

## PROJECT IDENTIFICATION FORM (PIF).

PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND: Least Developed Countries Fund

For more information about GEF, visit TheGEF.org

## **PART I: PROJECT INFORMATION**

### A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES:

Project Title:	Natural landscapes rehabilitation and Climate Change Adaptation in the region of Mumirwa in			
	Bujumbura and Mayor of Bujumbura through a Farmer Field School approach			
Country(ies):	Burundi	GEF Project ID:	8010	
GEF Agency(ies):	FAO	GEF Agency Project ID:	631094	
Other Executing Partner(s):	Ministry of Water, Environment, Spatial Planning and Urban Development (MWELPU) Ministry of Agriculture and Livestock (MAE)	Submission Date:	February 1, 2017	
GEF Focal Area(s):	Climate Change	Project Duration (Months)	48	
Integrated Approach Pilot	N/A			
Name of parent program:	N/A	Agency Fee (\$)	558,353	

		(in \$)		
Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	GEF Project Financing	Co-financing	
CCA-1 Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change	LDCF	5,327,397	14,600,000	
CCA-2 Strengthen institutional and technical capacities for effective climate change adaptation	LDCF	550,000	2,800,000	
Total Project Cost		5,877,397	17,400,000	

## B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To address the root causes of landscape degradation due to climate change and unsustainable land uses by rehabilitating degraded land and adapting integrated farming and natural systems to climate change in the region of Mumirwa in Bujumbura Mairie and in the Lake Tanganyika coastal area

				(in	(\$)
Project Component	Financing Type	Project Outcomes	Trust Fund	GEF Project Financing	Co- financing
1. Strengthening institutional and technical capacity for mainstreaming CC adaptation into policies, strategies and plans	TA	1.1 Strenghthened adaptive capacity to implement CCA priorities of the PNCC and the SNPACC at local, regional and national level.  Note: where possible, outcome indicators will be aligned with the revised AMAT once it is available.	LDCF	700,000	1,500,000
2. Enhancing climate- resilience of agro- ecosystems	INV	2.1 Agro-ecosystem CC resilience at the Lake Tanganyika basin reinforced by strengthening sustainable management practices.      2.2 Rehabilitated and sustainably managed forests and river banks.	LDCF	2,372,521	8,600,000
3. Improving the livelihoods of communities by	INV	3.1 Communities deploy a diversified set of resilient livelihood strategies in the project areas.	LDCF	2,225,000	6,050,000

strengthening and diversifying rural value chains					
4. Project monitoring and dissemination of results	TA	4.1 Project implementation based on results- based management and application of project lessons leanned in future operations facilitated.	LDCF	300,000	350,000
Subtotal 5,597,521 16,500,000					16,500,000
	Project Management Cost (PMC) 279,876 900,000				
		Total Project Cost		5,877,397	17,400,000

## C. INDICATIVE SOURCES OF **CO-FINANCING** FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co- financing	Amount (\$)
GEF Agency	IFAD - EU Millennium Development objective achievement acceleration project (PROPA-O)	In-kind	7,000,000
Bilateral aid agency	GIZ Project to improve land management and governance	Grant	1,000,000
Bilateral aid agency	NED National Programme of Agricultural inputs in Burundi	Grant 40% In-Kind 60%	2,600,000
National Government	BUR National Programme of Agricultural inputs in Burundi	Grant 40% In-Kind 60%	5,500,000
GEF Agency	Swiss through UNJP/FAO (SUN project) (UNJP/BDI/034/CEF)	Grant 50% In-Kind 50%	100,000
	EU through FAO (PROPA-O FAO) (GCP/BDI/031/EU)	Grant 50% In-Kind 50%	1,000,000
	Belgium through FAO (GCP/BDI/034/BEL)	Grant 50% In-Kind 50%	200,000
Total Co-financing			17,400,00

# D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS <sup>a)</sup>

						(in \$)	
GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	GEF Project Financing (a)	Agency Fee (b) <sup>b)</sup>	Total (c)=a+b
FAO	LDCF	Burundi	LDCF CCA1/2	(select as applicable)	5,877,397	558,353	6,435,750
Total GE	Total GEF Resources				5,877,397	558,353	6,435,750

a) No need to fill this table if it is a single Agency, single Trust Fund, single focal area and single country project.

## E. PROJECT PREPARATION GRANT (PPG)<sup>1</sup>

Is Project Preparation Grant requested? Yes 
No 
If no, skip item E.

GEF	Trust	Country/	Focal Area	Programming	(in \$)
-----	-------	----------	------------	-------------	---------

PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$1 mil; \$100k for PF up to \$3 mil; \$150k for PF up to \$6 mil; \$200k for PF up to \$10 mil; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

b) Refer to the Fee Policy for GEF Partner Agencies.

Agency	Fund	Regional/Global		of Funds		Agency	Total
					PPG (a)	Fee <sup>2</sup> (b)	c = a + b
FAO	LDCF	Burundi	LDCF		150,000	14,250	164,250
Total PPG Amount				150,000	14,250	164,250	

### F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS

N/A as project is solely financed through LDCF.

### PART II: PROJECT JUSTIFICATION

PROJECT OVERVIEW

A.1. PROJECT DESCRIPTION. BRIEFLY DESCRIBE:

1) THE GLOBAL ENVIRONMENTAL PROBLEMS, ROOT CAUSES AND BARRIERS THAT NEED TO BE ADDRESSED

Climate Change and the impact on livelihoods and interdependent natural eco-systems

