <u>Component 3</u>: Institutional development and capacity building (total: US\$11.5 million; IDA Financing: US\$7.1 million). For more details see the project description in Annex 7.

C. Project implementation performance to date

- 17. Overall, the project is progressing towards a successful achievement of its development objectives. The project is currently rated satisfactory both in terms of progress towards achieving its Development Objective and in overall Implementation Progress. As of May 15, 2014, the disbursement rate of the project is 89.4 percent.
- 18. There are no outstanding financial audits. The implementation of the safeguards requirements which caused the safeguards to be rated moderately satisfactory before the March 2014 mission has now been addressed. All the issues agreed on during the Mid-Term Review have now been addressed and the documents sent to the Bank for review. A revised Results Framework with updated performance indicators is attached in Annex 1. An ORAF is attached as Annex 2. Annex 8 provides more details on the project implementation performance of the parent project.
- The key results so far have been the development of 6,623 ha of lowlands (82 percent of the target); coverage of 7,952 ha with soil and water conservation measures (53 percent of the target); and construction of 9,396 compost pits (84 percent of the target). For animal production 3,200 dairy cows have been artificially inseminated; and about 25 million of poultry vaccinated against Newcastle disease. Environmental related activities implemented have included proofreading/revision of six forest development plans, completion of 10 inventories of fauna in four targeted protected forests, rehabilitation of 600 ha of degraded land in protected areas and the manual opening of 3,000 km of access roads. The project has supported the procurement of 52 multifunctional platforms¹ (MFP) and distributed 230,000 conservation bags (triple-bagging) for cowpea conservation to women groups that have contributed to improve the quality of products stored. Environmental related activities included acquisition of 350 hives and 16 Shea butter extraction presses that helped improve income generation of local communities around protected areas with an increase from CFAF 100 million to CFAF 290 million. The project has supported 60 "Warrantage" schemes which so far have stored 1,878 tons of products, and leveraged CFAF 118,886,505 (US\$273,773) credit from microfinance institutions. Furthermore, 98 cereal banks have been restructured into marketing cooperatives. For animal production, 2.6 million liters of milk were collected by 44 milk processing units against 1.3 million targeted.
- 20. **Financial Management (FM):** The overall performance of the Agricultural Productivity and Food Security Project in financial management is moderately satisfactory due to identified shortcoming in the internal control environment. The coordination unit has however made significant

-

¹ The idea has been to place an MFP (diesel engine that powers devices such as pumps, grain mills and grinders) designed for different cereals and nuts (rice, millet, maize, sorghum, peanuts and Shea nuts) and for electricity in rural areas. This helped farmers to augment their production of added-value products and to raise the quality of their products, promote access, especially for women, to the modern energy services by bringing electricity right into the heart of the village.

progress to address the key exceptions mentioned in the 2012 audited financial statements such as ineligible and unjustified expenditures and gathered tangible evidence that goods and services were properly delivered to final beneficiaries. In addition, a qualified FM officer has been recruited to improve the oversight of the bookkeeping and the quality and timely submission of interim financial reports.

- 21. **Procurement:** The overall performance of the Agricultural Productivity and Food Security Project in procurement is rated satisfactory. Procurement arrangements will remain largely the same under the proposed Additional Financing as under the parent project. Experienced procurement staff with full knowledge of the Bank's procurement procedures, are already fully functional in the PCU, as well as in the project's main implementing agencies. There are also focal points responsible for procurement at the different beneficiary agencies level. Likewise implementation and administrative procedures, acceptable to the Bank, are already being used by the PCU. Where needed, the implementation manuals will be updated before project effectiveness to take into account new activities under this additional financing and will be extended to the Ministry of Water, Hydraulic Planning and Sanitation, a new implementing agency where a focal point in charge of procurement would be appointed before effectiveness. Procurement for the proposed project would be carried out in accordance with the World Bank's Guidelines: "Procurement under IBRD Loans and IDA Credits" dated January 2011 (Procurement Guidelines); and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated January 2011 (Consultant Guidelines) and the provision stipulated in the Financial Agreement. An initial procurement plan has been prepared by the project preparation team and was finalized and agreed during negotiations.
- 22. **Project Monitoring and Evaluation:** The M&E arrangements of the PCU are rated as moderately satisfactory as the mechanism of data collection has to be improved. It comprises a core M&E team in the PCU, in each of the four Ministries involved in the project implementation (Ministry of Agriculture and Food Security; Ministry of Livestock and Fisheries, the Ministry of Environment and Sustainable Development, and the Ministry of Water, Hydraulic development and Sanitation) and in the National Chamber of Agriculture and Regional Chambers of Agriculture hosting the Multidisciplinary teams supporting the project implementation at regional level. In order to ensure that the M&E activities of the project are well followed and also to help improve its current MS rating, a new and well-seasoned M&E Specialist has been recruited.
- 23. **Environmental and Social Safeguards:** The project triggered: OP/BP 4.01 on Environmental Assessment; Pest Management (OP/BP 4.09); and Involuntary Resettlement (OP/BP 4.12) and was rated as environmental assessment Category B. No additional new safeguards policies are triggered by the AF.
- 24. An Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF), and Pest Management Plan were prepared, consulted upon and disclosed from January to March 2009. Two Environmental and Social Impact Assessments (with Environmental and Social Management Plans) were prepared, consulted upon and disclosed in March 2012. An Environmental and Social Screening Report was also prepared and disclosed in December 2013. The updated ESMF, RPF, and PMP have been re-disclosed on May 16, 2014.
- 25. An environmental audit of the project was undertaken in February 2014. While most of the sub-projects involved minor civil works and impacts for which mitigation measures were guided by the ESMF, in some cases, Environmental and Social Management Plans (ESMPs) should have been prepared and more efforts need to be undertaken to improve capacity for environmental management. Corrective measures have been undertaken. During implementation of the AF and the original project,

ESMPs will be prepared, consulted upon and disclosed for project activities with moderate to major impacts.

While an RPF was prepared for the original project, to date, it has not been necessary to prepare a RAP, as no land acquisition leading to resettlement or restrictions of access to resources or livelihoods has occurred. Land is owned by communities, and, following a consultative process within the communities, tenants, with assistance from the project, have been making improvements to the land they cultivate during the dry season. Once the improvements are made to the land, priority is given to the tenants to choose plots for farming. In April 2014, the Bank undertook a social audit to examine the land tenure arrangements. While the audit confirmed that RAPs are not necessary, it recommended that: the record-keeping for the land tenure arrangements be improved so that such records were accessible to the communities; remind communities about the availability of a grievance redress system for the project; ensure the safeguards documents are available in all the participating communities; and, there be more regular supervision of the social safeguards issues, given the land tenure arrangements in the project.

D. Lessons learned from the success and challenges in PAPSA implementation: 2010-2013

- Lesson 1: Development of lowlands responds to farmer's needs, promotes women's access to land and contributes to build resilience to climate shocks. Lowlands have played a significant role in the drought mitigation and climate adaptation strategy in Burkina Faso, and interest in their development has been growing since the droughts of the 70's and 80's. Since that time, the lowlands have become the object of considerable attention, and several government projects or NGOs have contributed to develop and secure access to these lands. Lowlands can be easily developed under regular rain conditions above 800 mm. Under that threshold lowland development is much more arduous. One study has estimated that the lowlands that can be easily developed in Burkina Faso extend over 620,000 ha nationwide. During the first half of the project implementation, project beneficiaries showed great interest in lowland development especially women who represent 43 percent of beneficiaries and have so far provided an additional 25,000 tons of rice although this activity is labor demanding. From this lesson learned, the project will scale-up lowland development to improve employment and crop production and will further adapt lowland development technology to the configuration of specific watersheds.
- 28. Lesson 2: Involvement of the private sector in the distribution of subsidized inputs can contribute to build a functioning input distribution network, improve farmer's geographical access to inputs and sustain the availability of inputs at a decentralized level. Until 2011, the subsidized government input distribution was done by the Regional Directorate of the Ministry of Agriculture and Food Security. Although this mechanism demonstrated the visibility and political commitment of the government in supporting the agriculture sector, it led to some confusion in delivery of technical advisory services. The pilot phase of the distribution of fertilizers by private input dealers tested in four regions under the parent project demonstrated the relevance of making clear separation between stakeholders involved in technical advisory services delivery and input business. Therefore, the project will continue supporting this approach and will promote the use of ICT for better targeting of project beneficiaries and an improved M&E system.
- 29. Lesson 3: Scaling-up adoption of agricultural technologies requires mechanisms and tools that bring together all value chain stakeholders. The dissemination of improved crop production technologies under the project revealed that adoption of technologies at production level is linked to the performance of other segments of the value chain. The low uptake of improved technologies has been a result of a number of factors that characterize the agricultural sector in Burkina Faso including among others, weak linkages and interaction between value chain stakeholders.

However, the technology generation should take into consideration among other things opportunities and constraints associated with input and output markets and the enabling policy environment. Therefore, the additional financing will integrate the innovation platform approach promoted under the WAAPP project with the aim of promoting multi-institutional learning to better understand what to change and influence in order to improve the adoption of improved agricultural technologies. This suggests bringing together multi-stakeholder and multi-disciplines into a context of multi-stakeholder learning practice to boost technologies adoption.

E. Rationale for the additional financing

- 30. The rationale for the Additional Financing is to scale up the impact and development effectiveness of PAPSA and to improve food security by promoting activities that build farmers resilience to climate shocks, increase agricultural productivity, improve irrigation infrastructures and their sustainable management, and reduce post-harvest losses and the marketing of food products and Warrantage. Moreover, in 2013, Burkina Faso proposed a Sustainable Water Management and Food Security Project (PAMESAD by its French acronym) and this received funding from the Global Agriculture and Food Security Project (GAFSP) public window to fill part of the financing gap of the country's agricultural investment program. The project emphasizes improved access to irrigation water and increased food production (including crop, livestock and fisheries production), with the view to ensuring greater food security. It was agreed in the project implementation arrangements that the PAMESAD will constitute an additional financing for PAPSA along with the IDA additional financing.
- 31. With the Additional Financing (AF), the project would target a total of 750,000 beneficiaries by the end of the AF implementation period. This includes 250,000 new beneficiaries to be covered by the GAFSP funding and 200,000 new beneficiaries under the IDA AF. As of the mid-term review at the end of June 30, 2013, the project had impacted 300,000 beneficiaries, thus suggesting an end of project target of 750,000 beneficiaries. The Additional Financing is therefore expected to contribute to reduce poverty, to improve food security and promote shared prosperity. The performance of the project to date is rated satisfactory in progress towards accomplishing its PDO and satisfactory in Implementation Progress with a disbursement rate of about 89.4 percent as of May 15, 2014.
- 32. **PAPSA results achieved to date:** Key results include: (a) an increased food crop production by 32 percent vs. a target of 35 percent at end of project; (b) an increase in quantity of surplus food products stored in *Warrantage* from 200 to 1878 tons; (c) exceeding the target for milk production (2.6 million liters vs. 2.5 million liters by EOP), (d) an increased local poultry vaccination coverage from 15 percent to 26 percent; and (e) increased revenues generated by communities adjacent to protected areas from CFAF 100 to 290 million vs. 400 million by EOP. Overall some 300,000 direct and indirect beneficiaries have, so far benefited from project activities.
- 33. As there is a crucial need for productivity-led growth in the agricultural sector, the proposed AF will contribute to raising agricultural productivity and food security while building capacity and resilience of poor producers to climate shocks. However, there is a need to scale-up the adoption of improved agricultural technologies by farmers. Project results so far have demonstrated that the expansion of small scale irrigation through the development of lowlands and soil and water conservation with the participation of local communities have been successful as the project is responding to the needs of smallholder farmer's needs. This proposed AF, is fully aligned with the country's accelerated growth and sustainable development program, SCADD, and Government's rural sector program, PNSR, and could serve as a basis for a quicker boost to agricultural productivity and food security.

- 34. **Implementation risks.** The project is classified as an A-type project under the Burkinabé national law regulating externally-funded projects. As an A-type, the project will be fully administered and managed by government bodies which may have weak financial, institutional, technical and fiduciary capacity. Efforts will be made to strengthen the capacity of stakeholders involved in project implementation and reinforce all the implementation agencies with skilled technical staff. Fiduciary capacity will be strengthened through training of the existing staff and bringing specific competencies to ensure that the project follows the fiduciary requirements of the Bank. There are some risks related to the upcoming elections. However, these are considered moderate. Even if there was a change in government, the impact on the project is expected to be limited, since the project is private sector oriented.
- 35. Sustainability risks. Sustainability and maintenance of investments in local communes is sometimes dependent on continuous funding from government budget and may lead to a lack of ownership by local communities of the project activities. However, rural infrastructure has proved to be managed far more efficiently under participatory mechanisms than directly by State companies or technical services. Project implementation arrangements, therefore will allow for oversight and control by beneficiaries. The management of small schemes will be entrusted directly to the communities (PICOFA model) and producer groups (Local Water Committees-CLE, Village Development Committees-CVD, and other formal rural organizations, etc.). The project will build their capacities in that area. It will provide them with models of documents, pre-specified parametric costs, etc. The project will provide special support to the establishment of irrigation committees and local water-user committees, including irrigation farmers and other stakeholders involved in water resources management in the project intervention zones for water management and infrastructure/equipment maintenance.
- 36. The proposed additional financing is consistent with paragraph 26 of OP 10.00 (Investment Project Financing) under which the International Development Association (Association) may provide Additional Financing for Investment Lending for scaling up the development effectiveness of a well-performing project.

III. PROPOSED CHANGES

37. The proposed AF will support the implementation of the Government's National Rural Sector Program (PNSR). It will scale-up PAPSA interventions by expanding activities through four dimensions. The first dimension refers to scaling-up the adoption of improved agricultural technologies by farmers through an approach that goes beyond on-farm/on-site trials and will complement current project activities with the development of irrigation infrastructures, animal fattening, fish farming and vegetable production. It will also expand project activities into all the regions of the country with GAFSP focusing in particular on the Center-East, Center-South and Sahel regions. The second dimension will focus on expanding soil and water conservation and lowland development to respond to the high number of requests for these technologies. Moreover, new approaches such as *Innovation Platforms*² to address technology adoption, "Fertilizer Microdosing"

² The Innovation Platform has emerged as an alternative promising framework to guide agricultural technology generation and dissemination. The concept defines operating principles and guidelines for stakeholders with diverse interests to come together to analyze the problem and develop solutions. This approach when adopted is expected to lead to promote technologies that are relevant to local conditions and are acceptable to local communities. It comprises of a set of individuals and organizations stakeholders (from research, extension, policy, and markets) working together around a developmental challenge with due consideration to end user concerns, requirements and capacities.

³ Microdosing involves the application of small, affordable quantities of inorganic fertilizer with the seed at planting time, or as top dressing 3 to 4 weeks after emergence. Farmers apply 2 to 6 grams of fertilizer (about a three-finger pinch) in or

technology will complement the existing technology dissemination strategies to improved agricultural productivity. The third dimension is related to the promotion of the mini-growth pole approach around reservoirs where full scale and small scale irrigation will be promoted by the project along with the development of value chains approach for commodities promoted. The fourth dimension will consist in the continuation of capacity building efforts for producers and producers' organizations, the matching grant scheme, and investments in irrigation and post-harvest equipment and infrastructures but with better targeting of beneficiaries through an improved Monitoring and Evaluation system with the introduction of Information and Communication Technologies (ICT)⁴.

