

AFRICAN DEVELOPMENT BANK GROUP



BURUNDI

SUPPORT TO AGRICULTURE TRANSFORMATION IN THE BUGESERA NATURAL REGION PROJECT (PATAREB)

APPRAISAL REPORT

AHAI DEPARTMENT

November 2017

Translated version

TABLE OF CONTENTS

	<u>PAGES</u>
<i>Currency Equivalents, Fiscal Year, Weights and Measures, Abbreviations and Acronyms, Project Brief, Project Summary, Results-Based Logical Framework, Project Implementation Schedule</i>	<i>i to v</i>
RESULTS-BASED LOGICAL FRAMEWORK.....	v
I. Strategic Orientation and justification	1
1.1. Linkages with the Country's Strategy and Goals.....	1
1.2. Justification of the Bank's involvement.....	1
1.3. Aid Coordination	2
II. Project Description.....	4
2.1 Components of the project.....	4
2.2 Adopted technical solutions and substitution solutions studied	5
2.3 Type of Project	5
2.4 Cost of project and financing arrangements	6
2.5 Area and beneficiaries targeted by the project	8
2.6 Participatory approach for the identification, design and implementation of the project.....	8
2.7 Consideration of Bank Group experience and lessons learned in project design.....	9
2.8 Key performance indicators.....	10
III. Project feasibility.....	10
3.1 Economic and financial performance	10
3.2 Environmental and social impact	12
IV. Implementation.....	15
4.1 Provisions for implementation:	15
4.2 Monitoring	17
4.3 Governance	18
4.4 Durability.....	18
4.5 Risk management	19
4.6 Knowledge Development	19
V. Legal framework	19
5.1 Legal instrument	19
5.2 Conditions associated with the intervention of the Bank	19
5.3 Compliance with Bank Policies.....	20
VI. Recommendation.....	20

Currency Equivalents

(October 2017)

Currency Unit =BIF

1 UA = 2.472.99675 BIF

1 UA = US \$ 1.41339

1 UA = 1.24727 Euro

Financial Year

1 January - 31 December

Weights and Measures

1 metric ton = 2204 pounds

1 kilogram (kg) = 2,200 pounds

1 meter (m) = 3.28 feet

1 millimetre (mm) = 0.03937 inches

1 kilometre (km) = 0.62 mile

1 hectare (ha) = 2,471 Ares

Acronyms and abbreviations

IGA	: Income Generating Activities
BIF	: Burundi Francs
WB	: World Bank
FDC	: Family Development Centre
TEC	: Technical Education Centre
PMU	: Project Management Unit
PSC	: Project Steering Committee
SFGPR II	: Strategic framework for growth and poverty reduction II
BTC	: Belgian Technical Cooperation
AVC	: Agricultural Value Chain
GDAPL	: General Directorate of Agricultural Planning and Livestock
PDAL	: Provincial Directorate for Agriculture and Livestock
CSP	: Country Strategy Paper
AFD	: African Development Fund
FAO	: Food and Agriculture Organization of the United Nations
TSF	: Transition Support Funds
IFAD	: International Fund for Agricultural Development
M/F	: Male/Female
IEC	: Information Education and Communication
MINAGRIE	: Ministry of Agriculture and Livestock
DPM	: Delegated Project Manager
MSNDPHG	: Ministry of National Solidarity, Human Rights and Gender
PAIRB	: Rural Infrastructure Support Project for the Bugesera Natural Region
PATAREB	: Support to Agriculture Transformation in the Bugesera Natural Region Project (PATAREB):
CAADP	: Comprehensive Africa Agriculture Development Programme
ESMP	: Environmental and Social Management Plan
PPP	: Public Private Partnership
TFP	: Technical and Financial Partners
NAS	: National Agricultural Strategy
UA	: Unit of Account
EU	: European Union
NPV	: Net Present Value
IRR	: Internal Rate of Return

PROJECT DOCUMENT

CLIENT RECORD

BENEFICIARY Republic of Burundi

EXECUTING AGENCY Ministry of Agriculture and Livestock (MINAGRIE)

Financing Plan

Source	Amount	Instrument
TSF (Pillar I)	UA 12 million	Grant
Government	UA 0.00 M.	-
TOTAL COST	UA 12 M.	

Key information on TSF financing

TSF Grant Currency	\$US
Commitment fee:	% per annum on undisbursed amounts
Service Commission	0% of outstanding amount per year
TRE (baseline scenario)	23.01%
TRI (baseline scenario)	20.17%
NPV	BIF 89,72 billion

Time Frame - Main milestones (Expected)

Preparation	August-September 2017
Concept Note Approval	October 2017
Project appraisal	October 2017
Project approval	December 2017
Entry into Force	January 2018
Closure of loan	December 2022
Last Disbursement	June 2023

Project Summary

General overview of the project: The Support to Agriculture Transformation in the Bugesera Natural Region Project (PATAREB) covers Bugesera natural region comprising seven (07) municipalities in Kirundo Province and Gitreranyi municipality in Muyinga Province. These municipalities cover an area of 2 100 km ², that is 7,5 % of the national territory, and has a population of 1 004 907 inhabitants (2017 estimates), 519 665 of them women, or more then 51,71% of the population within the project intervention zone (PIZ). The project targets economically, socially and environmentally fragile and disadvantaged communities, who possess significant agricultural and fish farming potential and whose sustainable development will contribute to improving food and nutritional security, increase the income of vulnerable small-scale producers, alleviate the impact of poverty on rural households and strengthen the resilience of populations, including women and youth. With a total cost of UA 12.00 million, fully funded from Pillar I (additional support) resources of the Transition Support Facility (TSF), the project will be implemented over a five-year period in three (03) components: (i) Support to Agricultural Infrastructure Development; (ii) Promotion of Agricultural Transformation and Improvement of the Living Conditions of inhabitants; and (iii) Management and Coordination. PATAREB will directly benefit more than 650,000 people, 51% of them women, and approximately 355 000 residents within the area of intervention. In order to ensure sustainability of investments, the participative and inclusive approach adopted during preparation and evaluation will continue during execution in order to associate all the recipients and to allow the durability of the investments. Similarly, an innovative approach to participative development of agricultural values chains and streams will be adopted to address the key constraints to durable financing of agricultural entrepreneurship within the framework of public-private partnerships (PPP) and improve the access to markets, guaranteeing a better price for producers.

Needs Assessment: Burundi's agricultural sector engages more than 94% of the active population and accounts for more than 39% of the GDP, more than 80% of foreign exchange earnings and provides 95% of the dietary intake. It also accounts for 25% of government spending. The financing needs of the sector were estimated at approximately BIF 145 billion during the evaluation mission, to achieve the objectives of the National Plan for agricultural investment (NAIP-2012-2017) in terms of increased production and productive capital, organization of producers, developing profitable sectors and strengthening institutions providing technical support to rural areas. In 2017, the resources are estimated to be BIF 59.28 billion, a significant deficit of over BIF 85.70 billion. The TSF resources, approximately BIF 29.28 billion, will help to significantly reduce the financing gap, especially in the eight (08) municipalities in Kirundo and Muyinga Provinces. Moreover, the control of water for irrigation in the project area requires significant resources, as well as the dissemination of new technologies, creation of added value in the main agricultural sectors, sustainable promotion of young agricultural entrepreneurs, and strengthening resilience of socio-ecological systems.

Added value for the African Development Bank: PATAREB supports the Bank's Ten Year Strategy 2013-2022 and the priority intervention areas funded by TSF in Burundi will support food and nutritional security, value chains and strengthen resilience. In particular, the project will contribute to reducing the Agricultural Financing Gap, serving as a catalyst for agricultural development of the area, by promoting a better control of water, reinforcing economic infrastructures, promoting appropriate technologies for food production, processing and marketing. In addition, PATAREB reinforces the Bank's role in financing the agricultural sector in Burundi while taking into account the Bank's previous experience in similar projects. Lastly, it implements the Bank strategy to "remedy fragility and reinforce resilience in Africa

2014-2019” by consolidating the role of communities, the private sector, and local NGOs in reinforcing resilience, local governance and citizen monitoring. This intervention will help build resilience and reduce situations of fragility that characterize the targeted Provinces. The project is also aligned to the Bank's Gender Strategy 2014 - 2018, in strengthening their right to ownership of developed land, economic empowerment through income generation and strengthening their capacity in management and in entrepreneurship.

Knowledge management PATAREB will establish a baseline for land surveys (including on value chains), which will serve to establish a reliable database, disaggregated by gender, to measure results indicators and the impact of the project. A geo-referenced map will be created to provide information on developed sites and completed infrastructure. Specific impact assessment studies (quick and in-depth) will be carried out by competent firms and the results will feed into the project database. This information will be made available on a web site and will be shared with all stakeholders. The project will also support training and capacity building for diverse local actors, including, in the first instance, farmers within the reclaimed wetlands and women in charge of processing and marketing food products. The project will seek to disseminate good practices for conservation and storage of agricultural products. In the field of irrigation, the project will develop expertise in hillside irrigation using solar energy, and resilience to climate change, disseminating innovative actions promoting local know-how, including by women. Communication mechanisms and capitalization of project outcomes, value addition processes benefiting women and youth through development of value chains, as well as participatory assessment and evaluation by the civil society integrated within the project implementation mechanism, is part of knowledge management.

RESULTS-BASED LOGICAL FRAMEWORK

(*): Baseline indicator data will be updated at the end of the baseline survey.

COUNTRY AND NAME OF PROJECT:		Burundi : Support to Agriculture Transformation in the Bugesera Natural Region Project (PATAREB) :				
PROJECT PURPOSE:		Stimulate agricultural development of Bugesera natural region by setting up production infrastructure, promoting agricultural value chains and support to social safety nets.				
RESULTS CHAIN		PERFORMANCE INDICATORS			VERIFICATION METHODS	RISK MITIGATION MEASURES
		Indicators (including ISP)	S. of Reference	Target		
IMPACT	Long term		2017	2022 and beyond	Stat. INSAE, EMICOV/EDS SCRPIII Studies / Survey AGVSA Reports	
	Food and nutritional security improved and incidence of poverty reduced	Average prevalence of food insecurity in the project intervention zone (PIZ)	12%	5% / 8% (2020)		
		Prevalence of chronic malnutrition (children 5-59 months) in the PIZ	50.8%	25% / 35% (2020)		
		Proportion of population in poverty within the PIZ, disaggregated: M/F	39%	25% / 30% (2018)		
Medium Term			2015	2020		Risks
OUTCOMES	1. An increase in agriculture, food , vegetables and fish production	Average productivity for rice and sorghum respectively (T/Ha)	≤ 2 and 0.8	≥ 10 and 2	Agricultural statistics Project Monitoring Reports Mid-term review report and project completion report	• Unclear land and demesnlal issues may bring difficulties in highlighting sites to be developed and compromise project objectives in terms of food security and the fight against poverty particularly for women and youth. Mitigation measures • Support to the project in terms of planning and land management which will result in the establishment of tripartite agreements (rights holders of the common lands, professional organizations) and cooperatives in order to mitigate conflicts
		Average productivity of maize and cassava respectively (T/Ha)	≤ 1 and 4.5	≥ 2.5 and 12		
		Average productivity for vegetables (T/Ha)	≤ 2	≥ 2.5 and 12		
		Commercial fish production volume / year (T)	700	2.200		
	2. Improved income for producers in rural areas, including women and young farmers	Income/year for food crop production managed by men/women (BIF)	540000/300000	1000000/855000		
		Income/year for horticulture production men/women (BIF)	90000/171000	1905000/2175000		
		Income per year for fish farm run by men/women (BIF)	ND	1260000/1065000		
	3. Access to income and social services improved for very poor households	Number of households benefiting from social transfers	ND	1500		
		% of social transfer beneficiaries with a current integrated farm plan.	ND	100%		
	3. Establishment of a pro-youth agri-business promotion framework	Number of operational companies with promoters H/F	ND	≥ 12/11		
		Number of bankable agri-business projects developed for H/F*	ND	100/88		
	Short Term			2017		
OUTPUTS	I. SUPPORT TO DEV. OF AGRICULTURAL INFRASTRUCTURE				Project activity report Monitoring unit reports Contracts signed with the companies Civil Society Activity Report	• Climatic hazards may aggravate ecosystem degeneration (drought, flooding, etc.) leaving inhabitants more vulnerable and promoting conflict. • Restricted ownership and management of rural infrastructures Mitigation Measure: • Irrigation, protection of areas at risk, opening up production zones, integration of climate information in designing projects, and safeguarding incomes will alleviate this risk.
	1.1 Reclaiming wetlands	Reclaimed wetland areas (ha) for the benefit of men/women	618	1150		
	1.2 Development of hillside irrigation	Area covered by pilot highland irrigation (ha) for the benefit of M/F	0	30/20		
	II. AGRICULTURAL TRANSFORMATION AND	Area (ha) developed using new technologies for M/F	ND	3.382 / 2.200		