Burundi's climate varies with altitude that reaches 2000 m in the ridge between the Congo and the Nile basin. The average rainfall ranges between 1400 mm and 1600 mm and annual average temperatures range from 0°C to around 15°C. The country is divided into two major river basins: 1) The Nile River Basin which comprises the Ruvubu river (and its tributaries), the Kanyaru river and a Kagera river tributary, and 2) the Congo River Basin. Despite this wealth of water resources, water in Burundi is a vulnerable resource which is limited by a variety of factors including the lack of irrigation infrastructure and often unfavorable weather conditions in some areas and the uneven spatial and temporal distribution of rainfall. The current climate of Burundi is characterized by seasonal variability in precipitation, producing long dry periods (June to September) and rainy seasons (October to May). Climate-related disturbances have often been recorded in different regions of the country. In the region of Mumirwa, drought recurrently leads to a reduction in water resources and a decline in agricultural production as well as losses in livestock and poultry populations. In contrast heavy rain causes severe erosion and flooding in the plains of Imbo, followed by destruction of infrastructure, including roads and houses in the city of Bujumbura. Based on NAPA's long term modeling, an overall increase of rainfall ranging from 3% to 10%, is expected, but with a decrease of 4% to 15% for the month of May (end of the rainy season) and October (the beginning of the rainy season). Models (i.e IFPRI, DFID) predict a tendency towards more extreme weather cycles (floods, drought etc.).Burundi endured significant economic costs from such extreme weather events: severe floods in 2006 and 2007 and severe drought from 1999-2000 and again in 2005. During this time, the northeast provinces were especially hard hit; this is an area which also supports a higher population density and resulted in a high loss of GDP, estimated between 5-17% (The Stockholm Environment Institute,2010). Also, an increase in average temperature of 0.4°C is expected every 10 years, with a total increase of 1.9°C expected by 2050. Therefore, climate change will likely represent one of the root causes of poverty by reducing crop productivity and consequently increasing land degradation due to unsustainable and intensive land use. The threats of these land uses on the environment are numerous. Many of the threats result in marginal land exploitation which in turn leads to additional conversion of remaining natural areas, degradation of watersheds, erosion, etc., all limiting the ability to provide the key ecosystem services Burundians depend on Small farmers and pastoralists are especially vulnerable because of their limited access to resources and knowledge suitable to help adapt to climate variability and climate change. As highlighted in the National Strategy on Agricultural development 2008-2015 of the Ministry of Agriculture and Livestock (MINAGRIE), there is an urgent need to address the following environmental threats: the continued use of the extensive model for animal (livestock) husbandry in a land-scarce and densely populated country is leading to overgrazing, poor production, and conflict; limited off-the-farm alternative economic opportunities are threatening the environment, as pressure on the land is increasing; traditional land inheritance systems resulting in smaller agricultural plots (< 0.5 ha on average) per household with continued and increasing demographic pressure is limiting availability of arable land and leading to exploitation of marginal and/or environmentally sensitive lands as well as land-based conflicts. Moreover, real incorporation of agroforestry in the technical approaches of farmers remains limited and traditional extensive practices continue to be the norm. This continues to result in degraded lands with limited agroforestry for green manure and limited chance for fallow leading to poorer soils.Limited awareness of the benefits of maintaining natural forests is leading to conversion of forests to other land cover and uses that produce more immediate and/or clear economic benefits. Many of these compounding factors lead to limited incentives for sustainable forest management for production or conservation by the State, local authorities, private sector, communities or individuals.

<sup>&</sup>lt;sup>2</sup> PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

A number of barriers that are described below prevent the efficient adaption of CCA measures at different levels.

### Barrier #1: Unsustainable, intensive land use and limited experience in CCA measures in the Mumirwa region

The NAPA has described the Mumirwa region as one of the areas most affected by climate-induced soil erosion due to rainfall events and decreases in vegetation. The region is characterized by a rugged landscape of hills patterned with various altitudes. It has a tropical climate with three micro climate nuances; a dry tropical climate in part of the lowland (<1400 m), a humid tropical climate (1400m-1800m) and a humid tropical altitude climate in the highlands. Its hydrography is dense and has many suitable sources. The area is reported to be among the most degraded in the country, based on the LADA national assessment undertaken by the FAO, impacting socio-economic and productive ecosystem services. The region is naturally prone to land degradation due to steep slopes, especially when the biomass cover is removed. The problems will be exacerbated by climate change, as heavy and erratic rainfalls will increase soil erosion on denudated soils. Much of the land and natural resources currently are overexploited due to the high population pressure (approx. 400 inhabitants/km2)and unsustainable land-use that contribute to the removal of the vegetation cover. For instance, due to land/water conflicts and overgrazed pastures, subsistence farmers are increasingly encouraged to raise their animals in enclosures (zero grazing system) with green fodder either gathered off nearby lands or harvested from their fields and brought back to the enclosures (USAID). Soil loss due to erosion is estimated to be more than 100 t / ha / year in this steep and populous region (Burundi Agriculture Research Institute, 1989, ISABU in French). Indeed, the Mumirwa region is characterized by high physical, chemical and biological soil degradation. Pests and diseases contribute to degradation, which are also anticipated to be exacerbated by climate change. Until recently, the area was generally covered by Mumirwa banana, which contributed not only to the increase in household income, but also the protection of soils. However, the banana xanthomonas wilt disease has recently led to serious losses in banana crops and has left the soil bare with subsequent increases in soil erosion, causing damage to the socio-economic infrastructure of the city of Bujumbura. This also has had an offsite affect by decreasing crop production in the nearby plains areas and by increasing pollution around Lake Tanganyika. Furthermore, degradation in these areas is associated with crop encroachment and shortening of fallow period due to overgrazing, fires, and forest cover reduction (deforestation).

Farmers in the region face enormous difficulties to adopt to CC in an effective manner due the lack of technical knowledge and needed equipment especially with regards to erosion control and soil fertility restoration (NAPA). Urgently needed is the introduction of adaptive management practices in combination with rehabilitation efforts in the climate-change affected region of Mumirwa, (that extends further to the Congo-Nile ridge until the Province of Makamba). The present project aims to introduce an integrated landscape-based approach to reinforce production resilience and to protect the natural environment in the selected areas.