A. Proposed objectives and key performance indicators

- 38. The AF will maintain the PDO of PAPSA which is "to improve the capacity of poor producers to increase food production and to ensure improved availability of food products in rural markets" thereby contributing to fight poverty and promote inclusive growth and strengthening the resilience of poor farmers to climate shocks in the Sahel context.
- As the original project PDO is aligned with the PDO in the GAFSP proposal, it was agreed that both the AF and the GAFSP will have the same PDO as the original project. Indeed, food security has three dimensions: (i) food availability suggesting sufficient quantities of food available on a consistent basis (supply of food through production, distribution, and exchange); (ii) food access: having sufficient resources to obtain appropriate foods for a nutritious diet (affordability) and (iii) food use: appropriate use based on knowledge of basic nutrition and care. The PAPSA is mostly targeting the supply side of food security (first dimension) with substantial investments to increase sustainable food availability in quantity (development of lowlands, perimeters and irrigation, promotion of improved seeds and fertilizers, improve distribution and exchange (nationwide interventions, promotion of Warrantage, cereals bank restructuring and promotion, market information system), for rural people. Furthermore, the project is also addressing the second dimension of food security (affordability) through activities that improve rural producer's revenues (sheep and cattle fattening, fish farming, promotion of non-timber forest products, vegetable production, access to agriculture credit, etc.). Activities such as fish farming, vegetable production, non-timber forest products while increasing the household revenues, at the same time contribute to diversify the daily diet and improve nutrition values of food which contribute to meet the physiological requirements of consumers addressing the third dimension of food security.

B. Revised Results Framework and results Indicators for AF Phase

40. The results framework for the overall PAPSA is revised to operationalize a number of recommendations from the mid-term review that was concluded in July 2013 and during appraisal to capture the additional outcomes and outputs that are envisaged to be generated. Moreover, some intermediate outcome indicator targets will need to be adjusted where necessary to take into account the specific indicators under the GAFSP financing. The mid-term review and appraisal suggested (a) the dropping of the following indicators (i) percentage reduction in share of rural households with annual cereal consumption less than 190 kg per capita; (ii) number of producers who have benefited

near the seed hole at the time of planting (equivalent to about 20 to 60 kg of fertilizer per hectare). Microdosing is adapted to traditional water management known as Zaï in Burkina Faso where small planting holes are dug early in the season and filled with manure. It is also easy to be adapted to other planting methods.

⁴ There is a potential for the use of information and communication technologies (ICT) to improve data collection and M&E activities. Mobile phones, new platforms and repositories, and even software for reporting have reduced costs and time, improved data validity, and increased the ease of implementation. The project will focus on beneficiaries targeting and will build on the existing initiative under the parent project for Market information and on WAAPP project on e-extension, both initiatives are working with the same platform operator.

from vouchers, (iii) number of input shops created with support of the project that are functional and (iv) number of pharmaceutical deposits set-up and functional with project support; and (b) the addition of the following indicators; (i) number of direct project beneficiaries of which female (percent) and young people (percent); (ii) yield increase rate of targeted crops (maize, rice, cowpeas tomato and onion) in the project targeted zones; (iii) area of developed lands in targeted zones (lowlands and perimeters); (iv) the areas under sustainable land management practices; (v) number of animal (cattle and sheep) fattened; (vi) the increase in fish production in the targeted zones; (vii) the number of fish enclosures constructed; and (viii) the number of water reservoirs with functional self-management committee. The project outcome indicators are summarized in Table 1 and more details of indicators by components and subcomponents are presented in the results framework in Annex 2.

Table 1: Changes in Project Outcome Indicators

Indicator	Unit	Original targets	Changes with AF	Revised targets
Direct project beneficiaries	Number	NA*	450,000***	750,000
- Of which female	Percentage	NA	40 percent	40 percent
- Of Which young people	Percentage	NA	10 percent	10 percent
 Increase in fish production in the targeted zones 	Metric tons	NA*	540	540
■ Increase in quantity of products stored in the <i>Warrantage</i> scheme in project targeted zones	Tons	25,000**	8,200	10,000
Percent increase in food crop production (rice, millet, sorghum, maize, cowpea) and in horticulture products (Onion and tomato) in project in targeted	Percentage	35%	20%	52%
 Increase in milk collected in the milk processing unit (UTL) monitored 	Million liters	2.5	1.7	3.5

^{*} new indicators

C. Extension of project closing date

41. It is proposed to extend the project closing date for the parent project (P114236) from June 30, 2016 to June 30, 2018, to allow completion of the expanded program. This will be the first extension of the project closing date. Implementation of activities funded under the proposed AF will hence take place within a period of about four (4) years from Board approval (June 2014).

D. Lifting outstanding partial disbursement conditions and reallocation of proceeds

42. The conditions of Disbursement under Category 2 (funds allocated to Matching Grants to households under Component 1(a)) required that contracts be signed between WFP and both a Technical Operator and a Financial Institution. Disbursement under Category 4 (funds allocated to Matching Grants to producers' associations under Component 2(a)), also required that contracts be signed between the Regional Chamber of Agriculture (RCA) and both the Technical Operator and the Financial Institution. However, the recruitment of the Technical Operator and the Financial Institution as part of the implementation of the input voucher-for-work scheme faced procurement difficulties and

^{**} Original target was overestimated; the mid-term review proposed to review the target.

^{***} of which GAFSP will cover 250,000 beneficiaries

made it impossible to implement the voucher-for-work scheme. It was therefore necessary to seek alternatives to the original scheme. An alternative scheme to align the Project's input distribution system with the input distribution scheme run by the Government in the wake of the 2008 food price crisis was proposed.

43. This alternative voucher-for-work mechanism was piloted in 2012 with the successful participation of the private sector in the distribution of fertilizers to project beneficiaries in selected regions. As envisaged in the original scheme, this mechanism also uses matching grant funds to improve producers' financial access to inputs. However, with the outstanding disbursement conditions under Categories 2 and 4, any disbursed matching grants would not be eligible for reimbursement, unless the disbursement conditions are lifted. It is therefore proposed to waive this condition under the Additional Financing. Lifting the outstanding disbursement conditions under Categories 2 and 4 will free up more than US\$14 million including the unallocated funds. Proceeds will be reallocated as indicated in Table 2.

Table 2. Reallocation of proceeds for the Burkina Faso, Agricultural Productivity and Food Security Project, Grant-No IDA H5210

Category of Expenditure	Allocations (SDR)						
	Original	Current	Revised				
(1) Goods, works and consultants' services for Parts 1 (b), 2(b) and 3 of the Project, including Training and audits	9,600,000.00	9,519,609.64	16,040,893				
(2) Matching Grants under Part 1 (a) (i) of the Project (crop and livestock)	8,300,000.00	8,300,000.00	5,760,902				
(3) Matching Grants under Part 1 (a) (ii) of the Project (communities around protected areas)	3,850,000.00	1,275,980.77	1,473,486				
(4) Matching Grants under Part 2(a) of the Project (post-harvest, processing)	1,500,000.00	1,500,000.00	1,021,680				
(5) Operating Costs	850,000.00	813,832.62	1,303,037				
(6) Refund of Preparation Advance	550,000.00	550,000.00	0.00				
(7) Unallocated	950,000.00	950,000.00	0.00				
Total	25,600,000.00	13,109,423.03	25,600,000.00				

^{*}Percentage of expenditure to be financed inclusive of taxes is 100 percent

E. Project intervention area

44. The project intervention area will remain country-wide. However, project interventions under the GAFSP financing will be concentrated in the Center-south, Center-East and Sahel regions around the identified water reservoirs with a possibility to extend the area to the neighboring East and Central Plateau regions to absorb the remaining additional 250 ha irrigated land to be developed under the project to reach the project targets.

^{**}Percentage of expenditure to be financed is 100 percent of amount disbursed

F. Proposed components description

45. The project components will remain the same and will take into account activities suggested under the GAFSP additional financing and will be implemented through the three components (i) improving food production, (ii) improving the availability of food products and (iii) coordination, management and monitoring & evaluation (M&E) of project activities. Changes in project costs per Components are indicated in Table 3.

Table 3: Changes in Project Costs (US\$ million) by Components with Additional Financing

	Origina	l Costs		Total				
Components	Total	IDA only	Total AF	IDA only	% IDA original costs	GAFSP only	revised project costs	
Component 1 – Improving food production	32.30	26.70	52.54	20.95	78.50	26.30	84.84	
Component 2 – Improving the availability of food products	6.70	5.40	14.81	5.50	101.80	9.30	21.51	
Component 3 – Coordination, Management and Monitoring & Evaluation of project activities	11.50	7.10	12.04	9.50	133.80	1.50	23.54	
Total costs	50.50	39.20	79.39	35.95	91.70	37.10	129.89	

- 46. Component 1: Improving food production (US\$52.54 million of which IDA financing: US\$20.96 million; GAFSP financing: US\$26.27 million). As a Sahelian country with 86 percent of its population employed in the agricultural sector, Burkina Faso is vulnerable to climate shocks and needs to build resilience for rural farmers. The component aims to secure and increase crop production, as well as facilitate access to fishery resources and promote livestock production, through sustainable management of water resources and the development of efficient irrigation and related productive infrastructures through matching grants and develop community works to fight poverty and put in place an inclusive approach that promotes shared prosperity.
- 47. For crop production (maize, rice, sorghum, millet), legumes (cowpea) and vegetables (onion, tomato), the component will develop crop production infrastructures through lowland development. It will develop: an additional 3,000 ha, of lowlands; 2,000 ha of water management infrastructures entirely covered by GAFSP financing of which 70 percent would be for community irrigation and 30 percent for private irrigation (irrigation works relate to the development of small irrigated areas around existing reservoirs with a minimum storage capacity of 300,000 cubic meters of water, excluding dams for domestic, hydro-electric and pastoral use); 5,000 ha of soil conservation and water harvesting measures and 3,000 compost pits for the production of organic matter for soil restoration.
- 48. For animal production, the AF will support the construction of 5,000 fattening units for cattle and 1,000 units for sheep fattening, 800 km of corridors to facilitate animal access to water resources covered at hundred percent by GAFSP financing. For local poultry, the AF will continue the dissemination of adapted habitat and will emphasize vaccination/sanitary and genetic improvement of poultry. Due to the persisting constraints related to poultry health and genetic improvement, the project will take a leadership role by setting up a task force that will include the WAAPP and PAFASP projects to work for sustainable solutions on these thematic issues. The project will continue

supporting livestock artificial insemination, and milk collection and processing and will promote new rural private sector actors to sustain the development of livestock artificial insemination.

- 49. For fish farming the AF will support the construction of a fish hatchery station in Yakouta (Sahel region), the rehabilitation of the fish farm station in Bazèga (Center-South region), the promotion of 26 weighing centers to improve fish marketing and the development of fish farming around water reservoirs. Fish farming is covered at hundred percent by GAFSP financing.
- 50. For zones adjacent to protected areas in which agricultural production has been curtailed or prohibited by law the AF will continue supporting valorization of non-timber forestry products and will promote lowland management and small game breeding units to significantly improve poor households revenues. GAFSP contribution to environmental related activities will cover the protection of river banks and land reclamation around water reservoirs.
- 51. This component will continue supporting agricultural technology dissemination. The technological packages for food crop production include improved seed being developed and/or tested by the WAAPP project, fertilizer, manure, sustainable soil management technologies, animal traction, and improved post-harvest technologies. For livestock production, the focus will remain on milk production and short cycle livestock products including cattle and sheep fattening and the technology packages that include genetic improvement (local and exotic breeds) and access to veterinary services and products (including, vaccination, and animal feed). The AF will integrate the innovation platform approach and will ensure that technology packages to be disseminated are adapted to the needs and to the specificity of the regions.
- 52. Component 2. Improving the availability of food products (US\$14.81 million of which: IDA financing: US\$5.50 million; GAFSP financing: US\$9.31 million): This component aims at strengthening the capacities of stakeholders to manage the variability of food supplies at local and national levels. This component will keep the two subcomponents:
- 53. **Sub-Component 2.1: Reducing post-harvest losses:** This sub-component will continue providing matching grants to eligible producer groups to: (i) ensure dissemination of improved technologies for reducing post-harvest losses, including improved storage (triple-bagging). Under the AF, triple-bagging will be targeting the Warrantage and restructured cereal banks; (ii) support sustainable management of the already acquired multifunctional platforms as the project will not procure new multifunctional platforms before making sure that the existing ones are fully functional; (iii) support the reinforcement of small scale improved food processing units managed principally by women groups around water reservoirs; (iv) scale-up milk collection by ensuring that milk collection centers equipment and organizations are functional and (v) extend the support to the valorization of non-timber forest products to the Sahel Protected area.
- Taking into consideration the perishable nature of horticultural products which will be produced around reservoirs, the project will also support the conservation and processing of onions and tomatoes. This will involve equipping women's groups with processing equipment including solar drying units.
- 55. **Sub-Component 2.2: Supporting the marketing of food products:** This sub-component will continue financing the development of village level warehouse receipt (Warrantage) schemes with the construction of an additional 50 community warehouses of which 20 will have a capacity of 500 tons (GAFSP financing) and 30 a capacity of 250 tons (IDA financing) each. The size of warehouses

will be modulated according to the potentialities of the targeted zones. The project will support the scaling-up of the implementation of the warehouse receipt system, and the partnership with decentralized financial institutions (Réseau des Caisses Populaires and other microfinance institutions) to further extend these activities to the areas which have expressed their interest in the system. In addition to cereals, the AF will include cowpeas in the Warrantage system as suggested by women groups and applicable even in the cereal deficit areas.

- These facilities will help reduce post-harvest losses, reduce the risk arising from the low level and/or volatility of producer prices at harvest time and improve the quality and value addition of the marketed products. The proposed component will build on the experience of the project in that area. The construction of the required facilities will be entrusted to AGETEER and/or SONATER, or other private companies through delegated execution agreements.
- 57. The restructuring of cereal banks into marketing cooperatives in deficit zones: the networking of these cooperatives with the National Agency for Management of Emergency Stocks (Société Nationale de Gestion des Stocks de Sécurité SONAGESS) will continue. In addition, the project will support completion of the development of market information systems (MIS) and its full implementation and monitoring. Already existing platforms set-up with Manobi Company will be strengthened to take into account modules that allow better targeting of project beneficiaries through mobile phone technology.
- 58. Component 3: Institutional development and capacity building (US\$12.03 million of which: IDA financing: US\$9.48 million; GAFSP financing: US\$1.51 million): This component aims at reinforcing capacities of institutions directly involved in the project implementation. Specifically, the component finances consultant services, equipment, training sessions, study tours and farmers' field days, and communication and information activities (e.g. awareness-raising campaigns, technology workshops, etc.). The project activities will continue to focus on the following subcomponents
- 59. **Sub-Component 3.1: Building capacities for extension and advisory services to farmers:** This sub-component will provide the required knowledge support for the implementation of project activities. It will contribute to build the capacity, including training of project stakeholders, multidisciplinary teams, and local technical staff. It will continue the support for: (i) building capacities of private and public extension service providers to support technology transfer to farmers; and (ii) strengthening capacity of public services involved in project implementation.
- 60. **Sub-Component 3.2: Strengthening agricultural input supply delivery systems:** This subcomponent will continue to support the expansion of existing network of input distributors in the rural areas, and strengthening their capacities to provide advisory services to farmers. Moreover, the project will promote the use of Information and Communication Technologies (ICT) in targeting project beneficiaries and in facilitating project monitoring and evaluation. The e-extension /e-voucher technologies will be piloted and implemented.
- 61. **Sub-Component 3.3: Strengthening the capacity of Producers' Organizations:** The project will continue financing: (i) the capacity strengthening of Regional Chambers of Agriculture to allow them to efficiently undertake their mandate under the project; and (ii) capacity strengthening and networking of grass roots farmers-based organizations to help them play a more active role in technology transfer and marketing of food products. GAFSP financing will focus on providing special support to the establishment of irrigation committees and local water-user committees, including irrigation farmers and other stakeholders involved in water resources management at the sub-basin level in the project intervention zones.