RESULTS CHAIN	PERFORMANCE INDICATORS			VERIFICATION METHODS	RISK MITIGATION MEASURES
	Indicators (including ISP)	S. of Reference	Target		
IMPROVEMENT OF LIVING CONDITIONS 2.1 Support to Development of Value Chains	Member of contact groups formed in the Farmer Field Schools (FFS) and Demonstration Units (DU) on technological innovations: M/F	0	105 / 105	• CARDER Reports Agreements and protocols signed Project activity report	• Capacity building in conflict management for municipalities Risks • Lack of follow-up of technological innovations by communities • Weakness of follow-up by municipalities (MOD), delays in procurement, low capacity in technical services and of companies. Mitigation Measures: • Take committed and participatory steps in involving, organizing and training local actors • Financing a capacity building program for all actors.
	Number of stores (post-harvest inputs) built managed by M/F	0	4 / 6		
	Person-days of training in technological review workshops : M/F	0/0	1450/1450		
	Number of peasants trained in fine with resilient technologies	ND	1750 / 1750		
	Number of producers of improved seeds assisted: M/F	0	20/10		
	Length of tracks built post-harvest (km)	0	13		
	Number of beneficiaries from the Funds for CVA Promotion : M/F	0	12,600/8,400		
2.2 Promotion of Youth Entrepreneurship	Number of business incubators supported	0	5≤	• DGPAE/MINAGRIE performance report • Civil Society Organizations report • MFI Report • Project Activity Report	
	Number of Youth Employability support beneficiaries	0 / 0	365 / 135		
	Number of PO and female EIG for transformation strengthened M/F	0 / 0	0 / 30		
	Number of innovative youth initiative support fund beneficiaries: M/F	0/0	105/105		
	Number of MFI that have signed agreements for rural financing	0/0	1		
	Number of young producers benefiting from support in fish farming M/F:	0/0	85 / 25		
2.3 Support to Social Safety nets	Area (ha) of catchment areas developed for the benefit of M/F	0/0	2.500 / 910		
	Area (ha) of catchment areas afforested for the benefit of M/F	0/0	1.000 / 650		
	Number of operators (M/F) benefiting from livestock breeds:	0/0	350 / 200		
	Number of operators (M/F) beneficiaries of agricultural inputs:	0/0	7.000 / 5.000		
	Number of operators (M/F) beneficiaries of IGA:	0/0	950 / 1.500		
	A number of social transfers beneficiaries taking part in awareness raising actions	0/0	2100		
III. PROJECT MANAGEMENT	Numbers of work plans and budget (AWB) produced and carried out	0/0	5	• MPP • SAP System • Audit Reports • Activity Reports • Mission aide-memoire • Impact assessment report	Risks • Institutional weakness of MINAGRIE in management and monitoring-evaluation. Mitigation Measures: A capacity building program for MINAGRIE and the PMU in project administration, procurement and financial management will mitigate this risk.
	Number of quarterly reports / approved annual audit reports	0/0	20/5		
	Numbers of PPM plans produced and updated /rate of disbursement	0/0	5 / ≥ 95%		
	Number of steering committee meetings held	0/0	10		
	Number of supervision missions carried out by project supervisors /the Bank	0/0	20 / 10		
	Number of mid-term review /completion reports produced	0/0	1/1		
	Number of mid-term review /completion reports produced	0/0	1/1		
COMPONENTS				INPUTS	
Component 1: Support to Dev. of agricultural Infrastructure:	UA 3.38 million (28.20%)		Total cost of project: TSF Grant Burundi Government	UA 12.00 million	
Component 2: Transf. Agricultural and improvement of living Cond.:	UA 7.46 million (62.19%)			UA 12.00 million (100%)	
Component 3: Project Management	UA 1.15 million (9.61%)			UA 0.00 million (0.00%)	
TOTAL UA 12.00 million (100%)					

(**) M/F: Male / Female

Indicative calendar of Project Execution

No	ACTIVITIES	2017		2018				2019				2020				2021				2022				2023	
		T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4	T1	T2
1	TSF Grant Negotiations																								
2	Signature of grant agreement																								
3	Satisfaction of conditions precedent to 1st disbursement																								
4	Publication of general procurement notice																								
5	Recruitment of PMU staff																								
6	PATAREB launching workshop																								
7	Procurement of PMU goods and offices (vehicles, IT equipment etc.)																								
8	Update of project baseline																								
9	Signature of agreements with partners organisations																								
10	Development of the Annual Work Plan(PTA)																								
11	Installation of management unit																								
12	Recruitment of service providers																								
13	Hillside irrigation: DAO																								
14	Installation of post-harvest infrastructure (tracks, storage warehouses, processing units): DAO																								
15	Agreement with Micro-finance Institutions																								
16	Agreement with Partner Organisations																								
17	Development of Rice Value Chains																								
18	Development of Sorghum Value Chains																								
19	Development of Maize Value Chains																								
20	Introduction of Blue Economy Value Chain																								
21	Training of actors																								
22	Watershed Management (ABV)																								
23	Support to Social Safety Nets																								
24	Development of Markets and Marketing																								
25	Monitoring and Supervision of Work																								
26	Development & Implementation of Monitoring-Evaluation System																								
27	Annual external audit																								
28	Completion report																								

PROPOSAL AND RECOMMENDATION OF MANAGEMENT TO THE BOARDS OF DIRECTORS OF THE AFRICAN DEVELOPMENT BANK GROUP CONCERNING A TRANSITION SUPPORT FACILITY GRANT TO THE REPUBLIC OF BURUNDI TO FINANCE THE SUPPORT TO AGRICULTURE TRANSFORMATION IN THE BUGESERA NATURAL REGION PROJECT (PATAREB)

Management submits this proposal for a UA 12 million TSF grant to the Republic of Burundi, to finance the Support to Agriculture Transformation in the Bugesera Natural Region Project (PATAREB).

I. Strategic Orientation and justification

1.1. Linkages with the Country's Strategy and Goals

1.1.1. PATAREB is in line the implementation framework strategy of Government overall development policy, as captured in the "Burundi Vision 2025" document and in the 2 phase of strategic framework for growth and poverty reduction (PRSP II). At the sector level, it at the same time supports implementation of the national Plan for agricultural investment (NAIP) linked to Burundi's National Agricultural Strategy (NAS) of the implementation of the national policy on social protection, as well as the national employment policy These strategies aim at a high and inclusive growth likely to promote improvement in the quality of life of vulnerable populations, by addressing food and nutritional security constraints, increasing incomes and creating employment particularly for the youth, by making agriculture more attractive. In addition to structural investments in water control, development of wetlands and afforestation of ridges, the project will contribute to the development of agricultural value chains targeted through new growth areas in Bugesera region and taking into account agro-industrial needs (rice, maize, sorghum, horticultural products, fish), as well as strengthening household resilience towards climate change. The project will also contribute directly to the objectives of the Comprehensive Africa Agriculture Development Programme (CAADP) of Agenda 2063 of the African Union and Sustainable Development Goals (SDGs), related notably to food security et improvement of nutrition, promotion of sustainable agriculture discernible by production, productivity and greater value addition, youth employment, infrastructure, promotion of gender equality and empowerment of women as well as climate change.

1.2. Justification of the Bank's involvement

1.2.1 Agriculture financing remains insufficient as a result of reduction of external financing but also because the Government has not increased the proportion of national resources reserved for the agricultural sector. The share of the national budget reserved for agriculture was, on average, 5.2% between 2012 and 2014, compared to 10% of the national budget agreed upon during the Maputo declaration and the PNIA review conducted in 2015 showing a gap of 450 billion BIF, which did not meet the target objective of inclusive growth, poverty reduction and strengthening of nutritional and food security. Considered in the past as the breadbasket of Burundi, Kirundo province, the project intervention zone is seriously affected by irregular rainfall patterns. As a result, it is one of the main emigration areas in the country. Climate analysis shows that the rainy season regularly experiences altered rainfall patterns and when this happens during the main farming seasons, the fall in agricultural production is considerable, increasing the rate of food insecurity which may be as high as 60%. On average, water deficit is estimated at more than 40%, which makes the choice offered by the development of swamps and hillside irrigation the best strategies to ensure a good harvest. In addition, due to a combination of several factors such as (i) the sharp drop in agricultural production resulting

from climate change, (ii) the precariousness of populations, exacerbated by the widespread practice of selling of standing crops causing a sharp drop in prices paid to producers, (iii) the high level of unemployment and underemployment, especially of the youth, Kirundo province is among the poorest in the country with a poverty index of 69.2% (ECVMB 2014) and a rate of malnutrition of children under 5 years, at more than 60%. In a context where 85 percent of the possesses land of less than or equal to 50 Ares and an average more than 6 children per household, efforts must be made to improve agricultural productivity, support the resilience the most vulnerable populations by allowing them to have access to employment and methods of financing income-generating activities.

1.2.2 As a result of drought experienced in Kirundo Province in recent years which have had a negative impact on living conditions, the Government has implemented an ad hoc working group to propose a lasting solution to this situation. Within this context, the Bank was requested to support this program by financing PATAREB, for an amount of UA 12 million, to strengthen the resilience of the people of this region. This TSF support will help reduce the deficit in agricultural investment within the region, in particular by implementing the NIPA of the SAN. Consistent and high rates of agricultural growth resulting from high productivity are therefore necessary for increase in incomes and to accelerate poverty reduction. By targeting this disadvantaged area with significant agricultural potential, and by supporting development of infrastructure and agricultural entrepreneurship, the TSF intervention will help reduce poverty, social disparities, promote employment of the youth, mitigate fragility, and build resilience to climate change. In the project design, the prism of fragility has been applied so that the main sectoral fragility factors identified in the project implementation zone are taken into account by project activities, as indicated in annex IV. Finally, the project fits within the strategy of some agribusiness companies who have opted for the substitution of imported raw materials with local products, which will contribute to the improvement of the country's trade balance.

The Bank's intervention through this project is justified by the vision and objectives of the transformation strategy for agriculture "Feed Africa" which is part of the High 5s of the Bank. The project will indeed contribute to the objectives of the strategy "Feed Africa" by: (i) poverty reduction through the financing of investment in facilities, infrastructure and equipment likely to be valued for the generation of income by the beneficiaries; (ii) promoting the transformation of agricultural products by agricultural value (CVA) chains; and (iii) the promotion of export of agricultural products by market development and the implementation of systems of market information. It also integrates the priority of the Bank "Improving the lives of people in Africa" insofar as it will contribute to: (i) eradicate famine by high quality and high volume food production; (ii) safeguard basic income through employment created within the framework of development work and income generating activities initiated in particular by households living in extreme poverty. Finally, through activities in support of Youth entrepreneurship, the project will contribute to the implementation of the Bank's strategy for Youth employment in Africa 2016-2025. At the national level, the project is aligned to the Bank's Country Strategy Paper for Burundi (2012-2016) which has been extended to the end of 2017, mainly on the Pillar II: Improvement of the infrastructure that integrates related activities oriented toward the fight against vulnerability and exclusion of vulnerable groups with the aim to contribute to mitigate the factors of fragility. Specifically, the project will contribute to results 4 to 7 of Pillar 2 namely: (i) contribution to the promotion of food security (ii) protection of the environment and sustainable management of soil and water, (iii) creation of jobs and (iv) adaptation to climate change.

1.3. Aid Coordination

1.3.1 The framework for aid coordination is based on the institutional mechanism of follow-up and evaluation of the LRCS2, articulated around the sectoral groups, which are frameworks for synergies and cooperation. Despite suspension of aid by some donors, the "agricultural and

rural development" and "social protection" sectoral groups have remained operational. The Bank actively participates in arrangement of consultations and dialogue which brings together non-governmental organizations involved in these sectors. The meetings are organised on a quarterly basis to facilitate discussions on subjects relating to policies, and to conduct, in a concerted manner, discussions relating to planning and programming of various projects and to ensuring regular monitoring of activities in the different sectors. This coordination mechanism allows improvement of complementarity of interventions by different PTFs, thus creating a natural synergy to multiply the impact of projects on the economic and social development of Burundi.

1.3.2 In the agricultural sector, the Bank financed the Bugesera natural region rural infrastructure support project which wrapped up its activities in 2016. The other donors involved in this sector are the World Bank, IFAD, the Kingdom of the Netherlands and Belgium. In the field of social protection, the Bank has financed capacity-building projects in the past few years which have allowed the setting up of institutional structures in charge of employment and social protection while at the same time supporting a project for strengthening entrepreneurial capabilities of the youth and women. The main stakeholders in the social protection sector are the World Bank, WFP and UNICEF. With respect to youth employment, the only active project is the one financed by IFAD. The table below presents the main amounts by sources of funding currently active in the agricultural sector in Burundi. The table below presents the principal amounts by sources of funding currently active in the agricultural sector in Burundi.