### Barrier #2: Lack of capacity, appropriate policies and application of legal instruments

In 2013 the GoB adopted the *Politique Nationale Sur Le Changement Climatique* (National Policy for Climate Change, PNCC in French) and the *Stratégie Nationale et Plan d'Actions sur le changement climatique* (National Strategy and Action Plan for Climate Change, SNPACC in French). In SNPACC, land degradation is considered one of the main CC risks. The strategy highlights the importance of serious efforts at capacity building in agricultural areas. However, these recent policies are scarcely applied (see baseline section). Furthermore, the lack of efforts toward CCA and land rehabilitation is indirectly linked to the lack of capacity, knowledge and experience, which are an obstacle for development, both at a smallholder and governmental scale. This is linked to weak governance, especially at a decentralized level. The proper functioning of local government councils and of individual councilors is of decisive importance for the future security, stability and reconstruction of the rural areas. Weak governance severely limits the scope of measures and reforms which can be undertaken, especially those that would attract the private sector. Finally, lack of capacity for appropriate planning directly contributes to land degradation. For example, modern infrastructure, such as roads, trails and modern roofs expose the landscape to extreme soil erosion and gulley formation. At the same time, lack of capacities to manage and to appropriately plan existing and new ecotourism infrastructures, such as natural reserves, parks, and beach facilities, contribute to degradation and decrease the potential for building a more diversified livelihood for rural communities.

### 2) THE BASELINE SCENARIO OR ANY ASSOCIATED BASELINE PROJECTS

As described above, the Government of Burundi (GoB) has recently approved the Naitonal Policy for Climate Change (PNCC) and the National Strategy and Action Plan for Climate Change (SNPACC); however, these policies and strategies are not yet applied. Despite the fact that climate variability has been considered in rural development policies, programmes and field activities, farmers and agro-pastoralists will soon be subject to greatly increased risks owing to climate and environmental changes, especially in the highly populated Bujumbura area. The NAPA follow-up to date has focused on creating basic awareness and enabling institutional conditions to better address CCA issues, and demonstrating best practices in climate-resilient agro-pastoral production for sustainable improvement of food security in the most vulnerable communities. Likewise, land degradation projects, such as the Kagera TAMP project, have focused on climate variability and CCA. However, still

lacking is a proven efficient outreach platform to increase institutional capacity to up-scale the wider adoption of demonstrated best practices and territorial management efforts.

The FAO and other international partners, such as IFAD, have supported the GoB in coping with repeated food crises and are now interested in supporting a shift from a reactive to a more proactive approach; linking food security, land rehabilitation, and CCA.

The GoB has an important portfolio of "projets sous tutelle" related to the issues of CCA and land degradation, led by the Ministry of Water, Environment, Spatial Planning and Urban Development (MWEPU), and the Ministry of Agriculture and Livestock (MAL). However, most of these projects and programmes do not systematically integrate CCA practices, but are often sector-specific in design (no integration between the components of production systems) and lack a systematic approach for training existing and future farmers and herders on methods to consolidate local knowledge and adaptation capacities, together with introduced practices aimed at improving ability to adapt. An example is the National Programme of Agricultural Inputs (BUR) launched by the GoB with the support from the Netherlands in 2013. The programme, which will form part of the baseline, aims at increasing agricultural production by facilitating access to agricultural inputs, especially mineral fertilizers, for poor communities.

Since 2010 the FAO has supported the GoB through development of non-formal, participative educational methods--the "Farmer Field Schools" (FFS), which help build farmers' knowledge and skills and enable adaptation and adoption of improved agronomic practices. The FFS approach is widely appreciated as a successful platform for scaling up the adoption of new practices by farmers. Recently, a landscape approach to agricultural management has been introduced through FFS in the Kagera TAMP project, and nutrition is currently being introduced into the FFS curricula through projects financed by Belgium and Switzerland, which are also part of the baseline projects. The strategy proposed in the current proposal is to introduce CCA practices and technologies to farmers in Burundi through the same FFS platform for community based learning.

The country's FFS activities are fully integrated into the MWEPU and are coordinated by the *Direction National pour la promotion et la vulgarisation agricole (DGMAVA* in French), which is responsible for FFS and community development organizations. The FAO has supported the GoB in the application of the FFS through several projects. However, to date the FFS curriculum and training materials do not systematically include CCA best practices, CC impact monitoring or climate forecasting as decision-support tools for farmers. An additional important baseline activity is the IFAD-funded EU MDO PROPA-O project (Millennium Development objective achievement acceleration project, FED/2012/024-118, Euro 18 million). This latter project addresses the improvement of the agricultural productive base using an Agro-Pastoral Field School (APFS) approach, but does not include NRM or CCA.

The table of chapter 4 provides further details related to the baseline projects which constitute the cofinancing of the proposed project.

# 3) THE PROPOSED ALTERNATIVE SCENARIO, WITH A BRIEF DESCRIPTION OF EXPECTED OUTCOMES AND COMPONENTS OF THE PROJECT

The proposed GEF co-financed project will expand the scope of activities carried out in the project intervention areas and focus on increasing resilience of the agricultural sector to CC. The resulting decrease in vulnerability of small-scale farmers and pastoralists who depend on agriculture and husbandry will increase food security in the region. In order to reach its objective, the project will build on existing FFS efforts in selected areas of the Bujumbura province and within the Lake Tanganyika basin, which will ensure a continuous process for updating the skills and information base needed for communities to cope with CC. The CCA interventions will be carried out in form of an integrated landscape approach, taking into account the special adaptation needs of farmers, agropastoralists and herders. The CCA best practices identified and implemented will strengthen and diversify ecosystem services as a strategy to improve both economic and agro-ecological resilience through the use of local and improved varieties, diversification and improvement of horticulture varieties, use of crop rotation schemes, agro-forestry, and development of small-scale irrigation. Improving agro-ecological resilience will be addressed through dissemination and testing of stress-tolerant crops (both drought and floods) and stress-tolerant livestock breeds, and by strengthening functional biodiversity of farming systems through activities that integrate improvements in agriculture, forestry and animal husbandry. Sustainable Land Management (SLM) will be applied through a community forest and river management scheme to reduce soil erosion and stabilize river banks. The proposed project will expand the network of FFS to support community based capacity building, promote participatory learning processes and implement various best management practices for the management of water and land. Strengthening and diversifying income-generating activities for the local communities will support the resilience of livelihoods. Outcomes will help to ensure climate resilience, improve natural resource management, enhance ecosystem services in agricultural production areas, and increase the quantity and quality of food produced.