Sub-Component 3.4: Coordination, Management and Monitoring & Evaluation (M&E) 62. of project activities: Project will continue to be coordinated by existing directorates of the implementing ministries, and the Regional Chambers of Agriculture and the central project coordination unit. In this context, the Project will provide financial and logistical support to these institutions, particularly in the areas of fiduciary management and the development of the Project's monitoring and evaluation system, including the social and environmental impacts of the project. The Project Coordination Unit (PCU) staff will be strengthened by the addition of the following staff: (i) a civil works engineer (specialist of irrigation development), (ii) an agronomist specialist of crop and livestock development, (iii) a specialist in charge of marketing infrastructure and the warehouse receipt Warrantage system and (iv) a fisheries/aquaculture expert, as well as two other specialists respectively in monitoring & evaluation and procurement. The respective sections in charge of capacity building, monitoring & evaluation, and administrative and financial matters of the PCU will also be reinforced with additional staff and adequate incremental operating costs. The project Focal Points in the regions will be supported by specialists in crop, livestock and fisheries development and marketing as required from the decentralized ministries structures and from the Regional Chambers of Agriculture.

G. Implementation Arrangements

- The project is classified as an A-Type project under the Burkinabè national law regulating externally-funded projects. As an A-type, the project will be fully administered and managed by government bodies. The implementation of the project will now include the Ministry of Water, Hydraulics Development and Sanitation (MEAHA) to take into account the strong water management aspect of the project, bringing the number of Ministries involved to four instead of three under the parent project. The four Ministries of Agriculture and Food Security (MASA), Livestock and Fisheries (MRAH), Environment and Sustainable Development (MEDD) and Water, Hydraulics Development and Sanitation (MEAHA) will be responsible for project implementation, each in its relevant areas of intervention. The Government will continue delegating implementation supervision, monitoring and evaluation at regional level to CRAs (Regional Chambers of Agriculture). For OFINAP (National Office of Protected Areas) since the project will be targeting the seven protected areas instead of only the three protected areas governed by OFINAP, the mid-term review suggested the project focal point at the MEDD will be mandated to supervise environmental related activities of the project including OFINAP.
- 64. Overall management of the project will be under the Ministry in charge of Agriculture. Each of the four implementing Ministries (Agriculture, Livestock, Environment, Water Hydraulics and Sanitation) will implement the Project's activities pertaining to their areas of competence.
- 65. A designated Coordinator for the overall project at the Ministry of Agriculture, and a designated focal point in each implementing ministry, will be in charge to coordinate the project's implementation. The Executive Secretary (Secrétaire General) of the National Chamber of Agriculture will be the project focal point for the National Chamber of Agriculture. For OFINAP (National Office of Protected Areas) since the project will be targeting the seven protected areas instead of only the three protected areas governed by OFINAP, the mid-term review suggested the project focal point at the MEDD will be mandated to supervise environmental related activities of the project including OFINAP. The mandate of the project coordinator, with the support of the focal points in their respective sectors, will include the preparation of consolidated annual work plans and budgets as well as progress reports, based on submissions from implementation partners, financial management and procurement information, general supervision activities, and monitoring and evaluation of project outcomes.

66. The focal points for the Ministries will be assisted by the Ministries' administrative and financial services for financial management, procurement and disbursement, as well as the Ministries planning units for Monitoring and Evaluation (M&E) activities. They will have a broad management and technical background with the required experience relating to project activities. They will be selected on the basis of agreed terms of reference.

IV. APPRAISAL SUMMARY

A. Project design and Implementation arrangements

67. The project institutional set-up and implementation arrangements have proved so far to be efficient in delivering infrastructures and services to the rural population. The implementation arrangements under the AF will therefore remain the same as for the parent PAPSA but strengthened with some additional staff as described above and will now include the Ministry of Water, Hydraulics Development and Sanitation (MEAHA) to take into account the strong water management aspect of the project, bringing the number of Ministries involved to four instead of three under the parent project.

B. Economic and financial analysis

- Planned investments under the additional financing (AF) of PAPSA have been analyzed to estimate the financial and economic impacts respectively on direct beneficiaries and across the country. The results were compared with those of the initial project. Details of the methodology used and the results obtained are shown in Annex 6. The financial analysis shows that even without subsidies, the main types of activities supported by the project are very profitable and generate the following financial rates of return: 88 percent for onion production, 63 percent for pig production, 61 percent for poultry, 55 percent for sheep fattening, 54 percent for fish farming fed with PEP and also for sorghum production on erosion-controlled sites, 53 percent for cattle fattening, 42 percent for fish fed with local fish food, 39 percent for irrigated rice and for lowland rice, 27 percent for the production of honey, and 20 percent for the processing and packaging of honey.
- 69. The analysis also shows that the mechanism of matching grant financing and the distribution of agricultural inputs promoted under the PAPSA are effective instruments. Their combination has enabled vulnerable small producers to better confront their cash needs at the beginning of the crop year, in an environment where this group of farmers would normally not meet the conditions of access to credit from banks and micro-finance institutions that would facilitate their adoption of new technologies. These new technologies have helped improve agricultural productivity, increase production, and to generate marketable surpluses. The matching grant financing mechanisms have contributed to improve the cash flow of small producers and processors and have led to increased incomes (gross margin) for these small producers / processors. Measures to introduce stricter selection criteria for beneficiaries of inputs under the PAPSA-AF will be crucial to ensure economic viability. In this regard, it would be important to strictly observe the selection procedures that are being introduced in the Implementation Manual currently being revised as part of the Additional Financing.
- 70. The Net Present Value (NPV) calculated based on an opportunity cost of capital of 10 percent is about 44.1 million U.S. dollars. The Economic Rate of Return (ERR) of the activities to be financed under the Additional Financing is estimated at 16.8 percent. The sensitivity analysis based on increases of 10 percent, 20 percent and 30 percent of program costs gives rates of return of 15.7 percent, 14.6 percent and 13.6 percent respectively. The sensitivity analysis based on reductions of 10 percent, 20 percent and 30 percent of project benefits results in economic rates of return of 15.5 percent, 14.1 percent and 12.5 percent respectively. The sensitivity analysis based on a two-year delay in the generation of benefits gives an economic rate of return of 13.2 percent. These rates of return

confirm the robustness of the results from the Additional Financing and low sensitivity to risks associated with increased costs, decreases in, or delays in, the realization of project benefits. Details on the Economic and Financial Analysis are indicated in Annex 6.

C. The rationale for public provision of project services

As stated above, in Burkina Faso there is a crucial need for productivity-led growth in the agricultural sector considering the country's existing demographic dynamics, its vulnerability arising from the Sahelian environment, its precarious food security situation and its exposure to market shocks. Public involvement and funding are fully justified because of public goods benefits of a significant number of people especially vulnerable poor producers with a large proportion of women (43 percent) to access food and to improve their livelihood. Annex 5 provides more details on gender mainstreaming in the project activities. There are also some investments, such as lowland development, irrigation infrastructures, animal fattening where public contributions to the capital investments for poor producers are important as a starter and cannot be left to the private sector alone to boost the achievement of food security. That confirms the strategic orientation to fight poverty and to share prosperity.

D. Value added of World Bank involvement

As stated above, the implementation of the project will complement and promote synergies with the other Bank supported rural sector projects including the Agricultural Diversification and Market Development Project (PAFASP) whose objective is to increase the competitiveness of selected agricultural subsectors that target both national and regional markets, the West Africa Agricultural Productivity Program (WAAPP) which promotes the generation and dissemination of agricultural technologies, the Bagré Growth Pole Project (BagrePole) which aims at increasing economic activity to promote an increase in private investment, employment generation, and agricultural production, and the Community Based Rural Development Program (PNGT2 - Phase 3) which is addressing rural land tenure issues. The World Bank will bring lessons learned from its long experience from current and past similar project implementation in Burkina Faso and worldwide to ensure that shortcomings recorded in other operations are avoided in the present operation. This also includes experience gained in community and matching grant programs, and from achievements and lessons learned notably in the parent project

E. Safeguards policies triggered

73. Similar to the parent PAPSA, this AF triggered: OP/BP 4.01 on Environmental Assessment; Pest Management (OP/BP 4.09); and Involuntary Resettlement (OP/BP 4.12). PAPSA is rated as environmental assessment Category B. No additional new safeguards policies will be triggered. The Government has taken appropriate measures for the expeditious completion of all the required safeguard documents including (the Environmental and Social Management Plan, the Pest Management Plan, and the Resettlement Policy Framework). All these documents were validated after consultations on April 8, 2014 and sent to the Bank on April 16, 2014 for disclosure at InfoShop. These documents have been disclosed in the country and submitted at InfoShop on May 16, 2014. More details on Safeguards are provided in Annex 9.

F. Financial management

74. The overall financial management risk for the additional financing is rated Substantial. It is considered that the financial management satisfies the Bank's minimum requirements under OP/BP

10.00, and therefore is adequate to provide, with reasonable assurance, accurate and timely financial management information on the status of the project required by World Bank.

- 75. Two Designated Accounts (DAs) will be opened at the Central Bank in Ouagadougou and will receive project proceeds on the basis of the project cash needs. The DAs will be used as a transit account and as such, funds will be transferred from the DAs to transactions accounts. These accounts will be opened at a commercial bank acceptable to the Association. The Coordinator and the Finance Officer will be joint signatories of these accounts. Direct payments and special commitments, will be made to service providers if needed. Disbursements will continue to be based on IFRs. Additional details are contained in a Disbursement Letter.
- 76. In-year Reporting and Monitoring: The un-audited Interim Financial Report (IFR) format of the original project will be updated to include the new elements introduced under additional financing. It will comprise sources and uses of funds by project expenditure classifications, a comparison of budgeted and actual project expenditures (commitments and disbursements) to date, and for the quarter. The PCU will submit the financial reports to the Bank within 45 days following the end of each calendar quarter. More details on financial management are indicated in Annex 9.

G. Procurement

Procurement for the project will be carried out in accordance with the World Bank's 77. "Guidelines: Procurement under IBRD Loans and IDA Credits "dated January 2011 (Procurement Guidelines); and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated January 2011 (Consultant Guidelines) and the provision stipulated in the Financial Agreement. The various procurement actions under different expenditure categories are described in general below. For each contract to be financed under the Financing Agreement, the various procurement or consultant selection method, the need for pre-qualification, estimated costs, prior review requirements, and time frame have been agreed between the borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The implementing entities, as well as contractors, suppliers and consultants will observe the highest standard of ethics during procurement and execution of contracts financed under this project. "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants" dated October 15, 2006 and updated in January 2011 (the Anti-Corruption Guidelines) shall apply to the project. Additional details on Procurement are provided in Annex 9.

H. Closing dates

78. The closing date of the original Grant was June 30, 2016. It is proposed to extend the original project closing date from June 30, 2016 to June 30, 2018, to allow completion of the expanded program. This will be the first extension of the project closing date.

I. Development impact of the Additional Financing

79. The development impact of the whole project (including the Additional Financing) would include: (i) providing the country with irrigation infrastructure to reduce the vulnerability of farm enterprises to climate change (flood, wind, and water erosion, excessive temperatures, drought, etc.)

to increase agricultural productivity and production; (ii) considerable rural transformation through development of lowland and irrigation infrastructure; (iii) substantial transformation of production systems underpinned by the development of irrigated agriculture and/or improvement of marketing infrastructure that enable farmers to bring together their products making them more visible; (iv) the improvement of production storage and marketing of surplus products and with marketing infrastructure (storage warehouses and warehouse receipt system).

J. Policy exceptions and readiness

80. There are no policy exceptions for this project.

Annex 1 Operational Risk Assessment Framework (ORAF)

Burkina Faso: Additional Financing for the Agricultural Productivity and Food Security Project (P149305)

Risks Project Stakeholder Risks Rating Stakeholder Risk Moderate **Risk Management:** Risk Description: Regular training and supervision will be provided to strengthen capacities of service providers Inadequate capacities at local level to Res Client Stage: Impleme Recurrent: implement activities: Lack of interest Due Date: Frequency: Status: In Progress ntation of financial institutions in the Warrantage scheme **Risk Management:** Signature of agreements between participating financial institutions and the project; Establishment and training of management committees; Resp: Client Stage: Implem Recurrent: Frequency: Status: In Progress Due entation Date: **Risk Management:** Regular supervision Resp: Recurrent: Stage: Implem Due Frequ Status: In Progress Bank entation Date: ency: Implementing Agency (IA) Risks (including Fiduciary Risks) Low Capacity Rating Risk Description: **Risk Management:** Management will be ensured by the PAPSA Management Unit that will be strengthened with incremental staff • Weak financial, institutional. specifically assigned for GAFSP financing; A capacity building plan will be set-up to fill the gap of weak technical and fiduciary capacity to financial, institutional, technical and fiduciary capacity for the key project stakeholders. implement Project's activities; Lack of counterpart funding may disrupt the Stage: Both Due Date: 31-Dec-2014 Frequency: Resp: Both Recurrent: Status: Not Yet normal functioning of the Project. Due

• Low capacity for project	Risk Management:													
managementLow capacity of producer groups at	Under	Sub-Co	mponent	3.3 trainin	g will be pr	ovide	ed basec	d on a needs ass	sessment					
field level • Low capacity for M&E in the project	Resp:	Client	Stage :	Impleme ntation	Recurrent:	√	Due Date:	Frequency:	CONTINUOUS	Status:	In progress			
targeted zones	Risk N	I anager	nent:				•			•	•			
	Specif	ic techni	cal train	ing will be	provided ui	nder (each sub	o-component;						
	Resp:	Client	Stage :	Impleme ntation	Recurrent:	V	Due Date:	Frequency:	CONTINUOUS	Status:	In progress			
	Risk N	Risk Management:												
	MASA's decentralized unit will receive support for M&E at the regional level.													
	Resp:		Stage: 1	mplement tion	Recurrent:	/	Due Date:	Frequency:	CONTINUOUS	Status:	In progress			
Governance	Rating	ting Moderate												
Risk Description:	Risk N	I anager	nent:											
Poor governance may affect public sector performance; • Coordination of project activities	Project activities are closely integrated into PNSR that offers a good framework for coordination, monitoring and evaluation, provision of additional capacity building, including training to stakeholders involved in project implementation;													
among four line ministries may prove difficult and may slow project	Resp:	Clie	ent Stag	ge: Implementation		t:	Due Date:	31-Oct-2014	Frequency:	Status:	Not Yet Due			
implementationM&E activities may be given	Risk N	I anager	nent:											
insufficient importance as compared to project management activities.				ng and eval t results;	uation budg	et fro	om the	overall manage	ment budget, and	l emphasis	on			
available for the execution of time sensitive field activities, (ii) procurement: delays in the award of	Resp:	Clie	ent Stag	e: Implementation		t:	Due Date:	30-Nov-2014	Frequency:	Status:	Not Yet Due			
	Risk N	I anager	nent:	·	•	•	•			•	,			
	The project management unit will be strengthened to acquire good track record in fiduciary compliance, including financial management and procurement;													

collusion of service providers with the management of the project	Resp:	Bank	Stage:	Impleme ntation	Recurrent:	Due Date:	31-Dec-2014	Frequency:	Status: Not Yet Due					
	Risk M	I anager	nent:	•	•	•			•					
	Delegated management contracts with established entities with good track record for procurement activities;													
	Resp:	Cli	ent Stag	ge: Implem ntation	ne Recurrent:	Due Date:	31-Dec- 2014	Frequency:	Status: Not Yet Due					
	Risk N	I anager	nent:	•		·	•	•						
	Additional capacity building to be provided on need basis													
	Resp:	Bank	Stage:	Implem entation	Recurrent:	Due Date:	31-Dec-2014	Frequency:	Status: Not Yet Due					
Project Risks														
Design	Rating	ting Moderate												
Risk Description:	Risk M	Ianagen	nent:											
Technical risks: (i) Climatic risks; (ii) Low adoption of improved	Dissemination of drought-resistant technologies, water-harvesting techniques, and soil management technologies.													
technologies; (iii) Crop pests and epizootics; (iv) Price variation shocks	Resp:	Client	Stage:	Impleme ntation	Recurrent:	DueI	Date: Frequent:	CONTINU	JOUS Status: In progress					
(v) Unavailable or inappropriate improved methods and tools might	Risk M	Ianagen	nent:											
lead to unsustainable outputs and outcome in reference to seeds, animal	Establis adoptio		of on-fa	rm tests pro			days; provision	of matching g	rants to support					
production, agricultural production technologies and irrigation development	Resp:	Client	Stage:	Impleme ntation	Recurrent:	Due Date:	Freque	ency: Yearl	y Status: In Progress					
development	Risk M	Ianagen	nent:											
				*	ection des végé and epizooties	taux) an	d the Veterinary	y Services will	be strengthened to					
	Resp:	Client	Stage:	Impleme ntation	Recurrent:	Due Date:	Frequency:	CONTINUO	US Status: In Progress					