Table 1.1 Principal amounts active in the sector since 2012			
Sector or sub-sector*	Proportion		
	GDP	Exports	Labour Force
Agricultural sector	39% (2016)	80%	90%
Stakeholders - Public Expenditure (programs or projects in progress)			
Government	Donors	Amounts (USD million)	Duration
BIF 28.5 billion per year (Average 20012-2014) That is 5.2% of the National Budget	World Bank	155	2016-2022
	BANK	-	-
	BTC	27.8	2011-2017
	Kingdom of the Netherlands	27.1	2016-2021
	IFAD	144	2014-2019
	FAO	9.7	2013-2018
Aid Coordination level			
Presence of thematic working groups			Yes
Presence of a global sectoral program			No

1.3.3 Burundi and its partners have made progress in terms of aid efficiency, particularly in predictability of aid and its inclusion in the budget. Efforts are still to be made with regard to incorporation of gender equality into the development plans and in the use of national public finance management systems and procurement. In Burundi, the use of national public procurement systems by the Bank in its operations remains rather limited. However, since 2013, it has begun to use the national procedures for the award of contracts in the framework of the national tenders (AON) on a pilot basis. The on-going revision of the Code of Public Procurement (CPP) and Standard Bidding Documents for National Tenders (DTAON), which benefits from the Bank's assistance, the World Bank and the Belgian Technical Cooperation, will allow the systematic recourse to the national procurement system. In terms of alignment to national systems and procedures, all projects are managed directly by permanent structures, within the supervising ministries. With regard to capacity building, the Bank works closely with

the Government, in organizing training in key areas such as financial management, disbursements and procurement with a view to the efficient and effective implementation of the portfolio by the CEP.

II. Project Description

2.1 Components of the project

The overall objective PATAREB is to contribute to the improvement of populations livelihood through agriculture development and transformation. The specific objective of the project is to stimulate inclusive agricultural development in the Bugesera natural region by putting up production infrastructure, promoting agricultural value chains and support to social safety nets. Scheduled for 5 years, the project comprises the following three (03) components: (i) Support to Agricultural Infrastructure Development; (ii) Promotion of Agricultural Transformation and Improvement of Populations Livelihood; and (iii) Management and Coordination. The activities are summarized in table 2.1 below:

Table 2.1: Components of the project

No.	COMPONENT	COST (UA 000)	DESCRIPTION OF COMPONENTS
A.	SUPPORT TO AGRICULTURAL INFRASTRUCTURE DEVELOPMENT	3,384.40 (28.20%)	<p><u>A1. Completion of wetland development</u></p> <ul style="list-style-type: none"> (i) Development of Nyavyamo swamp (300ha) (ii) Development of Kabuyenge swamp (232 ha) <p><u>A.2. Development of the hillside irrigation</u></p> <ul style="list-style-type: none"> (i) Bugabira municipality (20 ha on Cohoha Lake) (ii) Busoni municipality (10 ha on Lake Cohoha and 10 ha on Lake Rweeru) (iii) Kirundo municipality (10 ha on Lake Cohoha)
B.	PROMOTION OF THE AGRICULTURALTRANSFORMATION AND IMPROVEMENT OF POPULTATIONS LIVELIHOOD	7 462.95 (62.19%)	<p><u>B1. Support to Development of Value Chains</u></p> <ul style="list-style-type: none"> (i) Rice, maize and sorghum value chains (ii) Horticultural products value chain (iii) Subsistence agriculture value chain (iv) Blue economy value chain (v) Study on promotion of Banana, Maize and Horticulture value chains <p><u>B2. Promotion of Youth Entrepreneurship</u></p> <ul style="list-style-type: none"> (i) Business incubators; (ii) Support for Youth Employability (iii) Support to financing of young entrepreneurs; <p><u>B3. Support to Social Safety Nets</u></p> <ul style="list-style-type: none"> (i) Watershed Management - Labour intensive work <ul style="list-style-type: none"> • Gradual grading and agroforestry 1800 ha at Nyavyamo and 1550 ha at Kabuyenge (ii) Food security support for very poor and vulnerable households (few livestock and agricultural inputs) (iii) Support for income-generating activities (iv) Support to the strengthening of human capital;

No.	COMPONENT	COST (UA 000)	DESCRIPTION OF COMPONENTS
C	MANAGEMENT AND COORDINATION OF PROJECT	1 152.65 (9.61%)	(i) Organization of strategic and operational planning of project (ii) Coordination of the project activities (iii) Administrative , accounting and financial management (iv) Acquisition of goods, works and services, (v) Institutional support, (vi) Establishment of a training and communication plan (vii) Monitoring and evaluation of project execution
	TOTAL	12,000.00	

2.2 Adopted technical solutions and substitution solutions studied

2.2.1 The technical solutions adopted are based on the lessons learned from similar achievements, including the PAIRB and the PABVARC, adapted to the specific context of the area of intervention of the project. Thus the choice of gravity irrigation which involves watering the crops by dripping water through open conduits connected to a reservoir upstream which could be either a dam with a water pipe from the river or a water container has been preferred for Nyavyamo and Kabuyenge swamps.. This technical choice was motivated by the fact that the cost of construction of a gravity irrigation system is 3 to 4 times lower than that of a pressurised one and does not require a source of energy

2.2.2 Regarding hillside irrigation, the chose option was photovoltaic energy on the basis of the following benefits: (i) solar energy is inexhaustible and non-polluting (clean and does not emit greenhouse gases); (ii) it supplies energy needs in a sustainable manner and with significant savings; (iii) the costs of maintenance and operation of a thermal installation are relatively low; (iv) the energy performance is positive once configuration has been carried out in relation with the irrigation needs.

2.2.3 The choice of the "Cash for Work" approach has been prioritized with regard to support to social safety nets, in order to meet both the needs of protection of watersheds and access to income for the most vulnerable households. In addition, the transfer of agricultural inputs and support for income-generating activities naturally helps these households to emerge from vulnerability in a sustainable way.

Table 2.2: Alternative solutions considered and reasons for rejection

Alternative solution	Brief Description	Reason for rejection
Pressurised irrigation system, with an efficiency that can reach 80% to 90% of irrigation system	In addition to irrigation system install a pumping system to distribute water in the reservoirs.	This option is outside the project framework which requires involvement of individuals and local cooperatives in the implementation of hydro-agricultural developments to be installed at a community level. In addition, this solution is too expensive for all communities
Pressurised irrigation using thermal energy (diesel or petrol)	Pressurised irrigation using a pumping station operated by a fossil fuel energy source (diesel or petrol)	This option is considered too expensive, because of the cost of fuel. The source of energy is not aligned with the framework, in compliance with environmental standards
Recruit a private provider to perform all of watershed development works.	A service provider is recruited to complete the watershed development works for the benefit of inhabitants.	This option does not allow the service provider company to use the local labour force which will then access income benefits intended for the most vulnerable households.

2.3 Type of Project

PATAREB is an investment operation financed by a Pillar I grant from the Transition Support Fund. Burundi does not implement project and programs using the sectoral approach

due to institutional constraints. Consequently, the project approach has been considered more axed towards the framework of this proposal, to guarantee achievement of results and ensure effectiveness and efficiency in the use of resources allocated to the project.

2.4 Cost of project and financing arrangements

2.4.1 Cost of project. The total cost of the project is estimated at UA 12.00 million (BIF 29.28 billion) excluding taxes and duties. This cost is distributed as follows: UA 5.76 million (BIF 14.06 billion) in foreign currency and UA 6.24 million (BIF 15.23 billion) in local currency. This costs includes contingency reserves and for increase in costs which are estimated to be at 5% and 4% respectively on average. The provision for an increase in prices has been estimated on the basis of current levels and projected from rates of inflation in local currency and in foreign currencies at 3.2% and 1.8% respectively , per year on average. The provision for physical contingencies is estimated at between 0 and 7 %, a summary of the estimated cost of the project by component and by expenditure account is presented in Tables 2.3, 2.4 and 2.5 below, while the details are provided in the technical annex of project appraisal report.

Table 2.3:
Summary of Estimated Costs by Component

COMPONENTS	(Million BIF)			(UA '000)			% FE	% BC
	Local Cur.	For. Exch	Total	Local Cur.	For. Exch	Total		
A. SUPPORT TO DEV OF AGRICULTURAL INFRASTRUCTURE	2,710.50	4,734.00	7,444.50	1,110.79	1,940.04	3,050.82	64	28
Completion of Wetland Rehabilitation	2,410.50	4,034.00	6,444.50	987.85	1,653.17	2,641.02	63	24
Development of Hillside Irrigation	300.00	700.00	1,000.00	122.94	286.87	409.81	70	4
B AGRICULTURAL TRANSF. & IMPROV. POP. LIVE	9,841.00	7,022.99	16,863.98	4,032.93	2,878.08	6,911.01	42	63
Support to Value Chain Development	4,656.76	2,437.67	7,094.43	1,908.38	998.98	2,907.36	34	26
Promotion of Youth Entrepreneurship	2,486.75	325.00	2,811.75	1,019.09	133.19	1,152.28	12	10
Support to Social Safety Nets	2,697.49	4,260.31	6,957.80	1,105.46	1,745.91	2,851.37	61	26
C. MANAGEMENT AND COORDINATION OF PROJECT	1,652.09	1,006.85	2,658.94	677.04	412.62	1,089.66	38	10
TOTAL BASIC COSTS	14,203.59	12,763.84	26,967.42	5,820.76	5,230.74	11,051.50	47	100
Physical Contingencies	438.72	788.53	1,227.25	179.79	323.14	502.94	64	5
Financial Contingencies	583.81	503.45	1,087.26	239.25	206.32	445.57	46	4
TOTAL PROJECT COST	15,226.11	14,055.81	29,281.93	6,239.80	5,760.20	12,000.00	48	109

Table 2.4:
Summary of Project Cost by Category of Expenses

CATEGORY OF EXPENDITURES	(Million BIF)			(UA '000)			% FE	% BC
	Local Cur.	For. Exch	Total	Local Cur.	For. Exch	Total		
I. INVESTMENT	11,839.33	12,393.36	24,232.68	4,851.87	5,078.91	9,930.78	51	90
A. WORKS	3,770.04	8,796.76	12,566.80	1,545.00	3,604.99	5,149.99	70	47
Developments	2,898.99	6,764.31	9,663.30	1,188.03	2,772.08	3,960.11	70	36
Irrigation	300.00	700.00	1,000.00	122.94	286.87	409.81	70	4
Construction & Rehabilitation	32.55	75.95	108.50	13.34	31.13	44.46	70	-
Post-Harvest Infrastructure	538.50	1,256.50	1,795.00	220.68	514.93	735.61	70	7
B. GOODS	650.91	1,291.69	1,942.60	266.75	529.35	796.10	66	7
1. VEHICLES	72.50	217.50	290.00	29.71	89.13	118.84	75	1
2. FACILITIES, EQUIPMENT & INPUTS	578.41	1,074.19	1,652.60	237.04	440.21	677.25	65	6
C. SERVICES	4,268.38	2,304.90	6,573.28	1,749.22	944.57	2,693.79	35	24
Training	726.00	484.00	1,210.00	297.52	198.35	495.87	40	4
Technical Assistant	85.50	484.50	570.00	35.04	198.55	233.59	85	2
Studies	150.88	184.40	335.28	61.83	75.57	137.40	55	1
Contractual Services	3,249.75	1,083.25	4,333.00	1,331.78	443.93	1,775.70	25	16
Audit	56.25	68.75	125.00	23.05	28.17	51.23	55	-
D.MISCELLANEOUS	3,150.00	-	3,150.00	1,290.90	-	1,290.90	-	12
II. OPERATIONS	2,364.26	370.48	2,734.74	968.90	151.83	1,120.72	14	10
A. STAFF	1,849.65	-	1,849.65	758.00	-	758.00	-	7
B. TRANSPORTATION ALLOWANCE	97.00	-	97.00	39.75	-	39.75	-	-

CATEGORY OF EXPENDITURES	(Million BIF)			(UA '000)			% FE	% BC
	Local Cur.	For. Exch	Total	Local Cur.	For. Exch	Total		
C. MAINTENANCE, OPERATION AND REPAIR	157.73	283.85	441.59	64.64	116.33	180.97	64	2
D. GENERAL COSTS	259.88	86.63	346.50	106.50	35.50	142.00	25	1
TOTAL BASIC COSTS	14,203.59	12,763.84	26,967.42	5,820.76	5,230.74	11,051.50	47	100
Physical Contingencies	438.72	788.53	1,227.25	179.79	323.14	502.94	64	5
Financial Contingencies	583.81	503.45	1,087.26	239.25	206.32	445.57	46	4
TOTAL PROJECT COST	15,226.11	14,055.81	29,281.93	6,239.80	5,760.20	12,000.00	48	109

Table 2.5:
Expense Calendar by component (in thousands of UA)

COMPONENTS	PROJECT YEARS					Total
	2018	2019	2020	2021	2022	
A. SUPPORT TO DEV OF OF AGRICULTURAL INFRASTRUCTURE	91.01	1,523.28	1,583.35	92.79	93.97	3,384.40
Completion of Wetland Rehabilitation	91.01	1,069.46	1,583.35	92.79	93.97	2,930.58
Development of Hillside Irrigation	-	453.82	-	-	-	453.82
B. AGRICULTURAL TRANSF. & POP. LIVELIHOOD IMPROV.	1,019.76	2,519.72	2,802.57	871.94	248.95	7,462.95
Support to Development of Value Chains	376.72	1,550.49	588.78	369.22	211.76	3,096.99
Promotion of Youth Entrepreneurship	628.82	216.42	308.02	18.51	18.54	1,190.30
Support to Social Safety Nets	14.22	752.81	1,905.77	484.21	18.66	3,175.66
C. MANAGEMENT AND COORDINATION OF PROJECT	449.43	188.83	180.61	165.97	167.81	1,152.65
TOTAL PROJECT COSTS	1,560.20	4,231.84	4,566.53	1,130.71	510.73	12,000.00

2.4.2 Financing facility: The costs shall be entirely financed by a TSF grant amounting to UA 12 million. Counterpart contributions by the government were not feasible for this project, given that Burundi is recovering progressively but with major challenges from the 2015 socio-political crisis, hardly mobilising contributions for recent and on-going operations. This situation gave the Country-Team no other choice but to recommend a financial arrangement without counterpart state funds, if at all feasible. Within this context, the project was designed to allow financing of all activities from TSF resources. Distribution of financing of expenses by source of funds and list of goods and services is recorded in tables 2.6 and 2.7, here below.