The identified baseline projects already address agro-pastoral production, capacity building of farmers through the FFS approach, sustainable agriculture to reduce environmental risks and CC threats, livestock repopulation, rehabilitation of

degraded areas through reforestation and, rehabilitation of socio-economic infrastructure. However, despite the substantial contribution of the baseline scenario, the activities carried out so far have no systematic approach to CCA, and therefore the gaps and barriers continue to aggravate the weak situation.

The project will be implemented though the following four components:

## Component 1: Strengthening institutional and technical capacity for mainstreaming CCA adaptation into policies, strategies and plans.

The additional financing from the LDCF through Component 1 (US\$ 700,000) will strengthen the technical capacity in the Ministry of Water, Environment, Spatial Planning and Urban Development (MWELPU), the Forestry Department, and Ministry of Agriculture and Livestock (MAE in French) at national, regional and district levels on climate change adaptation, diversified agriculture strategies, agro-forestry and community forest management. In order to ensure an effective coordination across ministries and to facilitate the mainstreaming of most effective CCA approaches and practices into policies, strategies and plans the project aims at establishing a cross-sectoral coordination mechanism including (but not limited to) MWELPU, Forestry Department, and MAE. One of the key results will be a knowledge based territorial management plan and a communication strategy.

The outcome of the first Component will be: Strengthened adaptive capacity to implement CCA priorities of the National Policy for Climate Change and the National Strategy and Action Plan for Climate Change at local, regional and national level.

### **Component 2: Enhancing climate-resilience of agro-ecosystems**

The additional financing from the LDCF through Component 2 (US\$ 2,372,521) will support the rehabilitation of degraded land and the resilience of agro-ecosystems of the Lake Tanganyika basin. This will be achieved by introducing at least 15 best practices including: (i) practices that improve crop and livestock productivity, and (ii) practices that build functional biodiversity of farming systems through integration of agriculture, forestry and animal husbandry, and the use of drought resistant varieties and species. All selected practices will aim at promoting integrated approaches to soil fertility, water management, and agroforestry, as improved options for climate-resilient integrated natural resource management in crop-livestock systems. The project will build upon and benefit from the current existing FFS system, which will be extended to 22 new pilot areas (reaching at least 264 new FFS) in order to disseminate the identified practices. The FFS approach will develop an integrated perspective for improving livelihoods and will aim to improve nutritional status by diversifying local food types, and by increasing production and promoting consumption of high-nutritional value foods. Furthermore the FFS approach will consider gender aspects targeting 30% of women within at least 5000 farmers and agro-pastoralist households. As a measure to protect farmland from floods and from negative impacts of run-off water, the project will pay particular attention to reforestation activities and the stabilization of riverbanks. The sustainable management of rehabilitated areas of forests and river banks will be addressed by establishing Community Forestry Committees and incentive mechanisms for the establishment of a river bank management structure.

The outcomes of the second Component will be: a) Agro-ecosystem CC resilience at the Lake Tanganyika basin reinforced by strengthening sustainable management practices and, b) Rehabilitated and sustainably managed forests and river banks.

### Component 3: Improving the livelihoods of communities by strengthening and diversifying rural value chains

The additional financing from the LDCF through Component 3 (US\$ 2,225,000) will promote the diversification of climate resilient livelihood strategies and the intensification of agriculture production systems to better manage climate risks and vulnerabilities. This diversification will be achieved by setting up, within the 22 pilot areas developed under Component 2, four investment pilot areas where a total of eleven (11) activities, aiming at strengthening and diversifying local production systems, will be carried out, targeting at least 20% of the households. The activities will build upon CCA practices acquainted within Component 2 and on-going efforts provided by the baseline (see Chapter 4). The exact scope and details of activities will be determined jointly with the beneficiaries and in accordance to the social, agro-ecological and economic conditions that characterizes each of the four pilot areas. It is however expected that such activities comprise the following: a) creation of small-scale rural infrastructure for agricultural production and storage facilities, building on the PROPA-O baseline, b) reinforce the distribution techniques and the appropriate (CC resilient) use of inputs, building on the existing National Programme of Agriculture, and c) develop handicrafts and support ecotourism, building on the existing ecotourism infrastructures (the project will collaborate closely with the *Organisation D'appui Paysanne*, which is reinforcing handicraft production in rural areas). In the coastal areas of Lake Tanganyika the component will also develop additional income-generating activities such as NTFP and small livestock production.

The outcome of the third Component will be: Communities deploy a diversified set of resilient livelihood strategies in the project areas.

#### **Component 4: Project monitoring and dissemination of results**

The performance monitoring will rely essentially on the project M&E system. The M&E system will specify the impact, outcome and output indicators, the activities to be performed, the methodology, and clarify the roles and responsibilities of partners and stakeholders. The monitoring and evaluation system will include outcome and output indicators of the Adaptation Monitoring and Assessment Tool (AMAT) relevant to LDCF objectives targeted by the project (see Table B). Outcome and output indicators which will be gender sensitive, targets and baseline will be established during the full proposal preparation stage. The impact of adaptation practices and improvement of adaptive capacities and livelihoods will be assessed through surveys (farmer groups and households) and will be compared against the initial baseline scenario. Best climate change adaptation practices will be screened based on the indicators: environment friendliness, potential to reduce the impacts of climate risks, economic viability, sustainability, social acceptability, gender sensitivity, income generation, enterprise diversification, seasonal relevance and community's need. The GEF funds will be used to carry out an independent mid-term and a final evaluation, and to disseminate good practices and lessons-learned for up-scaling by the partners and stakeholders to ensure the project's sustainability.

The outcome of the fourth Component will be: Project implementation based on results based management and application of project lessons learned in facilitated future operations.

# 4) INCREMENTAL/ADDITIONAL COST REASONING AND EXPECTED CONTRIBUTIONS FROM THE BASELINE, THE GEFTF, LDCF, SCCF, AND CO-FINANCING;

Table 1 - Co-financing projects

The project will receive co-financing from different sources, as depicted in the following table. This information will be updated during the PPG for crafting final co-financing arrangements.