	Risk Ma	nagemer	nt:										
					ne project will s e SONAGESS.	uppo	ort scal	ing-up proce	ssing of agricultur	ral produ	icts; Linking		
	Resp: C	Client St	_	npleme tation	Recurrent:	Du Da	ie ate:	Frequency:	CONTINUOUS	Status:	In Progress		
	Risk Ma	nagemer	nt:										
	The lessons from the implementation of the first three years of the project and from other projects, PAFASP particularly for irrigation and cattle, and WAAPP for seed production and crop development) have been taken into consideration in project design; close liaison will be maintained with these projects												
	Resp:	Bank	Stage:	Prepar ation	Recurrent:	Du Da	ie ate:	Frequency:	CONTINUOUS	Status:	In Progress		
Low community demand to	Risk Management: Capacity building of project stakeholders on the implementation of the ESMF												
implement or sustain Natural Resource Management and Sustainable Land Water Management and production technologies;	Resp:	Client	Stage:	Implem entation			Due Date:	Frequency:	CONTINUOUS	Stat	us: In progress		
The limited profitability of some	Risk Ma	nagemer	nt:										
project activities may provide insufficient incentive to producers to adopt innovations; Unsuccessful	Targeted areas will be those that offer best potential for selected value chains; this will ensure strong ownership by beneficiaries as they benefit greatly from increased incomes and food security;												
	Resp:	Both	Stage:	Implem ntation	e Recurrent:		Oue Oate:	Frequency:	CONTINUOUS	Status:	In progress		
The low participation in	Risk Ma	nagemer	nt:										
implementation activities may lead to insufficient ownership of project		nent of pr magemen				ies i	in the in	mplementation	on, development an	nd mana	gement of		
	Resp:	Client	Stage:	Implementation		Du Da		Frequency:	CONTINUOUS	Status:	In progress		

Land issues may be of constraint		_						_	and preventi PNGT2-Phas			icts will be dressing this		
	Resp:	Bot	h Stag	e: Implem entation	Recurrent:	√	Due Date:	Frequency	y: CONTIN	UOUS	Status:	In progress		
Lack of market access and fluctuation	Risk Management:													
of prices may be a disincentive		Construction of storage structures and implementation of Warrantage scheme will reduce post-harvest losses and give more price negotiating power to producers;												
	Resp:	Clie	ent Stag	e: Implem entation	Recurrent:	√	Due Date:	Frequency	y: CONTIN	UOUS	Status:	In progress		
Social and Environmental	Rating		Moderat	te	•	.,		·			•	·		
Risk Description:	Risk Management:													
Limited compliance with environmental regulations due to the	The project will recruit an environmental specialist as technical team member.													
lack of environment management capacities among Project stakeholders	Resp:	Client	-	Impleme ntation	Recurrent:	\	Due Date:	27 March, 2015	Frequency:		Status:	Not Yet Due		
Risk Description:	Risk Management:													
Climate change and rainfall variability may undermine the gains of management practices and household income, as rainfall strongly affects	Dissemination of drought-resistant technologies; Promotion of full scale, small scale as well as low development; The Sustainable Land and Water Management, soil management techniques reduce reffects of climate variability and build farmers resilience to climate shocks;													
production and hence rural poverty.	Resp:	Client	Stag	e: Implementation	Recurrent	✓	Due Date:	Frequenc	cy: CONTIN	NUOUS	Status	: In progress		
Risk Description:	Risk N	A anagen	nent:	•	•		•		•			•		
Natural disasters (droughts or floods) in some areas and resulting ecological	Feasib	ility stud	ies for a	n in-depth o	liagnostic of	site	es and lo	wlands deve	eloped for irr	igation	will be c	onducted		
damage may affect the integrity of the irrigation works and/or cause displacement of populations.	Resp:	Clie	ent Stag	e: Implementation	Recurren	t:	Due Date:	31-Dec-201	4 Frequency	7:	Status:	Not Yet Due		
Risk Description: Low-priority concern among beneficiaries about river banks	yields	and prod	uction as	s well as irr					of resource d heless, traini			griculture ss campaigns		

management;	Resp:	Clien	nt Stage:	Impleme ntation	Recurrent:	<	Due Date:	Frequency	y: CONTINUC	US St	atus:	In progress	
Program and Donor	Rating	I	Low					•		•			
	Risk Management:												
	The World Bank is member of the Burkina Faso Sectoral Dialogue Framework for Rural Development, Food Security and Environment. During project preparation and implementation, project activities and implementation progress will be shared with the sector donors to build synergies and complementarities.												
	Resp:	Bank	Stage:	Both Ro	ecurrent: 🔽	Due	e Date:	Frequency:	CONTINUOU	S Stati	ıs: I	n Progress	
Delivery Monitoring and Sustainability	Rating	N	Moderate								•		
activities; Weak productivity and adoption of new technologies. • Low capitalization of project achievements at the end of the project; • Sustainability and maintenance of investments in local commune is dependent on continuous funding from government budget	Risk Management:												
	Management committee of each infrastructure constructed under the project will be set-up. The project will provide special support to the establishment of irrigation committees and local water-user committees, including irrigation farmers and other stakeholders involved in water resources management at the sub-basin level in the project intervention zones for water management and infrastructure/equipment maintenance.												
	Resp:	Client S	tage: In	mpleme latation	Recurrent:		Oue For Pate:	Frequency: (CONTINUOUS	Statu	s: I	In progress	
	Risk Management:												
	Project category is of type A with respect to Burkina Administration regulations suggesting that the project is implemented through the existing technical institutional within the different ministries involved in the project implementation.												
	Resp:	Client	Stage:	Impleme ntation	Recurrent:		Due I Date:	Frequency:	CONTINUOUS	Statu	s: I	n progress	
Overall Risk													
Overall Implementation Risk: Moderate													
Risk Description: Even with the challer implementation is informing this additi										ee year	s of		

Annex 2: Revised Results Framework and Monitoring Indicators

Current (PAD)	Proposed changes	Comments or rationale of change						
Project Development objective								
	Direct Project Beneficiaries (number) of which female (percent) and young people (percent) ^(a) (New)	This core indicator added at mid-term review was not taken into account in the parent project appraisal document. Emphasis will be put on individual beneficiaries of at least one project action. The indicator will be disaggregated according to gender and young people						
Percentage increase in food crop production (rice, millet, sorghum, maize, cowpea) in targeted zones ^(a)	Percentage increase in food crop production (rice, millet, sorghum, maize, cowpea) and in horticulture products (onion and tomato) in targeted zones	The reformulation takes into account onion and tomato due to expanded project activities.						
	Increase in fish production in the targeted zones ^(a) (New)	This indicator is considered due to expanded project activities that aim at responding to beneficiaries needs.						
Increase in milk production in project targeted zones	Increase in milk collected in the milk processing unit (UTL) monitored	Data on milk production were hardly collected. It is agreed that data will be collected from milk processing units monitored.						
Increase in quantity of products stored in the <i>Warrantage</i> scheme in project targeted zones ^(a)	No change							
Percentage reduction in share of rural households with annual cereal consumption less than 190 kg per capita ^(a)	Dropped	At Decision Meeting, it is agreed that this indicator will be affected by many factors outside the project control.						

Current (PAD)	Proposed changes	Comments or rationale of change
	Component 1: Improv	ing food production
Number of producers who have benefitted from vouchers;	Dropped	The input voucher-for-work scheme faced procurement difficulties and made it impossible to implement. The Midterm review meeting has decided to drop it.
	Yield increase rate of targeted crops (Maize, rice, cowpea, onion and tomato) in targeted zones (New)	This indicator has been documented since the MTR as it helps capture data related to onion and tomato. The two productions have been considered by the AF and will then be taken into account with the expanded project activities.
	Number of animals (cattle and sheep) fattened ^(a) (New)	This indicator is considered due to expanded project activities. In addition women are most of those who benefit from this activity that helps increase their revenues.
	Area of developed lands in targeted zones ^(a) Lowlands Irrigated permeters (New)	This indicator is added at mid-term review. Irrigated perimeters are further considered to take into account the expanded project activities around water reservoirs
	Areas under sustainable land management practices (New)	This indicator is added at mid-term review to measure land reclamation results of the project
Percent of area covered by improved technologies (seeds, fertilizer) in the project targeted zones ^(a)	Dropped	Improved seeds production and dissemination has been transferred to WAAPP project.
Percent increase in local poultry vaccination coverage	No change	
	Number of fish enclosures constructed (20 m x 20 m) ^(a) (New)	This indicator is added to take into account the expanded project activities around water reservoirs
Increase in revenues generated by communities adjacent to the 7 targeted protected areas	No change	

Current (PAD)	Proposed changes	Comments or rationale of change
	Component 2 : Improvi	ng Food Availability
Number of <i>Warrantage</i> schemes set-up and functional ^(a)	No change	
Amount of credit provided by financial institutions through the Warrantage system (a)	No change	
Number of cereal banks restructured into marketing cooperatives and functional	No change	
Number of milk collected centers rehabilited or created that are functional	No change	
Componer	nt 3: Institutional Devel	opment and Capacity Building
Number of input shops created that are functional;	Dropped	Budget of input shops creation has been dropped due to constraints related to ownership, sustainability and management.
Number of pharmaceuticals deposits set-up and functional with project support	Dropped	Budget of input shops creation has been dropped due constraints related to ownership, sustainability and management
Number of seed producers trained and operational	Dropped	Seeds related activities have been transferred to bank funded WAAPP program
	Percent of water reservoirs with functional self-management committees ^(a) (New)	This indicator is added to take into account the expanded project activities around water reservoirs
Percent of targeted producers organization and community organization who organize annualy their General Assembly during which they report on their activities	No change	
Number of public and private service providers trained ^(a)	No change	
Percent of satisfactorily executed contracts	No change	
M&E system provides regular data and information on project results and impact to stakeholders	No change	

⁽a) Indicators measuring GAFSP additional financing results either specifically or both GAFSP and IDA financing

REVISED PROJECT RESULTS FRAMEWORK

			Baseline	Actual	(Cumulative	Target Valu	ies		Data Collection	on
Indicator Name	Core	Unit of Measure	Original Project Start 2010	(Current) Baseline AF 12/31/2013	Year 1 2014	Year 2 2015	Year 3 2016	Year 4 2017 (End Target)	Frequency	Source data/ Methodology	Resp. for data collection
			Project I	Developmen	t Objectiv	e Indicato	ors				
Direct Project Beneficiaries (number)		Number	not available	300,000	400,000	525,000	675,000	750,000	Annual	Annual report	Project M&E CRA; MEDD; MASA, MRAH, MEAHA
Of which Women (percentage)		Number	not available	92,000	120,000	157,500	202,500	225,000	Annual	Annual report	Project M&E CRA;
Of which Young people (percentage)		Number	not available	not available	40,000	52,500	67,500	75,000	Annual	Annual report	Project M&E CRA; MEDD; MASA,MRAH, MEAHA
Increase in fish production in the targeted zones		Metric ton	not available	0	67.5	150	350	540	Annual	Annual report	Project M&E CRA; MRAH
Percentage increase in food crop production (rice, millet, sorghum, maize, cowpea) and in horticulture products (onion and tomato) in targeted zones		Percentage Metric tons	NA 3,590,000	32% 4,764,941	37% 5.002,114	42% 5,250,786	47% 5,496,558	52% 5,742,229	Annual	Annual report	DGPER/MASA
Increase in quantity of products stored in the Warrantage scheme in project targeted zones		Metric ton	200	1,878	3,000	5,000	7,000	10,000	Annual	Annual report	Project M&E MASA/ DGFOMR
Increase in milk collected in the milk processing unit (UTL) monitored		Number	1,300,000	1,803,000	2,200,000	2,700,000	3,200,000	3,500,000	Annual	Annual report	Project M&E, MRAH

			Baseline	Actual		Cumulative	Target Valu	ies		Data Collection	on
Indicator Name	Core	Unit of Measure	Original Project Start 2010	(Current) Baseline AF 12/31/2013	Year 1 2014	Year 2 2015	Year 3 2016	Year 4 2017 (End Target)	Frequency	Source data/ Methodology	Resp. for data collection
			Int	ermediate R	esults Indi	icators					
	Component 1: Improving food production										
Areas under sustainable land management practices		Hectare (Ha)	0.00	7,952	9,952	11,952	12,952	12,952	Annual	Project's M&E system Permanent agricultural survey	Project M&E /DRASA
Area of developed lands in targeted zones		Hectare (Ha)	0.00	21,423	22,923	24,923	26,423	26,423	Annual	Project's M&E system	Project's M&E /DRASA/CRA
Lowlands		Hectare (Ha)	0,00	6,623	7,623	8,623	9,623	9,623	Annual	Project's M&E system	Project's M&E /DRASA
Perimeters		Hectare (Ha)	NA (new)	14,800	15,300	16,300	16,800	16,800	Annual	Project's M&E system	Project's M&E /DRASA/ DGADI
Percent increase in local poultry vaccination coverage		Percentage	15	26	36	40	45	50	Annual	Project's M&E system	Project M&E, MRAH
Number of animal (cattle and sheep) fattened		Number	NA (new)	0	12,500	37,500	75,000	112,500	Annual	Project's M&E system	Project M&E, MRAH
Number of fish enclosures constructed (20 m x 20 m)		Number	NA (new)	0	25	100	150	150	Annual	Project's M&E system	Project M&E, MRAH
Yield increase rate of targeted crops (Maize, rice, cowpea, onion and tomato) in targeted zones		Percentage	NA	NA	5 percent	10 percent	15 percent	20 percent	Annual	Project's M&E system	Project M&E MASA/CRA
Maize		Percentage	not available	1,683 kg/ha	5 percent	10 percent	15 percent	20 percent	Annual	Project's M&E system	Project M&E DRASA/CRA
Rice		Percentage	not available	2,186 kg/ha	5 percent	10 percent	15 percent	20percent	Annual	Project's M&E system	Project M&E DRASA/CRA