Table 2.6:
Project Financing Plan

FINANCING SOURCES	(Million BIF)			(UA '000)			%
	Local Cur.	For. Exch	Total	Local Cur.	For. Exch	Total	
TSF Grant	15,226.11	14,055.81	29,281.93	6,239.80	5,760.20	12,000.00	100.0
Government of Burundi	0.00	-0.00	0.00	0.00	0.00	0.00	-
Total	15,226.11	14,055.81	29,281.93	6,239.80	5,760.20	12,000.00	100.0

Table 2.7:
Allocation of Project resources by Source of Financing (in thousands of UA)

LIST OF GOODS AND SERVICES	TSF Grant ('000 UA)		
	LOCAL CURRENCY	FOREIGN CURRENCY	TOTAL
A. WORKS	1,545.00	3,604.99	5,149.99
Developments	1,188.03	2,772.08	3,960.11
Irrigation	122.94	286.87	409.81
Construction and Refurbishment	13.34	31.13	44.46
Post-harvest infrastructure	220.68	514.93	735.61
B. GOODS	266.75	529.35	796.10
Vehicles	29.71	89.13	118.84
Facilities	237.04	440.21	677.25
C. SERVICES	1,749.22	944.57	2,693.79
Training	297.52	198.35	495.87

LIST OF GOODS AND SERVICES	TSF Grant ('000 UA)		
	LOCAL CURRENCY	FOREIGN CURRENCY	TOTAL
Technical Assistance	35.04	198.55	233.59
Studies	61.83	75.57	137.40
Contractual Services	1,331.78	443.93	1,775.70
Audit	23.05	28.17	51.23
D. MISCELLANEOUS	1,290.90	-	1,290.90
E. STAFF	758.00	-	758.00
F. OPERATION	210.89	151.83	362.72
Non-allocated	419.04	529.46	948.51
Total	6,239.80	5,760.20	12,000.00

2.5 Area and beneficiaries targeted by the project

2.5.1 The project intervention zone (PIZ) covers the natural region of Bugesera extending over all the seven communes of Kirundo Province and the Gitreranyi Commune of Muyinga Province. It is bordered to the North and the West by the Republic of Rwanda and Ngozi Province. To the South and East, it shares a common border with Muyinga Province. Its surface area of 2,100 km² represents 75% of the national territory. The population of the Province in 2017 is estimated at 1,004,907 inhabitants, of whom 519,665 are women. Despite having a high agricultural potential, the region's agricultural yields are low not only because of the limited use of chemical fertilisers, but also the rudimentary farming techniques, lack of inputs, degeneration of seeds, etc. the dominant cultivation system is the combination of crops with the exception of rice cultivation, which is carried out in monoculture in swamps.

2.5.2 The project will directly benefit a population of 900,000 people (51% women) composed mainly of agri-pastoralists. The latter will be supported through activities aimed at developing rice, maize and sorghum value chains and supporting the development of the blue economy. The development of these value chains will also benefit private sector companies engaged in the processing of agricultural products. In addition, special attention will be paid to vulnerable populations as well as the youth. Vulnerable populations will benefit particularly from the "Cash-for-work" approach developed through watershed management, transfer of agricultural inputs and support for the development of income-generating activities. This population group will benefit from 20% of parcels that will be developed in the Nyavyamo swamp. The project will also prioritise youth through related activities related to entrepreneurship promotion to enable self-employment. The choice of beneficiaries will be made in close consultation with the populations and the local Administration.

2.6 Participatory approach for the identification, design and implementation of the project

The Bank has adopted the participatory approach in its assistance to Burundi to formulate the request for TSF financing and throughout the project preparation process. This has resulted in the organisation of workshops and discussion meetings with public institutions, non-state actors, producer organizations, civil society including organizations working in the field of gender, private sector, TFPs and beneficiaries. This approach made it possible to better understand the major issues, to identify the appropriate solutions, and to reach a broad consensus on its design and the implementation modalities of the project. Thus, the producers reaffirmed the need to take into account the current rights holders in the allocation of developed swamp parcels. Rural women in the PIZ emphasised their access to developed perimeters, and new processing and marketing technologies. The Kirundo Governor and Local Authorities expressed their specific needs to address the vulnerability of inhabitants, by supporting social safety nets, improving agricultural production conditions and mitigating conflicts related to land competition. As for the youth, they insisted on vocational training and their successful

establishment as modern agricultural entrepreneurs targeting the markets. The project will continue this participatory approach so that local actors take ownership of activities and implementation during implementation. Good communication will be developed to ensure visibility of achievements and impacts and wide dissemination of project achievements.

2.7 Consideration of Bank Group experience and lessons learned in project design

2.7.1 In October 2017, the Bank's portfolio in Burundi consisted of 17 operations, of which 8 were national, at a total amount of UA 121.4 million (USD 171.2 million). The agricultural sector does not have an active project, the only project in the sector having closed on 31/12/2016. The overall performance of the portfolio is assessed as satisfactory with a rating of 3.5 in scale from 1 to 4. The portfolio review conducted in 2016 highlighted shortcomings that were taken into account to ensure the project's performance. These include: (i) Lack of familiarity with the Bank's procurement and internal control rules and procedures within the PIUs delays in setting up key project staff; (ii) delay in setting up key personnel, (iii) delay in the development of technical studies and poor synchronization of input procurement and weather patterns, (iv) low ownership of project achievements by beneficiary organizations; (v) delay in the provision and / or insufficiency of counterpart funds which severely hampers the implementation of the Bank's projects. In addition, the project took into account lessons learned from the Bank's Strategy and Program Appraisal Report for Burundi 2004-2015, which focused on (i) insufficient targeting to ensure that vulnerable populations are taken into account in the various projects as well as (ii) a weak integration of job creation support activities, especially for the youth and environmental conservation.

2.7.2 The design of PATAREB took into account the lessons learned from the Bank's projects in Burundi and those of the Bank's TSF portfolio, as shown below:

Table 2.8:
Consideration of the Bank Group experience and lessons learned

Key lessons and experiences	Actions taken in the PATAREB design
Lack of familiarity with the Bank's procurement and internal control rules and procedures within the PIUs.	Provide proper training in Bank procurement and financial management procedures at project launch to PIU members and executives from partner administrative structures involved in project management.
Delay in setting up key project staff.	Adoption of the pre-procurement process in order to quickly set up the PIU and launch the various procurement processes.
Delays in the development of technical studies.	
Low synchronisation of agricultural input acquisition and the rhythm of the seasons.	The project will adopt community procurement for agricultural input acquisitions to ensure compliance with growing seasons.
Low ownership of project achievements by beneficiary organisations.	Right from the start of the project; recruit a local operator (NGO) with the necessary expertise to: (i) structure and strengthen the organisational capacities of producer organisations, (ii) provide support for improving good governance of POs, and (iii) support development of agricultural production.
Late and/or insufficient provisions of counterpart funds severely handicap the implementation of the Bank's projects.	Limited use of counterpart funds to finance key activities to address current fiscal challenges.
Insufficient targeting of vulnerable populations.	The NGO providing support from the beginning of the project will support the process of targeting vulnerable households.

Key lessons and experiences	Actions taken in the PATAREB design
Some fragility factors such as environmental protection, employment, especially of youth are not sufficiently taken into account in Bank operations in Burundi.	A sub-component has been set aside to support the creation of youth employment and the protection of the environment will be taken into account in watershed management and reforestation.

2.8 Key performance indicators

The main performance indicators to be monitored from the baseline are: (i) number of rehabilitated dams; (ii) developed areas with partial and total control; (iii) level of additional production (tonnes) and crop yields (t/ha); (iv) number of VA infrastructure completed (market sheds, km of farm tracks, warehouses for products and inputs, etc.); (v) number of operators by type of development supported disaggregated by gender; (vi) number of technology reviews and multi-stakeholder platforms completed and the percentage attributed to women; (vii) level of income growth including that of women and youth; (viii) number of youth jobs and women created in entrepreneurial initiatives; (ix) number of producers, processors and traders trained and organized into cooperatives in accordance; (x) degree of involvement of women in decision-making bodies and their rate of access to land after development; (xi) number of installed transformation units; and (xii) malnutrition rate in the beneficiary population. All the indicators selected for the project have been aligned with the main CSP indicators and those retained within the framework of the NAIP.

III. Project feasibility

3.1 Economic and financial performance

3.1.1 The financial and economic analysis of the project was carried on the basis of cost/benefit analysis of the expected outcomes of the project, comparing the with and without project situations, over the life cycle of investments in promotion of agricultural transformation or project's lifespan (Project life), estimated at 25 years. The expected benefits of the project come from the transformation of agriculture into the project intervention zone (PIZ), based on the preservation of natural resources and other livelihoods, including: (i) the sustainable promotion of agricultural value chains by intelligent agriculture, for productions in the project area such as rice, sorghum, maize, cassava, beans and farm produce. (ii) promotion of the blue economy (pond culture, cage and above-ground bins); (i) sustainable promotion of value chains of non-timber forest products (NTFPs), such as honey (beekeeping), pods, almonds, seeds and natural fruit, leaves and bark used in the traditional pharmacopoeia; (iv) improving the ecological balance and maintaining a habitat conducive to wildlife development that also offers environmental opportunities; (v) improving the well-being of the population by preventing drought and famine, improving food security, reducing the medical bill with the regulation of climatic conditions, reducing the hardship of the population; the work of families, especially women and vulnerable groups, improving people's life expectancy, better incomes for access to health care and education, etc. (vi) improvement of animal and livestock production, because of the quality and abundance of pasture and water; (vii) spin-offs from carbon dioxide sequestration (carbon credit, including bio-carbon); and (viii) the creation of temporary and permanent jobs, resulting from project achievements. The detailed assumptions of the economic and financial analysis, the tables of production and exploitation models (situation without and with the project) and the financial and economic flows are detailed in the technical annexes (Annex B8).

Table 3.1: Key economic and financial factors

<i>NPV (baseline scenario)</i>	89.72 billion BIF
<i>TRI (baseline scenario)</i>	20.17%
<i>Economic NPV (baseline scenario)</i>	92.01 billion BIF
<i>TRE (baseline scenario)</i>	23.02%

3.1.2 Financial performance: The additional revenues resulting from the various models of development and exploitation retained are the following: (i) development of marshes (floodplains with water control) allows double rice cultivation (10 T/ha in total per year), corresponding to about BIF 1 509 000/ha, or BIF377 000 per farmer with 51 % of women beneficiaries; (ii) facilities also used for market gardening in rotation, for a production value BIF 7,474,000/ha or BIF 1,868,500 per male farmer, including women beneficiaries; (iii) cultivation of sorghum and maize in family farming on plateaux and watersheds BIF990 000 /ha per farmer; (iv) the development of fish farming on and around Cohoha and Rweru lakes, for an estimated annual income per farmer of BIF845,000 (see Annex B7 for the typology of farm size and overall additional revenues released, thus contributing to increased value added through the project). The internal financial rate of return (IRR) is estimated at BIF 89.72 billion. The sensitivity tests established on the basis of simulations of successive decreases in prices or agricultural yields from 2.5% to 35%, show that the IRR falls more slowly than prices and yields, with a break-even value that is set at a drastic price reduction of more than 27.25%. As a result, the IRR is stable, with the effect of reducing the incidence of poverty in the IPA.