Donor and	Executive	Baseline project description	Co-financing and additional value
project name	institution		
	/budget (USD		
	M) / timing		
(MDO-EU) PROPA-O Millennium Development Objective achievement acceleration project  Donor: IFAD	State Institution Entity: Ministry of Agriculture and livestock (MAL)  18 M  2012- 2017	PROPA-O aims to capitalize on the achievements, experiences and successful methods from previous and ongoing interventions by EU, IFAD and other partners in food security and malnutrition eradication. Main intervention sectors include the improvement of the agricultural productive base, producers' organizational capacity building, promotion of stocking, processing and trading of agricultural products, and promotion of nutrition education. The project uses APFS but does not address neither NRM nor CC.  The project is implemented along the coast of Lake Tanganyika.	Co-financing: US\$ 0.5M to Component 1, US\$ 0.95M to Component 2, US\$ 5.2 M to Component 3, US\$ 0.25 M to Component 4, and 0.1 US\$ M to management.  Synergies and complementarities will include capacity building for agricultural producers and improvement of the productive base for a better management of water and natural resources. The proposed activity (Component 1 and 2) will be additional to PROPA-O Component 1, Axis 1.1.d, and 1.2.a by including CCA into capacity building through FFS. While the PROPA-O is addressed to watershed management the proposed project includes the CCA FFS as a key activity to sustainably improve productivity. Also, the Component 2 of the intended LDCF project will define a diverse set of agricultural and production practices and techniques; develop small scale infrastructure; and reinforce input distribution. These activities will be exploited in subcomponent 1.1 of the APRA-O project. The PROPA-O activities will significantly co-finance the establishing of new livelihood options under Component 3, particularly in the processing of agricultural products. Finally, PROPA-O will contribute to M&E (Component 4) and in the management of the intended project.
GIZ Project for the	State Institution Entity: Ministry	In Burundi, more than 80% of the cases in tribunals originate from land conflicts.	Co-financing: US\$ 1M to Component 1.
Improvement of	of Water,	Land based crime between members of the	To complement the GIZ project, the proposed project
Food Security	Environment,	same family are observed today. The GIZ	aims at strengthening the institutional arrangements
and Social	Land Planning	project aims at improvingland	around natural resources management and building
Cohesion in the	and City Planning	management and governance to secure	adaptive capacity to CC at the grassroots level,
Province of		land tenure and solve conflicts. Project	addressing the nexus between food security and climate
Rural	1 M	components include:	change adaptation.
Bujumbura.		Supporting agricultural production: plant	

			<u> </u>
Government of	State Institution	production, income from agricultural; production and productive infrastructure  • Improving food consumption: nutritional advice in the municipalities;  • Promoting integrated community development: cultural and sporting events.  Although key municipal infrastructure is being built by the project to improve sustainable production conditions, such as terraces to sustainably combat erosion and protect productive land, the project does not include activities with stated aims to cope with CC and mainstream CCA at community, local and national levels.  The Government of Burundi, with support	Co-financing:
Netherlands and Government of Burundi	Entity: Ministry of Agriculture and Livestock (MAL)	from bilateral and multilateral partners, has established a ''National program of subsidies for agriculture inputs'', including mineral fertilizers. The programme aims to	Netherland: US\$ 2.3 M to Component 2, US\$ 0.2 M to Component 3, and US\$ 0.1 M to Component 4. GoB: US\$ 4.7M to Component 2, US\$ 0.1 M to Component 3, and US\$ 0.7 M to Management
National Programme of Agricultural inputs in Burundi.	6.5 M from the Netherlands and 8 M from GoB 2013-2020	modernize and develop the agricultural sector, to generate long term growth, employment, revenue and wellbeing. The objective is to increase agricultural production while making inputs available at a relatively accessible cost to the generally poor communities.	The collaboration between the intended project and the Netherlands and GoB activities will allow access to mineral manure for experimentation among the supervised FFS and the development of income generating activities. Capacity building sessions on the efficient use of chemicals will be introduced in the LDCF project through the Netherlands/Gob project. The LDCF project will be additional to the Netherlands and GoB activities by introducing CCA into the subsidy's framework.
Belgium (GCP/BDI/034/B EL)  Multi-stakeholder Program to improve food security in the municipalities of Cendajuru, Gisuru and Kinyinya	State Institution Entity: Ministry of Agriculture and livestock (MAL)  0.64 M from Belgium  2013 - 2018	The FAO Burundi has recently benefitted from the Belgian Fund for food security that contributed to making available and accessible a well-balanced diet for the vulnerable populations, through an FFS adapted curricula. CCA is currently not mainstreamed in the FFS curricula.	Cofinancing US\$ 0.2 M to Component 2.  The LDCF project will be additional to the Belgium funds, by introducing the CCA modules into the FFS already involved in the Multi-stakeholders Programme. Inversely the focus on building capacity to address balanced diets and nutrition will be introduced in the FFS curricula of the LDCF project.
Switzerland UNJP/BDI/034/C EF through FAO Tackling malnutrition in the vulnerable province of Ngozi	Jointly implemented by UNICEF, FAO, and WFP.  0.67 M from Switzerland  2014 – 2016 (possibly extended)	Jointly with the FAO Belgian project mentioned above, the activity aims at training for, and promoting of Farmer Field Schools (FFS) and Junior Farmer Field and Life Schools (JFFLS), particularly for the benefit of youth and female heads-of-household in Ngozi area by enriching local food, and by increasing production and promoting consumption of high-nutritional value food. The project area is likely to be expanded to the Bujumbura zone. CCA is currently not mainstreamed in the FFS curricula.	Cofinancing US\$ 0.1 M to Component 3.  Similarly to the previous listed project, the LDCF project will be additional to the Switzerland funds by including CCA into FFS curricula. Contrariwise the Switzerland funded project will contribute to introduce nutritional modules in the FFS of the LDCF project, with a special focus to production and consumption of enriched food. Marketing of enriched foods will contribute to improve the livelihoods and diversify the farmers' revenue.
EU through FAO (PROPA-O FAO) (GCP/BDI/031/E U)  Support to agricultural development,	FAO 2 M from EU 2013 - 2017	The project, set in the framework of the EU-MDO and complementary to the National Food Security Programme (PNSA), aims at reinforcing the farmers' productive capacity and at improving water and natural resources management. The project is implemented in the province of Makamba, within the region of Mumirwa.	Cofinancing US\$ 0.45 M to Component 2, US\$ 0.45 M to Component 3, and US\$ 0.1 M to Management.  The additionality of the intended project to the EU funded project will consist in introducing of CCA best practices and tools. The EU project activities will cofinance the FFS establishment for water and NRM (Component 2) and the monitoring activities in

enhancement of		Component 4.
agricultural	Although the project includes actions to	
products and	reduce environmental risks and protection	
access to the	of land and natural resources (such as	
market in the	improved management of wetlands and	
provinces of	watersheds) the project does not include	
Makamba and	activities with stated aims to cope with CC.	
Rutana.		