			Baseline	Actual	(Cumulative '	Target Valu	ies		Data Collection	on
Indicator Name	Core	Unit of Measure	Original Project Start 2010	(Current) Baseline AF 12/31/2013	Year 1 2014	Year 2 2015	Year 3 2016	Year 4 2017 (End Target)	Frequency	Source data/ Methodology	Resp. for data collection
Cowpea		Percentage	not available	800 kg/ha	5 percent	10 percent	15 percent	20 percent	Annual	Project's M&E system	Project M&E DRASA/CRA
Onion		Percentage	not available	21 Tons/ha	10 percent	20 percent	30 percent	40 percent	Annual	Project's M&E system	Project M&E DRASA/CRA
Tomato		Percentage	not available	25 Tons/ha	10 percent	20 percent	30 percent	40 percent	Annual	Project's M&E system	Project M&E DRASA/CRA
Increase in revenues generated by communities adjacent to the 7 targeted protected areas		Million CFA	100	290	340	390	440	500	Annual	Project's M&E system	MEDD/ OFINAP
			Compone	nt 2 : Impro	oving Foo	d Availabi	lity				
Number of Warrantage schemes set up and functional		Number	2	60	125	250	350	560	Annual	Project's M&E system	Project M&E/ DGFOMR
Number of cereal bank restructured into marketing cooperatives and functional		Number	0	98	148	198	248	298	Annual	Project's M&E system	MASA/ DGFOMR
Amount of credit provided by the financial institutions through the <i>Warrantage</i> system		Million CFA	5	119	169	319	419	519	Annual	Project's M&E system	Project M&E / DGFOMR
Number of milk collection centers rehabilitated or created that are functional		Number	0.00	0.00	10	20	30	30	Annual	Project's M&E system	DGPA/MRAH

			Baseline	Actual		Cumulative	Target Valu	ies		Data Collection	on
Indicator Name	Core	Unit of	Original Project Start 2010	(Current) Baseline AF 12/31/2013	Year 1 2014	Year 2 2015	Year 3 2016	Year 4 2017 (End Target)	Frequency	Source data/ Methodology	Resp. for data collection
	'	Compone	ent 3: Instit	tutional Dev	velopment	and Cap	acity Build	ling			
Percent of targeted producers and community organizations who organize annually their general assembly during which they report on activities		Percentage	Not available	75	80	90	100	100	Annual	Project's M&E system	Project M&E/ DGFOMR
Percent of water reservoirs with functional self-management organizations		Percentage	NA (new)	0	70	100	100	100	Annual	Project's M&E system	Project M&E/ DGFOMR/ DGADI
Number of public and private service providers trained		Number	0.00	1,338	1,638	1,938	2,238	2,338	Annual	Project's M&E system	Project's M&E
Percent of satisfactorily executed contracts		Percentage	0.00	75	80	90	90	90	Annual	Project's M&E system	Project's M&E
M&E system provides regular data and information on project results and impact to stakeholders		Yes/No	No	Yes	Yes	Yes	Yes	Yes	Quarterly	Project's M&E system	Project's M&E

Annex 3. Project costs

BURKINA FASO - Agricultural Productivity and Food Security Project

Components and Sub-components	IDA Financing (000 \$US)	%	GAFSP Financing (000 \$US)	%	Contribution Beneficiaries (000 \$US)	%	Contribution Government (000 \$US)	%	Total (000 \$US)
Component 1: Improving food production	20,961.90	39.9	26,272.00	50.0	4,137.40	7.9	1,168.80	2.2	52,540.10
Crop production	10,120.60	30.1	20,689.10	61.6	1,618.50	4.8	1,168.80	3.5	33,597.00
Animal Production (including fisheries)	5,603.80	44.0	5,582.80	43.8	1,552.90	12.2	0.00	0.0	12,739.50
Forestry and Protected areas	4,987.40	83.8	0.00	0.0	966.10	16.2	0.00	0.0	5,953.50
Component 2 : Improving Food Availability	5,503.10	37.1	9,313.60	62.9	0.00	0.0	0.00	0.0	14,816.70
Reducing post-harvest losses	4,083.20	62.3	2,468.80	37.7	0.00	0.0	0.00	0.0	6,552.10
Supporting the marketing of food products	1,419.90	17.2	6,844.80	82.8	0.00	0.0	0.00	0.0	8,264.70
Component 3: Institutional Development and Capacity Building	9,485.00	78.8	1,514.50	12.6	0.00	0.0	1,035.70	8.6	12,035.20
Building capacities for extension and advisory services to farmers	1,098.00	56.3	532.00	27.3	0.00	0.0	321.10	16. 5	1,951.15
Strengthening agricultural input supply delivery systems	107.30	100.0	0.00	0.0	0.00	0.0	0.00	0.0	107.30
Strengthening the capacity of Producers' Organization	1,439.80	88.1	195.30	11.9	0.00	0.0	0.00	0.0	1,635.20
Coordination. Management and Monitoring & Evaluation (M&E) of project activities	6,839.80	82.0	787.20	9.4	0.00	0.0	714.60	8.6	8,341.60
Total	35,950.00	45.1	37,100.10	46.9	4,137.40	5.2	2,204.50	2.8	79,392.00

Annex 4. Water reservoirs identified in the Sahel, Center South and Center-East Regions

			Name of	GPS Coo	ordinates	Type of	Reservoir	Area to	be develo _l	ped (Ha)
Province	Commune	Village	the Water reservoir	Longitude	Latitude	Infrastr ucture	Volume (x 000 m3)	up- stream	down- stream	Total
			SAH	HEL REGION	(9 SITES)					
Oudalan	Tin-Akoff	Massifigui	Massifigui	00°15'44.0" W	14°55'55.0" N	Dam	1.000	25.00	26.70	51.70
Séno	Dori	Yakouta	Yakouta	00°08'34.0" W	14°04'24.0" N	Dam	265.000	50.00	-	50.00
	Aribinda	Liki	Boukouma	00°44'33.0" W	14°10'47.0" N	Dam	2.780	69.50	74.10	143.60
Soum	Aribinda	Gait-Goata	Gait-Goata	00°00'31.0" W	14°10'13.0" N	Dam	3.760	94.00	100.30	194.30
200111	Aribinda	Gasseliki	Gasseliki	00°58'05.0" W	14°00'14.0" N	Dam	390	9.80	10.40	20.20
	Djibo	Djibo	Djibo	01°37'18.0" W	14°06'41.0" N	Dam	1.180	29.50	31.50	61.00
	Mansila	Mansila	Mansila	0°37'57.9" E	13°9'20.49" N	Dam	500	12.50	13.30	25.80
Yagha	Tangougounadié	Tangougounadié	Higa	00°41'28''E	13°34'22"N	Lake	40.000	50.00	-	50.00
Tit	Titabé	Dinalaye	Dinalaye	0°43'22" E	13°36'21.49" N	Dam	970	24.30	25.90	50.20
Total								364.60	282.20	646.80

			Name of	GPS Coo	ordinates	Type of	Reservoir	Area to	be develop	ped (Ha)
Province	Commune	Village	the Water reservoir	Longitude	Latitude	Infrastr ucture	Volume (x 000 m3)	up- stream	down- stream	Total
			CENTER-	SOUTH REC	GION (12 SIT	ES)				
	Doulougou	Bangleongo	Bangleogo	01°28'42.2" W	12°58'35.3" N	Dam	550	13.8	14.7	28.5
	Doulougou	Gana	Gana	01°24'20.0" W	12°03'02.0" N	Dam	335	8	10	18
	Doulougou	Kagamzindé	Kagamzince	01°20'49.4" W	12°08'24.9" N	Dam	640	0	10	10
	Doulougou	Lamzoudo	Goaghin	01°21'46.2" W	12°07'02.0" N	Dam	497	12.4	13.3	25.7
D (Doulougou	Sincene	Sincene	01°33'33.5" W	11°54'20.8" N	Dam	700	17.5	18.7	36.2
Bazéga -	Kombissiri	Bissiri	Bissiri	01°13'58.9" W	12°05'40.8" N	Dam	470	15	2	17
	Kombissiri	Kombissiri	Pindega	01°18'35.1" W	12°02'11.0" N	Dam	533.3	10	14	24
- -	Kombissiri	Konioudou	Konioudou	01°16′20.1" W	12°02'23.7" N	Dam	900	5	20	25
	Sapone	Koagna	Bonko	01°34'54.1" W	12°01'09.5" N	Dam	635	15	16	31
	Toece	Yargo	Zogo	01°16'57.3" W	11°49'22.6" N	Dam	450	11	12	23
Nahouri	Ziou	Tomabissi	Guélwongo	00°50'07.6" W	11°01'02.8" N	Dam	400	0	11	11
Namouri	Ziou	Tomabissi	Tomabissi	00°50'10.3" W	11°00'58.9" N	Dam	426.7	10.7	11.4	22.1
Total							6.537	118.4	153.1	271.5

- ·	C	7711	Name of the	GPS Coo	rdinates	Type of	Reservoir Volume	Area t	o be devel (Ha)	oped
Province	Commune	Village	Water reservoir	Longitude	Latitude	Infrastruct ure	(x 000 m3)	up- stream	down- stream	Tota l
			CENTE	R-EST REGIO	ON (12 SITES	S)				
	Bane	Ouanda	Yaya Diallo Popsy	00°21'36.5" W	11°29'18.5" N	Dam	2.500	62.5	66.7	129.2
	Bittou	Bittou	Bitou	00°18'35.9" W	11°16'18.3" N	Dam	420	10.5	11.2	21.7
Boulgou	Tenkodogo	Tenkodogo	Tenkodogo I	00°22'36.2" W	11°46'21.8" N	Dam	340	8.5	9.1	17.6
	Tenkodogo	Tenkodogo	Tenkodogo II	00°21'39.6" W	11°47'24.7" N	Dam	655	16.4	17.5	33.8
	Zabre	Youngou	Youngou	00°33'56.0" W	11°06'19.4" N	Dam	380	9.5	10.1	19.6
Koulpélogo	Sangha	Ganzadouré	Ganzadoure	00°03'44.0" E	11°17'42.0" N	Dam	2.544	63.6	67.8	131.4
	Baskoure	Baskouré	Baskouréria nguin	00°14'21.1" W	12°10'02.6" N	Dam	560	14.0	14.9	28.9
	Kando	Kampelsézougo	Karaga- bouli	00°26'58.2" W	12°24'56.4" N	Dam	1.190	29.8	31.7	61.5
Voywittongo	Koupela	Naftengasetbin	Naftenga	00°23'52.2" W	12°06'43.6" N	Dam	375	9.4	10.0	19.4
Kourittenga	Pouytenga	Pouytenga	Pouytenga	00°25'52.3" W	12°13'57.4" N	Dam	645	16.1	17.2	33.3
,	Tensobentenga	Tensobtenga	Tensobtenga	00°16'15.2" W	11°59'42.2" N	Dam	1.900	47.5	50.7	98.2
	Tensobentenga	Zoomkoom	Zomkomé	00°13'13.3" W	11°54'41.7" N	Dam	360	9.0	9.6	18.6
Total								615.6	656.6	613.2

Annex 5. Gender mainstreaming in PAPSA activities

- 1. *Gender and access to land:* Burkina Faso's economy is highly dependent on agriculture, livestock, and forestry. Almost 90 percent of the population is engaged in subsistence agriculture, often on lands that are highly fragile and prone to erosion and desertification. The introduction of soil and water conservation techniques and lowland development under the PAPSA project has enabled many farmers to grow crops on land they had long since abandoned. But, tenure security is critical to enable adoption of these techniques. It is well known that many women lack the necessary control rights over the land they farm, diminishing their incentives and capacity to invest in measures that could significantly boost the productivity of their crops.
- 2. However, the activities implemented under the project have strongly supported land access rights especially for women since up to 43 percent of project beneficiaries on lowlands developed are women. The additional financing will continue supporting equitable access to land for men and women in developed lands with reference to the newly adopted Rural Land Tenure Law adopted in June 2009 (Act. No 034 on The Rural Land Tenure System).
- 3. **Gender and income generating activities:** Under the parent project, 52 multifunctional platforms⁵ and 16 Shea butter extraction presses were procured to ease post-harvest activities done mainly by women. Post-harvest activities such as triple-bagging where about 230,000 bags have been purchased have targeted women. The AF will continue reinforcing women management, maintenance and technical capacities. Moreover, the *Warrantage* system benefited 8284 persons of which 43 percent were women. However, the credit granted to women was less than 20 percent of the total (CFAF 104 million). The project will ensure that women are more involved in the *Warrantage* system and the equivalent credit amount leveraged is improved.
- 4. The increased access to land for women under the project, especially on the developed lowlands and irrigated perimeters, has helped increase income and improved both access and quality of food for women. For example, for rain-fed rice production and horticultural crops (grown during the dry season), the average gross margin generated is CFAF 71,000 per ha and 60,400 per ha respectively. The income generated helped women diversify their sources of income by engaging in petty trade and animal production. Women are also the main stakeholders in the fish value chain. Fish farming that will be developed under the AF will contribute to creating jobs for women and youth as well as improving their incomes. Expanded animal fattening activities around water reservoirs will target women and youth with the aim of increasing their incomes and their contribution to household expenditures and financial autonomy.
- 5. A typical day for a wife and mother starts before dawn and finishes long after dark, by the time food has been prepared, children cared for, animals fed, crops tended to and sufficient water brought from far away wells. The introduction of multi- functional platforms under the

the village.

_

⁵ MFP consists of a diesel engine that powers devices such as pumps, grain mills and grinders designed for different cereals and nuts (rice, millet, maize, sorghum, peanuts and Shea nuts) and for electricity in rural areas. This has helped farmers to augment their production of added-value products and to raise the quality of their products, promote access, especially for women, to the modern energy services by bringing electricity right into the heart of

project aims at liberating time and energy for the most vulnerable groups in the community and in using the time gained for productive and income generating activities, and at bringing electricity right into the heart of the village. Time-use surveys conducted by UNDP suggest that the introduction of multi-functional platforms reduces between two to six hours per day the time women devote to domestic chores, such as agro-processing and food preparation. In almost all the villages studied, the platforms have helped to increase agricultural production, particularly of Shea butter, rice and maize.

Annex 6. Economic and Financial Analysis

BURKINA FASO: Agricultural Productivity and Food Security Project (PAPSA) – Additional Financing (AF)

A. Methodology

- 1. The Additional Financing (AF) would not lead to any change in the development objective of the parent project which is to improve the ability of small farmers to increase food production and ensure greater availability of agricultural products on the markets. The AF will focus on: (i) the completion of infrastructure investments implemented in the initial project such as irrigation infrastructure (lowland and perimeters). Such infrastructures strengthen the resilience of smallholder farmers to food insecurity, poverty and climate change evidenced by floods and water and wind erosion caused by increased frequency of severe weather events (wind / rain), heavy layers of dust due to wind erosion and drought and heat waves due to both the increase in temperature and decrease in rainfall; (ii) the completion of market infrastructure (storage warehouses for inventory credit and marketing cooperatives) that help regulate the supply of products to facilitate smallholder access to credit and make available food in areas of chronic food deficit; and (iii) strengthening the capacity of stakeholders of targeted sectors and their professional and inter-professional organizations as well as public and private providers that provide essential goods and services to beneficiaries of the project. These investments will be implemented through subsidies (agricultural inputs) and the mechanism of matching grants.
- 2. Through these investments, the AF will generate financial and socio-economic benefits to project beneficiaries and the national economy as a whole. An analysis of the different types of investments planned under the additional financing was done to assess their financial and economic impacts respectively on beneficiaries and on the national economy as a whole. The results were compared with those of the baseline and the initial project.
- 3. While capacity building carried out under Component 3 "Institutional Development and Capacity Building" would have strong positive benefits on beneficiaries and activities, these benefits are difficult to assess and no attempt has been made to quantify these benefits as part of the present cost-benefit analysis. Investments being promoted under Component 1 "improving food production" and Component 2 "Improving the availability of food" would lead to the diffusion and adoption of techniques and technologies by the beneficiaries. These investments generate considerable direct benefits on which the benefit – cost analysis has been based. Access to these investments will be demand driven and on the basis of a participatory approach. In this context, the type and size of each investment and the nature of the activities in it are not precisely known in advance. The economic and financial analysis is therefore based on actual results of farm models supported under the parent project. Although only illustrative, each analysis conforms as closely as possible to real conditions taking into account farm models based on real data. Indeed, it is based on actual technical and economic data of activities supported under the original project. These data are stored in the project database. They refer to the most promoted menus of technological themes developed under the project.
- 4. Under the project, several farm models have been implemented. The cost-benefit analysis has been based on thirteen (13) farm models that have data for all the parameters necessary to carry out such an analysis. The models are as follows: Model 1: production of lowland rice (1 ha); Model 2: irrigated rice production (1 ha); Model 3: Production of onion (1 ha); Model 4:

production of sorghum on erosion-controlled sites (1 ha); Model 5: grass-fed beef (unit a herd of 5); Model 6: sheep fattening (20 herd unit); Model 7: poultry farming (unit of 7 hens and 120 chickens marketed per year); Model 8: pig breeding (unit of 7 heads and 24 piglets marketed per year); Model 9: aquaculture with fish fed PEP food; Model 10: aquaculture with fish fed local food; Model 11: storage of cereals and cowpeas (250 tons filled to 80 percent capacity); Model 12: honey production (60 1 / year, 4 hives / beekeeper); Model 13: honey processing, packaging (6,000 1 / year treating honey from about 100 beekeepers).

5. Financial prices used are market prices as of March 2014. Economic prices were estimated from the wholesale price or FOB price minus intermediate costs. In Burkina Faso, input taxes are almost nonexistent, and therefore economic and financial prices are very similar. A conversion ratio of financial to economic price of 95 percent was used. A period of 20 years was used for the economic analysis. Without subsidies, the adoption of new technologies will be difficult in the context of Burkina Faso where access to credit in general and rural credit in particular is very limited. But the financial analysis was conducted without subsidy. In the economic analysis the subsidy was not removed.

B. Analysis of the financial impacts of investments on project direct beneficiaries

- 6. Based on the above assumptions, the investment activities promoted and provided without subsidies, would give encouraging results looked at in three ways:
- (i) Costs and Financial Benefits due to the Additional Financing: Through Component 1 and Component 2, the AF supports the adoption of new technologies that require acquisition of new skills and increase the level of expenditure (investment costs and operating expenses) compared to the baseline. Although expenditures would increase, the analysis shows that farm models supported in the project substantially improve sales and gross margin of activities as shown in Tables 1 and 2 below.

Table 1: Median Increase in financial costs and benefits

	Baseline (without project situation)	Situation with project	Increase rate (percent)
Median Investment Cost (CFAF)	95,000	750,000	689.5
Median Operating expenses (CFAF/yr)	150,000	421,800	181.2
Median Gross returns(CFA F /yr)	175,000	791,667	352.4
Median Gross margin (CFAF/yr)	30,000	340,400	1034.7

(ii) The financial Rates of return of different farm models are satisfactory: They are: 88 percent for onion production, 63 percent for pig farming, 61 percent for poultry, 55 percent for sheep fattening; 54 percent for fish farming fed with PEP and sorghum production on erosion-controlled sites, 53 percent for cattle fattening, 42 percent for aquaculture fed with local fish food, 39 percent for irrigated and lowland rice, 27 percent for the production of honey and 20 percent for the processing and packaging of honey.

Tableau 2: Profitability of investments for project beneficiaries

	TECHNOLOGY	IRR	NPV (at 10
		(percent)	percent)
			(in CFAF)
MODEL 1	Lowland rice (1 ha)	39	1,423,142
MODEL 2	Irrigated rice (1 ha)	39	6,401,170
MODEL 3	Onion (1 ha)	88	19,316,220
MODEL 4	Sorghum SAE (1 ha)	54	1,238,817
MODEL 5	Sheep fattening (herd of 20)	53	4,810,880
MODEL 6	Cattle fattening (herd of 5)	55	4,724,074
MODEL 7	Poultry (7 hens with 120 chicken marketed / yr.)	61	923,302
MODEL 8	Pig farming (7 units, 24 piglets marketed /yr.)	63	2,064,856
MODEL 9	Fish farming in enclosures fed with PEP	54	2,124,630
MODEL 10	Fish farming in enclosures with local fish food	42	1,041,629
MODEL 11	Storage of cereals and cowpea (250 tons filled to	26	24,478,534
	80 percent)		
MODEL 12	Honey (60 liters / yr., 4 hives)	27	457,865
MODEL 13	Processing and packaging of honey (6,000 liter/yr.)	20	679,974

(iii) Analysis also shows that the mechanism of matching grant financing and the distribution of agricultural inputs promoted under the PAPSA are effective instruments: Their combination has enabled vulnerable small producers to better confront their cash needs at the beginning of the crop year in an environment where this group of farmers would normally not meet the conditions of access to bank credit and micro-finance institutions that would facilitate their adoption of new technologies. These new technologies have helped improve agricultural productivity, increase production and to generate marketable surpluses. The matching grant financing mechanisms have contributed to improve the cash flow of small producers and processors and have led to increased incomes (gross margin) for these small producers / processors. Measures to introduce stricter selection criteria for beneficiaries of inputs under the PAPSA -AF will be crucial to ensure economic viability. In this regard, it would be important to strictly observe the selection procedures that are being introduced in the Implementation Manual currently being revised as part of the Additional Financing.

C. Economic impacts of investments at country level

7. The Economic Net Present Value (NPV) has been calculated using an interest rate of 10 percent assumed to correspond to the opportunity cost of capital in the country. The resulting NPV is about US\$44.1 million. The Economic Rate of Return (ERR) of the entire AF program is estimated at 16.8 percent. Although satisfactory, this rate is lower than the initial project. The main reasons for this include: (i) the reduced access to agricultural inputs because of the non-implementation of the "voucher for work" mechanism; (ii) taking into account 100 percent of the cost of additional financing excluding input subsidies while for the initial project only the cost of component 1 " improved production and access to food " was included in the economic analysis; and (iii) the delay in the implementation of the initial project, which has limited the dissemination of results of tests of technology packages.

8. These rates are explained by the yields that are increasing due to improved farming techniques and technologies and the availability of irrigation infrastructure and marketing promoted by the project. The above results are conservative because they are based solely on quantifiable benefits of Components 1 "improved production and access to food" and 2 "Improving the availability of food," and do not take into account the expected results from component 3 "Institutional Development and Capacity Building" that have not been quantified.

Table 3: Economic Return Rate (ERR) of the project (NPV in US\$)

	Economic	
	ERR	NPV
Baseline scenario	16.8 %	
NPV (at 10 percent (million \$US))		44.1

D. Sensitivity Analysis

9. The sensitivity analysis based on increases of 10 percent, 20 percent and 30 percent of project costs gives rates of return of 15.7 percent, 14.6 percent and 13.6 percent respectively. The sensitivity analysis based on reductions of 10 percent, 20 percent and 30 percent of project benefits results in economic rates of return of 15.5 percent, 14.1 percent and 12.5 percent respectively. The sensitivity analysis based on a two-year delay in the generation of benefits gives an economic rate of return of 13.2 percent. These rates of return confirm the robustness of the results from the Additional Financing and low sensitivity to risks associated with increased costs, decreases in, or delays in, the realization of project benefits.

Table 5: Sensitivity Analysis

Hypothesis	Economic Analysis	
100 percent Project cost, input subsidy excluded		
100 percent gross margin of project activities		
Period: 20 years		
Conversion factor from financial to economic		
gross margin: 0.95		
Results	ERR	NPV
Base (VAN =0)	16.5	
NPV (10 percent)		
(Million CFAF)		19.849.4
(Million US\$)		44.11
If gross margin decrease by 10 percent	15.5	
If gross margin decrease by 20 percent	14.1	
If gross margin decrease by 30 percent	12.5	
If project cost increase by 10 percent	15.7	
If project cost increase by 20 percent	14.6	
If project cost increase by 30 percent	13.6	
If project benefits delayed by two years	13.2	

E. Development impact of the Additional Financing

- 10. The development impact of the whole project (including the Additional Financing) would include:
 - (i) reducing the proportion of rural households consuming less than 190kg/person of cereals which is the food base of the Burkinabe;
 - (ii) considerable rural transformation through: (a) the development of lowland and irrigation infrastructure; (b) cost-effective and attractive economic activities for the labor force including the youth and women; (c) the establishment of a formal framework for dialogue and exchange between stakeholders at different levels (region and department) and between specific sectors in order to develop synergies and complementarities between economic initiatives;
 - (iii) substantial transformation of production systems underpinned by the development of irrigated agriculture through the development of irrigation infrastructure and animal watering points and the creation and/or improvement of marketing infrastructure that enable farmers to bring together their products making them more visible.
 - 11. The Value added of the Additional Financing is to ensure increased public investment targeted at the rural poor and vulnerable groups (small producers/ processors) through:
 - (i) The Improvement of production storage and marketing of surplus products by (a) providing the country with irrigation infrastructure to reduce the vulnerability of farm enterprises to climate change (flood. wind and water erosion. excessive temperatures. pockets of drought etc.) and to reduce the amplitude of inter-annual variations in crops and to increase agricultural productivity; and (b) providing the country with marketing infrastructure (storage warehouses and warehouse receipt system) and with grain marketing cooperatives which help to regulate the supply of products to facilitate smallholder access to credit and to make available food in areas of chronic food deficit;
 - (ii) **Promotion of a consultation framework at the territorial level (regional and departmental) and target sectors** to strengthen the technical, organizational and institutional capacity of the public and private sectors for better coordination of economic initiatives and promotion of the most vulnerable groups (women and youth);
 - (iii) Extending the impact of the development objective of the project by (a) combining an approach that responds to demand in the country according to the potential of each region with an approach that leads to focus interventions (crop production, livestock and fish production) around small growth poles organized around irrigation for the Eastern, Central-South Central-East and Sahel regions. that are vulnerable from food and nutritional points of view; and (b) by providing and strengthening support in and around protected areas to restore wildlife and floral biodiversity while at the same time promoting activities contributing to improved food security and increased income of the local population.

BURKINA FASO - Agricultural Productivity and Food Security Project Additional Financing

Annex 7: Detailed Description of Continuing, Modified, or New Project Activities of the AF Phase

- 1. The three project components would remain unchanged under the Additional Financing (AF). These are: (i) *Improving food production*; (ii) *Improving the availability of food products*; and (iii) *Institutional development and capacity building*.
- 2. Component 1: Improving food production (US\$52.54 million of which IDA financing: US\$20.96 million; GAFSP financing: US\$26.27 million). In Burkina Faso, the crop production system is still largely dominated by traditional farming practices and the productivity gap compared to what can be achieved under improved agricultural technologies is still high. However, the country, being a Sahelian country, is vulnerable to climate shocks and the need to build resilience for rural farmers is a must. Therefore, the aim of this component would be to secure and increase crop production, as well as to facilitate access to fishery resources and promote livestock production, through sustainable management of soil and water resources and the development of efficient irrigation and related productive infrastructures. The project will provide matching grants to poor household farmers in targeted zones as incentive for the adoption of appropriate improved packages.
- 3. The technological packages being promoted for food crop production include improved seeds (supporting the promotion of the use of improved seeds being developed and/or tested by the WAAPP project including vegetable seeds), fertilizer, manure, sustainable soil management technologies, animal traction, and improved post-harvest technologies. Targeted crops remain food crops that include maize, rice, sorghum, millet, and cowpeas for cereals and onion and tomato for horticulture products. For tubers such as cassava, yam and sweet potato, the Southwest, Center-west, Center –East and East regions will be targeted. For livestock production, the focus will be on milk production and short cycle livestock products and the technology packages will include: genetic improvement (local and exotic breeds) and access to veterinary services and products (including, vaccination, and animal feed). For zones adjacent to protected areas in which agricultural production has been curtailed or prohibited by law, the focus will be on technologies for valorization of non-timber forestry products and wild fauna breeding units.
- 4. This component will develop an additional 5,000 ha for irrigation including 3,000 ha of developed lowlands and 2,000 ha of irrigated perimeters of land around water reservoirs of which 70 percent for community irrigation and 30 percent for private irrigation. The project will support soil conservation and water harvesting measures with an additional 5,000 ha through community works and 3,000 compost pits for the production of organic matter for soil restoration.
- 5. Producers around the water reservoirs on irrigated lands developed by the project will be given extension advice through the regional DRDH services to improve their husbandry practices, based on the improved methods and practices developed and disseminated as part of the WAAPP-prescribed packages.
- 6. For livestock, it is envisaged to develop two access corridors, averaging 10 km in total length per water reservoir. The project will finance the construction of community storage facilities for livestock feed and other farm inputs, as well as private cattle fattening facilities

around the water points. Specifically, the project will build (i) at least one collective store on each of the 40 water reservoirs targeted by this activity; (ii) 1,000 fattening units distributed as follows: 500 fattening units for cattle with a capacity of at least 5 cattle each (2,500 cattle) and 500 fattening units for sheep with a capacity of at least 10 animals (5,000 sheep). Each fattening unit is expected to undertake three 3-months production cycles per year (total annual expected production is 7,500 cattle and 15,000 sheep). The sites will also be equipped with operating equipment (feeders, watering tanks, cart, straw chopper, etc.).

- 7. The project will also lead a task force⁶ for poultry development and will contribute to improved vaccination coverage, improved habitat and genetics for 3,000 production units. Infrastructure for fish farming will also be developed through the rehabilitation of some important existing fishing infrastructures (Yakouta, Bazega). Fish farming will be developed around the identified water reservoirs. Support to fish production will consist in funding the stocking of 30 reservoirs and adoption of fish production techniques in cages on 15 water bodies. The project will support the production of fingerlings in rehabilitated hatcheries and strengthen fishermen organizations.
- 8. A minimum cash contribution will be required to enroll in the matching grant program for technology adoption. The contribution will vary according to the type of beneficiary and the type of activity as specified in the Project Implementation Manual (PIM). The project will finance community works planned and organized by Village Development Councils and CRA.
- 9. As far as sustainable management of irrigation infrastructures is concerned, in Burkina Faso and many other countries, rural infrastructure has proved to be managed far more efficiently under participatory mechanisms than directly by State companies or technical services. Project implementation arrangements, therefore will allow for oversight and control by beneficiaries. Patterned against the successful PICOFA model, the management of small schemes will be entrusted directly to the decentralized communities and producer groups (Local Water Committees-CLE, Village Development Committees-CVD, and other formal rural organizations, etc.)
- 10. The project will build their capacities in that area. It will provide them with models of documents, pre-specified parametric costs, and, in some cases, lists of service providers meeting the technical, legal and regulatory requirements. For more complex facilities, project management will be entrusted to agencies such as SONATER and/or AGETEER on the basis of implementation support agreements. SONATER and AGETEER have a good track record as 'delegated executing agencies' on behalf of the State or its agencies, local authorities and associations, and all other public or private organizations, projects or programs, for civil works in rural areas (buildings, hydro-agricultural development, small dams and water reservoirs, wells and boreholes, fingerlings nurseries, etc.). It has been agreed that in all cases, the responsibility for developing the water resources has to be separated from water usage since it has been proven that such separation would lead to stronger user ownership and better management of the investments by the users

⁶ The task force will include stakeholders of the Agricultural Diversification and Market development project and the West Africa Agricultural Productivity Program, all World bank supported projects, Poultry inter-professional organization, experts and resource persons, the ministry of Livestock and Fisheries and other donors program dealing with poultry value chain.

- 11. For input subsidies and other incentives, project support to grain production will be based on the alternative mechanism to the Voucher for work system put in place by the Government of Burkina Faso, including a subsidy of up to 50 percent to improve the access of farmers to quality inputs for the maintenance of soil fertility and to increase crop yields of developed lowlands and targeted irrigated perimeters. This subsidy will be made available equally to all the farmers (men and women) of the project-supported irrigated perimeters. The project will also support the production and use of organic fertilizer through existing methods of composting being extended under the parent project. It is expected that by project end, participating producers would have appreciated the value of improved inputs (especially fertilizers, improved seeds and organic matter), through increased productivity and incomes, they would have mobilized sufficient resources on their own to purchase these inputs even at non-subsidized prices. To preserve the common practice among market gardeners who traditionally purchased fertilizers at cost, the project will not finance fertilizer subsidies for this group of producers.
- 12. Component 2. Improving the availability of food products (US\$14.81 million of which: IDA financing: US\$5.50 million; GAFSP financing: US\$9.31 million): This component aims at strengthening the capacities of stakeholders to manage the variability of food supplies at local and national levels. This component will keep the two subcomponents:
- 13. Sub-Component 2.1: Reducing post-harvest losses: This sub-component will continue providing matching grants to eligible producer groups to: (i) ensure dissemination of improved technologies for reducing post-harvest losses, including improved storage (triple-bagging). Under the AF, triple-bagging will be targeting the Warrantage and restructured cereal banks; (ii) support sustainable management of the already acquired multifunctional platforms as the project will not procure new ones before making sure that the existing multifunctional platforms are fully operational; (iii) support the reinforcement of small scale improved food processing units managed principally by women groups around water reservoirs; (iv) scaling-up milk collection by ensuring that equipment of milk collection centers are better organized and are functional; (v) extending the support for the valorization of non-timber forest products to the Sahel Protected area; and (vi) promoting sustainable management of fishery resources through the use of inputs and equipment that comply with fishing norms and standards. To this end, the project will facilitate the acquisition of such inputs by fishermen and their access to weighing equipment to improve fish marketing.
- 14. Taking into consideration the perishable nature of horticultural products which will be produced around reservoirs, the project will also support the conservation and processing of onions and tomatoes. This will involve equipping women's groups with processing equipment including solar drying units. The acquisition and installation of these units will be fully subsidized by the project. Beneficiary contribution will be modulated according to the type of micro-projects. Operational mechanisms will be detailed in the PIM.
- 15. Sub-Component 2.2: Supporting the marketing of food products. This sub-component will continue financing the development of village level warehouse receipt (Warrantage) schemes with the construction of an additional 50 community warehouses of which 20 will have a capacity of 500 tons each and 30 with a capacity of 250 tons each, equipped with mechanical winnowing, bagging and processing equipment of agricultural production. The project will support the scaling-up of the implementation of the warehouse receipt system, and the partnership with decentralized financial institutions (Réseau des Caisses Populaires, and other microfinance institutions) to further extend these activities in the areas which have expressed

their interest in the system. In addition to cereals, the AF will include cowpeas in the *Warrantage* system as suggested by women groups and applicable even in the cereal deficit areas.

- 16. These facilities will help reduce post-harvest losses, reduce the risk arising from the low level and/or volatility of producer prices at harvest time and improve the quality and value addition of the marketed products. The proposed component will build on the experience of the project in that area. The construction of the required facilities will be entrusted to AGETEER and/or SONATER, or other private companies through delegated execution agreements.
- 17. The key activities to be funded are: (i) sensitizing and training farmers on best practices for conservation and storage to minimize losses due to poor storage conditions; (ii) training farmers on collective marketing of cereals; and (iii) connecting producers with financial institutions and potential buyers (using market information, dissemination of price information, organization of consultations and meetings, etc.). Based on observed cases such as the experience of the Union of groups of agricultural marketing (UGCPA) in the Mouhoun area, the expected impact of *Warrantage* is price stabilization, i.e., the reduction of the price difference observed between harvest time and the lean time which is currently about 20 percent. The other expected impact is an increase in the annual average price of 10 percent to the producer.
- 18. The restructuring of cereal banks into marketing cooperatives in deficit zones, and the networking of these cooperatives with the National Agency for Management of Emergency Stocks (Société Nationale de Gestion des Stocks de Sécurité SONAGESS) will continue. In addition, the project will support completion of the development of market information systems (MIS) and its full implementation and monitoring. The already existing platform set-up with Manoby Company will be strengthened to take into account modules that allow better targeting of project beneficiaries through mobile phone technology.
- 19. Component 3: Institutional development and capacity building (US\$12.03 million of which: IDA financing: US\$9.48 million; GAFSP financing: US\$1.51 million): This component aims at reinforcing capacities of institutions directly involved in the project implementation. Specifically, the component will finance consultant services, equipment, training sessions, study tours and farmers' field days, and communication and information activities (e.g. awareness-raising campaigns, technology workshops, etc.). The project activities will focus on the following sub-components:
- 20. Sub-Component 3.1: Building capacities for extension and advisory services to farmers. Under the parent project, the project supported the training of 1,338 public and private technical advisory service providers. This sub-component will continue to provide the required knowledge support for the implementation of project activities. It will contribute to building capacity, including training for project stakeholders, multidisciplinary teams, and local technical staff. It will continue the support for: (i) building capacities of private and public extension service providers to support technology transfer to farmers; and (ii) strengthening capacity of public services involved in project implementation.
- 21. As far as environmental and social safeguards are concerned, the project will support the National Bureau for Environmental Evaluation (BUNEE) of the Ministry of Environment and Sustainable Development for supervision and validation of Environmental and safeguards studies and the monitoring of the implementation of the Environmental and Social Management Framework (ESMF), the Pest and Pesticides Management Plan (PPMP) and the Resettlement Policy Framework (RPF).

- 22. Moreover, innovation under the AF includes the promotion of new rural private sector actors to sustain the development of livestock artificial insemination. Therefore, support will be provided in terms of equipment, capacity building and exchange visits to provide technical and managerial capacity for improved quality of services in the 13 regions.
- 23. Sub-Component 3.2: Strengthening agricultural input supply delivery systems. This subcomponent will support expanding of existing network of input distributors in the rural areas, and strengthening their capacities to provide advisory services to farmers. Moreover, the project will promote the use of Information and Communication Technologies (ICT) in targeting project beneficiaries and in facilitating the project monitoring and evaluation. The e-extension/e-voucher technologies will be piloted and implemented. The project will build on the WAAPP project in terms of dissemination of ECOWAS new laws on seeds, agricultural inputs and legislations on veterinary products.
- 24. **Sub-Component 3.3: Strengthening the capacity of Producer Organizations**. The parent project supported the training of 86 leaders of farmers' umbrella organizations and 348 farmers' organization members. The project also supported the training of 83 inter-professional organization members on partnership contract management and on quality standards of agricultural products. The project contributed to reinforcing the technical capacity of farmers involved in the development of value chains. Indeed, 6,774 producers of whom 1,725 are women received training in various topics against 2,000 targeted by the project.
- 25. The project will continue financing: (i) the capacity strengthening of Regional Chambers of Agriculture to allow them to efficiently undertake their mandate under the project; and (ii) capacity strengthening and networking of grass roots farmer-based organizations to help them play a more active role in technology transfer and marketing of food products. Value chains inter-professional organization will also be supported.
- 26. The project will also provide special support to the establishment of irrigation committees and local water-user committees, including irrigation farmers and other stakeholders involved in water resources management at the sub-basin level in the project intervention zones. Support will be provided to key stakeholders (e.g., business oriented farmers) by strengthening their capacities through training, field and exchange visits.
- 27. Capacity building of fish value chain stakeholders will involve producers / fishermen, fishmongers, processors, retailers and restaurant keepers. It will include support to structure the value chain through technical training, workshops and exchange visits. Capacity building will involve about 1,100 actors, 40 percent of whom women are and 10 percent are youth.
- 28. Sub-Component 3.4: Coordination, Management and Monitoring & Evaluation (M&E) of project activities. Project implementation arrangements will not be changed and will be coordinated by existing directorates of implementing ministries, and Regional Chambers of Agriculture and the central project coordination unit. In this context, the Project will provide financial and logistical support to these institutions, particularly in the areas of fiduciary management and the development of the Project's monitoring and evaluation system, including the social and environmental impacts of the project.
- 29. The Project Coordination Unit (PCU) staff will be strengthened by the addition of the following staff: (i) a civil works engineer (specialist of irrigation development), (ii) an agronomist specialist of crop and livestock development, (iii) a specialist in charge of marketing

infrastructure and the warehouse receipt Warrantage system, and (iv) a fisheries/aquaculture expert, as well as two other specialists respectively in Monitoring & Evaluation and procurement. The respective sections in charge of capacity building, Monitoring & Evaluation, and administrative and financial matters of the PCU will also be reinforced with additional staff and adequate incremental operating means. The project Focal Points in the regions will be supported by specialists in crop, livestock and fisheries development and marketing as required from the decentralized ministries structures and from the Regional Chambers of Commerce.

Beneficiaries' targeting

- 30. Selection of household beneficiaries of the project's activities will be based on criteria, such as farm size, types of crops and gender. For agriculture, priority will be given to producers with less than 5 ha land size with no farm equipment. For livestock production, cattle and sheep fattening, poultry, priority will be given to households having less than 5 dairy cows, 5 hogs or 30 chickens. At least 30 percent and 10 percent of the subsidies will be provided to women and young household heads respectively, given the critical role of these demographic groups in supporting rural economic growth and food security in the country.
- 31. **Regarding milk production**, the project will also give priority to organized women groups around the existing 150 small milk collection units to directly connect them to private sector.
- 32. For post-harvest processing and marketing activities (including Warrantage), the project will target existing farmers organization who are recognized by the chamber of agriculture and are officially registered. The justification for using CRAs is that they are 'umbrella' bodies, representing all stakeholders at the regional level. The project will primarily target women and youth groups who are especially active in these activities.
- 33. The project will target communities living around the following protected areas: Nazinga Forest Reserve and Game Ranch, Po or Kabore Tambi National Park, Boulon-Koflande Forest Reserve, Comoe-Leraba Forest Reserve, Arly National Park, Hippo Lake Biosphere and Forest Reserve, and Sahel Forest and Game Reserve. These communities are already organized in associations and have prepared community development plans including the development of non-timber forestry products.
- 34. **For irrigation infrastructures**, the selection of beneficiaries will be based on the procedures described in Decree No. 2012-705-PRES/PM/MAH/MEF/MATDS/MEDD/MRA of September 6, 2012 regarding 'the general prescriptions for land occupation related to the use of family type irrigation schemes. In a nutshell, the decree provides for the establishment of an ad'hoc selection committee composed of local authorities, administrative, customary, civil society, decentralized technical services authorized, producer organizations, and women's organizations. This decree also specifies that gender should be taken into account in the allocation of plots, by setting a quota in favor of women, youth and other disadvantaged groups.
- 35. **Project activities will be entrusted to private sector operators (including NGOs),** whenever they have sufficient expertise to handle project tasks. The project will provide training to facilitate participation in project activities by interested operators that are insufficiently equipped for technology transfer.

Annex 8: Project Implementation Performance of Parent Project

BURKINA FASO – Agricultural Productivity and Food Security Project (PAPSA)

1. Overall the project is successfully achieving its development objectives. The project is currently rated satisfactory in terms of progress towards achieving its PDO and also satisfactory in the overall Implementation Progress (IP). Over 90 percent of the original grant of US\$40 million will be committed by end of FY14.

Table 6.1: Summary of the Project Performance over the course of 2013 as rated in ISRs

	ISR Ratings Sequence and Dates				
Rating items	February 14, 2013	November 18, 2013	March 24, 2014		
	Sequence 5	Sequence 6	Sequence 7		
PDO Objectives	MS	MS	S		
Implementation performance ratings					
Overall IP	S	MS	S		
Project management	S	MS	S		
Financial management	MS	MS	MS		
Counterpart financing	S	MS	MS		
Procurement	MS	MS	S		
M&E	MS	MS	MS		
Overall Safeguards rating	S	MS	S		
Overall risk rating	Moderate	Moderate	Moderate		
Project component ratings					
Improving food production	S	MS	S		
Improving the availability	S	S	MS		
of food products	S	S	MID		
Institutional development and Capacity Building	S	MS	S		

Component 1: Improving food production. This component aims at financing (a) 2. matching grants; and (b) community works to support the adoption of high performing agricultural technology packages by poor households. As of December 31, 2013, the project has contributed under this component to the establishment of 207 on-farm trial plots (with different technology packages) along with 218 commented visits with 12,636 participants of whom 44 percent have been women. The project has contributed to developing 6,623 ha of lowland (82 percent of the target, 43 percent of beneficiaries are women), 7,952 ha covered by soil and water conservation measures (53 percent of the target) and 9,396 compost pits (84 percent of the target). Implementation of activities in support of animal production achieved significant results and included 3,200 dairy cows inseminated and about 25 million of poultry vaccinated against Newcastle disease. Environmental related activities implemented in areas adjacent to protected areas included proofreading/revision of six forest development plans, completion of 10 inventories of fauna in four targeted protected forests, rehabilitation of 600 ha of degraded land in protected areas, manually opened 3,000 km of access roads and mechanically opened 300 km of access roads, etc.

- 3. The project has supported the capacity building of public and private service providers involved in the implementation of the project activities including the project coordination team, producers, farmers' organization, etc. Training has been provided on various topics with the aim of ensuring proper implementation of advisory support activities which benefited 1,338 persons. The project has supported the training of leaders of 86 farmers' umbrella organizations and 348 farmers' organization members and the members of 83 interprofessional organizations on different topics. The project contributed to reinforcing the technical capacity of farmers involved in the development of value chains. Indeed, 6,774 producers of whom 1,725 are women have already received training in various topics against 2,000 targeted by the project.
- 4. **For the agricultural input supply delivery systems,** the "voucher for work" program has not been implemented due to difficulties encountered in recruiting technical and financial operators. An alternative mechanism has been proposed and successfully implemented. This mechanism is aligned with the government input subsidy system consisting of 50 percent subsidy of inputs for poor households with the Regional Chamber of Agriculture (CRA) assistance in identifying the targeted producers and private input dealers involved in inputs distribution.
- 5. The project governance mechanisms have been set-up and these will be applied in the implementation of the Additional Financing. The decree establishing the Steering Committee (SC) has been adopted and the technical monitoring committee (TMC) has been set-up. The SC has a joint composition with ten representatives of the public sector and ten representatives from the private sector and professional agricultural groups. The SC is functional and its regular annual sessions are held for approving Annual Work Plan and Budget as well as to take decisions on key strategic orientations of the project. Four sessions of the TMC have been organized involving consultations with and participation of all stakeholders involved. A light project coordination unit is in place headed by a National Coordinator and assisted by a financial management specialist, a procurement specialist, M&E specialist, an internal controller, an assistant and an accountant.
- 6. The project implementing agencies are in place. All project focal points in the Ministries (Ministry of Agriculture and Food Security, Ministry of Livestock and Fisheries, Ministry of Environment and Sustainable Development) are also in place and leading the implementation of project activities in their respective areas of competence. The project contributed to building the technical and organizational capacities of the Regional Chamber of Agriculture (CRA). Moreover, six technical multidisciplinary teams consisting of an agronomist, an animal production specialist and an M&E specialist under the administration of CRA are in place and are in charge of overseeing project implementation in the 13 regions.
- 7. Component 2. Improving the availability of food products. This component aims at strengthening the capacities of stakeholders to manage the variability of food supplies at local and national levels. This component has two subcomponents: Sub-Component 2.1: Reducing post-harvest losses and the Sub-Component 2.2: Supporting the marketing of food products. The aim is to provide matching grants to eligible producer groups to: (i) ensure dissemination of improved technologies for reducing post-harvest losses, including improved granaries and double-bagging; (ii) finance multifunctional platforms to facilitate adoption of food processing equipment; (iii) support the reinforcing of small scale improved food processing units managed principally by women groups in rural areas; and (iv) to finance the development of village level warehouse receipt (Warrantage) schemes.

- 8. As of December 2013, the project has supported the procurement of 52 multifunctional platforms for women groups and distributed 230,000 conservation bags (triple-bagging) for cowpea conservation to women groups. The average storage duration was increased from 2 to 7 months and women's income improved. Environmental related activities included acquisition of 350 hives and 16 Shea butter extraction presses improved income generation of local communities around protected areas with an increase from CFAF 100 million to CFAF 290 million as well as the availability of non-timber forest products through production and processing such as honey and Shea butter.
- 9. As of December 2013, the project has supported the establishment of 60 *Warrantage* schemes which stored 1,878 tons of products, and leveraged CFAF 118,886,505 (US\$237,773) credit from microfinance institutions. Furthermore, 98 cereal banks have been restructured into marketing cooperatives and have provided encouraging results and attracted the interest of the beneficiaries. For animal production, 2.6 million liters of milk have been collected by 44 milk processing units against 1.3 million targeted.
- 10. Component 3. Institutional development and capacity building. This component aims at reinforcing capacities of institutions directly involved in the project implementation and coordination and M&E activities. Specifically, the component finances consultant services, equipment, training sessions, study tours and farmers' field days, and communication and information activities (e.g. awareness-raising campaigns, technology workshops, etc.). The project activities have been implemented through the following sub-components: (i) Sub-Component 3.1:-Building capacities for extension and advisory services to farmers; (ii) Sub-Component 3.2:- Strengthening agricultural input supply delivery systems; (iii) Sub-Component 3.3:- Strengthening the capacity of Producers' Organization; and (iv) Sub-Component 3.4: Coordination, Management and Monitoring & Evaluation (M&E) of project activities with the aim of providing the required knowledge support for the implementation of project activities, expanding of existing network of input distributors in the rural areas and capacity building including training for project stakeholders, multidisciplinary teams, and local technical staff.
- 11. The project has supported the capacity building of public and private service providers to support the implementation of the project activities including the project coordination team, producers, farmers' organization, etc. Training has been provided on various topics with the aim of ensuring proper implementation of advisory support activities. Training of public and private technical advisory service providers benefited 1,338 persons. The project has supported the training of leaders of 86 farmers' umbrella organizations and 348 farmers' organization members. The project also supported the training of members of 83 interprofessional organizations on partnership contract management and on quality standards of agricultural products. The project contributed to reinforcing the technical capacity of farmers involved in the development of value chains. Indeed, 6,774 producers out of whom 1,725 are women have already received training in various topics against 2,000 targeted by the project.

Annex 9. Financial Management, Procurement and Safeguards

A. Financial management

- 1. The overall financial management risk for the additional financing is rated Substantial. It is considered that the financial management satisfies the Bank's minimum requirements under OP/BP 10.00, and therefore is adequate to provide, with reasonable assurance, accurate and timely financial management information on the status of the project required by World Bank.
- 2. Two Designated Accounts (DAs) will be opened at the Central Bank in Ouagadougou and will receive project proceeds on the basis of the project cash needs. The DAs will be used as a transit accounts. One DA will finance eligible expenditure of the matching Grant Scheme under Component 2 of the Project. A second DA will finance all other eligible expenditures under the other components. These accounts will be opened at a commercial bank acceptable to the Association. The Coordinator and the Finance Officer will be joint signatories of these accounts. Direct payments and special commitments, will be made to service providers if needed be. Disbursements will continue to be based on IFRs. Additional details will be contained in a Disbursement Letter.
- 3. In-year Reporting and Monitoring: The un-audited Interim Financial Report (IFR) format of the original project will be updated to include the new elements introduced under additional financing. It will comprise sources and uses of funds by project expenditure classifications, a comparison of budgeted and actual project expenditures (commitments and disbursements) to date, and for the quarter. The PCU will submit the financial reports to the Bank within 45 days following the end of each calendar quarter.
- 4. Annual Financial Statements: As required under the original project, the PCU will prepare the project's annual financial statements, including the activities related to additional financing in compliance with IFAC Standards and World Bank requirements. These financial statements will include: (a) a statement of sources and uses of funds; (b) a statement of commitments; (c) accounting policies adopted and explanatory Notes; and (d) a management assertion that project funds have been expended for the intended purposes as specified in the relevant financing agreements.
- 5. External audit: The Financing Agreement as agreed during negotiations, requires the submission of Audited Financial Statements for the project (original and AF) to IDA within six months after end of Government's fiscal year. The scope of the work of the external auditor of the project will be extended to cover the additional activities under the additional financing. An opinion on the Audited Project Financial Statements in compliance with International Federation of Accountant (IFAC) is required.
- 6. Financial Covenants: The Borrower shall establish and maintain, at all times, a financial management system including records and accounts, and shall prepare related financial statements in accordance with accounting standards acceptable to the Bank.

B. Procurement

7. Procurement for the project will be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits "dated January 2011 (Procurement Guidelines); and "Guidelines: Selection and Employment of Consultants by World

Bank Borrowers" dated January 2011 (Consultant Guidelines) and the provision stipulated in the Financial Agreement. The various procurement actions under different expenditure categories are described in general below. For each contract to be financed under the Financing Agreement, the various procurement or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame have been agreed between the borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The implementing entities, as well as contractors, suppliers and consultants will observe the highest standard of ethics during procurement and execution of contracts financed under this project. "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants" dated October 15, 2006, updated in January 2011 (the Anti-Corruption Guidelines) shall apply to the project.

- 8. **Procurement of Goods, Works and non-consulting services:** Procurement will be done under International Competitive Bidding (ICB) or NCB using the Bank's Standard Bidding Documents for all ICB and National Standard Bidding, or alternatively documents agreed with or satisfactory to the Bank. Community participation in accordance with the provisions of paragraph 3.19 of the Procurement Guidelines will apply for activities outlined in the financial agreement and elaborated in the project implementation document. Small value procurements for goods and works may be procured under shopping procedures. Direct contracting may be used where necessary if agreed in the procurement plan in accordance with the provisions of paragraph 3.7 to 3.8 of the Procurement Guidelines.
- 9. National Competitive Bidding (NCB) Procedures: For all contracts which are not advertised internationally, identified as NCB procurement method in the project procurement plan approved by the Bank, national procedures will apply consistent with the legal framework for procurement in Burkina Faso. The national competitive bidding procedures currently in force in the Burkina Faso were evaluated previously by the Bank, and generally found to be acceptable, with certain exceptions. Firstly the national procurement thresholds are very low compared to the Bank thresholds and all contracts estimated to cost US\$10,000 and more are summited to prior review of the Ministry of Finance. This is causing time delays in the procurement process. The Ministry is implementing measures to eliminate redundant prior review controls and reduce time delays. Secondly the national standard bidding documents were finalized and published on July 2009. The Bank is working with the government to identify the inconsistencies with the Bank's standard bid documents in order to recommend some exceptions to the NCB method, to facilitate Bank investment operations. Until the national bidding documents are finalized and acceptable to the Bank, the Bank's standard ICB documents would be adapted for all NCB procurements identified in the procurement plan. The adapted version will be cleared by the Bank.
- 10. **Selection and Employment of Consultants**: The selection method will be Quality and Cost Based Selection (QCBS) method whenever possible. Contracts for specialized assignments estimated to cost less than US\$200,000 equivalent may be contracted through Consultant Qualification (CQ).
- 11. The following additional methods may be used where appropriate: Quality Based Selection (QBS); Selection under a Fixed Budget (FB); and Least-Cost Selection (LCS); Short lists of consultants for services estimated to cost less than the equivalent of: (i) US\$500,000 per contract for supervision; and (ii) US\$200,000 for all other consultancy assignments may be

composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. However, if foreign firms express interest, they will not be excluded from consideration. Single Source Selection (SSS) may be employed with prior approval of the Bank and will be in accordance with paragraphs 3.8 to 3.11 of the Consultant Guidelines. All services of Individual Consultants (IC) will be procured under contracts in accordance with the provisions of paragraphs 5.1 to 5.6 of the Guidelines.

- 12. **Operating Costs:** Operating costs shall consist of operations and maintenance costs for vehicles, office supplies, communication charges, equipment, utility charges, travel expenses, per diem and travels costs, office rental, training costs, workshops and seminar and associated costs, among others. Operating costs will not include salaries of civil servants.
- 13. **Training and Workshops:** Training and workshops will be based on capacity needs assessment. Detailed training plans and workshops activities will be developed during project implementation, and included in the annual work plan and budget for Bank's review and approval.
- 14. **Assessment of Procurement Capacity and Risks:** Procurement performance is rated satisfactory. Procurement arrangements will remain largely the same under the proposed Additional Financing. The procurement unit is well staffed to handle the existing portfolio and the proposed additional resources.
- 15. **Procurement plan:** The Recipient has developed a draft procurement plan for the first 18 months of the implementation of activities under the Additional Financing as the basis for the procurement methods for each contract. Immediately upon approval of the Additional Financing, with the Recipient's agreement and following revisions if needed, the plan will be published on the Bank's public website and the Recipient's intranet website. Once approved, the procurement plan shall be updated in agreement with the Bank on an annual basis or as required, to reflect the actual project implementation needs and improvements in institutional capacity.
- 16. **Fraud, Coercion, and Corruption:** All procuring entities, as well as bidders, suppliers, and contractors shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraphs 1.16 & 1.17 of the Procurement Guidelines and paragraphs 1.23 & 1.24 of the Consultants Guidelines.
- 17. **Frequency of Procurement Implementation Support :** In addition to the prior review as indicated in the procurement plan, the preliminary capacity assessment of the implementing agency recommended supervision missions to visit the field twice a year and to carry out post reviews of procurement actions once annually.

C. Safeguards

- 18. The project triggered: OP/BP 4.01 on Environmental Assessment; Pest Management (OP/BP 4.09); and Involuntary Resettlement (OP/BP 4.12) and was rated as environmental assessment Category B. No additional new safeguards policies are triggered by the AF.
- 19. An Environmental and Social Management Framework (ESMF), Resettlement Policy Framework (RPF), and Pest Management Plan were prepared, consulted upon and disclosed from January to March 2009. Two Environmental and Social Impact Assessments (with Environmental and Social Management Plans) were prepared, consulted upon and disclosed in March 2012. An Environmental and Social Screening Report was also prepared and disclosed in December 2013. The updated ESMF, RPF, and PMP have been re-disclosed in May 2014.

- 20. An environmental audit of the project was undertaken in February 2014. While most of the sub-projects involved minor civil works and impacts for which mitigation measures were guided by the ESMF, in some cases, Environmental and Social Management Plans (ESMPs) should have been prepared and more efforts need to be undertaken to improve capacity for environmental management. Corrective measures have been undertaken. During implementation of the AF and the original project, ESMPs will be prepared, consulted upon and disclosed for project activities with moderate to major impacts.
- While an RPF was prepared for the original project, to date, it has not been necessary to prepare a RAP, as no land acquisition leading to resettlement or restrictions of access to resources or livelihoods has occurred. Land is owned by communities, and, following a consultative process within the communities, tenants, with assistance from the project, have been making improvements to the land they cultivate during the dry season. Once the improvements are made to the land, priority is given to the tenants to choose plots for farming. In April 2014, the Bank undertook a social audit to examine the land tenure arrangements. While the audit confirmed that RAPs are not necessary, it recommended that: (i) the record-keeping for the land tenure arrangements be improved so that such records were accessible to the communities; (ii) remind communities about the availability of a grievance redress system for the project; (iii) ensure the safeguards documents are available in all the participating communities; and (iv) there be more regular supervision of the social safeguards issues, given the land tenure arrangements in the project.
- 22. All three safeguard documents provide detailed mitigation measures to ensure sustainability and compliance with Burkina Faso's regulations and legislations, as well as with the World Bank environmental and social policies. Activities financed under the project will be screened using a standardized approach based on the tools developed under the original project. ESMPs will be prepared as needed for the small works expected to be undertaken under this AF. For works with negligible impacts environmental measures based on national laws and regulations will apply.
- 23. The PCU does not currently have a specific environmental specialist and the staff in charge of monitoring and evaluation who benefitted from safeguards training during Bank supervision missions has so far been responsible for safeguards implementation. Moving forward, under this AF, the PCU will hire a dedicated Environmental and Social Expert to oversee the implementation of the project safeguards instruments and coordinate efforts at the national level. The PCU staff will continue to regularly monitor and follow-up with any safeguard issues. The Bank's supervision missions will also continue to include environmental and social specialists. Moreover, as part of capacity building activities under sub-component 3.4, the project will help the Ministry of Environment to monitor the implementation of the project's three safeguards instruments.

Annex 10. The Warrantage scheme description

- 1. Warrantage is a rural credit guarantee scheme. Its introduction in West Africa (Niger) in 1999 is generally attributed to the European Union's Aid Program for World Hunger but the scheme, in fact, has its roots in agriculture credit in Europe in the 19th century. The scheme enables groups (associations) of village farmers to: (i) receive full or partial payment for their crop production upon delivery; (ii) access financial institution financing using the crop as collateral; (iii) enhance sales prices due to the "consolidation" of the group's production; and (iv) benefit from higher price trends which may materialize once the "glut" of seasonal supply has passed. It allows farmers to borrow money without having to sell off their produce when prices are the lowest, conduct other income generating activities but also take advantage of price increases at the time of lean periods and/or dispose of their production for their own consumption after repayment of the loan. Warrantage financing is increasingly being successfully used in West Africa (notably Niger, Burkina Faso, Niger and Senegal), as well as globally, and is increasingly receiving the support of the World Bank Group, European Union, FAO, USAID and other donor and microfinance institutions.
- 2. The credit advance generally covers a period of several weeks or months. Warrantage is typically extended by or through a microfinance institution, working independently or in concert with commercial banks or donor organizations which have greater access to financing resources. The scheme is purposely kept "simple" and relevant to the farmer association. It draws on the local MFI's astute institutional knowledge of the farmer and farming community and their proven track record to perform. A farmer will generally deliver his or her harvest to a local warehouse, whose access is held jointly by the financial institution and farmer association, usually in the form of two pad locks. Upon delivery of the harvest, the farmer receives some payment. The stock generally serves as collateral for advances which the farmer then uses to buy essential inputs for his or her next crop or for other essential purposes (school fees is one such use).
- 3. The harvest is generally sold to traders or processors who come to the village warehouses to seek products. As the harvest period elapses, the farmer association and MFI, agree, in consultation, with the timing of the further sale of stored produce. The time lapse may result in the appreciation of the net price which the farmer obtains for his harvest. Indeed, recent statistical data by FAO and others reveal that farmer associations receive substantially higher returns for crops held under Warrantage. These returns, in return, enable the farmer to purchase improved seed, fertilizer, small pumps and other inputs which help to increase yield and production. Warrantage is also proving to be an effective means to introduce MFIs and local commercial banks to agriculture financing. However, the scheme also has its risks. The MFIs and farmers association must take special care to insure that the crop held in inventory is well and safely stored and that they avoid commodity speculation. Further, the farming association needs to be well organized. Appropriate banking legislation needs to be in place and enforceable.
- 4. Warrantage has, to date, typically been used in West Africa for non-perishable crops like millet, peanuts and rice. However, it may also be extendable, with particular care for storing, to onions, garlic, dried tomatoes and peppers, and other crops.