3.1.3 Economic performance: The basic economic rate of return is 23.01% for a net present value (NPV) of BIF 92.01 billion. The other economic impacts of the project can be summarized as follows: (i) the upstream effects of additional revenues on providers (NGOs, companies, suppliers, consulting firms); (ii) the downstream effects of generating additional income on traders and processors who are predominantly women, thus contributing to women's empowerment and economic empowerment; (iii) lowering foreign exchange costs by significantly reducing the import bill for rice in the country's trade balance and currency balance; (iv) the impact on wealth creation in the country through the increase in GDP induced by the generation of additional value added. For households, the benefits of the project will result, inter alia, in better nutrition for vulnerable groups (children, women of childbearing age and the elderly), a reduction in the medical bill, the arduous task of agricultural workers, particularly women, reducing the incidence of monetary and non-monetary poverty, enhancing livelihoods and household resilience to food insecurity and the effects of climate change, and in the long run, increase in life expectancy and improvement of the human development index.

3.1.4 The results of the financial and economic analysis show that PATAREB is financially and economically viable.

3.1.5 Sensitivity Analysis: The sensitivity analysis was carried out on the basis of scenario analysis to simulate the financial performance indicators (NPV, IRR and A/C Ratio) from the most sensitive endogenous variables of the analysis model used, namely the price and output of the productions. The simulations thus carried out show that, as the prices of products fall , the financial performance indicators also drop, but much more slowly. On the basis of this result, it can be concluded that the financial performance of PATAREB can be considered as stable, although the project's financial results are sensitive to lower prices. In addition, the switch-over threshold linked to the price decrease is over -27.5%. Therefore, prices need to fall drastically by more than 27.5% for the internal rate of return (IRR) to be equal to the opportunity

cost of Capital estimated at 12%. The successive decline in yields is also reflected in a drop in the values of the financial performance indicators (IRR, NPV, A/C ratio), as in the previous situation with the fall in prices. Similarly, the break-even point of return is -27.88% decline in yield. The scenario synthesis is presented in Annex B8, as indicated above.

3.2 Environmental and social impact

3.2.1 PATAREB is a follow-up to the Bugesera Natural Region Rural Infrastructure Support Project (PAIRB), which focused on major developments. The activities planned during this second phase of the Project will complement those that were not completed during the first phase and will focus on improving value chains, social safety nets and youth entrepreneurship. The project is classified in Category 2. In line with Bank procedures, the summary of the ESMP was posted at least one month ahead of expected Board consideration.

3.2.2 The planned activities will be mainly carried out in rural areas, outside the dwellings, on agrosilvopastoral areas. They are not likely to generate negative impacts or major risks, or lead to significant asset losses or population displacements. These impacts and effects will be of minor magnitude and could be mitigated by application of different mitigation measures and good practices. The negative impacts will be small, and will be mainly related to the generation of waste, the risks of pollution, the risk of accidents and gas emissions during the realisation of certain developments.

3.2.3 An Environmental and Social Management Plan (ESMP) has been developed in line with the Bank's environmental and social policies and guidelines, and in accordance with Burundi's regulatory framework in the field. The ESMP recommended different measures, mitigation and enhancement, but also provisions to be made during the implementation of the project, as well as the costs associated with these different measures.

3.2.4 An Ordinance of the Minister in charge of the environment had set up a Technical Committee in charge of the implementation of the ESMP of Phase I of the project. This Committee could be renewed taking into account the new sub-components (social safety nets and youth entrepreneurship), and by integrating the provincial and municipal structures responsible for the environment, social development, gender, youth, etc. During the implementation of the project, the Project Management Unit (PMU) will be responsible for coordinating the activities of the Environmental Monitoring Committee and providing them with administrative, technical and financial support; etc.

3.2.5 **Climate change:** CO₂ emissions per capita (metric tons) in Burundi are estimated at 0.03 tons (2013), compared with 1.1 in Africa and 3.0 in developing countries. Burundi is also experiencing a significant reduction in ODS (ozone depleting substances) consumption, from 26.76 tonnes weighted in the 2000-2004 period to 7.0 tonnes in 2015. However, there is a sharp decline in forest area on the national territory. From 11.3% in 1990, it represented only 6.7% in 2010, and fell to a proportion of just 5.5% in 2015. The current rate is 64.54 square kilometres of annual loss of the area covered by forests, or more than 2% of annual average.

3.2.6 In relation to climate change, the project area is mainly confronted with recurring droughts, sometimes alternated by periods of heavy rains that have led to swamps flooding, lake level rise, siltation some lowlands, soil erosion, etc. These natural phenomena negatively impact ecosystems, production systems and food security. In this context, the activities planned by the project will to a large extent enhance the resilience of ecosystems and communities to climate change, through the implementation of a series of actions that will contribute to the

improvement of the production systems , the reduction of the practice of the extensive system, the restoration of ecosystems through the application of good agricultural practices, reforestation actions, the establishment of green belts, bank protection activities, etc.

3.2.7 The project activities align with the options and priority activities identified in Burundi's National Action Program for Adaptation to Climate Change (NAPA). The project should benefit from the "SAP-Burundi" project (early warning system) to integrate climate information into the agricultural calendar, the management of works, etc. As part of the National Program of Reforestation, Burundi is committed to increase carbon dioxide sinks by reforestation of 4,000 hectares per year for 15 years from 2016. The PATAFI, which has planned a major reforestation program and the establishment of green belts, etc., will contribute to achieving the set objective.

3.2.8 **Gender:** Women (about 52%) and youth (average age of the provincial population, 20.5 years and median age, 16.0 years) represent a large majority of the population in the project area. Despite the existence of large hydro agricultural resources and potential, the population of the project area is among the poorest in the country (76% on a national average of 64%). Farming and farming systems are still traditional and weakly intensified.

3.2.9 The consultations revealed that the agricultural sector, in which a large majority of women are involved, faces the following main constraints: very high pressure on land and fragmentation of agricultural parcels (average 0.5 ha); difficulties for producers and especially for women to access land and inputs; work overload due to household chores, strong responsibility for child rearing, household operation and management; weak management and programs on improving and diversifying production systems, leadership and entrepreneurship; difficulties related to the conservation, the processing and the sale of the products, etc.

3.2.10 Despite the efforts made, there is still inequality and discrimination against women in terms of equitable access to land and other factors of production; and decision-making bodies.

3.2.11 The PATAREB, whose main activities target women, in particular, will contribute to improving their access to factors of production such as credit and land, conservation, processing, production flow, etc. The project will thus make a significant contribution to improving women's living conditions by improving agricultural production systems and sectors, increasing production and income, and strengthening their capacity; etc.

3.2.12 The consultations also revealed that they spend most of their income on the family, especially children. Increasing women's incomes will help improve household food security and well-being. The project will ensure that women and women benefit equally from other project benefits.

3.2.13 The Ministry of National Solidarity, Human Rights and Gender (MSNDPHG) is in charge of the promotion of women and gender equality. To carry out its mission, the MSNDPHG includes within it a Directorate General for the Promotion of Women and Gender Equality, structured in two departments: the Department for the Promotion of Women and the Department of Gender Equality. The Ministry also relies on deconcentrated structures called Family Development Centers (FDC), which are located at the level of each Province. The latter are relays of the ministry to communities on all aspects related to gender and other missions.

3.2.14 Provincial and municipal bodies and structures dealing with gender issues will have to be integrated into the bodies responsible for project management (technical committee, monitoring committee, etc.). Gender-related indicators will be taken into account in the project's monitoring and evaluation system based on disaggregated data by sex, etc.

3.2.15 **Social:** With 84.7% for Muyinga and 76.2% for Kirundo respectively, the provinces in the area of influence of the project had poverty rates well above the national average (64%). In terms of nutrition, the province of Kirundo has a global acute malnutrition rate of 5%, that of chronic malnutrition at 47.9% which is above the critical threshold of 40% set by WHO.

3.2.16 In such a context of poverty and vulnerability, by improving agricultural production systems and the development of value chains, the positive impacts and effects of the project will be considerable on local and even national development in different sectors, activities and on all social categories (adults, youth, women, etc.). The project will contribute to improving agricultural production and incomes, enhance food security, foster the creation of local employment opportunities, contribute to poverty reduction and the vulnerability of targeted populations, reduce unemployment and youth migration, contribute to the empowerment of women, etc.

3.2.17 However, the works could generate nuisances and inconveniences (noise, dust, exhaust gases, etc.) that could affect the health (respiratory diseases) of the workers and the populations who would be exposed to it. The mixing of populations in the work areas can also contribute to the proliferation of sexually transmitted diseases (STI/HIV AIDS). Rigorous safety, awareness and good practice measures are advocated to minimize and reduce these risks.

3.2.18 **Youth employment and promotion of agricultural entrepreneurship:** This component will help develop the entrepreneurial culture of young project leaders to increase incomes and create decent jobs for youth and women. The project will assist the emergence of small clusters of young promoters and will directly reach 1,200 young girls and boys trained in agricultural entrepreneurship, and installed in all links of the value chain: production activities in developed marshes, farms fish farming, processing, trade and services. This initiative aims ultimately, by its multiplier effect to reach nearly 3,600 young men and women.

3.2.19 To this end, the project will work in partnership with the Kirundo Trade Centres (CEM Kirundo) and the Mutwenzi Centre in the identification, selection and training of beneficiaries. These institutions will receive project support, and will work with the Microfinance Institutions (MFIs) present in the project area for the financing needed for business development. Thus, the supervision of young promoters will be done in the incubation Centres, mentioned above, also responsible for mobilising aggregators and private operators. They will help youth to make their credit reports more reliable in order to better access the available financial resources. The project will also facilitate youth's access to developed perimeters and equipment in the form of basic kits, according to their business plans and areas of specialisation. Finally, the project will promote partnerships between all actors for better integration of value chains (production, processing, inputs, markets, etc.). The operational modalities of agricultural entrepreneurship and financial incentives will be defined following a specific study at the start of the project.

3.2.20 **Forced relocation:** The activities of PATAREB do not induce any displacement of populations nor their resettlement. They contribute to the development of the affected territories and to maintain the populations in their zones

IV. Implementation

4.1 Provisions for implementation:

4.1.1 **Implementing rules:** In line with the Presidential Directives N°02/2015, the Country should take all necessary steps to fast-track the start-up of the project. The Ministry of Agriculture and Livestock (MINAGRIE) will be in charge of the project management and coordination. A multi-sector project steering committee (PSC) will also be established to ensure guidance and orientation of the project implementation, as required. As part of the coordination of project activities, MINAGRIE will be supported by a full-time Project Management Unit (PMU), under the supervision of the Kirundo Provincial Directorate of Agriculture and Livestock, which has its headquarters in Kirundo. The PAIRB Administrative, Financial and Accounting Procedures Manual will need to be adapted to affirm the enhanced role of DPAE in the management of PATAREB.

4.1.2 The PMU will be mainly in charge of the coordination, monitoring and evaluation of project activities. It will be composed as follows: (i) a Project Coordinator; (ii) an Internal Monitoring and Evaluation Specialist; (iii) an Irrigation Engineer; (iv) a Procurement Specialist; (v) an Agronomist; (vi) a youth entrepreneurship specialist, (vii) a socio-economist, (viii) an administrative and financial manager; and (ix) an accountant. In addition, there needs to be an option for using MINAGRIE's internal expertise for positions whose capacities exist within. In accordance with the results of the consultations of the preparation and evaluation missions, these positions are those of the Coordinator and the Monitoring and Evaluation Specialist. For each of the two positions, three CVs will be submitted to the Bank, which will validate the evaluation report of the proposals made by the Ministry. The use of the expertise of the previous project was also retained. Thus, the Rural Engineering Expert should be reappointed if he is still available to fill this position. This proposal is justified by the fact that development and infrastructure development play a significant role in PATAREB. For all other positions, recruitment will be done through a call for applications.

4.1.3 The project will also have support staff recruited as needed. In Bujumbura, the PMU will be supported by a Project Antenna responsible for liaising with the Home Ministry and the technical partners of the project and central services of the Administration to carry out activities requiring coordination with these Organisations. The PMU will also be supported by one-off technical assistance.

4.1.4 Value chain development activities will be carried out under agreements to be signed with IRRI for the rice value chain and ISABU for the maize, sorghum and food value chains, respectively.

4.1.5 In order to deal with the problems of agricultural financing in the project area, a Guarantee Fund will be established and an agreement signed with UCODE and an MFI with satisfactory capacities and of which more than 70% of the credits distributed go to the agricultural sector to enable beneficiaries to have easy access to credit.

4.1.6 **Procurement:** All purchases of goods (including non-consulting services), of works and consultancy services, financed by the Bank under the project, will be made in accordance with the *“Procurement Policy for Funded Operations by the Bank Group”* as of October 2015 and in accordance with the provisions set out in the Financing Agreement. More specifically,

procurement will be carried out according to the Bank's Procurement Methods and Procedures (MPA) based on the relevant standard tender documents (DSAO) for all markets.

4.1.7 **Procurement Risk and Capacity Assessment (ERCA):** The risk assessment at the country, sector and project levels as well as the acquisition capability of the Executing Agency (EA) for the project was conducted and the results were used to guide the decision of the choice of the procurement system (Borrower, Bank, or Third Party) used for specific activities or a set of similar activities in the project. In addition, a market analysis was conducted with a view to obtaining information on market characteristics, the factors that may affect competition and the main players in the sectoral markets. The results of the evaluations and market analysis notably made it possible to carry out procurement planning, market structuring, the choice of the best procurement methods and procedures (MPA) adapted to the desired objective, and the establishment of the review and supervision framework by the Bank.

4.1.8 Appropriate risk mitigation measures were included in the Procurement Risk and Capacity Assessment Action Plan (PERCA) as outlined in Section B.7.9. of Annex B7.

4.1.9 **Financial management:** The Project Management Unit (PMU) will be responsible for the overall coordination and financial management of the project. Its financial management staff will include the Project Coordinator, the Administrative and Financial Officer, the Accountant and the Cashier, all recruited in accordance with the procurement provisions of the project.

4.1.10 The financial management systems of the PAIRB Management Unit whose structures will be used under the PATAREB framework are not generally satisfactory and the overall fiduciary risk is substantial due to the absence of: (i) a Coordinator and the financial staff indicated above; (ii) an administrative, financial and accounting procedures manual; (iii) an operational computerized accounting and financial management software; and (iv) financial management tools and terms of reference.

4.1.11 Consequently, the PMU must make the following arrangements: (i) Establish, as soon as the Project is launched, a budget plan coupled with the provisional calendar of activities; (ii) recruit, from the start of the Project, a consultant responsible for drawing up the Administrative, Financial and Accounting Procedures Manual (MPCF), and another consultant responsible for setting up the computerized accounting and financial management system (CCIS); (iii) allocate financial tasks as soon as financial staff are recruited; (iv) put in place the financial management framework and instruments (see Annex B 6 of Volume II).

4.1.12 **Disbursements:** The disbursement methods to be used to mobilize the financing of the TSF Grant are: (i) the direct payment method; (ii) the special account / working capital method and (iii) the repayment method. Direct payments will be made in accordance with work contracts, goods and services signed between the recipient and the suppliers in accordance with the Bank's procurement rules and procedures and the national procurement legislation. The special account method will be used for the payment of operating expenses, training costs, field mission expenses, and so on. This will result in the opening of a Special Account at the Central Bank of Burundi, which in turn will, for all the funds received from the TSF, supply the bank account of the CGP opened in a bank acceptable to the AfDB. The repayment method will be used when eligible expenditures on the resources of the TSF Grants have been pre-financed with the prior approval of the Bank. These disbursements will be done in accordance with the list of goods and services and the Bank's rules and procedures as described in the disbursement manual. The disbursements modalities are detailed in the technical annexes.

4.1.13 Audits: An independent and competent external audit firm will audit the reliability of the consolidated annual financial statements prepared by the CGP once a year and assess the functioning of the internal control system for the entire project. He will be recruited according to the terms of reference and the competitive bidding procedures recommended by the Bank. The audit costs will be financed by the TSF Grants. Audit reports must be sent to the Bank every year, no later than 6 months after the end of the audited financial year. Audits will be conducted in accordance with IFAC's International ISA Auditing Standards and the Bank's comprehensive terms of reference, which will be communicated to the project.

4.2 Monitoring

4.2.1 Monitoring mechanisms: A Project Steering Committee (PSC) will be set up. It is chaired by the Minister of Agriculture and Livestock or his representative, and composed of a representative of the Ministry of Finance, the Permanent Executive Secretariat of the National Commission for Social Protection, the Governor of Kirundo, the DPAE, two (02) Beneficiary Representatives, a Private Sector Representative and a Civil Society Representative. The PSC will meet at least twice a year in regular sessions to approve the budget and validate the results of the project performance. The PSC Secretariat shall be provided by the DGPAE. The responsibilities of the PSC shall be as follows: (i) major guidelines based on the coherence between the strategic framework and the execution of the project; (ii) ensuring that the results and recommendations of the external evaluation reports are taken into account in the execution of the project; (iii) directives to the PMU for the eventual reorientation of the Project; (iv) approval of the project's annual work program and budget (AWPB) prior to submission to the Bank's no-objection notice; and (v) guaranteeing project development objectives.

4.2.2 Internal monitoring and evaluation will be carried out by the Project Monitoring and Evaluation Unit, while external monitoring and evaluation will be provided by the DGPAE and the Ministry in charge of Finance. The external monitoring and evaluation is to measure the effectiveness and efficiency of outputs (products) of the project and their contributions to the achievement of development results that are the effects and impacts of the project. This be ensured with the involvement of other stakeholders, in addition to the two annual supervision missions organized by the Bank. The mid-term review will be conducted in the 3rd year. At the end of the project, the Bank and the Government will produce a completion report in due time. The main stages of implementation are summarized below.

Table 9: Indicative Project schedule

No.	ACTIVITIES	OFFICIALS	DEADLINE
1	Evaluation	BANK	October 2017
2	Negotiations	GVT / BANK	November 2017
3	Presentation of the project to the Board	BANK	December 2017
4	Signing the Memorandum of Understanding for TSF Grants	GVT / BANK	December 2017
5	Fulfilment of conditions	GVT	January 2018
6	Authorization of the 1st disbursement.	BANK	January 2018
7	Signing of agreements with partners	GVT	January 2018
8	Project launch	GVT / BANK	January 2018
7	Submission of deliverables	Deliverables	February 2018-Dec. 2022
8	Midterm review	GVT / BANK	June 2020
9	Completion of activities	Governments / BANK	October 2022
10	Completion report	Governments / BANK	December 2022
11	Audits :	GVT	Annually

4.3 Governance

4.3.1 In the area of economic and financial governance, Burundi has achieved encouraging results since the 2015 crisis, initiating a number of structural reforms in public financial management, and the mitigation of fiduciary risks. However, improvements are needed for domestic resource mobilization, programming and allocation of public resources. Although there has been progress in bringing the public procurement system up to standard, slowness in the procurement system is still one of the major shortcomings in project implementation. At the project level, risks related to fiduciary issues will be mitigated, including the use of a public financial management system and the strengthening of the PMU's procurement and financial management capacity.

4.3.2 With regard to land, the dualism of modern and customary rights is a major handicap in promoting investments in agriculture in Burundi and to local peace. PATAREB will improve land governance by providing support for land planning and management, as well as strengthening municipalities' capacity to manage them. Tripartite agreements will be established between land claimants, municipalities and professional organizations, and collective agreements will mitigate conflicts.

4.4 Durability

4.4.1 The project is based on a participatory approach for better ownership of activities. Rural communities, local authorities and decentralized technical services have indeed been involved in the design of the project, and therefore will participate in all the developments they benefit from and will be reinforced to prevent and manage conflict linked to resource exploitation. They will bring their own knowledge and perceptions on the phenomena of climate change.

4.4.2 The sustainability of the program is also based on the participation of the beneficiaries in the project. The PMU will work in collaboration with these organizations to ensure land tenure security, strengthen the capacities of farmers' organizations (OPs) for the technical and financial management of infrastructure, and initiate sustainable mechanisms for the recovery of infrastructure maintenance and renewal costs. Watershed protection activities will be carried out as part of the social safety nets. Support for para-agricultural trades (mechanization, maintenance, advisory support, etc.) will also help to ensure the long-term provision of services necessary for the viability of the activities undertaken. The simplicity of the planned infrastructure and the capacity building of the beneficiaries favour the sustainability of the investments. In particular, their realization will take into account the reliable climatic information collected.

4.4.3 The use of the “*value chain*” approach with the consideration of aspects of processing, storage and marketing of products will make it possible to link production to markets more. Thus, the creation of small processing units of economically, financially and technically viable products will be a guarantee of the sustainability of the achievements of the project. The project will ensure the development of gender sensitive infrastructures and technologies to promote the sustainable economic empowerment of vulnerable people (women and youth) and the diversification of their sources of income. Sustainability of project interventions will also be ensured through the effective involvement of the local private sector, MFIs and aggregator enterprises in the approach to achieving sustainable settlement of young entrepreneurs and access to markets.

4.5 Risk management

Table 10:
Risks and mitigation measures

RISKS	LEVEL	MITIGATION MEASURE
Unclear land and state-owned land issues can lead to difficulties in exploiting the sites to be developed and compromise the objectives of the project in terms of food security and the fight against poverty, especially for women and young people.	Means	Project support for planning and land management that will result in the establishment of tripartite agreements (having land rights, municipalities, professional organizations) and collective agreements to mitigate conflicts
<ul style="list-style-type: none"> • Climatic hazards that can accentuate the degradation of ecosystems (drought, floods, etc.), make communities more vulnerable and promote conflict. • Limited ownership and management of rural infrastructure 	Means	<ul style="list-style-type: none"> • Irrigation, the protection of vulnerable areas, the opening up of production areas, the integration of climate information into the design of works, the securing of income, will mitigate this risk; • Capacity building of municipalities,
<ul style="list-style-type: none"> • Lack of monitoring of technological innovations by communities • Weakness in monitoring by municipalities (MOD), slow procurement, low capacity of technical services and low capacity of enterprises 	Means	<ul style="list-style-type: none"> • Participative approach and involvement, organization and training of local actors • Funding of a stakeholder capacity building program
The institutional weakness of MINAGRIE in terms of management and monitoring and evaluation	Means	The capacity building program of MINAGRIE and the PMU on project administration, procurement and financial management will mitigate this risk

4.6 Knowledge Development

The project will be a disaggregated database, according to the type of reference that will be used to establish the baseline situation. Then a map will be produced with geo referencing of the activities carried out. This information will be networked and posted on a website to be shared with all stakeholders. The same will be true for the results of the independent (rapid and in-depth) impact assessments. The actions included in the project that will also lead to knowledge development are the popularization of innovative technologies, technology review workshops, innovation / multi-stakeholder platforms and exchange visits and support for innovative product processing experiments as part of a private partnership / OP; and promoting innovative youth and women's employability actions and resilience building activities for vulnerable groups. Finally, the project will put in place an integrated knowledge management system on project activities through the regular dissemination of acquired knowledge.

V. Legal framework

5.1 Legal instrument

The legal framework of the project will be a TSF Grant Memorandum of Understanding signed between the Republic of Burundi and the Bank.

5.2 Conditions associated with the intervention of the Bank

5.2.1 Conditions precedent to entry into force: The entry into force of the TSF Grant Memorandum of Understanding is subject to signature by the parties.

5.2.2 Prerequisites for the first disbursement of the donation: The obligation for the Bank to make the first disbursement of the donation will be subject to the entry into force of the TSF Donation Memorandum of Understanding, in accordance with the provisions of paragraph 5.1.7

above, and proof of fulfilment by the recipient, to the satisfaction of the Bank, both formally and substantively, of the following conditions:

- (i) Provide the Bank with proof of the opening of a Special Account with the Central Bank of Burundi for the Project intended to receive the Project funds in US dollars and the opening by the PMU with a bank acceptable to the Bank, a BIF Account for the Project intended to receive the Grant's resources (see 5.1.10);
- (ii) Provide the Bank with evidence of the recruitment of the Coordinator and the Project Administrative and Financial Manager, whose qualifications will be submitted for prior approval by the Bank (5.1.1);

5.2.3 Other conditions: The Recipient must also provide the Bank with the following, no later than six (6) months after the first disbursement of the Grant's resources:

- (i) Proof of the recruitment of the Procurement Specialist, the Monitoring and Evaluation Specialist and the Accountant, whose qualifications and experience will have been previously submitted to the Bank for approval (see 5.1.2);
- (ii) Agreements with Partner organisations (ISABU, IRRI, UCODE, CEM & MITUWENZI).

5.3 Compliance with Bank Policies

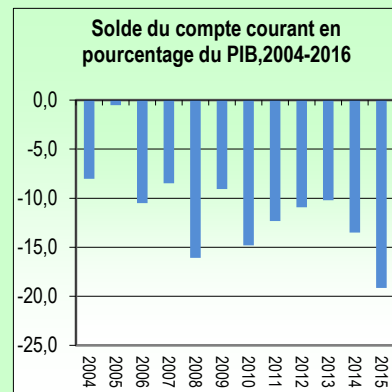
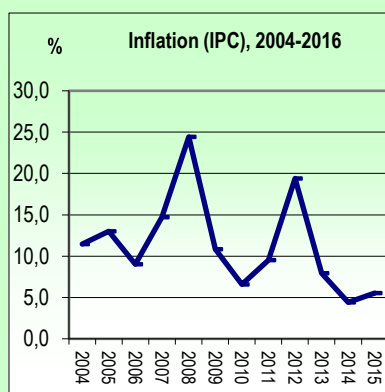
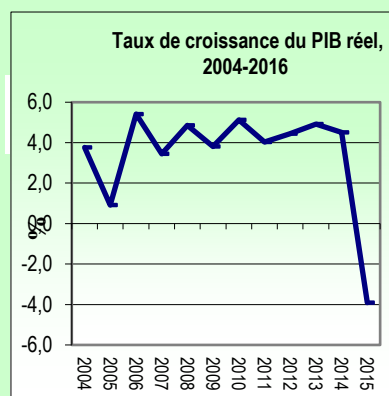
This project complies with all applicable Bank policies. The Board of Directors is requested to approve the TSF Grants. The project will be implemented as part of the Bank's intervention strategy in Burundi defined in the 2012-2016 CSP, which was extended at the end of 2017.

VI. Recommendation

Management recommends that the Boards of Directors approve the granting to the Republic of Burundi of Pillar I resources of the Transition Support Facility (TSF), a Grant of a maximum amount of not exceeding UA 12 million, for the purpose and under the conditions set out in this report.

Appendix I. Comparative Socio-Economic Indicators of Burundi (March-June 2017)

Indicators	Unity	2000	2011	2012	2013	2014	2015	2016 (e)
National Accounts								
GNI at current market prices	US \$ Million	880	2,154	2,430	2,616	2,921	2,907	...
GNI per capita	US \$	130	220	240	250	270	260	...
GDP at current prices	Million US \$	709	2,236	2,333	2,452	2,849	2,836	3,109
GDP at constant prices from 2000	US \$Million	709	1,028	1,074	1,127	1,177	1,131	1,141
GDP growth in real terms	%	-0.9	4.0	4.4	4.9	4.5	-3.9	0.9
GDP per capita growth in real terms	%	-3.0	0.5	1.0	1.5	1.1	-7.0	-2.4
Gross domestic investment	% of GDP	7.5	22.6	22.2	23.5	26.4	15.9	15.4
Public investment	% of GDP	6.4	12.5	14.2	11.6	16.1	10.6	10.0
Private investment	% of GDP	1.2	10.1	8.0	11.9	10.4	5.3	5.3
National savings	% of GDP	-4.2	1.0	-3.7	-4.0	-2.7	-4.9	-0.1
Price and Currency								
Inflation (CPI)	%	24.3	9.5	19.4	7.9	4.4	5.5	5.5
Exchange rate (annual average)	local currency / US \$	720.7	1,261.1	1,442.5	1,555.1	1,546.7	1,571.9	1,640.1
Money supply, annual changes (M2)	%	34.8	10.5	10.3	14.0	9.5	9.0	6.7
Speed of money circulation (GDP / M2)	%	24.6	29.1	26.9	27.1	25.6	27.6	25.8
Public finances								
Total revenue and grants	% of GDP	22.3	21.9	25.0	27.1	23.8	28.5	21.9
Total expenditure and net loans	% of GDP	24.7	36.4	37.3	28.5	31.8	30.5	27.9
Deficit (-) / Overall surplus (+)	% of GDP	-2.3	-11.4	-10.2	-4.6	-3.2	-8.6	-6.7
External sector								
Change in volume of exports (goods)	%	4.7	0.4	32.3	-19.8	23.1	2.6	24.1
Change in volume of imports (goods)	%	1.7	-19.5	11.0	-1.3	10.8	3.3	-47.6
Changes in terms of trade	%	-22.0	-9.0	-20.6	-9.6	25.4	15.8	-0.4
Balance of current accounts	Million US \$	-61	-276	-255	-250	-384	-543	-582
Balance of current accounts	% of GDP	-8.6	-12.3	-10.9	-10.2	-13.5	-19.1	-18.7
International reservations	Importation months	2.9	3.6	3.4	3.7	3.5	1.7	2.0
Debt and financial flows								
Debt service	% of exports	70.1	2.3	7.2	14.6	14.9	18.8	16.7
Total external debt	% of GDP	155.1	21.8	21.7	22.0	19.5	20.4	24.8
Total net financial flow	Million US \$	79	566	531	589	539	260	...
Net Official Development Assistance	Million US \$	93	572	523	559	515	367	...
Net direct investments from abroad	Million US \$	12	3	...	7	47	7	...



Source: AfDB Statistics Department; IMF: World Economic Outlook, April 2017 and International Financial Statistics, April 2017; Department of Statistics: Data Platform (database), March 2017; OECD, Statistical Systems Division.

Notes: Data not available (e) Estimates (p) Projection, Last update: June 2017

Appendix II. Table of the AFDB portfolio in Burundi (amounts in UA): October 2017

PROJECT TITLE	LOAN NO	SECTOR	APPROVAL DATE	SIGNATURE	DATE OF ENTRY INTO FORCE	COMPLETION DATE	FINAL DATE OF DISBURSEMENT	SUM OF VD CAP.	TOTAL LOAN
BURUNDI - DEVELOPMENT AND ASPHALTING OF MUGI ROADS PROJECT	2100155023016	Transport	06/27/2012	23/07/2012	23/07/2012	12/31/2018	31/12/2017	19,435,293.16	27,500,000.00
HYDROENERGY JIJI MULEMBWE	5900155006951	Power	06/23/2014	31/07/2014	31/07/2014	12/31/2019	31/12/2019		14,340,000.00
NELSAP INTERCONNECTION PROJECT - BURUNDI	2100155018519	Power	11/27/2008	16/03/2009	16/03/2009	12/31/2025	31/12/2019	2,845,056.54	15,150,000.00
PROJECT PREPARATORY STUDY FOR DEVELOPMENT OF BUJUMBURA PORT	5150155001302	Transport	10/14/2013	13/12/2013	13/12/2013	12/31/2017	31/12/2017	650,124.65	825,020.41
WATERSHED MANAGEMENT AND ENHANCEMENT PROJECT	5550155000201	Environment	04/22/2013	28/05/2013	28/05/2013	06/30/2018	31/10/2017	1,915,352.09	2,186,801.09
	5900155004701	Environment	04/22/2013	28/05/2013	28/05/2013	06/30/2018	30/06/2018	5,491,281.86	6,230,000.00
NORTHERN NYAKARARO-MW DEVELOPMENT AND ASPHALTING PROJECT	2100155028266	Transport	09/24/2014	19/11/2014	19/11/2014	06/30/2018	30/06/2018	8,449,645.70	19,420,000.00
PROJECT TO SUPPORT THE PROCESS OF DEVELOPING STRATEGIES OF	5900155012201	Social	05/17/2017	(blank)	16/08/2017	06/30/2019	31/03/2019		8,700,000.00
PROJECT FOR THE CONSTRUCTION AND ASPHALTING OF THE GITEGA-NYANG ROAD	2100155020566	Transport	06/29/2011	16/03/2012	16/03/2012	11/30/2017	30/11/2017	2,786,338.36	10,000,000.00
	5900155001852	Transport	06/29/2011	16/03/2012	16/03/2012	11/30/2017	30/11/2017	31,523,905.77	32,000,000.00
SUPPORT PROJECT FOR THE SOCIO-ECONOMIC REINTEGRATION OF YOUNG PEOPLE	5900155010403	Social	05/25/2016	13/10/2016	13/10/2016	12/31/2020	28/06/2019	276,695.06	770,000.00
	5900155010501	Social	05/25/2016	07/11/2016	07/11/2016	12/31/2020	28/06/2019	118,826.48	380,000.00
MAKEBUKO RUYIGI ROAD PROJECT	2100155026566	Transport	12/18/2013	18/02/2014	07/07/2014	06/30/2019	31/12/2017	6,744,009.14	8,940,000.00
PROJECT MANAGEMENT PLAN FOR PRODUCTION, TRANSPORT AND DISTRIBUTION	5900155006753	Power	04/30/2014	14/08/2014	14/08/2014	03/31/2018	31/03/2018	69,858.47	414,000.00
PROJECT RN 18 NYAKARARO-MWARO - GITEGA PHASE II TRONCON KIBUMB	2100155034067	Transport	02/01/2017	23/05/2017	(blank)	12/31/2020	31/12/2020		9,720,000.00
	5900155011453	Transport	02/01/2017	23/05/2017	(blank)	12/31/2020	31/12/2020		4,080,000.00
REGIONAL RUSUMO HYDROPOWER - BURUNDI	2100155026516	Power	11/27/2013	18/02/2014	18/02/2014	08/31/2019	31/08/2019	165,725.60	16,700,000.00
	5580155000001	Power	11/21/2013	23/09/2014	23/09/2014	08/31/2019	31/08/2019	437,865.73	10,620,397.83
RUZIZI III - SUPPORT FOR COOPERATION, REGIONAL NTÉGRATION	2100155031718	Power	12/16/2015	07/03/2016	07/03/2016	12/31/2022	31/12/2022	105,707.90	1,710,000.00
RUZIZI III HYDROPOWER PROJECT (BURUNDI)	2100155031719	Power	12/16/2015	07/03/2016	07/03/2016	12/30/2021	31/12/2022		19,290,000.00

Annex III: Summary of Procurement Terms and Conditions

CATEGORIES	Millions of UA								
	BPS			BMP					Total
	AOO	AON	Others	AOO	AON	L/R	ED	Others	
1. Works									
1.1 Wetland development				2.66 [2.66]					2.66 [2.66]
1.2 Hillside Irrigation					0.458 [0.458]				0.458 [0.458]
1.3 Post-harvest infrastructure					0.822 [0.822]			0.048 [0.048]	0.822 [0.822]
Rehabilitation of local UGP									0.048 [0.048]
1.4 Watershed Development								2.02 [2.02]	2.02 [2.02]
2. Goods									
2.1 Agricultural inputs				0.706 [0.706]				0.018 [0.018]	0.706 [0.706]
2.2 Huskers									0.018 [0,018]
2.3 Vehicles / Motorcycles								0.026 [0.026]	0.122 [0.122]
2.4 UGP premises					0.122 [0.122]				0.026 [0.026]
3. Consulting Services									
3.1 Market studies						0.106 [0.106]			0.106 [0.106]
3.2 Study developments						0.038 [0.038]			0.038 [0.038]
3.3 Control / monitoring works						0.081 [0.081]			0.081 [0.081]
3.4 Stakeholders training						0,263 [0,263] 0,178 [0,178]			0,263 [0,263]
3.5 Training and capacity building									0,178 [0,178]

to beneficiaries of safe nets						0.055 [0.055]			
3.6 Audit of project accounts						0.097 [0.097]			0.055 [0.055]
3.7 Technical assistants						0.758 [0.758]			0.097 [0.097]
3.8 CGP staff						0.039 [0.039]			0.758 [0.758]
3.9 Procedures and execution manuals									0.039 [0.039]
3.10 Agreement with IRRI							0.471 [0.471]		0.471 [0.471]
3.11 Agreement with ISABU							0.525 [0.525]		0.525 [0.525]
3.12 Agreement with UCODE							1.861 [1.861]		1.861 [1.861]
3.13 Agreement with Kirundo CEM							0.442 [0.442]		0.442 [0.442]
3.14 Agreement with Mutwenzi CAP							0.285 [0.285]		0.285 [0.285]
4. Operations									
4.1 Operations								0.404 [0.404]	0.404 [0.404]
TOTAL									

+ *Figures in brackets represent financing by the Bank.*

Appendix IV: PATAREB: Taking into account Risks Related to Fragility Factors

1. Fragility context in Burundi

After significant progress in consolidating peace and security, economic and financial reforms and improving living conditions of its citizens, in 2015, Burundi underwent a socio-political crisis which slowed down the overall progress achieved. Fragility from the 2015 crisis resulted in a breakdown of socio-political cohesion. Recommendations from an inter-burundi dialogue launched in May 2016 with the help of the international community are slow to be translated into concrete actions. Nevertheless, before the present situation, Burundi had experienced more serious and intense crises from which arose the launch of a peace process and signature of the Arusha Agreements in 2000, cited worldwide as an example of successful social dialogue and peace-building. This experience conferred upon Burundi internal conflict resolution and peace-building capacities which could serve as a basis for moving out from the current crisis. On the economic front, a crisis in 2015 led to a GDP decline of 3.9%. Burundi returned to growth in 2016, but at a slower pace (0.9%) to improve the living conditions of the population. Relations with technical and financial partners (TFPs), in particular the European Union and several of its member countries have not improved much since the crisis.

The country is among the poorest in the world, with a poverty rate of 64.6% in 2014 (67.1% in 2006). The latest UNDP Human Development Report 2016 ranks Burundi 184th out of 188 countries and territories. In addition, the country faces a high unemployment rate, estimated at more than 50%, which particularly affects young people. In addition, the impact of the political crisis, combined with the freeze on external assistance, was further exacerbated in 2016 by the low level of service provision, especially in key sectors, following the decrease in budget appropriations. (29.8% for education, -54% for health and the fight against AIDS, -13.7% for agriculture and livestock and -85.4% for water, environment, urban and physical planning). These declines are attributable to freezing of 33% of the non-public financial assistance between 2014 and 2016. This resulted in: (i) the shortage of drugs, vaccines and supplies for health facilities; (ii) insufficient teaching materials in schools, difficulties in managing basic education and the exclusion of 80,000 students from the education system in 2016; and (iii) pockets of starvation and high levels of malnutrition in some places.

2. Taking into account fragility in the project

The various documents available on Burundi (DSP, regional fragility study, briefs, briefing notes, etc.) show that the main factors of fragility are political, economic, social and environmental. Annex A5 (Volume II) describes how these factors are taken into account by the project. At the sectoral level in the project area, PATAREB interventions in response to the main fragility factors identified are summarized below:

Fragility factors	Situation and challenges	Measures supported by the project intervention
1. Security issues (conflict, violence, insecurity)	<ul style="list-style-type: none">- physical and psychological threats, populations- insecurity and violence limit safe access to basic social services- movement limitations due to insecurity with a significant impact on economic activities,	<ul style="list-style-type: none">- appropriate response to mitigate the socio-economic impacts of crises and to avoid frustrations, tensions and conflicts- increase the resilience capacities of vulnerable local populations most affected by using local labor through immediate occupations such as community service work (HIMO)

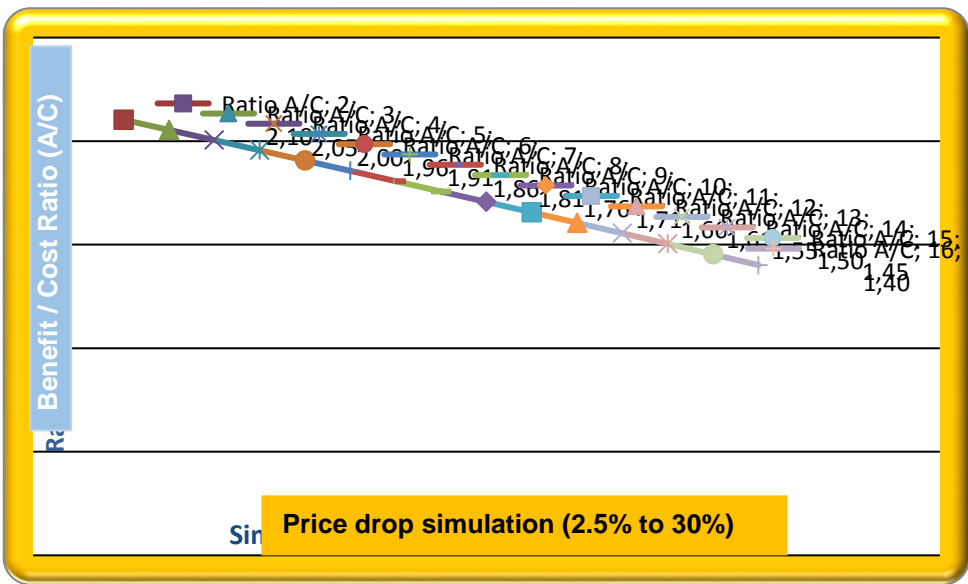
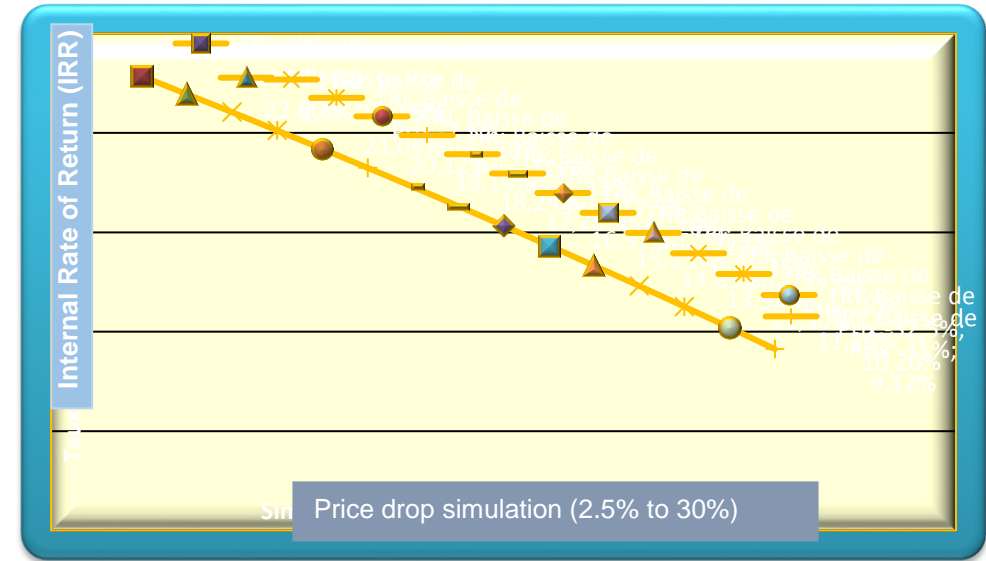
Fragility factors	Situation and challenges	Measures supported by the project intervention
		<ul style="list-style-type: none"> - give priority to mutual aid and solidarity through existing mechanisms such as community work or solidarity funds
2. Low agricultural land security	<ul style="list-style-type: none"> - many land disputes in the country - multiple causes of these conflicts - land tenure dominated by patriarchal inheritance management 	<ul style="list-style-type: none"> - Land development based on a legal framework - Anticipating conflicts by guaranteeing access to justice services and various alternative mechanisms of mediation and justice. - hydro-agricultural schemes accompanied by the establishment of tripartite and collective agreements to mitigate conflicts
3. Taking the humanitarian dimension into account	<ul style="list-style-type: none"> - Regional consequences of the Burundian conflict at the level of refugees and internally displaced persons - return of Burundian refugees 	<ul style="list-style-type: none"> - measures to ensure that populations returning from exile can be reintegrated - coordination with organizations involved in facilitating reintegration
4. Low productivity of the agricultural sector and food insecurity	<ul style="list-style-type: none"> - Traditional production system. - a multitude of small family farms - use of rudimentary tools - production intended primarily for self-consumption - low yields - decrease in pastures - Semi-intensive or integrated farming 	<ul style="list-style-type: none"> - Taking into account the issue of agricultural growth and its contribution to food security - development at the scale centered on: <ul style="list-style-type: none"> o productivity, o agricultural yields on areas of optimal size and an improved mode of exploitation, o professionalization, o value chains o access to the market
5. Overfished fish resources	<ul style="list-style-type: none"> - Overexploitation and pollution of lakes aggravated by famines - tendency to dry up lakes after drought - Fish ponds scattered in the marshes 	<ul style="list-style-type: none"> - Support for the development of the blue economy value chain at: <ul style="list-style-type: none"> o Training and sensitization of fishing communities o organization and supervision of fishing activities o creation of lake management committees o Collection and destruction of any material that does not meet the standards. o respect of a buffer zone of at least 50 meters o credits through microfinance institutions o support for fish farming o support for fish farming and fish enlargement (fish cage in lakes)
6. Insufficient road and energy infrastructure	<ul style="list-style-type: none"> - Road network of the province generally in good condition - Rehabilitation of communal roads and rural roads partly ensured by so-called "community works" activities - Energy needs covered by the use of firewood and charcoal. 	<ul style="list-style-type: none"> - construction of post-harvest tracks - regional planning undertaken in collaboration with the relevant services of the other departments - use of alternative energy sources

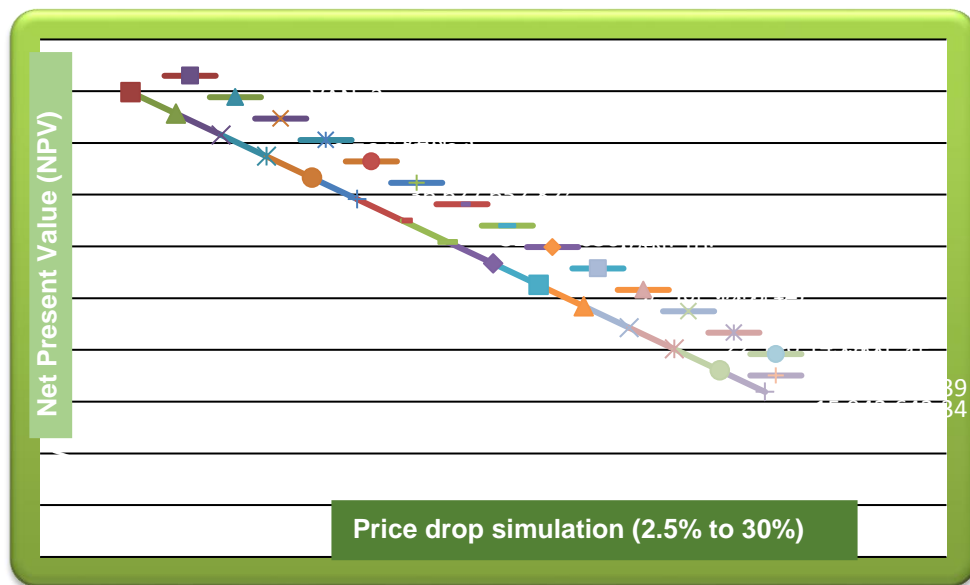
Fragility factors	Situation and challenges	Measures supported by the project intervention
7. Low organization of producers, processing and marketing of agricultural products	<ul style="list-style-type: none"> - beginning of structuring in associations, groups or cooperatives - private sector not developed despite some initiatives - informal marketing of agricultural products - sale of products either directly to consumers or to intermediaries 	<ul style="list-style-type: none"> - structuring of producer organizations within certain sectors - establishment of cooperatives - store construction (inputs and post-harvest) - training in technology review workshops - training in resilient technologies - support for improved seed producers
8. Poverty and inequalities	<ul style="list-style-type: none"> - Families survival difficulties - Several categories of vulnerable people 	<ul style="list-style-type: none"> - ensure food security and basic income security for households living in extreme poverty - strengthening the management of natural and social risks by increasing the resilience capacities of vulnerable populations - employment and income opportunities for the poor, youths and women
9. Consideration of gender issues	<ul style="list-style-type: none"> - importance of women's work in agriculture - multiple other responsibilities of rural women 	<ul style="list-style-type: none"> - Contribution to women's empowerment - increase in women's income - Improvement of women's living conditions and environment
10. Management of natural disasters and adaptation to climate change (drought, floods, bushfires, ...)	<ul style="list-style-type: none"> - Combined effect of climate change and the El Niño phenomenon - Degradation of natural resources (soils, forests, etc.) - drying up and temporary flooding of swamps - poor access to drinking water 	<ul style="list-style-type: none"> - Strengthening the resilience of ecosystems and communities to climate change through: <ul style="list-style-type: none"> o improvement of production systems, o the reduction of the practice of the extensive system, o restoration of ecosystems o reforestation activities, o establishment of green belts, bank protection actions, introduction of innovative techniques into the agricultural system o the construction of hydraulic structures allowing optimal water management, o development of irrigated areas o the promotion of hillside irrigation o dissemination and extension of high-yielding, short-cycle crops, and drought-resistant forest and agro-forestry species o the promotion of the practice of raising small livestock, which makes it possible to fertilize the soil o introduction and promotion of a pumping system using photovoltaic energy around lakes

Appendix V: Economic and Financial Analysis: Summary Table of the Financial Analysis

Synthesis of scenarios															
Scenario Values	Current Values :	Price drop -2.5%	Price drop -5%	Price drop -7.5%	Price drop -10%	Price drop -12.5%	Price drop -15%	Price drop -17.5%	Price drop -20%	Price drop -22.5%	Price drop -25%	Price drop -27.5%	Price drop -30%	Price drop -32.5%	Price drop -35%
Variable cells:															
Price drop	0,00%	2.50%	5.00%	7.50%	10.00%	12.50%	15.00%	17.50%	20.00%	22.50%	25.00%	27.50%	30.00%	32.50%	35.00%
Resulting cells:															
VAN	89,718, 657.01	82,833, 155.96	76,764, 654.91	73,696, 153.86	55,627, 652.82	34,559, 151.77	32,490, 650.72	30,422, 149.67	28,353, 648.63	26,285, 147.58	24,216, 646.53	22,148, 145.49	20,079, 644.44	18,011, 143.39	15 942, 642.34
TRI	23.01%	21.95%	21.04%	20.12%	19.19%	18.24%	17.28%	16.31%	15.33%	14.33%	13.32%	12.30%	11.26%	10.20%	9.12%
Ratio A/C	2.11	2.05	2.00	1.96	1.91	1.86	1.81	1.76	1.71	1.66	1.61	1.55	1.50	1.45	1.40

*The Current Values column displays the values of the variable cells at the time of creation of the summary report. The variable cells of each scenario are located in the shaded columns and the rate of change of the values on the basis of the simulations are graphically represented below.





Appendix VI. Map of the project area