### 5) GLOBAL ENVIRONMENTAL BENEFITS (GEFTF) AND/OR ADAPTATION BENEFITS (LDCF/SCCF);

The LDCF project is expected to generate the following adaptation benefits in the area; a) At least 80% of 5,000 farmers in the project area (of at least the 30% women) adopt knowledge-based territorial management plans so that a single policy and strategy is implemented, b) Ecosystem CC resilience of Lake Tanganyika basin is reinforced by improving agricultural infrastructure investment for community-based adaptation, c) A diverse set of agricultural practices and production techniques are piloted in 22 selected areas (2 selected areas per commune), d) Four CCA/SLM investment pilots are in place (as part of the 22 selected areas under Component 2, e) Four community forest management schemes are in place covering 5,000 ha and 300 km river banks are stabilized to reduce negative effects of run-off water and floods on productive land, f) Eleven pilot climate resilient activities in place to support local communities and farmers in strengthening and diversifying their production, g) 5% increase in targeted rural population revenue in piloted CCA/SLM investment areas, enabling rural stakeholders to cope with CC by adopting diversified agricultural activities and community-based adaptation practices (including CCA/SLM investments).

### 6) INNOVATIVENESS, SUSTAINABILITY AND POTENTIAL FOR SCALING UP.

Building an environment that promotes **innovation** is the objective of the FFS approach. Existing local knowledge is solicited, valued, and tested along with newly introduced ideas. Discussions, debates, and experimentation are the core of the field schools. Conducting experiments in communal field school plots provide a zero-risk environment where farmers can test new ideas with no fear of loss. Continuous local-scale innovation is ensured by the FFS "grass-roots laboratories" approach, in which farmers build and expand their knowledge base and evaluate technical options. In general, previous experience with the FFS projects in the sub-region shows that sustainability of the Field School approach requires investment and time. Adoption or "institutionalization" of these new educational approaches comes only after sustained stakeholder involvement at multiple levels, during which the benefits of the approach become clear, leading to an increasing demand for activities.

With the additional financing from the LDCF, the proposed intervention will be innovative as it will expand the scope of the activities carried out in the country related to increased resilience of the agricultural sector to climatic changes and contribute to decreasing the vulnerability of small-farmers and pastoralists who depend on agriculture and husbandry, through the FFS methodology which ensures a continuous process for updating the information base needed to cope with CC.

The sustainability of the expected project outcomes is built into the project approach and outputs as follows:

<u>Sustainability of the capacities introduced</u>: The FFS system is well established in Burundi and provides a solid and durable structure for the project results to be sustained, replicated and mainstreamed beyond the project's duration. Through capacity building activities - addressed to farmers, program managers and facilitators - the use of new tools and systematized information to enable communities to cope with CC-induced threats will be built and sustainability ensured. This will bring specific CCA-oriented curricula into rural development activities using an FFS/APFS approach. In many of the countries in the sub-region, where field schools have been active, statistics show more than 90% reduction in use of toxic pesticides by training only a fraction of the total farming households. Given a sufficient "critical mass" of trained farmers, this diffusion (farmer-to-farmer) helps in scaling up numbers and ensuring sustainability.

<u>Institutional strengthening</u>. By creating strong awareness, capacity building and inter-institutional dialogue on climate change adaptation in agricultural sector policies and programs will be ensured that the process of adaptation to risks of climate change will be sustainable beyond the project. Effective communication between the lead ministry dealing with climate change adaptation (e.g. ministry of environment) and central ministries such as finance and planning will be reinforced and guaranteed by the project through an inter-sectoral task force.

<u>Income generation</u>. Income generating activities such as handicrafts and ecotourism, Non-Timber Forest Products (NTFP) production, and small livestock raising will increase and diversify stakeholder revenue; thereby enhancing the financial sustainability and acceptance of proposed methods over the long term.

A.2. Stakeholders. Will project design include the participation of relevant stakeholders from civil society and indigenous people? (yes  $X / no \square$ )

The project will collaborate with the following civil society organisations: Association Pour Le Developpement Integre Des Communautes (ADIC), the NGO PROTOS, Organisation D'appui Paysanne (OAP), Help Chanel Burundi (HCB), Association

Pour La Protection De L'environnement « Dukungire Ibidukikije » (Environ-propre). ADIC supports a peasant agriculture program conducted jointly by the OAP and Brotherhood Mutual. The project has entered its second phase aiming to increase food production and income for the people of the province of Burjumbura. It services 2,275 households, grouped into 111 producer associations distributed in 11 towns. PROTOS is a Belgian organization whose mission is to contribute to the fight against poverty and to improve food security in the Bujumbura province through integrated management, protection, restoration and enhancement of natural resources. OAP is a local organization that focuses on organizing community activities through agriculture capacity building, handicrafts, market development, and infrastructure building. HCB is specialized in integrated watershed management and will work as a field level service provider. Environ-propre works in community organization, watershed management, and community based forest management.

The above mentioned organizations, which include indigenous people and civil society, have been involved since the PIF design through the FFS network in the project zones. Based on their previous experience and collaboration with villages involved in the FFS each organization cleared up the main areas of collaboration and provided decisive inputs on project design such as suggestions related to income generating activities.

A consultative workshop will be organized at the beginning of the PPG phase to jointly develop a stakeholder Participation Plan. The Plan will define the specific tasks, intervention areas and the steps of the project execution in which each identified stakeholder will be involved. Specifically, the support of the mentioned stakeholders during project implementation will be focused on two main steps: a) at the beginning of the project for an initial recognition of existing best practices and lessons learned in CCA and to select the most successful; b) during capacity building of the farmers through FFS/APFS by supporting the training to improve CCA and by strengthening the liaison of farmer groups with extension services.

## A.3. Gender Considerations. Are gender considerations taken into account? (yes X /no ).

In Burundi gender mainstreaming efforts are generally already very advanced. According to the Global Gender Gap Index Burundi ranks at 22 out of 136. Nonetheless the proposed project will follow the GEF and FAO policy of ensuring gender equality since poor rural women are among the most affected by CC. The project will therefore ensure the equal participation of men and women in the initial stages of project conception, approval and implementation. A needs assessment will be done at the project development phase and be used to define the roles of women and men early in the project. Moreover, the project will determine the interests and needs of other vulnerable groups such as youth, landless, children, elderly and internally displaced people. The project will develop a Gender analysis that will identify the different roles and responsibilities of women and men, their control over and access to resources and services, their knowledge base and access to information, and their involvement in decision-making processes and leadership roles in local institutions, organizations and networks. By including a thorough gender analysis at the design stage, the project is able to identify and address gender gaps and support strategic activities that promote women's and men's economic and sociopolitical empowerment. The gender analysis will be conducted in a participatory manner, which will raise the consciousness of local women and men about different types of gender inequality and empowers women and men to take action to reduce inequality. Further, the gender analysis will be mainstreamed into livelihoods analysis and thereby represent another principal cornerstone of project design and implementation. The gender analysis will also be an integral part of project implementation and activities to monitor progress and assess project impact.

A.4 Risk. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable):

Risk	Rating	Mitigation measure
Occurrence of extreme weather events which may affect crop cycles and increase food/nutritional insecurity, as well as natural climate shocks which may cause contingencies and emergencies during project operations	Н	Climate change will likely represent a high risk because it will reduce crop productivity due to extreme events (both drought and flooding), and consequently increase land degradation. The project will mitigate this risk by implementing land conservation, SLM activities and CCA policies and measures to strengthen pro-active and coordinated responses, as well as by initiating multi-stakeholder, community-based capacity-building initiatives (i.e FFS). Appropriate partnerships and collaborations with on-going emergency/post-emergency initiatives and with governmental programs regularly supporting crop health will improve responses to those risks.  Finally, mitigation measures to cope with extreme weather events will include managing the crop calendar in overlapping or sequential phases to reduce the risk of total destruction from any single-season extreme weather event; also, the diversification of climate resilient livelihood strategies such as developping handicrafts and supporting ecotourism, building on the existing ecotourism infrastructures (activity of component 3).
Lack of capacity in local institutions	Н	Government capacity is likely to represent a high risk, although capacity for FFS activities has been demonstrated in other areas of the country. The risk of non-compliance will be mitigated by mobilizing and articulating the capacity of different actors, projects, programs and bilateral agencies to work intensively with government and gradually transfer skills to government

		counterparts. The limited capacity will be mitigated by mobilizing capacities of different actors and establishing a cross-sectoral coordination mechanism.
Pest and disease outbreaks and	M	Pest and disease attacks are likely to pose a medium risk. The project will address LD risks by
disruptions that could hamper		strengthening capacities of rural stakeholders to manage crops sustainably and to avoid pest
land rehabilitation strategies		and disease attacks. The project will address CCA risks by systematically linking the adoption
and reduce project		of CCA measures to reduce seed multiplication failures, particularly with specialized seed
beneficiaries' ability to		farmers. Also, an Integrated Pest Management strategy will be developed and applied as an
participate actively in critical		effective method to reduce the risks of pest and disease attacks without endangering human
project activities.		and environmental health through highly hazardous pesticides.

*Note: a detailed rsik analysis will be conducted during the project's PPG phase.* 

### A.5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives:

The project draws on lessons learned, tools and predictions from a number of FAO-led projects and initiatives in Burundi and other African countries. First, it builds on the technical capacities and growing experience of the FAO with the FFS approach in Burundi and other African countries, where a strong FFS institutionalization process is either established or underway. It will collaborate with similar LDCF projects working on the integration of CCA considerations into the FFS approach in other West-African countries such as Mali (GCP/MLI/033/LDF), Niger (GCP/NER/043/LDF), Burkina Faso (GCP/BKF/054/LDF) and Senegal (still in the PPG phase). Collaboration with these countries will be based on activities related to exchange of experience, lessons learned and good practices, which have already been included in the budgets of the mentioned LDCF projects. Lessons learnt will be integrated to the proposed project also from the GEF-funded Kagera Transboundary Agro-ecosystem Management Project (TAMP), which uses FFS and SLM approaches to address land degradation, biodiversity and climate change related issues.

Collaboration will be established also with recent and on-going IFAD projects with the aim of maximize community participation in the project area. The Transitional Programme of Post-Conflict Reconstruction (PTRPC) addresses watershed management, livestock restocking, and rehabilitation of socio-economic infrastructure. Given the project's long experience in the Bujumbura area, the intended project will benefit from its success in organizing community activities around the development and preservation of natural resources. The IFAD Programme d'Appui à la Relance du Secteur d'Elevage (Livestock Sector Rehabilitation Support Project, PARSE) has been working towards providing participative learning in improved production and marketing practices, and improving private sector delivery of inputs and processing facilities. The IFAD « Projet d'Appui à l'Intensification et de Valorisation Agricole » (Agricultural Intensification and Value-enhancing Support Project) will work in the Bujumbura area until 2017 to help poor, small-scale farmers build their human, physical and technical capacity to protect productive assets, increase productivity, improve nutrition, raise incomes and improve market access to permit producers' organizations to make the most of value added to their produce. Finally, the IFAD Programme de Développement des Filières (Value Chain Development Programme, PRODEFI) will support the human, physical and technical capacity of poor smallholder farmers to enable them to protect their productive assets, thus increasing their production of rice and milk and raise their incomes in a sustainable manner until 2019. The IFAD projects will strongly support the third Component of the proposed project "Improving the livelihoods of communities by strengthening and diversifying rural value

Various collaborations will be established with other GEF funded projects to avoid duplication and maximize sharing of lessons learned. An important collaboration will be established with the "Projet d'Aménagement des Bassins Versants et de Résiliance Climatique" (PABVRC-B) aimed at the rehabilitation of natural landscapes and CCA in Bujumbura and financed by the AfDb (7.10 M Euros) and GEF (3.16 M Euros). The project aims to ensure improved access, management and development of watersheds to strengthen meteorological and hydrological information systems. The main activities of the first component include the construction and maintenance of a network of rural tracks and forest roads on hills and targeted installations and the watershed management using an anti-erosion infrastructure. The project is implementing reforestation on hill-slopes to reduce erosion and in the lowland areas around Lake Tanganyika to improve river-bank management. The second component addresses strengthening systems for the collection and dissemination of meteorological and hydrological information by the Geographical Institute of Burundi (IGEBU), who is a partner of the present project. The intended project will also benefit from hydrometeorological data that will be collected on site to help communities and planners of the intervention to make appropriate choices of strategies and approaches to adapt to CC. Collaboration between the two projects will also focus on the harmonization of approaches to participatory watershed management and community management of forest plantations.

Strong collaboration will be established with the UNDP CCA project: "Community Disaster Risk Management in Burundi". The proposed project will enhance local authorities and communities' capacity to prepare for and manage CC-induced disasters, and will address climate forecasts for early warning, protection of buffer zones in various areas, including Bujumbura. The proposed project will be fully harmonized with the UNDP activity by using data and tools in the FFS capacity building process.

Note: additional opportunities for cooperation will be looked into during the project's PPG phase.

### DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 IS THE PROJECT CONSISTENT WITH THE NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS? (YES X /NO $\square$ ). IF YES, WHICH ONES AND HOW: NAPAS, ASGM NAPS, MIAS, NBSAPS, NCS, TNAS, NCSAS, NIPS, PRSPS, NPFE, BURS, ETC.:

The Government of Burundi (GoB) has developed strategies and plans to combat climate change. The GoB submitted the National Action Plan for Adaptation to Climate Change (NAPA) to UNFCCC in 2007. The present project is relevant to the following NAPA priorities, i) preserve existing forests and reforest denuded areas, ii) establish mechanisms for the control of erosion in sensitive areas, iii) check the fluvial dynamics of rivers and streams in Mumirwa, including the city of Bujumbura, iv) popularize the short-cycle food crops and those resistant to drought, v) identify and popularize drought-resistant tree species, and vi) educate and inform policy makers and other stakeholders, including local communities on how to adapt systems in the face of climate variability.

The National Policy Strategy and a Plan of Action on climate change have been elaborated in 2012 as a setting for the integration of climate-change aspects in all sectors of the socio-economic life of the country. Considering that climate change's negative impacts are likely to continue for decades, to cope with it is a high strategic priority for the country. However, the policy depicts several constraints to CCA, notably; (i) inadequate institutional and legal settings, (ii) insufficiency of the financial means to sustain CCA activities, (iii) absence of expertise, data and tools for the assessment of CC impacts and vulnerability, (iv) increasing population size, vulnerability of ecosystems, and infrastructures, including weak awareness of human vulnerability, especially at the communal level, and (v) insufficient meteorological infrastructure to sustain necessary research and a systematic monitoring system, including the problem of production of data and their diffusion in real time. To this effect, the CCA policy insists on the importance of the integration of CCA and CCM in the wider spectrum of national development policies, including the main sectors negatively affected by CC. These sectors include: resources in water, agriculture and food security (crops, livestock, fishing), energy, biodiversity and ecosystems (forests, fauna, humid zones, etc.), land use system and soil protection, human health, transportation, risk management, capacity building and research.

In 2013 the GoB approved the Politique Nationale Sur Le Changement Climatique (National Policy for CC, PNCC in French) to provide a framework to: i) integrate CC in sector policy and planning, ii) reinforce CC adaptation measures, iii) create synergies between community resilience to CC and poverty eradication, and iv) promote emission reductions. The policy is strictly linked with agriculture and NRM sectors, Also, in 2013 the Stratégie Nationale et Plan d'Actions sur le Changement Climatique (National Strategy and Action Plan fof CC, SNPACC in French) was approved. The SNPACC highlights that land degradation is one of the main CC related risks. The Strategy gives high relevance to the agricultural sector by supporting i) the use of adapted and short cycle crop varieties, ii) research on technologies that are resilient to CC, and iii) capacity building in the agricultural sector.

## PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT AND GEF **AGENCY**

A. Record of Endorsement<sup>3</sup> of GEF Operational Focal Point (S) on Behalf of the Government(s): (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this SGP OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Ing Rémy NDAGIJIMANA	Permanent secretary	Ministry of Water,	28/08/2014
		Environment,	
		Land and Urban	
		Planning	

Ing Rémy NDAGIJIMANA	Permanent secretary	Ministry of Water,	28/08/2014
		Environment,	
		Land and Urban	
		Planning	
	·	<u>.                                      </u>	

В.	GEF Agency (les) Cerunication

This request has been prepared in accordance with GEF policies<sup>4</sup> and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator,	Signature	Date	<b>Project Contact</b>	Telephon	Email
Agency name		(MM/dd/yyyy)	Person	e	Eman
Gustavo Merino		03/03/2015	William Settle,	(+39) (06)	William.Settle@fao.org
Director; Investment			Project Manager,	570 56039	
Centre Division; Technical			Plant Production		
Cooperation Department			and Protection		
FAO			Division, FAO,		
Viale delle Terme di			Rome		
Caracalla (00153)					
Rome, Italy					
TCI-Director@fao.org					
Jeff Griffin				(+39) (06)	Jeffrey.griffin@ fao.org
FAO GEF Coordinator				57055680	
Email:					
Jeffrey.Griffin@fao.org					
Tel: +3906 5705 55680					

 $<sup>^{\</sup>rm 4}$  GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF