GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: FULL-SIZE PROJECT
TYPE OF TRUST FUND:GEF TRUST FUND (IAP)

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PART I: PROJECT INFORMATION

Project Title: Support for sustainable food production and enhancement of food security and climate resilience in Burundi's highlands			
Country(ies):	Burundi	GEF Project ID:[1]	9178
GEF Agency(ies):	FAO	GEF Agency Project ID:	642896
Other Executing Partner(s):	Ministry of Water, Environment, Territorial and Urban Planning; Ministry of Agriculture and Livestock	Submission Date:	28/03/2017
GEF Focal Area (s):	Multi-focal area (IAP set-aside)	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☒	Corporate Program: SGP ☐	
Name of Parent Program	Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa - An Integrated Approach	Agency Fee ($)	665,670

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in $) GEF Project Financing	(in $) Co-financing
IAP-Food Security, LD-1, Program 1	Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods: Programme 1: Agro-ecological intensification	GEFTF	1,300,000	8,000,000
IAP-Food Security, LD-1, Program 2	Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods: Programme 2: SLM for Climate-Smart Agriculture	GEFTF	2,115,554	12,250,728
IAP-Food Security, LD-3, Program 4	Reduce pressures on natural resources by managing competing land uses in broader landscapes: Programme 4: Scaling-up sustainable land management through the landscape approach	GEFTF	1,696,103	12,900,000
IAP-Food Security, LD-4, Program 5	Maximizing transformational impact: Maintain land resources and agro-ecosystem services through mainstreaming at scale, Programme 5: Mainstreaming SLM in development	GEFTF	1,515,173	8,900,000
IAP-Food Security, BD-4, Program 9	Mainstream biodiversity conservation and sustainable use into production landscapes and seascapes and production sectors, Programme 9: Managing the human-biodiversity interface	GEFTF	769,500	3,000,000
	Total project costs		7,396,330	45,050,728

[1] Project ID number remains the same as the assigned PIF number.
[2] When completing Table A, refer to the excerpts on GEF 6 Results Frameworks for GETF, LDCF and SCCF and CBIT programming directions.

B. PROJECT DESCRIPTION SUMMARY

Project Objective: To increase adoption of resilient, improved production systems for sustainable food security and nutrition through integrated landscape management and sustainable food value chains

Indicators: (1) % households suffering from moderate +severe food insecurity in intervention microcatchments; (2) % increasing dietary diversity among project community households (% households daily consume (a) at least 5 different food groups, (b) animal protein; (3) IAP TT LD-1 (i): Land area under effective agricultural, rangeland and pastoral mgmt practices and/or supporting climate-smart agriculture.

Baseline: (data collected through HH-BAT survey): (1) Moderate food insecurity: 74% (male led HH), 76% (female led HH), Severe food insecurity: 2 % (male led HH), 2% (female led HH); (2) (a) 23% (male led HH), 16% (female led HH), (b) 5%; (3) 0 ha

Targets: (1) Moderate food insecurity: 65% (male led HH), 65% female led HH), Severe food insecurity: 0% (male led HH), 0% (female led HH); (2) (a) 40% (male led HH), 35% (female led HH), (b) 15%; (3) 30,079 ha (including (i) 8,000ha of increased trees in cropping systems/agroforestry plus reforestation of LD hotspots, (ii) 15,000 ha annual crops; and (iii) 7,079 ha perennial crops).

Project Components/ Programs	Financing Type[3]	Project Outcomes	Project Outputs	Trust Fund	(in $)	
					GEF Project Financing	Confirmed Co-financing
1. Strengthened institutional framework and support mechanisms	TA	1.1: Multi-stakeholder and multi-scale platforms operational in supporting policy, institutional and knowledge sharing mechanisms for scaling out of sustainable agriculture systems and integrated natural resources. **<u>Indicators:</u>** # IAP TT LD-4 (ii): Type of mechanisms, institutions, legal and regulatory frameworks <u>*Mechanisms:*</u> (i) Provincial policy platforms (incl. AgBD) (ii) Knowledge sharing and planning mechanism on ILM <u>*Legal & regulatory frameworks:*</u> (iii) ILM regulatory framework (iv) National FFS strategy (extent of operationalization) (v) Country Strategic Framework (CSIF) (applied)	1.1.1: Agriculture and Rural Development Sector Working Groups (GSADR) at national (1) and provincial (3) levels strengthened and watershed management committees and multi-year plans in place at project sites (9). 1.1.2: Functioning multi-stakeholder knowledge sharing mechanism in place at national (1) provincial (3) and local (4) levels (watershed; FFS networks), and promoting exchange of experiences and lessons learned (successes and failures) on scaling out of SLM / integrated natural resources / landscape management. 1.1.3: Legal and regulatory frameworks on SLM, sustainable use of agrobiodiversity and agricultural and environmental strategies and plans are	GEFTF	1,437,000	5,253,500

[3] Financing type can be either investment or technical assistance.

		Targets: (i) P-GSADR has demonstrated success in scaling out INRM in 3 provinces (intersector policy and actions etc) (ii) KS mechanisms (1 national linked to WOCAT global, 3 provincial, 4 local) mechanisms effectively sharing best practices on INRM and value chains. (iii) Harmonised guidance in place for implementing INRM, erosion control, BD, and interlinked value chains (iv) FFS strategy fully operationalised (v) CSIF applied/ integrated in plans and budgets at provincial (3), communal (3) and watershed (3) levels	better known at national (1) and provincial level (1) and taken into account and applied in communal development plans and watershed management plans (number of plans tbd). 1.1.4: Community consultations through a participatory negotiated territorial development process (PNTD) and Free prior informed consent process (FPIC) conducted. 1.1.5 National strategy for harmonisation of FFS-INRM operationalised in the 3 provinces with particular attention to resilient and sustainable food and agricultural systems.			
2. Improved livelihoods and food security though integrated water-shed management, competent producers' organizations and sustainable food systems	TA/INV	2.1: Increased land area and agro-ecosystems under integrated natural resources/ landscape management and SLM best practices and supported by FFS and sustainable value chains for increased production and sustainable livelihood. **Indicators:** (i) IAP TT LD-3 (ii): Application of INRM practices in the wider landscape (ii) extent of adoption of SLM/integrated landscape management practices (iii) % of farmers producing for market (disaggregated by gender) (iv) % farmers with improved production (disaggregated by gender)	2.1.1: Micro-watershed management plans developed and implemented (9) using combined appropriate SLM technologies and a harmonised integrated natural resources management approach. 2.1.2: FFS master trainers (25) and facilitators (100) trained on the job with 318 FFS groups and practicing SLM/INRM at farm and watershed scale, and national FFS curricula (1) updated. 2.1.3: Network of (pre) cooperatives/producer organizations and FFS groups supported and demonstrating improved access to food value chains.	GEFTF	TA 3,049,124 INV 1,000,000	35,422,728

		In addition, the project will generate carbon benefits. (v) metric tons of CO2 eq avoided **<u>Targets</u>** (i) 9 catchments implementing INRM with enhanced BD (at genetic, species and habitat levels) (ii) a) Integrated agrosilvopastoral systems with well designed SLM practices effectively combined across 9 catchments and multiple benefits on livelihoods and ES documented and demonstrated (ii) b) 30,000 ha of combined SLM practices in place by the project end plus 50,000 ha scaled up through baseline projects and watershed plans (including 4,000 ha of agrobiodiversity in particular orphan crops such as finger millet) (iii) 8,930 (> 30% female headed households, 20% orphan headed households) (iv) FFS monitored and demonstrating production and diversity increases compared to normal practice (+25% by 200 FFS) In addition, (v) over a duration of 5 years: - On-farm (increase in biomass/agri. crops): 28,213t CO2 eq avoided - On-farm (increase of tree cover): 97,920t CO2 eq avoided The indirect benefits (over a capitalization phase of 15 years):	2.1.4: An *in situ* seed bank system established (1 per targeted Province) and farmer-produced adapted varieties promoted as a basis for local food systems and improved nutrition. 2.1.5: Steep slopes and highly degraded areas rehabilitated through tree planting, with attention to indigenous species, to increase biodiversity, productivity and resilience and to reduce pressure on woody material (target: 120 FFS).			

		- On-farm (increase in biomass/agri. crops): 564,266t CO2 eq avoided - On-farm (increase of tree cover): 1,958,407t CO2 eq avoided				
3. Monitoring and assessment of global environmental benefits and socio-economic impacts to inform decision making	TA	3.1: M&A framework in place and capacity of relevant institutions built to carry out monitoring activities, communicating experiences and impacts. **Indicators:** (i) # staff in concerned institutions trained and applying tools and systems for monitoring GEBs, SLM/INRM and interlinked value chains and their impacts on food and livelihood security and ecosystem services (ii) # farmers applying participatory impact monitoring tools (iii) Communication strategy in place (visibility and for development) Availability of project results and communication materials in country and shared with regional Hub **Targets:** (i) 200 staff trained and applying tools for monitoring multiple impacts (ii) 636 farmers applying participatory impact monitoring tools and sharing results (iii) Communication strategy effectively implemented and project experiences shared through diverse, targeted communication and technical materials (10 per year)	3.1.1: Government staff and extension workers (number tbd) trained and able to use relevant M&A tools and approaches, also in archiving data. 3.1.2: Pre-cooperatives and FFS group members (total of 318 FFS, number pre-cooperatives tbd) and trained and able to use participatory impact monitoring tools and approaches (HH-BAT, FFS PM&E, LADA local). 3.1.3: Project results and experiences compiled, communicated widely and shared with the project regional hub and partner projects 3.1.4 Project progress reports prepared on time, mid and final evaluation conducted.	GEFTF	1,558,000	4,374,500

		SLM/INRM impacts compiled and shared on a 6 monthly basis and workshops held with GSADR to discuss findings and policy implications at provincial (3) and national levels (1) (e.g. GSADR and DPAEs) and regional hub level (2)				
				Subtotal		7,044,124	45,050,728
				Project Management Cost (PMC)[4]		352,206	-
				Total project costs		7,396,330	45,050,728

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount ($)
GEF Agency	Food and Agriculture Organization (FAO)	In-kind	500,000
Recipient Government	Govt of Burundi through IFAD loan portfolio (PRODEFI II)	In-kind	21,440,000
Recipient Government	Govt of Burundi (World Bank PRODEMA II)	In-kind	6,000,000
Recipient Government	Govt of Burundi (World Bank coffee project)	In-kind	14,110,728
Recipient Government	MEEATU	In-kind	3,000,000
Total Co-financing			45,050,728

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee a) (b)[2]	Total (c)=a+b
FAO	GEFTF	Burundi	LD	IAP-FS	1,144,312	102,988	1,247,300
FAO	GEFTF	Burundi	BD	IAP-FS	893,431	80,409	973,840
FAO	GEFTF	Burundi	CCM	IAP-FS	1,784,862	160,638	1,945,500
FAO	GEFTF	Burundi	IAP	IAP-FS	3,573,725	321,635	3,895,360
Total Grant Resources					7.396,330	665,670	8,062.000

a) Refer to the Fee Policy for GEF Partner Agencies

[4] For GEF Project Financing up to $2 million, PMC could be up to10% of the subtotal; above $2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[5]

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	*4,000 hectares*
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	*30,079 hectares*
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	*Number of freshwater basins*
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	*Percent of fisheries, by volume*
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO_{2e} mitigated (include both direct and indirect)	over a duration of 5 years: - On-farm (increase in biomass/agri. crops): 28,213t CO2 eq avoided - On-farm (increase of tree cover): 97,920t CO2 eq avoided The indirect benefits (over a capitalization phase of 15 years): - On-farm (increase in biomass/agri. crops): 564,266t CO2 eq avoided - On-farm (increase of tree cover): 1,958,407t CO2 eq avoided
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	*metric tons*
	Reduction of 1000 tons of Mercury	*metric tons*
	Phase-out of 303.44 tons of ODP (HCFC)	*ODP tons*

[5] Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	*Number of Countries:*
	Functional environmental information systems are established to support decision-making in at least 10 countries	*Number of Countries:*

F. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/CBIT Trust Fund) in Annex D.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF[6]

A.1. Project Description

Global environmental and/or adaptation problems, root causes and barriers that need to be addressed

The root causes and barriers were not highlighted in the PIF. These have been detailed in Section 1.2.1 and 1.2.3 respectively.

Baseline scenario / associated baseline projects

The Food and Agriculture Organisation (FAO), the International Fund for Agricultural Development (IFAD), the World Bank (WB) and other international partners have supported the Government of Burundi (GoB) in watershed management and sustainable agricultural production for natural resources management and food security and improved livelihoods. This is supporting a shift from a reactive to a more proactive approach linking food security, land rehabilitation, biodiversity conservation and climate change adaptation (CCA) and mitigation (CCM).

The GEF incremental investment will be firmly rooted in significant baseline investments (main co-financing sources of the project) made through the following government programmes and initiatives in Burundi and target provinces;

- IFAD's Value Chain Development Programme – Phase II (PRODEFI – II)
- World Bank Coffee Sector Competitiveness Project / (le Projet d'Appui pour la Compétitivité de la Filière Café - PACDC)
- World Bank Productivity and Development of Agricultural Markets – Phase II (PRODEMA II)
- FAO technical cooperation projects (3 of particular relevance)

More detail of each is provided in Section 1.2.2

Proposed alternative scenario, GEF focal area strategies, with a breif description of expected outcomes and components of the project

The project's objective is now "*to increase adoption of resilient, improved production systems for sustainable food security and nutrition through integrated landscape management and sustainable food value chains*" - the word

[6] For questions A.1 –A.7 in Part II, if there are no changes since PIF , no need to respond, please enter "NA" after the respective question.

divesified has been dropped from the version in the PIF, as it was found during the PPG that the land users already adopt highly diversified systems.

The IAP-FS project's target agroecological zone is the "highland perennial" zone – the Central highlands (see Annex 9 Map 2 – zones 1,500-2,000m and >2,000m).

The project will adopt a landscape approach for its on-the-ground activities, through a focus on micro-catchments and wider watersheds as the main geographical units. Selection of the intervention micro-catchments (BVs – bassins versants) was made based on a number of criteria, including:

- socio-economic aspects (proportion of the food insecure population, percentage of female heads of household, safety thresholds) (see particularly Annex 9 Map 4);
- environmental aspects (degree of land degradation, frequency of floods and droughts) (see particularly Annex 9 Map 5);
- feasibility and institutional capacity (existing schedule, availability of farmers organizations, availability of support services / guidance, access to markets);
- interest of local community members;
- local guidance, notably from local government technical and other staff;
- absence of other on-going on-the-ground interventions;
- presence of other stakeholders in the proximity of the project area (co-financing).

The Government decided that the project should focus on on-the-ground interventions in three provinces Gitega, Muramvya and Mwaro (see Map 6 in Annex 9), to avoid over-extending and consequently risking dispersing the project's resources too thinly. The aim is to ensure that by concentrating on-the-ground activities across restricted landscapes, and by partnering for wider adoption of proven practices, the project will be able to demonstrate meaningful impacts and multiple benefits (Tables 6 and 7). (See Section 1.1.2 of ProDoc for full details of the interventions micro-catchements.)

The project will seek to achieve its objective through three interlinked outcomes and fourteen (14) outputs. These GEF funded interventions will complement the baseline interventions of IFAD and the World Bank (see above and Section 1.2.2).

There has been no major change in the project design since the PIF, except for some revision of some of the outputs and outcomes for a stronger logical flow. Indicators and targets now reflect the fully designed project activities.

The proposed project is well aligned with GEF Focal Area/LDCF/SCCF strategies. Particularly, the following "Focal Area Objectives" are addressed;

LD-1: Agricultural and Rangeland Systems -Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods, Programme 1: Agro-ecological intensification / Programme 2: SLM for climate-smart agriculture [SDG 1 + SDG 2 + SDG 15]. Outcome 1.1: Improved agricultural, rangeland and pastoral management; Outcome 1.2: Functionality and cover of agro-ecosystems maintained.

LD-3: Integrated landscapes - Reduce pressures on natural resources from competing land uses in the wider landscape, Programme 4: Scaling-up sustainable land management through the landscape approach [SDG 1 + SDG 2 + SDG 15] Outcome 3.1: Support mechanisms for SLM in wider landscapes established; Outcome 3.2: Integrated landscape management practices adopted by local communities based on gender sensitive needs.

LD-4: Maximizing transformational impact: Maintain land resources and agro-ecosystem services through mainstreaming at scale, Programme 5: Mainstreaming SLM in development [SDG 1 + SDG 2 + SDG 15] Outcome 4.1: SLM mainstreamed in development investments and value chains across multiple scales ; Outcome 4.2: Innovative mechanisms for multi-stakeholder planning and investments in SLM at scale.

BD-4: Mainstream biodiversity conservation and sustainable use into production landscapes and seascapes and production sectors Programme 9: Managing the human-biodiversity interface [SDG 1 + SDG 2 + SDG 15] Outcome 9.1 Increased area of production landscapes and seascapes that integrate conservation and sustainable use of biodiversity into management.
Outcome 9.2 Sector policies and regulatory frameworks incorporate biodiversity considerations.

See Section 1.5.3 and Table 15 for further details

The table below summarises the changes to the Objective and Outcomes form the PIF

PIF	**PRODOC**
Objective: To improve diversified production systems for sustainable food security and nutrition through integrated sustainable landscape management and establishment of sustainable food value chains	"*To increase adoption of resilient, improved production systems for sustainable food security and nutrition through integrated landscape management and sustainable food value chains*". The word "diversified" has been removed as during the PPG the team found the systems to be highly diverse.
Component 2: 2:Improved livelihoods and food security though integrated water-shed management	Changed to: Improved livelihoods and food security through integrated watershed management, competent producers' organizations and sustainable food systems
Component 3: Monitoring and assessment of global environmental benefits and socio-economic impacts	Changed to: Monitoring and assessment of global environmental benefits and socio-economic impacts to inform decision making
Outcome 1.1: Multi-stakeholder and multi-scale platforms in support of policy and institutional reform and knowledge sharing mechanism for upscaling of SLM / integrated natural resources / landscape management in place.	No change in title – now Outcome 1
Outcome 1.2: Supportive policies and extension structures in place to support sustainable smallholder agricultural systems and food value-chains	Merged with Outcome 1.1 to form Outcome 1 (with higher aggregated target indicators linked to GEF LD FA).
Outcome 2.1: Increased land area and agro-ecosystems under integrated natural resources / landscape management and SLM best practices	Title revised to Increased land area and agro-ecosystems under integrated natural resources/ landscape management and SLM best practices and supported by sustainable value chains for increased production and sustainable livelihoods Combined with Outcomes 2.2 and 2.3 in PIF to form Outcome 2
Outcome 2.2: Agricultural production diversified and sustainable food value chains strengthened	Merged to form Outcome 2

and/or established	
Outcome 2.3: Support increase in investment flows to integrated natural resources/ landscape management	Merged to form Outcome 2
Outcome 3.1: Strengthened capacity of relevant institutions to incorporate resilience (climate variability, natural disasters and market fluctuations) into project design and implementation, and for monitoring of GEBs, including tools and systems for monitoring of SLM impacts on food and livelihood security and ecosystem services	Outcome 3: M&A framework in place and capacity of relevant institutions built to carry out monitoring activities, communicating experiences and impacts. Refined and shortened. Contents remain the same.
Outcome 3.2 Framework in place for M&A of resilience and socio-economic benefits including food and livelihood security	Merged with PIF Outcome 3.1 to form Outcome 3

Increemental reasoning and expected contributions from the baseline and co-financing

The GEF incremental investment will build on and complement the baseline and co-financing interventions which include four investment projects/programmes financed by IFAD and the World Bank and three technical cooperation projects supported by FAO.

IFAD's Value Chain Development Programme – Phase II (PRODEFI-II)

The GEF incremental investment will leverage and strengthen the focus on SLM / INRM in the PRODEFI FFSs, including provision of training and technical materials for enhancing capacity of Master Trainers and Facilitators, thus scaling-up the impact of the GEF investment for transformational change. In turn the IAP-FS project will link and benefit from the PRODEFI investments in developing and strengthening value chains – as the new FFS and cooperatives will be able to more readily sell produce, such as milk and rice, through benefitting from storage and other infrastructure where they are located in neighbouring watersheds as well as accessing advice and training for being able to benefit from the improved value chains. There will also be beneficial exchange of experiences between PRODEFI and IAP-FS in regard to Component 2, as well as synergies in Component 3 on developing harmonised monitoring and evaluation tools. Moreover the multi-stakeholder policy platforms and knowedge sharing mechanisms for SLM / INRM developed by IAP-FS under Component 1 will be advantageous for all partner interventions due to enhanced cross-sectoral coordination at national, provincial and landscape levels.

World Bank Productivity and Development of Agricultural Markets Project (PRODEMA) – Phase II

The IAP-FS will leverage incremental benefits from infrastructure developments under Component 2 of PRODEMA II, notably the rehabilitation of access roads will provide incremental benefits to the IAP-FS project.

World Bank Coffee Sector Competitiveness project (PACDC)

The GEF incremental investment will leverage a focus on SLM / INRM in the PACDC, scaling-up the adoption of the knowledge sharing mechanisms established under Outcome 1 of the IAP-FS, notably the SLM Learning Alliance.

Three technical cooperation projects supported by FAO compleent the baseline and corfianncing: i) Integrated approach to sustainable intensification of agriculture through efficient use of resources - Strategic support in Burundi and Niger; ii) FAO Institutionalization of Field Schools in Eastern Africa; and iii) Reduce Rural Poverty through information, participatory communication and social mobilization for rural women, men and youth.

The IAP project will address the barriers (see Section 1.2.3) to improve food security and address the pervading unsustainable land management systems by strengthening intersectoral approaches and supporting the development of policies conducive to sustainable food production and reduced land degradation. The project will also leverage knowledge sharing mechanisms at all levels and thus ensure land users are equipped to plan and manage their land using INRM approaches – and that communities become self-reliant to plan and manage their environment using landscape approaches to support restoration of ecosystem services. The GEF incremental investments will also support land users to participate in all aspects of value chains, inter alia: accessing inputs / improved seeds and planting materials; post-harvest processing; storage; bulking to achieve better prices in new markets; and market information. This will improve and strengthen communities' resilience and adaptive capacities.

The table below provides an outline of the incremental cost reasoning of the GEF intervention

Outcome	**Baseline Scenario**	**GEF Alternative Scenario**
Outcome 1: Multi-stakeholder and multi-scale platforms operational in supporting policy, institutional and knowledge sharing mechanisms for scaling out of sustainable agriculture systems and integrated natural resources management approaches.	There is an array of remaining barriers for SLM / INRM mainstreaming in the institutional, policy and legal framework at national and provincial levels, also the lack of an effective knowledge sharing system. Notably, this includes the lack of an effective intersectoral framework and process, limited sharing of knowledge on SLM best practices and INRM approaches for promoting integrated land use /production systems and scaling up and the currently poorly supported agricultural extension system.	GEF financing will support effective cross-sectoral coordination at national, provincial and landscape levels through the establishment of multi-stakeholder policy platforms for SLM / INRM, with a focus on scaling up through integrated landscape management and sustainable food and agricultural systems, also the development of knowledge sharing mechanisms. The project will support, enhance and make more effective the existing multi-sectoral decision making platforms at different levels, notably the Agriculture and Rural Development Working Group at national and provincial levels, also integrated watershed management at landscape level bringing together local actors (NGOs, producer organizations and state services -agriculture, environment, health), to support SLM / INRM and the development of value chains for food and nutrition security in the three intervention provinces. The GEF incrementality will particularly be the development of an inter-sectoral knowledge sharing mechanism at national and provincial levels - an "SLM Learning Alliance" - which will identify, document and develop options and recommendations on SLM / INRM for different agroecosystems (which have already been successfully tested in the targeted agro-ecological zones (building on Burundi and wider experiences, inter alia Kagera TAMP, other TerrAfrica SIP and IAP-FS projects and partners via the regional Hub project). These information products and awareness will be shared via a wide range of stakeholders from national to local levels, including technical staff / decision makers in the project intervention areas, also between the project area and other parts of Burundi (notably the intervention areas of

Outcome	Baseline Scenario	GEF Alternative Scenario
		the co-financing projects) for transformational impact at national level. Specifically, the project will ensure there is an adequate budget for guidelines / teaching tools and that these are tailored for the target beneficiaries, avoiding the trap of producing vast arrays of information on the internet – or in glossy booklets written in English. Simple materials will be produced in local language "Kirundi" – also in pictorial forms, while local communications experts / NGOs will be used to develop radio, video, songs, dramas etc. to disseminate more effectively messages. This will reinforce mainstreaming of SLM / INRM and knowledge of the many synergistic benefits of SLM technologies. The project will facilitate the documentation of experiences by local practitioners through the UNCCD-WOCAT database of SLM best practices, which could include short videos as well as photos. In addition, the project will pilot the use of "Digital Green" innovative video-enabled media approach in Burundi for improved communications. Digital Green is a not-for-profit international development organization that uses an innovative digital platform for community engagement to improve lives of rural communities across South Asia and Sub-Saharan Africa (Gandhi et al, 2009). Digital Green has refined over 10 years' an approach to work with extension service providers to share knowledge on improved agricultural practices, livelihoods, health, and nutrition, using locally produced videos and human mediated dissemination. Community members will play an active role and will be given a voice through the process. Feedback and adoption data will be collected to better target programming and communication work with public, private and civil society partners towards social behavioural change for nutrition and environmental health Experiences and lessons will also be shared more widely with other IAP-FS country projects via the regional hub project. The total value of incremental costs of this outcome is 1,437,000 US$.
Outcome 2: Increased land area and agro-ecosystems under integrated natural	There is **insufficient technical capacity** of staff in SLM across all involved organisations. Notably, state institutions involved in land management reveal weaknesses in the numbers and capacity of human resources. For	In the alternative GEF scenario, the project will catalyse large-scale scaling-out of improved landscape management / SLM technologies through boosting awareness and knowledge of SLM / INRM technologies and approaches to address sustainable agriculture and

Outcome	Baseline Scenario	GEF Alternative Scenario
resources/ landscape management and SLM best practices and supported by sustainable value chains for increased production and sustainable livelihoods	example, within MEEATU, staff are not sufficiently skilled in watershed management. Concerning **human capacity**, there are several universities (one state, others private) and secondary educational institutions which provide land management training for technicians and managers in Burundi. However, the country's National Action Programme to Combat Desertification (NAP) (GoB, 2011b) recorded an increased lack of certain capabilities in specialized areas such as hydrology, meteorology, climatology, soil science, etc. At the commune level, natural resource management is entrusted to the agronomists, foresters or agricultural engineering technicians. Often those staff have not received any specific training on integrated approaches. It follows that on the one hand these technicians can provide only limited explanations on the benefits of SLM and are constrained in their abilities in applying appropriate planning techniques, for example not adequately involving the land users people, or offering only top-down "un-diversified techniques and technologies". Major constraints to smallholder farm production include **dwindling extension services** and inadequate links between research, extension and farmers, which is critical at this time of changing weather, climate and other external pressures. In terms of land management, there has been a low level of training of farmers and low capacity of agricultural extension structures (MINAGRIE). Many zone / commune level staff have been in post for many years, so were trained before more recent awareness-raising, bottom-up, learning-by-doing, FFS approaches and community planning, so are accustomed only to offer land users top-down sector-based recommendations., rather than empowerment and advice on how stakeholders can plan and manage nested micro-catchments sustainably	food security issues at all levels (provincial and local extension services to land users). SLM / INRM technologies are being implemented in Burundi catalysed by previous projects – but due to the barriers identified in Section 1.2.3, notably limited skills and knowledge, the practices have limited uptake and thus the scale of benefits achieved is limited. Currently there are virtually no functioning value chains – in part due to the lack of production surpluses. By boosting crop, livestock and biomass production, the project will create the need for and support the development of a small number of key VCs (complimenting those supported by the cofinancing project PRODEFI II). The project investments will address the main drivers and begin the process of reversing land degradation and biodiversity loss, which are increasingly leading to the loss of ecosystem services. Significantly increasing the land area that is under integrated natural resources management will besides safeguarding resources for future generations will support increased production and productivity of the vital food crops and livestock products in the intervention micro-catchments by the small-scale near subsistence land users. In turn, this will improve the foundations of food security and contribute to possible surpluses to enter value chains, which will be developed to support enhanced livelihoods and reduced levels of poverty. Capacity development at all levels for INRM / SLM is of paramount importance to Component 2 of IAP-FS-FS, which will include training (of technical staff, Master Trainers, FFS Facilitators) in INRM / SLM and improved production systems to improve household livelihoods, nutrition, food security and resilience to climate change. Guidance on integrated planning at watershed/catchment level backed up by FFS will also support adoption of SLM on a large scale for increased and sustainable productivity of land resources, food security and resilience of communities and restoration of resources and the maintenance of ecosystem services benefitting wider society. This will vastly scale-up the numbers of land users trained and implementing SLM / INRM technologies across the target micro-catchments – but also more widely across Burundi via the knowledge sharing (Component 1). The IFAD PRODEFI II project and World Bank projects in the pilot provinces and more widely in their implementation areas beyond the IAP-FS intervention

Outcome	Baseline Scenario	GEF Alternative Scenario
	in the face of the many challenges (see Sections 1.1.1 and 1.2.1). Civil society institutions (associations in land management) also **lack operating skills**. These are young organisations; often with low levels of capacity in skilled human resources to understand complex and interrelated land management issues. These are often opportunistic associations, which have been created specifically when there is a job opportunity offered a donor / or development project, thus particularly they lack the tools and resources to ensure effective supervision. Moreover, their lifespan is related to the financing term. The paramount remaining barrier is the lack of cross-sectoral and multi-stakeholder outreach /knowledge sharing mechanism, combining financial / agricultural / environmental concerns, in order to increase the institutional capacity to scale-up the wider adoption of demonstrated best practices and landscape-level management efforts. The SLM / natural resources management requires the application of diverse and complementary technologies and techniques related to soil and water conservation, soil fertility management, biodiversity management, crop, livestock and , forest management, etc. In the project area, except for IFAD, which advocates an integrated approach (conservation of soil development, fertility, livestock farming integration), most others limit the development of BV to digging ditches and erosion control and the payment of community beneficiaries without any monitoring mechanism and support and thus the impacts are not known and durability of structures is compromised. Extension services lack easy-to-use, appropriate agroecosystem specific teaching materials in Kirundi / pictorial versions (illiteracy is around 80% among land users in project area) which they could use to support	provinces (see Section 1.2.1), will be important partners to the IAP-FS to achieve the vital scaling-up. These three investment projects have complementarity objectives on the ground and have agreed as part of co-financing to use IAP-FS training materials, also sharing of same FFS facilitators, master trainers that benefit from IAP-FS knowledge products (revised training curricula and best practice approaches). In the PRODEFI intervention areas, the IAP-FS beneficiaries will be able to benefit from better access to market mechanisms and infrastructure established by the IFAD project including roads, milk collection centres, storage facilities and processing units. The IAP-FS will in turn enhance access to training materials and methods for FFS-SLM and watershed management. This will mobilize wider adoption of SLM practices for productivity, resilience and restoration of natural resources and landscape. This is the key entry point to ensure that SLM is adapted at larger scale. The total value of the incremental costs under this outcome is 4,049,124 US$.

Outcome	Baseline Scenario	GEF Alternative Scenario
	appropriate technologies and techniques related to SLM (erosion control, fertility, fertilizer application, choosing appropriate agroforestry species, alternative legumes (food and fodder / forage), crop-livestock integration etc.), understanding of climate change and linking production to value chains to develop resilient livelihoods. For example, a recent study in Burundi (FAO, 2015d) found non-leguminous *Tithonia diversifolia*" outperforms in nutrient releases compared to the commonly known leguminous agroforestry shrubs and trees". Successful action SLM requires effective planning methods that actively involve the beneficiaries of interventions. Unfortunately, although the watershed development approach is currently adopted by several project / programme teams as an intervention approach, it is not understood and applied consistently. Existing development planning frameworks are not fully inclusive and communities often face development decisions being made without their being fully consulted. Indeed, most of the players reduce the information they provide to that specifically relating to allocation of tasks to the beneficiaries. Most technicians have no participatory planning support, instead of participating in the planning and accountability processes, local people are merely used to provide labour rather than actively contributing to micro-catchment level land use planning and monitoring.	
Outcome 3: M&A framework in place and capacity of relevant institutions built to carry out monitoring activities, communicating experiences and impacts.	In the baseline situation, there is a lack of a harmonized framework for monitoring and assessment (M&A) and lack of capacity in the relevant institutions to carry out participatory M&A. In the project area and for natural resource management the M&A systems showed several weaknesses: weak participation of beneficiaries and administration; lack of impact assessment indicators and impact monitoring, with a focus	Under the incremental scenario, the GEF funds will be used to support M & A of SLM practices and their impacts (GEBs, local environmental benefits and socio-economic benefits). This will enable to take advantage of the wealth of accumulated knowledge: traditional, innovative experiences, projects, research and lessons learned, successes and failures. Effective M & A can lead to major and highly beneficial changes in approaches and technologies, as these are adapted to specific local situations.

Outcome	Baseline Scenario	GEF Alternative Scenario
	on physical achievements (kms of contouring performed, number of trees produced and planted, number of compost heaps/ pits etc.); lack of tools and technical measures;, different development standards for watersheds, inconsistent units. Furthermore, the population especially the farmers are 80% illiterate. This is a handicap and a major barrier in the use of communication tools. The written press is relatively weak in the public education sector and thus booklets etc. written to support behavior change in land use, even if written in Kirundi, have limited reach. However, posters and videos could assist. Furthermore, in all ecological zones, there are small numbers of innovative / model farmers, who can serve as teaching agents to educate the rest of the population. The FFS process is improving the situation through farmer learning by doing and exchange but deserves to be scaled up to reach many more farmers and ensure sustainability. In terms of information, training and environmental education, the base-line situation in the region is characterized by limited communication channels on the radio. In the intervention area, there are local radio stations (inter alia Star FM, FM Humuriza, and national radio), also televisions. Much more information on agriculture and livestock, weather forecasts etc. is needed and could be delivered using appropriate tools.	As key players, the diverse groups of land users will actively participate in M & A as their knowledge and opinions in regard to various SLM options and interventions are crucial. The project will invest in training and capacity building for M & A, particularly to improve knowledge management skills and decision support. The project will develop a prototype M & A system for INRM and value chains to enhance participation of beneficiaries and administration. It will develop impact assessment indicators and methods/ tools to monitor effects and impacts and train local actors in their use The M&A system will be shared with partners as a basis for developing harmonised standards for watersheds BVs and ensure the use of consistent units as a basis for contributing to monitoring the SDGs in particular targets 2.4 and 15.3, in regard to land degradation, sustainable agriculture and food security. The total incremental cost of activities under this outcome is 1,558,000 US$.

Global environmental benefits / adaptation benefits

The anticipated GEBs remain as in the PIF and have been detailed in Section 1.3.1 (Component 3) of the ProDoc.

- area under sustainable land management - 80,000 ha (including 49,921 ha through cofinancing project FFSs);
- increase in crop land productivity – 20% of land users reporting increased in yields of key crops, associated trees and livestock and income from value chains (haricot beans/other legumes, vegetables and fruits)

- conservation and sustainable use of agro-biodiversity (genetic resources, species and habitat) – revival in growing *Colocasia esculenta* (taro), *Eleusine coracana* (finger millet), *Vigna unguiculata* (cowpea), *Cajanus cajan* (pigeon pea) – key neglected / orphan crops with nutritional value across intervention area.

- In addition, the project will generate carbon benefits by increasing the amount of biomass, soil organic carbon and the tree cover in project area. The direct benefits (over a duration of 5 years) are as follws: on-farm (increase in biomass/agri. crops): 28,213t CO_2 eq avoided, on-farm (increase of tree cover): 97,920t CO_2 eq avoided. The indirect benefits (over a capitalisation phase of 15 years) are: on-farm (increase in biomass/agri. crops): 564,266t CO_2 eq avoided, on-farm (increase of tree cover): 1,958,407t CO_2 eq avoided. Annex 24 provides further details.

Innovativeness, sustainability and potential for scaling-up

Innovativeness

The project promotes a multi-sectoral approach and coordination at the national, provincial and local levels for SLM/INRM using a landscape approach (catchment planning), build inter-sectoral coordination mechanisms to ensure mainstreaming of SLM/INRM. The project strategy is also based on strengthening national to local institutions and establishing national to local level support systems (policy platform and knowledge sharing mechanism).

These new / revived support systems will mobilise uptake of integrated SLM/INRM and provide links to wider sources of information and support via the IAP-FS regional hub project / network of the twelve child projects.

On the ground level, the project will be innovative, through catalysing FFSs which focus on SLM / INRM using a catchment approach so as to mobilise wider community involvement and scaling out at landscape level, and enhancing the organization of land users and assist them to benefit from improved links to value chains (access to improved planting materials, inputs, advice on storage/ packing, bulking to enhance marketing etc.) where none currently exist. The project will pilot the use of "Digital Green" innovative video-enabled media approach for improved communications to share knowledge on improved agricultural practices, and their livelihood, health and nutrition benefits and will promote on innovative planning, financing and incentive measures for SLM/INRM scaling out at community/watershed and wider landscape scale.

The project is also piloting a number of tools including the the use of HH-BAT, a project-customised version of the SHARP, the "Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists" tool developed by the FAO is designed as an instrument to assess the resilience of farmer and pastoralist households to climate change. Due to its nature as a self-assessment tool, HH-BAT has been a valuable addition for project design and will be used throughout the project implementation as a monitoring and evaluation tool. During the PPG, HH-BAT has been used to establish a resilience baseline at household level, from which the impacts of project interventions will be observed, measured and asnecessary during implementation interventions can be better targeted. This could be backed up by linking with the innovative Integrated Food Security Phase Classification (IPC) tool for improving food security analysis and decision-making. M & A of SLM practices and their impacts will also enable to take advantage of the wealth of accumulated knowledge: traditional, innovative experiences, projects, research results and lessons learned - successes and failures.

Sustainability

Social sustainability

Gender equality and gender mainstreaming please refer to Section A.4. Gender Equality and Women's Empowerment

Involvement of young people will be a project priority at the local level, through specific efforts to encourage youth (men and women) to participate in the FFSs, also in income generating activities (IGAs) (Output 2.1.4).

Other vulnerable groups residing in marginalized areas, such as those prone to drought and flooding as well as the disabled, elderly and other marginalized are considered to be particularly vulnerable. The project will therefore explicitly take into account the special needs of such vulnerable groups to ensure they benefit from the project interventions. In particular, the project will train and support local actors in strengthening local governance to enhance the autonomy and voice of marginal and vulnerable groups (women, youth and Batwa) and improve access, control and management over natural resources and conflict resolution (using the PNTD approach). Also, specific activities will be organised in schools and out of schools for school-aged children (learning on food, nutrition, soil and water through vegetable gardens/FFS study plots) and through FFS and value chain development women and youth will be included in agro-business development (post-harvest storage, processing, access to markets and credit.

Food security has very strong linkages to the restoration of the degraded agricultural lands including steep slopes, riverine areas and wetlands. The improved varieties / agricultural practices (including agroforestry and small livestock) and SLM / INRM actions under the project will ensure increases incrop and livestock yields to reduce the currently high levels of hunger and will contribute substantively to household level food security in the local communities. The wider dissemination of knowledge of SLM / INRM (Output 1.1.2 - support mainstreaming of SLM knowledge and SLM Learning Alliance) will catalyse wide scaling-out of the win-win-win benefits of SLM / INRM through FFSs and catchment management in Burundi, which should catalyse improvements in household and community level food security beyond the project's intervention catchments.

Ownership by local institutions and communities of the overall processes of the project are vital for the social sustainability of the project. The basic theories of community catchment management and farmer field schools include commitment and display of ownership by local communities and strong facilitation of local institutions; the project's strategy is to implement SLM / INRM through robust FFSs and watershed committees, which will ensure continued ownership and decision making processes at the local level post project.

Environmental Sustainability

The project will be implemented in highland areas under moderate to severe threat of degradation where there are increasingly high levels of food insecurity, despite land users adopting some SLM approaches and growing a diversity of crops.

This project will catalyse land users to adopt integrated suites of SLM / INRM technologies and agro-silvo-livestock systems to boost their yields (diverse crop, livestock and tree products), within an overall landscape approach through supporting community catchment planning, aiming to restore wider ecosystem functioning for win-win-win benefits. Educational material and planning efforts will pay attention to key elements of the policy and legal framework relating to land degradation/ management, sustainable agriculture, agro-biodiversity and climate change

At the catchment level on the ground the project will also support efforts to increase tree and shrub cover with indigenous species and reducing pressure on the existing wood resources through promotion of more energy efficient stoves / charcoal production methods.It will also promote attention to biodiversity by demonstrating increased resilience (to climate and market shocks) that land users can derive from growing local nutritious food and fodder crops (neglected orphan crops, fruit varieties, leguminous species) local animal breeds for meat and dairy products and agroforestry species for energy and reduce pressure on woody biomass. It will promote agro-biodiversity through a study of wild plant relatives in the target catchments/communities and in the buffer zone for Kibira national park and biodiversity fairs and demonstration gardens to make available diverse species/varieties to farmers according to interests and preferences.

Financial and Economic Sustainability

Project interventions will seek to ensure a viable anchor into existing local and institutional systems to create favourable conditions for the sustainability of the achievements and to ensure sustainable management of investments. In this perspective, the project is positioned as a tool for facilitating the emergence and sustainable development of the inter-sectoral approach. The integration of project activities in major national development programmes, and in the community planning process, will ensure the institutionalization of a regular support from government (human and

financial resources) and local communities (in kind and cash). At the community level, the project will promote the sustainable use of resources through increasing revenues that land users will derive from the sustained productivity, opportunities for exploitation of neglected aspects of biodiversity (local crop fruit varieties as foods, local animal breeds, leguminous fodder crops, agroforestry, market niches, medicines, biomass, etc.), potentially incentives for environmental services (use of energy efficient stoves) and other government support (for carbon sequestration, drought mitigation, biodiversity conservation).

The project therefore will place particular emphasis on information, structuring and involvement of beneficiaries in the various activities that lead to the above. It will support and strengthen the emergence of entities and capabilities able to represent the needs of the population and mobilize them around community driven projectssupported by competent local service providers. This community and participatory development approach is a guarantee for good ownership by the beneficiaries of the initiatives and achievements of the project. This will ensuretechnical and organizational support, at thecatchment/watershed level and for associated infrastructure, through establishing management committees to ensure proper monitoring, maintenance and investment management. Local governments and authorities will also be supported by the project in order to be able to provide advisory support and monitoring activities during and after project completion. Taking into account the level of development of producers organizations (POs) in terms of organizational capacity and management will determine the required level of intervention. Evaluations of organizational and management capacities shall be annual and conducted in a participatory manner so as to target and provide expanded coaching and quality.

The project is essentially a capacity building project, and its success will be measured by the scale of the adoption of improved and diversified natural resources management systems and practices and results in terms of improved livelihoods. The project will strive to put in place mechanisms to encourage and enable beneficiaries (land users and service providers) to strengthen their organizations and their technical and financial capacity and to support the upkeep and maintenance of the investments made by the project. The dynamism and capacities generated will in turn determine the sustainability of project achievements.

The project will facilitate in particular the organization of beneficiaries groups and cooperatives able to organise themselves to access and, as needed, draw on savings and credit for the purchase and reliable supply of agricultural inputs and/or investment by members in seed multiplication, processing equipment, storage facilities (granaries; sheds) and for autonomous management of enterprises (nurseries, seed banks, woodlots etc.). The capacity of producer organizations (associations and cooperatives) will be strengthened to create their self-development, implement and manage a sustainable supply of inputs, and ensure the continuous availability of quality seeds in partnership with specialized research institutes. Improving the supply of good quality seeds and the levels of adoption of improved farming practices will ensure the transition towards sustainable integrated systems of production that are viable and resilient to shocks.

The sustainability of the project investments will be guaranteed by strengthening the capacity of existing Producers Organizations (POs) and permanent structures) of decentralized technical services of MINAGRIE through the Provincial Agriculture and Livestock Directions (DPAEs), etc.) and by offering quality services to small producers. Moreover, the accountability of producers' organisations in (i) the completion of input controls, (ii) the management of small productive investments (equipment, stores, etc.) in close collaboration with development partners and (iii) the mastery of the implementation of their activities will ensure their economic independence and decision-making capacity (planning and management). The investments planned by the project at post-harvest level will: (i) increase incomes and improve living conditions of rural populations through improved productivity of differents value chains and the new enterprises/ agro-business opportunities; (ii) reduce transaction costs and losses due to improved processing techniques, storage and packaging facilities; (iii) decrease imports of products of priority industries promoted; (iv) structure agro-businesses into pre cooperative structures for the emergence of private producers / cooperative societies, a strategic step for the future sustainability and economic dvelopment.

The approach to develop a community solidarity chain for livestock that has been successfully used in Burundi will be enhanced and extended to vegetable production (*inter alia* banana plants + sweet potato strings) and local seed banks and multiplication.

Sustainability of Capacity Development

Capacity development will be an important focus of the project as a study conducted during the PPG highlighted the serious human capacity development needs (see Section 1.2.3 of ProDoc for details),

One of the specific objectives of the Burundi IAP-FS project (and indeed the overall programme) is to contribute to improving the organizational and technical capacities of the institutions and communities involved in the sustainable management of land and the development of value chains to ensure food and nutrition security.

To achieve this goal, two strategic choices have been made during project design: 1) strengthening the organizational and managerial capacity of stakeholders and 2) technical capacity building at all levels.

Strengthening the organizational and managerial capacities of sectoral and existing intersectoral bodies for improved coordination of institutions will focus on activities contributing towards the creation of a more conducive environment for the implementation of SLM. Support for the adaptation of the institutional and legal frameworks to enhance the principles SLM and INRM, also strengthening the technical and managerial capacities of key existing platforms for improved dialogue and collaboration among the sectoral ministries, such as GSADR at national and provincial levels will ensure good intersectoral coordination and cooperation. Capacity building of the network of key SLM resource persons at national, provincial and municipal levels will essentially comprise stakeholders from the many agriculture and environment subsectors under MINAGRIE and MEEATU, also local administration and communities.

Participation and accountability of public institutions, local government and communities based on participatory planning, implementation and monitoring and assessment of all activities of the project is likely to ensure the sustainability of actions, through making land resources more productive in the medium and long-term, providing beneficiaries with improved incomes and more resilient livelihoods from healthy and resilient ecosystems.

The enhancement of the technical capacity of the direct beneficiaries (communities) and management structures both private and public (extension services of MINAGRI, MEEATU and local NGOs) that are actively involved in SLM will be based on adapted approaches and technologies for sustainable and integrated planning and management of natural resources and production systems. . Indeed, the approach of technical capacity development based on community management through integrated catchment planning and mangement building on local knowledge as well as expertise of technical/ research bodies, also practice-oriented action using the FFS approach will enhance adaptation and resilience.

The themes of the training included in this project design at national, provincial and local levels have been proposed by beneficiaries, to meet their needs.

The selection of beneficiaries of FFS training including master trainers and facilitators/animators as well as local technicians (provinicial agriculturists, zonal assistants and local facilitators) will contribute to the sustainability of capacity development activities.

The organization of exchange forums at regional and national level on SLM practices, sustainable food and agricultural systems and integrated natural resources management approaches and their impacts is an effective way of opening eyes to the importance of adaptive management for developing best practices and technologies to address issues of local and national impotance e.g nutritious foods for consumption and sale and for enhanced national food security; energy saving technologies for land users that contribute to carbon sequestartion and climate mitigation at national level.

Replication and up-scaling

The project sites are representative of the highland agroecosystem of Burundi. Thus the SLM/INRM technologies being advocated via FFS approaches by the project will be replicable in many other areas of the country and scaled out during the project in collaboration with cofinancing projects (PRODEFI II, PRODEMA, LVEMP as well as through synergy in terms of technical guidance). The systematization of experiences, lessons learned and production of learning/training tools will serve to promote the scaling out of project results through national stratgeies and across the target geography of the IAP-FS programme.

The up-scaling potential of the project activities and results is high, given its complementarity with national policies, plans, and programmes, particularly the co-financing projects of the IFAD and World Bank co-financing projects. It is

envisaged that they will both use the training of trainer process and agro-ecosystems tailored SLM technology options/recommendations in their implementation areas and, in turn, will provide IAP-FS with improved value chains where the projects operate in neighbouring watersheds.

Lessons will be shared across the IAP-FS programme to the eleven other participating countries through activities of the IAP-FS regional hub project.

In addition, the FAO Representation in Burundi will disseminate information through the FAO regional initiatives that are led by the FAO offices in Accra, Ethiopia and Harare, on the results and lessons learned with other countries with similar characteristics and problems.

A.2. Child Project

This is a child project of the overall GEF FS-IAP Program, which includes eleven other countries.

Burundi is included in the Program as it has been seriously affected by environmental degradation and loss of ecosystem services, resulting in persistently low crop and livestock productivity and increased food insecurity for millions of smallholder farmers, in particular the most vulnerable groups, such as women and youth.

The IAP-FS Program seeks to tackle major drivers of environmental degradation by advancing a holistic and integrated approach to enhancing agricultural productivity in smallholder systems where food insecurity is directly tied to agriculture. This approach is to ensure that gender and nutrition are mainstreamed as important elements to address the food security challenge. The Program builds on existing efforts at national and regional level to address various barriers (policy, institutional, and knowledge) to emphasize a shift toward safeguarding the natural capital that underpins sustainability and resilience for food security in the long term. The Program is promoting a paradigm shift in African agriculture that emphasizes the importance of natural capital and ecosystem services, which will help ensure the long-term sustainability and resilience of production systems.

The three outcomes of this “child” project are closely linked to the intended results of the overall program, namely:

Outcome 1: Multi-stakeholder and multi-scale platforms operational in supporting policy, institutional and knowledge sharing mechanisms for scaling out of sustainable agriculture systems and integrated natural resources management approaches - will contribute to achieving the Program component on the establishment of institutional frameworks for influencing sustainability and resilience;

Outcome 2: Increased land area and agro-ecosystems under integrated natural resources/ landscape management and SLM best practices and supported by FFS and sustainable value chains for increased production and sustainable livelihoods - will contribute to achieving programmatic outcome 2 on the scaling up of integrated approaches;

Outcome 3: M&A framework in place and capacity of relevant institutions built to carry out monitoring activities, communicating experiences and impacts - will contribute to Program level outcome 3 by supporting effective M&A.

During project implementation, the Burundi IAP-FS project team and stakeholders will participate actively in activities foreseen under the framework of the regional hub project, which is designed to create linkages between childprojects and beneficiary countries. Notably, the Burundi IAP-FS child project will contribute to and is anticipated to greatly benefit from the “Cross-cutting capacity building, knowledge services and coordination project for the Food Security Integrated Approach Pilot Program” (the “hub” project) which will provide a link to wider sources of information and support (from the IAP-FS hub project also the other eleven child projects).

Component 1 of the Burundi project (the inter-sectoral knowledge sharing mechanism at national and provincial levels to develop a “SLM Learning Alliance”), is expected to particularly benefit through interaction across the program (particularly with countires in similar AEZs) and from Outcome 1 of the hub project, with enhanced access to information products and for transformational impacts at national level. There is a particular need in Burundi for

guidelines / teaching tools, many of which undoubtedly already exist in other coutrnies, which could then be tailored for the target local beneficiaries, avoiding the traps of reinventing the wheel and / or producing vast arrays of information on the internet – or in glossy booklets written in English. The project has need of straightforward materials in local language (Kirundi), also in pictorial forms, also tailored radio, video, songs, dramas etc.materials to disseminate messages more effectively. This will reinforce mainstreaming of SLM / INRM and knowledge of the many synergistic benefits of SLM technologies.

A.3. Stakeholders.

In order to ensure buy-in and ownership of project activities and the objective, the beneficiary communities (individuals, NGOs and CSOs[7]), local, provincial and national institutions and partners in this project have been involved from the start in the project's design, including throughout the project preparation phase. The project preparation phase included:

- A Project Preparation Inception Workshop (Bujumbura April 2016), which brought together all stakeholders and potential partners;
- A second design and consultation mission took place in May 2016, during which the international PPG consultant, along with the national team of consultants held consultation workshops in each province, visited potential project sites and conducted discussions with focus groups and communities (including members of all three main ethnic groups – Hutu, Tutsi and Batwa) and with district technical officials on food security, environmental degradation and climate change impacts on local livelihoods. Questions to communities allowed the design preparation team to understand the current and past issues in the sub-region as well as to identify needs of communities in order for them to reach resilient livelihoods and food security;
- From April to July 2016, the three national consultants undertook research, conducted further field visits and held targeted meetings with stakeholders and potential partners and;
- From May to July 2016, a team of staff co-opted from the Ministere de l'Agriculture et de l'Elevage (Ministry of Agriculture and Livestock - MINAGRIE), led by a specialist international consultant, conducted a comprehensive baseline household (HH) survey of 402 HHs to support a tailored project design. The FAO-developed tool "Self-evaluation and Holistic Assessment of climate Resilience for farmers and Pastoralists" (SHARP) was used for the survey (see Annex 14 of ProDoc for full report). The survey was preceded by 5 focus group discussions across the 3 provinces to complement the data collection with qualitative information. The focus groups particularly targeted vulnerable groups such as women, youth and the elderly, in order for them to be able to voice their concerns. They will be specifically targeted in this project, in particular through Component 2, which will provide activities designed around their specific needs, capacities, knowledge and social roles with the objective to increase the land area under INRM and SLM and enhance productivity to contribute to food security.
- The validation workshop took place on 25 October 2016 and brought together representatves of key stakeholders, including representatives from the ministries, technical sectors, partner projects and NGOs to discuss the project activities and expected results (outputs and objectives) and implementation and cofinancing arrangements. Detailed reports of the inception, consultation and validation workshops are provided in the ProDoc Annexes 12 and 13.

Through the 14 agreed outputs and 68 proposed activities, this project has been designed to respond to relevant concerns expressed by communities and actors in the three target provinces in accordance with natioanl priorities and needs to enhance livelihood and ecosystem resilience and food security in the long term.

Indigenous peoples

[7] NGOs and CSOs involved during the PPG included: Vi-Agroforestry, ACORD, CAPAD, AVEDEC, ADISCO, ODAG, NBA, LCA, Dukingire Kibira, FCBN, IRAC, ODEB (Organization pour la Défense de l'Environnement), CONSEDI (Conseils pour le Développement Intégré), Réseau Burundi 2000+ .

According to estimates, the number of minority Batwa people is around 1% of the total population (78,071 according to the report on the land situation of the Batwa in Burundi in 2008). The territorial occupation shows that they are spread all over the national territory, with a greater concentration in the Provinces of Cibitoke, Gitega, Karuzi, Kayanza, Ngozi and Bujumbura.

During the PPG field studies and focus group discussions (FGD), it was confirmed that some Batwa indigenous peoples live in the intervention areas. The Batwa are one of three ethnic groups that make up society in Burundi, along with the Hutu and Tutsi. Batwa are estimated to number roughly 1% of the national population, thus estimated at around 2,000 in the project's intervention area. The three ethnic groups are inter-mingled, with no specific geographical areas for each group across the proposed project intervention zone, thus all three groups were invoolved in the FGDs and HH-BAT survey.

The presence of Batwa triggers the need for the project to establish Free, Prior and Informed Consent (FPIC) for project activities to ensure that the Batwa are adequately informed about and agree to the project intervention. FPIC is a universal norm of international law. [The normative framework for FPIC consists of legal instruments including the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the ILO (International Labour Organization) Convention 169, and the Convention on Biological Diversity among others.]

Due to time and financial constraints, also the desire not to stimulate anticipation for the IAP-FS project before it has been designed and funding approved, it was concluded that the best approach will be to complete the FPIC process during the project's inception period [Output 1.1.4: Community consultations through a participatory negotiated territorial development process (PNTD) and Free prior informed consent process (FPIC) conducted], when there is a project team in place. The project manager will prioritise catalysing work specifically with this community to reassure and confirm that the project will respect their dignity, rights, interests, cultural specificities and that they will benefit from all the advantages of the project. This will include the "series of steps and iterative phases are needed before the community can arrive to a collective decision of consent or withhold-consent" using participatory engagement (consultations and negotiations) as the means and tools
through which FPIC can be achieved (see Section 1.3.2 and Annex 17).

A.4. Gender Equality and Women's Empowerment.

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Overall, the project is designed to benefit 33,534 rural households. The project recognizes that women are vital stakeholders in managing the land, using natural resources and in food security in Burundi. All project activities consistent with the FAO gender policy and GEF Policy on Gender Mainstreaming (PL/SD/02. May 1, 2012) which aims to "promote the goal of gender equality through GEF operations". Thus the target is that **at least 30%** of the project's direct beneficiaries will be women, including those who head households (also 30% young people) at the institutional and community levels.
Gender analyses were specifically included during the PPG by the value chain national consultant (see Annex 18), in FGDs by the whole PPG team and during the HH-BAT baseline household survey (Annex 14).

During the PPG it was confirmed that women are the majority of the agricultural labor force and are also involved in post-harvest activities (storage, preservation, processing and marketing). However, they have limited access to inputs, technical advice, improved technology, credit, land and decision-making [Annex 14 notes "When comparing decision-making scores across female- and male-headed HHs, the difference is even greater: 14.27 vs 21.55 (Table 13). This highlights a gender issue in some HH decision-making processes"]. Women suffer more than men from a lack of tools and little adapted mechanization, especially for the processing of rice, making their tasks even longer and more arduous.

The HH-BAT study found that as far as food insecurity is concerned, comparison of FIES-H and FIES-EX-H scales between male- and female-led HHs did not point out outstanding differences: male-led HHs are only slightly more food secure. According to results of the FIES-EX-H scale, severe food insecurity affects 2% of male-led HHs and 4% of female-led HHs.

Regarding nutrition, the situation varies according to gender of HH head, as diets of male-led HHs tend to be more diversified with greater access to cereals, vegetables, fruits and milk. Male-led HHs have access to more food groups than female-led HHs. Specifically, 16% of interviewed male-led HHs consumed three food groups in the 24 hours preceding the survey. The % of female-led HHs that ate three food groups is 24%. The statistics are inverted when the number of food groups consumed is higher: 19% of male-led HHs consumed six food groups in the preceding 24 hours, only 7% of female-led HHs did so. Raw scores of dietary diversity level confirm the situation: male-led HHs with low dietary diversity level are 20%, female-led HHs are 35%. Conversely, male-led HHs with high dietary diversity level are 23%, female-led HHs are only 8%. Regardless of the gender of HH head, the majority of surveyed HHs fall under the medium dietary diversity level (57%).

The differences between male- and female-led HHs as regarding types of most consumed food groups showed that tubers, beans and legumes, and oil/fat are the most consumed food groups, regardless of the gender of HH head. The major dietary variations between male- and female-led HHs concern cereals (50% vs 40%), vegetables (75% vs 54%), fruits (32% vs 12%) and milk (6% vs 1%). These differences have serious health implications.

The project will proactively seek to ensure meaningful participation of women taking into account the specific constraints and barriers they may face (see above). The project will promote the participation and empowerment of women to strengthen their roles in planning and decision-making, and to improve their productivity, food security, incomes and living conditions. Gender empowerment in agriculture will be addressed by the project through (i) gender-sensitive training within the FFS framework, including with advisory services (regarding SLM and also nutrition), also provision of hand tools, (ii) representation of women in key decision making platforms (e.g. a fixed quaota for women will be introduced in the established watershed committees), (iii) provision of micro-grants to women farmers through the established FFS structure, and (iv) access to gender-responsive good practices disseminated through the audio-visual and education materials the project will prepare.
Specific training modules for facilitators will be used with the aim of mainstreaming gender equality in FFS to ensure that women are involved and have access to: information, technical training, management and decision-making tools, credit and market. Examples of these modules are: a) characteristics and stereotypes of women and men; b) agree or disagree: declarations on the characteristics of women and men and revision of the criteria for participation in the FFS; c) roles of women and men in agriculture, from grandparents to the present: an analysis of roles over three generations.

Moreover gender analysis will be included in the development of new food value chains to ensure that they are gender-sensitive and inclusive and can contribute towards women's empowerment. In order to be able to better track gender-related impacts, some gender-sensitive indicators will be included in the monitoring and evaluation system at project incpetion to ensure that women can adequately benefit from the envisaged activities.

Under Component 1 (Output 1.1.3: Legal and regulatory frameworks on SLM, sustainable use of agrobiodiversity and agricultural and environmental strategies and plans are better known at national (1) and provincial level (1) and taken into account and applied in communal development plans and watershed management plans) one of the project activities will be to “conduct information events and support the application of relevant instruments for SLM/INRM including FAO Voluntary Guidelines (soil management, tenure, pastoral, responsible agricultural investments)”. These will have a gender focus.

At the national level, the project will endeavor to include as many women as possible in the policy platform / knowledge sharing mechanisms – and include women in all groups participating in hub training / other activites.

At the local institutional level, the project will ensure that women actively participate in the watershed committees and producers’ associations, ensuring that women make up at least 30% of the members and contribute in responsible roles and decision making processes.

As indicated above, the project will also facilitate women land users’ access to training and other project benefits, notably links to value chains, by ensuring at least 30% of the members of farmer field schools are women. [Trainings targeted at women will be designed and organized at times and in locations that women can easily access and using

tools and methods that are mindful of different literacy levels and language barriers.] Awareness raising and gender sensitization activities will be organized at community level to facilitate equal participation of different categories of women and men (e.g. by age, ethnicity, marital status etc.).

Women are particularly specified as beneficiaries of activities in the following Outputs:

Under Output 1.1.4 – Activity: Train and support local actors in strengthening local governance to enhance the autonomy and voice of marginal and vulnerable groups (women, youth and Batwa) and improve access, control and management over natural resources and conflict resolution (PNTD approach)
Under Output 2.1.5 – Activity: Promote and train community groups on the use of appropriate energy saving technologies and the assessment of their benefits for men and women (such as energy saving stoves, solar tools, biogas and brickettes for example with CNTA).

As detailed in the Results Framework (Annex 1 of the ProDoc), two of the three objective targets of the project are gender disagregated:

% households suffering from moderate +severe food insecurity in intervention microcatchments

% increasing dietary diversity among project community households (% households daily consume (i) at least 5 different food groups, (ii) animal protein (HH-BAT baseline data)

Several of the targets and indicators in Outcome 2 are similarly gender disagregated:
2.1: Increased land area and agro-ecosystems under integrated natural resources/ landscape management and SLM best practices and supported by FFS and sustainable value chains for increased production and sustainable livelihood.

Indicators:
(i) IAP TT LD-3 (ii): Application of INRM practices in the wider landscape
(ii) Extent of adoption of SLM/integrated landscape management practices
(iii) % of farmers producing for market (**disaggregated by gender**)
(iv) % farmers with improved production (**disaggregated by gender**)

Targets
(i) 9 catchments implementing INRM with enhanced BD (at genetic, species and habitat levels)
(ii) a) Integrated agrosilvo-livestock systems with well designed SLM practices effectively combined across 9 catchments and multiple benefits on livelihoods and ES documented and demonstrated
(ii) b) 30,000 ha of combined SLM practices in place by the project end plus 50,000 ha scaled up through baseline projects and watershed plans
(iii) 8,930 **(> 30% female headed households**, 20% orphan headed households)
(iv) FFS monitored and demonstrating production and diversity increases compared to normal practice (+25% by 200 FFS)

A.5 Risk.
The following table describes the risks that might prevent the project objective from being achieved the proposed interventions and measures to mitigate them.

	Description of risk	Impact[8]	Probability of occurrence	Degree of incidence	Mitigation actions	Responsible party
1	**Climate contingency risk**: Drought- may be so severe that it threatens crop and livestock survival, thus curtailing the basis for development of value chains appropriate for food security.	ML: The technical practices related to SLM implemented by the project become ineffectual over the course of the project	ML	amber	The project will mitigate this risk by implementing SLM activities, watershed management and CCA& CCM 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 programmes regularly supporting crop health will improve responses to those risks.	Project Steering Committee (PSC)
2	**Climate contingency risk**: Floods – may be severe and threaten crops and livestock survival, also damaging links to markets	MH: The technical practices related to SLM implemented by the project become ineffectual over the course of the project Also, links to value chains could be disrupted	MH	amber	The project should work to improve catchment planning to reduce flood risk, including SLMs which enhance rainwater infiltration and water storage. Project to improve food storage facilities in rural areas. Co-financing project working to improve roads.	PCU Executing Partners
3	**Social risks:** Lack of social acceptance of introduced INRM/SLM tools and practices by the target groups will threaten the project's impact and sustainability.	H: This is will severely affect all the aspects of the project implementation and delivery at the ground level, especially given the community-driven nature of the project	L	green	Cultural values (e.g. linked to food preparation/preferences) and traditions (such as agricultural production methods) in a rural set-up hardly change. In order to ensure social acceptance by target groups and eventual wide-scale adoption of improved crops and INRM/SLM tools and practices, the project uses participatory approaches such as the FFS and HH-BAT to ensure that interventions meet, not only the norm of the social system, but also the different	PCU Executing Partners

[8] H: High; MH: Moderately High; ML: Moderately Low; L: Low

	Description of risk	Impact[8]	Probability of occurrence	Degree of incidence	Mitigation actions	Responsible party
					needs of women and men. Moreover, communities have been consulted during the preparation of the project and have expressed their interest and willingness to participate in the project activities.	
4	**Institutional risk:** Limited involvement and weak cross-ministerial cooperation between the two involved ministries.	H: The project activities will take place in a compartmentalized manner and the project results will be severely affected. The positive results generated by the project will not be sustainable either	ML	green	Introducing greater resilience and sustainability into food production systems will require stronger links between the environment and the agriculture sectors at all levels. The project is therefore designed with the view of strengthening cross-sectoral collaborations by establishing multi-sectoral policy and knowledge platforms (the Agriculture and Rural Development Group)[4]. Here the stakeholders' common interests, the project's multi-scale benefits (evidence based) and appropriate incentive mechanisms for each party's involvement will be identified and elaborated on. Activities will hence be designed and implemented in a win-win manner for all parties involved. The project's steering committee will also comprise of senior members from the partner government agencies ensuring constant involvement and coordination.	FAO / PCU PSC
5	Political risk: reduction in political will and decrease in support from the government	MH: This could influence the institutional priorities and support, specifically from the main government counterpart's side. This will affect all aspects of the project	ML	amber	The government has fully backed the development of the project and high level participation was ensured both at the project preparation and validation workshops. The project through its PSC will constantly coordinate with high level policy makers to keep them	PCU, PSC

	Description of risk	Impact[8]	Probability of occurrence	Degree of incidence	Mitigation actions	Responsible party
		delivery.			appraised and maintain their support for the project.	
6	Security issues	ML: Current insecurity issues could escalate	MH	amber / red	Project cannot mitigate	

A.6. Institutional Arrangement and Coordination.

FAO will be the GEF Agency responsible for the supervision, and provision of technical guidance during the implementation of the project. In addition to FAO as GEF agency, the project will have the following executing partners:

At the national level

The Ministry of Agriculture and Livestock (MINAGRIE) will be the lead government counterpart and coordinating agency in this project working in close collaboration with the Ministry of Water, Environment, Spatial and Urban Planning (MEEATU). The MINAGRIE will ensure good overall project implementation. To this end, a focal point and deputy political focal point will be appointed to regularly monitor the implementation of the project. These two technical persons will come from the two ministries mentioned above (one from each). They will also play the interface between the Government and FAO. These institutions will be responsible for facilitating meetings and work of Project Steering Committee, Annual Work Plan and Budget review and approval, regular visits of interventions on the ground with project partners to guide the project team, approaches and alignment with national policy and strategies and ensure the project is making good progress, valuable products and impacts in line with project targets and indicators, and to contribute to mid-term review and project terminal evaluation.

Project Coordination Unit (PCU) located within MINAGRIE (Bujumbura) will be supported by the national focal point and staffed by:

- National Project Coordinator/SLM expert
- Monitoring and Assessment Officer (international part time)
- Operations and Administration Officer
- Short-term consultants

A further project office will be located within MINAGRIE (DPAE Gitega), supported by provincial facilitator and staffed by:

- National expert agribusiness/value chains
- National expert FFS/community mobilisation

[See Figure 9 in ProDoc]

At provincial level

The decentralized structures of the two leading ministries including Provincial Directorates of Agriculture and Livestock (DPAE) and the Burundi Office for the Protection of the Environment (OBPE) will be heavily involved in the implementation of project. The Ministry of Agriculture and Livestock will also appoint a Provincial Facilitator (FPP) within each DPAE to support the project Coordination Unit (PCU) in following up on field interventions in the

province. At commune level, the project interventions will be supervised by the communal agronomist/ zonal agronomist, each of whom will report to their respective Provincial Coordinator. Under the guidance of the communal agronomists, FFS facilitators will be trained and then participate in technical and organizational capacity development activities for FFS groups, cooperatives and watershed committees. Finally these two ministries will facilitate collaboration and ensure the synergies of the project activities with those of other partners through multi-stakeholder and multi-sectoral platforms (Outcome 1). [See Figure 10 of ProDoc.]

Coordination with other GEF-financed projects

The proposed project will coordinate with existing projects / programmes in order to promote synergies when appropriate, support other interventions, share knowledge and resources when possible, avoid duplication and ensure value-added to the development sector in Burundi.

At start-up, FAO and the executing partners will collaborate with the implementing agencies of other programmes / projects in Burundi in order to identify opportunities and mechanisms to maximise synergies with other relevant GEF projects (see Section 3.1.2), as well as projects supported by other donors. This collaboration will include: (i) informal communications between GEF agencies and other partners in implementing programs and projects; and (ii) exchange of information and outreach materials between projects.

The project will particularly benefit from being within the regional IAP-FS programme comprisng 12 projects with similar themes (although differing agroecosystem contexts). The Burundi project, under Output 1.1.2, specifically includes an activity "Facilitate the participation of SLM Learning Alliance members in IAP-FS regional hub activities and solicit exchange visits/ workshops/ policy dialogue between countries on priority themes".

Experiences and lessons will also be shared more widely with other IAP-FS country projects via the regional hub project.

Additional Information not well elaborated at PIF Stage:

A.7 Benefits.

The project will catalyse maintainance of the agricultural biodiversity in terms of diversity of crops grown including trees (Output 2.2.4) and livestock kept in the intervention areas. This will bring a range of inter-linked socio-economice benefits, including: better dietary diversity; improved nutritional levels and increased food security - while enhancing resilience to shocks (see Annex 14 of the ProDoc on the current low levels of dietary diversity, nutritional and food security) at local levels.

Undeveloped value chains - In Burundi, all players in the agricultural sector are convinced that the development of Burundi's agricultural sector can only be achieved with the support of agribusiness, which inevitably passes through the development of strengthened value chains and increased investment.

During the PPG, a national consultant completed a detailed inventory and analysis of the potential value chains in Burundi, identifying them and performing a SWOT analysis (strengths, weaknesses, opportunities and threats). The study also identified the capacity and interests of existing farmer field schools / inter-cooperative networks and other producers' organizations (POs) in engaging in value chain activities. [Annex 18 of the ProDoc presents a summary of the survey results, including results of pairwise ranking among stakeholders of the key crops (for food security, climate resilience, protection of the environment, household income / profitability, market potential and nutritional value) and the SWOT analyses for five key crops].

There is a proliferation of associations of farmers / producers (POs), but these are generally poorly organized, moreover currently value chains are weakly organised at both local and national levels, except where cofinancing projects are investing as with the IFAD support to milk and rice value chains and World Bank for a competitive coffee sector.

The project, in Outputs 2.1.3 and 2.1.4, will support a range of activities to improve access to food value chains. These market linkages aim to raise household incomes and improve nutrition and livelihoods in the project implementation areas - and the supply of food to wider markets at provincial level.

The development of value chains will enhance support for the project-catalysed more integrated land use systems and better natural resource management practices (i.e. improved efficiency and ecological functions of sustainable, diversified systems generating improved productivity and income with reduced inputs and costs) reinforcing the benefits of the conservation of resources, restoration of degraded lands and maintenance of ecosystem services.

A.8 Knowledge Management.

The project includes extensive attention to knowledge management, particularly:
Output 1.1.2: Functioning multi-stakeholder knowledge sharing mechanism in place at national (1) provincial (3) and local (4) levels, and promoting exchange of experiences and lessons learned (successes and failures) on scaling out of SLM / integrated natural resources / landscape management which includes the following activities:

- Establish a National SLM Learning Alliance (ACCESS-SLM) to produce, validate, exchange and distribute appropriate tools and thereby strengthen capacity of technical sectors and field projects (i.e. technical briefs, training modules targeted to different levels and actors, SLM action-research on SLM, INRM, FFS, sustainable agriculture, nutrition and food security,
- Facilitate the participation of SLM Learning Alliance members in IAP-FS regional hub activities and solicit exchange visits/ workshops/ policy dialogue between countries on priority themes such as:
  - Climate smart agriculture (CSA) and the conservation and efficient management of rainwater (study tour in 2 countries)
  - Adapted genetic resources (study tour to identify opportunities with ISABU, Biodiversity International and ICRAF)
  - Improved value chains (workshop)
  - Organisation of FFS networks and platforms (workshop)

Innovative financing and incentive measures for SLM/INRM scaling out at watershed/ landscape scale (workshop)

- Raise awareness of actors on key UNCCD, UNFCCC, CBD and FAO decisions and promote knowledge sharing tools notably the use of WOCAT global database on SLM and the Science Knowledge Brokering Portal (SKBP) and the Economics of land degradation (ELD) knowledge base.
- Train and support actors on the ground/ partner projects in assessing and entry of SLM best practices (locally identified technologies and approaches) in the WOCAT global database
- Support exchange visits/events between FFS and their communities to exchange innovations and good practices and analyse impacts (open days, producers' fora etc.)
- Collaborate with universities/agricultural schools to develop case studies to show the results and impacts of sustainable integrated food and agriculture systems/ INRM and support their integration in programmes and curricula.
- Develop and use audiovidual materials to share innovative practices and their benefits through training and communications (e.g. Digital Green or similar) with partner projects and actors (advisory services, NGOs, state services and private sector) (linked to Output 3.1.3)

B. Description of the consistency of the project with:
B.1 Consistency with National Priorities.

The project has been developed to be aligned to all relevant national development goals and policies, particularly:

Growth and Poverty Reduction Strategy Paper (2012)
The Government recognizes that for many years, Burundi has faced accelerated environmental degradation that has already resulted in the deterioration of livelihoods and lower production capacity, particularly in the agricultural sector. With regards to the agriculture sectors, the objective is to support sustainable food and agriculture systems to reduce vulnerability to shocks and to boost profitability. Agro-environmental development priorities include improving access to sustainable inputs, restoring tree and forest cover, rebuilding livestock herds and integrating crops-livestock and trees, introducing drought-tolerant crop varieties and energy saving technologies, and supporting agricultural research and extension activities.

Burundi Vision 2025
Identifies the preservation of the environment and climate change as major priorities and attempts to demonstrate /build evidence ofthe links between poverty reduction and environmental conservation.

Vision of the Agricultural Sector
With an economy dependent on agriculture, investment in the sector is crucial. The government has made agriculture a priority, committing to increase spending on agriculture to at least 10% of the national budget as per the Maputo Declaration.

National Agricultural Strategy (2007-2015) – published in 2008
In the area of sustainable management of natural resources and land in particular, the National Agricultural Strategy 2007-2015 undertakes to work to combat land degradation through various activities.

National Strategy and Action Plan Against Land Degradation (2011-2016) / Stratégie Nationale et Plan d'Action de Lutte contre la Dégradation des Sols (SP-LDS)
The national strategy and action plan developed as part of the implementation of the Convention is based on a national vision: "Participation by all groups of the population and strengthened commitment to take concrete action to protect and rational use of land for the well-being of present and future generations."

National Adaptation Plan of Action to Climate Change (NAPA, 2007)
Burundi's NAPA identifies limited human and financial resources and inadequate institutional framework as the main obstacles to the fight against climate change. The IAP-FS project will contribute to supporting GoB to address these through investment in capacity building of human resources at all levels (inter alia land users, FFS members, provincial and national GoB technical staff) including awareness of the opportunities and indeed the necessity for wide adoption and scaling out of SLM to adapt to climate change and reduce vulnerability.

The project will also contribute to all three of the strategic objectives in the NAPA to cope with the negative impacts of climate change.

Furthermore, the project will catalyse scaling-up of specific adaptation measures in some of the "most vulnerable sectors" identified in the NAPA (agriculture and livestock, wetland ecosystems, terrestrial ecosystems and landscapes including reducing deforestation and energy saving measures).
[see Section 1.5.1 of the ProDoc for more details]

The project is consistent with the National action plan for implementation of the United Nations Convention to Combat Desertification (UNCCD) (2011), as elements of the strategy include:

- Burundi would reverse the land degradation trend and lead the whole Burundian community to undertake an effective and efficient concrete and lasting actions against land degradation;
- All segments of the population and strengthened commitment to take concrete action for protection and rational use of land for the well-being of present and future generations;
- to operationalize the UNCCD NAP catalyse a horizontal coordination structure of stakeholders in land management.

The project addresses some of the constraints and contributes to the new strategy in the National Strategy and Action Plan on Biodiversity 2013-2020 to the United Nations Convention on Biological Diversity (specifically concerning agrobiodiversity).

The project is also consistent with the Second National Communication to the United Nations Framework Convention on Climate Change and the Intended Nationally Determined Contributions (INDCs) (September 2015). Concerning adaptation to climate change, Burundi aims to strengthen its ability to cope with the adverse impacts of climate variability and change in the most vulnerable socio-economic sectors while ensuring sustainable development of its population.
[see Section 1.5.2 of the ProDoc for more details]

C. DESCRIBE THE BUDGETED M &E PLAN:

M&E Activity	Responsible parties	Time frame/ Periodicity	Budget
Inception workshop	NPC, FAO Burundi (with support from the LTO, and FAO-GEF Coordination Unit)	Within two months of project start up	USD 6,000
Project Inception Report	NPC, M&A Experts and FAO Burundi with clearance by the LTO, BH and FAO-GEF Coordination Unit	Immediately after the workshop	Project staff time
Field-based impact monitoring	NPC, project partners, local organizations	Continuous	USD 15,000 (NPC time, technical workshops to identify indicators, monitoring and evaluation workshops)
Supervision visits and rating of progress in PPRs and PIRs	NPC, FAO (FAOBU, LTO). FAO-GEF Coordination Unit may participate in the visits if needed.	Annual, or as needed	FAO visits will be borne by GEF agency fees Project Coordination visits shall be borne by the project's travel budget
Project Progress Reports (PPRs)	BH with support from NPC and intern. Monitoring expert, with stakeholder contributions and other participating institutions	Six-monthly	USD 2,760 (3.5% of the PCU's time)
Project Implementation Review (PIR)	BH (in collaboration with the PCU and the LTO) Approved and submitted to GEF by the FAO-GEF Coordination Unit	Annual	FAO staff time financed though GEF agency fees. PCU time covered by the project budget.
Co-financing Reports	BH with support from PCU and input from other co-financiers	On a semi-annual basis, considered as part of semi-annual PPRs	USD 789 (1% of the PCU's time)
Technical Reports	NPC, FAO (LTO, FAOBU)	As needed	
GEF IAP Tracking Tools	NPC/monitoring expert and reviewed by FAO LTO	At mid-point and end of project	Project staff time
Mid-term evaluation (MTE)/review	MTE: FAO Independent Evaluation Unit in consultation with the project team, including the FAO-GEF Coordination Unit	Midway through the project implementation	USD 40,000 by an external consultanct / consultancy

M&E Activity	Responsible parties	Time frame/ Periodicity	Budget
(MTR)	and others MTR: FAO Burundi, External consultant, in consultation with the project team, including the FAO-GEF Coordination Unit and others	period	
Terminal Evaluation	External consultant, FAO Independent Evaluation Unit in consultation with the project team, including the FAO-GEF Coordination Unit and others	At the end of the project	USD 50,000 by an external consultant. FAO staff time and travel costs financed by GEF agency fees.
Terminal Report	PCU; FAO (FAOBU, LTO, FAO-GEF Coordination Unit, TCS Reporting Unit)	Two months prior to the project end.	USD 8,000
Total budget			**USD 122,549**

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies[9] and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Daniel Gustafson Deputy Director-General (Programmes) and O-i-C/TC and TCI, Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153 Rome, Italy		28/03/2017	Fritjof Boerstler Technical Officer, FAO GEF Coordination Unit. Investment Centre Division.	+3906 570 55398	Friotjof.Boerstler@fao.org
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[9] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).
See Annex 1 of the ProDoc

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

GEF Council comments (general on programme and the specific ones from Germany on Burundi)

From	No.	Comment	Response
Germany	1	Land tenure issues are mentioned as major barriers for Integrated Natural Resources Management (INRM) in certain contexts but the programme does not address these. It is recommended to support ongoing land policy reform processes where possible, particularly through capacity development of local level institutions.	Agreed. Output 1.1.3 "Legal and regulatory frameworks on SLM, sustainable use of agrobiodiversity and agricultural and environmental strategies and plans are better known at national (1) and provincial level (1) and taken into account and applied in communal development plans and watershed management plans " includes as range of pertinent activities, including specifically "Conduct information events and support the application of relevant instruments for SLM/INRM including FAO Voluntary Guidelines (soil management, tenure, pastoral, responsible agricultural investments)"
	2	Technical innovation needs to be fully adapted to physical and socio-economic conditions at target group level (critical example: Biogas in regions with extreme lack of biomass). Piloting exercises should as far as possible be redesigned in favour of broad application of simple technologies. Particular emphasis needs to be given to up-scaling of organic fertilization technologies and management of biomass.	Agreed. The project will, using the FFS approach, encourage well-tested and cost-effective integrated locally adapted "packages" (for each agroecosystem) of SLM and INRM technologies (including landscape+agroecological+climate smart agriculture approaches), inter alia agroforestry (with native species), evergreen agriculture, various other methods to enhance soil organic matter content (to enhance rainfall infiltration and storage, also nutrient retention – and overall functioning), soil water conservation and promoting local agrobiodiversity (e.g. reviving interest in growing neglected crops (taro and finger millet – see Annex 21). The project will use training methodologies and technical assistance approaches currently used by FAO that are known and accepted by technical experts and producers. Local knowledge of farmers and indigenous communities is included in this approach. The project technical feasibility is based on the presence of entities with sufficient fundamental technical capacity to support and further transfer local technologies at the ground level. The project will ensure this

			through improving the technical capacities of province and local level technical and extension staff, including through training of FFS master trainers, to enable them to provide this improved approach to farmer advisory services. Only small hand tools, items such as foot pumps and small-scale processing and packaging equipment will be included through the project.
	3	Rain fed agriculture and upland parts of the landscapes need not to be neglected. Both, livelihood perspective and value chain approach can therefore be considered within the landscape framework.	Agreed. The project's target agroecological zone is the "highland perennial" zone – the central highlands of Burundi. The intervention microcatchments are predominantly rain-fed and have their lowest points over 1,400m (see Table 8 in ProDoc). All the on-the-ground interventions adopt a landscape approach.
	4	Since the non-sustainable provision of wood energy is one important element of forest and landscape degradation and since wood energy plays a key role for food security, Germany suggests addressing this theme within strategies for food security. Existing good practices for sustainable wood energy production can be up-scaled within the project component "scaling up integrated approaches for sustainability and resilience"	Agreed. Outcome 2 of the project includes adopting a landscape approach, developing watershed plans following participatory diagnostics (Output 2.1.1). Also,"Output 2.1.5: Steep slopes and highly degraded areas rehabilitated through tree planting, with attention to indigenous species, to increase biodiversity, productivity and resilience and to reduce pressure on woody material" has been designed to not only reduce land degradation but also enhance sustainable wood energy production – and finally two activities to specifically address the wood fuel issues – promoting energy saving stoves and efficient production of charcoal – for resilience.
	5	Within its special unit *"One World, No Hunger"* the German Ministry of Economic Cooperation and Development (BMZ) has launched regional programmes to which synergies and linkages could be established. These are in particular: a. *Programme on soil protection and rehabilitation for food security* in Kenya, Ethiopia, Burkina Faso b. *Programme on Green Innovation Centres* in Burkina Faso, Ghana, Kenya, Nigeria, Malawi c. *Programme on food security and resilience* in Burkina Faso, Malawi, Kenya	Not applicable

		and Ethiopia	
	6	Strengthening evidence of the benefits of investment into SLM is a priority issue for monitoring and research and a key motivation for investing in SLM. This is the special focus of the Economics of Land Degradation Initiative (http://eld-initiative.org/) which is preparing also a regional approach in Sub-Saharan Africa. Links and synergies could be established.	Agreed. This will be addressed by the PCU as part of Outcome 1
	7	The monitoring system which will be established within the programme could be aligned with / made applicable for national monitoring systems, in order to establish / support long term monitoring of food security progress and resilience.	Agreed. Outcome 3 of this project "M&A framework in place and capacity of relevant institutions built to carry out monitoring activities, communicating experiences and impacts" specifically addressed the need to build capacity in Burundi for monitoring and assessment. This particularly includes use of the FAO SHARP tool (HH-BAT) (see Annex 14 of the ProDoc), also building capacity to monitor hydrology and GEBs – to increase capacity beyond the immediate project implementation area.
	8	The planned budget of 35 to 120 Mio USD per child project is for the envisaged implementation period of 60 month quite high. Necessary ownership of land users for SLM needs to build up; capacities of implementing partners might not be sufficiently available and needs to build up. Were these aspects analysed and considered in planning? What are options to adapt budget planning if necessary (shifts between child projects, extension of project period)?	Agreed. The capacity of implementing partners in Burundi has already benefited from the Kagera TAMP project (2010 – 2015) and the project has been designed to include a balance of inputs from national experts with support from technical experts of FAO, the implementing and executing agency and international consultants.
Burundi specific from Germany		Soil erosion could be addressed more prominently in the text, as soil loss rates of about 100-150t/ha/annum are common in Burundi. Soil erosion will be aggravated by future climate change signals such as increased annual precipitation and occurrence of more extreme weather events hence climate change as such should be incorporated into the proposal as factor and not extreme weather event only.	Agreed. Soil erosion was recognised by the PPG team as a major element of land degradation in the intervention micro-catchments - although probably not the most serious in Burundi (e.g. in Bujumbura Rural). The SLM technologies proposed in the detailed ProDoc are firmly focused on addressing this – stating (in Section 1.2.3) "Attention must remain focused on the use of SLM / INRM, including for example reduced tillage, agroforestry, conservation agriculture and grain-legume intercropping to build up soil health, with if necessary limited additions of inorganic fertilisers to support traditional (compost and manure) and non-traditional

			local materials". This will enhance the resilience of the soils to, for example, changes in rainfall totals and intensity, through improving the structure, hence rainfall infiltration capacity – while reduced tillage and CA also provide year-round vegetative cover to the soil surface, reducing erosion. Output 2.1.5 of the project more specifically addressed soil erosion in hotspots "Steep slopes and highly degraded areas rehabilitated through tree planting, with attention to indigenous species, to increase biodiversity, productivity and resilience and to reduce pressure on woody material".
		The proposal points out that expansion of agriculture into wetlands are part of a wider problem in terms of freshwater resources base. The proposal further notes under paragraph 2 "Context and baseline scenario" the aim to effectively link the project with PRODEFI, IFAD. One of its objectives is to manage and rehabilitate wetlands for agricultural use. There seems to be incongruence in the proposal between the need for expansion of agriculture land and an ecosystem approach that regards ecosystem services deriving from wetlands.	Agreed. In the ProDoc (Section 1.2.1) it is recognised that "The land and freshwater resource base, associated biodiversity and the human populations whose livelihoods and food security depend on those resources, are being threatened by land degradation across Burundi, leading to declining productive capacity of croplands and pasturelands, deforestation and expansion of agriculture into wetlands through encroachment and irrigation development." The challenge remains that there is a lack of alternatives and the decline in available land for subsistence agriculture (due to the high rate of population growth) is placing land users at growing risk of food insecurity and forcing them to intensify agricultural and livestock production by adopting unsustainable land use and management practices. The project will support the development and implementation of nine (9) micro-watershed management plans combining appropriate SLM and INRM approaches (Output 2.1) (including supporting watershed management committees in developing local rules and by-laws through their watershed action plans to address priority problems related to access, control and management of natural resources) . This will include training in the landscape approach – which will highlight issues around expansion of agriculture into wetlands, which are recognised as highly important to act as

			"sponges" which limit extreme highs and lows in river flow. The project includes the activity "Provide advice on the sustainable use of valley bottoms and flood plains and the stabilisation river banks and lakeshores (300 km) with bamboo and other perennial species to improve water quality, conservation and management through efficient irrigation and permanent access by local populations". The IAP-FS project will not advocate agricultural expansion onto wetlands – but will highlight the risks and as the project's SLM training materials will be used by co-financing projects, this should ensure that these projects also appreciate the risks of this expansion.
		In the present context the risk of political unrest and conflict needs be considered and marked as high. Furthermore, Germany suggests to consider the question of land ownership as highly relevant in the context of SLM where long terms approaches require land security and user rights.	Agreed. Table 17 of the ProDoc has marked Security issues – Impact "moderately likely" "Current insecurity issues could escalate" and the "Probability of occurrence" moderately high "Degree of incidence" - amber / red The project is addressing the tenure issue through Output 1.1.3 "Legal and regulatory frameworks on SLM, sustainable use of agrobiodiversity and agricultural and environmental strategies and plans are better known at national (1) and provincial level (1) and taken into account and applied in communal development plans and watershed management plans" includes the activity "Conduct information events and support the application of relevant instruments for SLM/INRM including FAO Voluntary Guidelines (soil management, tenure, pastoral, responsible agricultural investments)" .
		Exchange and collaboration with the GIZ Project "Climate Change Adaptation for the protection of water and soils resources" is recommended, in order to multiply impacts in the context of climate change mitigation and adaptation.	Agreed. The PCU will initiate this at project start-up.
US	1	How will the child projects proceed without impacting forest and key	The project aims to increase agricultural production on existing crop land not extend

		biodiversity areas that will be opened or face pressure as a result of increased agricultural production? Will there be a broader framework developed to address this important issue?	the area under cropping. Concerning biodiversity, Muramvya Province includes an important part of the Kibira National Park (40,000 ha), which includes exceptional biodiversity in the remnants of its forests. The park lies on the Congo-Nile, which is the watershed line between the two basins of the major rivers of the continent, namely: the Congo River to the west and the River Nile in east. Kibira National Park is part of a series of mountain forests which extends north into Rwanda and is being linked northwards (through another GEF project LAFREC) towards the Volvanoes National Park. Kibira is of undeniable environmental and economic value for the country, particularly as the water tower of the country. Its privileged location on the Congo-Nile means that the park plays a fundamental role, regulating the water regime, thus protecting the watershed against erosion and the plains against flooding. The ecosystem functions of Kibira are vital to much of the agricultural land of Burundi and supports production of hydro-electricity for the country. The project will contribute to supporting and reducing pressure on the biodiversity of the park and the buffer zones through activities under Output 2.1.4. Including: ➢ Mobilise research to undertake a study of wild plant relatives in project study areas and in the buffer zone for Kibira national park. ➢ Organise biodiversity fairs (3 sites x 2 times) and establish and support demonstration gardens (3) to provide diverse species/varieties to farmers according to interests and preferences. With growing populations, there is pressure on the park boundaries – which sustainable intensification (and diversification) outside the park boundaries could alleviate.
	2	How will processes be used to create viable and inclusive multi-stakeholder groups at both national and local jurisdictions?	Multi-stakeholder groups already exists in Burundi, including Agriculture and Rural Development Sector Working Groups (GSADR) at national (1) and provincial (3)

			levels, also watershed management committees. The project will work with these groups, to strengthen, train and support them to (see Section 1.1.1 of ProDoc) to enhance their capacities and profiles – with the intention that over the project period they will have established sufficient profile that they become self-sustaining or become considered sufficiently important that they need to be supported form GoB into the future.

Scientific and Technical Advisory Panel Comments (5 May 2015)

Comment No.	Comment	Response
3b	How will local knowledge and scientific knowledge be combined so they are mutually reinforcing in describing, monitoring, and assessing land degradation and environmental changes (e.g. climate risks) in ways that are pertinent to a diversity of stakeholders?	"Output 1.1.2: Functioning multi-stakeholder knowledge sharing mechanism in place at national (1) provincial (3) and local (4) levels, and promoting exchange of experiences and lessons learned (successes and failures) on scaling out of SLM / integrated natural resources / landscape management" will support combining local and scientific knowledge for a wide range of purposes within the project and beyond. This includes: ➢ Establish a National SLM Learning Alliance (ACCESS-SLM) to produce, validate, exchange and distribute appropriate tools and thereby strengthen capacity of technical sectors and field projects ➢ Facilitate the participation of SLM Learning Alliance members in IAP-FS regional hub activities and solicit exchange visits/ workshops/ policy dialogue between countries on priority themes such as ➢ Raise awareness of actors on key UNCCD, UNFCCC, CBD and FAO decisions and promote knowledge sharing tools notably the use of WOCAT global database on SLM and the Science Knowledge Brokering Portal (SKBP) and the Economics of land degradation (ELD) knowledge base. ➢ Train and support actors on the ground/ partner projects in assessing and entry of SLM best practices (locally identified technologies and approaches) in the WOCAT global database ➢ Support exchange visits /events between FFS and their communities to exchange innovations and good practices and analyse impacts (open days, producers' fora etc.) ➢ Collaborate with universities/agricultural schools to develop case studies to show the results and impacts

		of sustainable integrated agricultural systems/ INRM and support their integration in programmes and curricula. ➢ Develop and use audiovidual materials to share innovative practices and their benefits through training and communications (e.g. Digital Green) with partner projects and actors (advisory services, NGOs, state services and private sector). These are linked to "Output 3.1.3: Project results and experiences compiled, communicated widely and shared with the project regional hub and partner projects ", which is part of the wider M&A Outcome
3c	What are the factors that are likely to influence the adoption of a technology (e.g. conservation agriculture, agro-biodiversity, integrated management of mixed crop and livestock systems) across a wide spatial area? Some factors to consider include labor, cost of introducing or maintaining the technology, local and cultural factors	**Sustainability of Capacity Development** One of the specific objectives of the Burundi IAP-FS project (and indeed the overall programme) is to contribute to improving the organizational and technical capacities of the institutions and communities involved in the sustainable management of land and the development of value chains to ensure food and nutrition security. To achieve this goal, two strategic choices have been made during project design: 1) strengthening the organizational and managerial capacity of stakeholders and 2) technical capacity building at all levels. Strengthening the organizational and managerial capacities of sectoral and existing intersectoral bodies for improved coordination of institutions focuses on activities contributing towards the creation of a more conducive environment for the implementation of SLM. Support for the adaptation of the institutional and legal frameworks to enhance the principles SLM and INRM, also strengthening the technical and material capacities of key existing platforms for dialogue between the sectoral ministries such as GSADR at all levels (national and provincial) are ways that will assure on good coordination and cooperation. This capacity building of the network of key SLM resource people at national, provincial and municipal levels essentially comprises stakeholders from the agriculture and environment sectors (MINAGRIE, MEEATU), also local administration and communities. This broad approach will ensure the sustainability of local resources mobilized by the different stakeholders. Participation and accountability of public institutions, local government and communities to the beneficiaries based planning, implementation and monitoring and assessment of all activities of the project is likely to ensure the sustainability of actions, make land more productive in the long-term and provide them with additional resources. The enhancement of the technical capacity of the direct beneficiaries (communities) and management structures

		both private and public (extension services of MINAGRI, MEEATU and local NGOs active in the GDT) involved in SLM is based on approaches and technologies that guarantee sustainability. Indeed, the approach of technical capacity building chosen based on community management and integrated microcatchments by extension based on local knowledge, also practice-oriented action using the FFS approach assures this. The themes of the training included in this project design at national, provincial and locals have been proposed by beneficiaries, to meet their needs. The selection of beneficiaries of FFS training as facilitators, animators who favor voluntary producers, technicians on site (municipal agriculturists, zonal assistants and local facilitators) contribute to the sustainability of capacity building activities. The organization of exchange forums at regional and national level on sustainable land management is an effective way of opening eyes to new technologies / best practices applicable at the national or local level. **Apropriateness of Technologies** The project will, using the FFS approach, encourage well-tested [10] and cost-effective integrated locally adapted "packages" (for each agroecosystem) of SLM and INRM technologies (including landscape+agroecological+climate smart agriculture approaches), *inter alia* agroforestry (with native species), evergreen agriculture, various other methods to enhance soil organic matter content (to enhance rainfall infiltration and storage, also nutrient retention – and overall functioning), soil water conservation and promoting local agrobiodiversity (e.g. reviving interest in growing neglected crops (taro and finger millet – see Annex 21). The project will use training methodologies and technical assistance approaches currently used by FAO that are known and accepted by technical experts and producers. Local knowledge of farmers and indigenous communities is included in this approach. The project technical feasibility is based on the presence of entities with sufficient fundamental technical capacity to support and further transfer local technologies at the ground level. The project will ensure this through improving the

[10] The project will implement technologies advocated in the existing documents on good SLM practices such as those developed by the GEF project "capacity building" in Burundi and the TerrAfrica programme. The project will also disseminate tools such as the WOCAT database, tools and questionnaires to document and assess SLM approaches and technologies, which include existing technical data on Burundi and in the same agro-ecological zones elsewhere (Rwanda, Uganda etc.).

		technical capacities of province and local level technical and extension staff, including through training of FFS master trainers, to enable them to provide this improved approach to farmer advisory services. Only small hand tools, items such as foot pumps and small-scale processing and packaging equipment will be included through the project. Technologies The project will, using the FFS approach, encourage well-tested and cost-effective integrated locally adapted "packages" (for each agroecosystem) of SLM and INRM technologies (including landscape+agroecological+climate smart agriculture approaches), inter alia agroforestry (with native species), evergreen agriculture, various other methods to enhance soil organic matter content (to enhance rainfall infiltration and storage, also nutrient retention – and overall functioning), soil water conservation and promoting local agrobiodiversity (e.g. reviving interest in growing neglected crops (taro and finger millet – see Annex 21). The project will use training methodologies and technical assistance approaches currently used by FAO that are known and accepted by technical experts and producers. Local knowledge of farmers and indigenous communities is included in this approach. The project technical feasibility is based on the presence of entities with sufficient fundamental technical capacity to support and further transfer local technologies at the ground level. The project will ensure this through improving the technical capacities of province and local level technical and extension staff, including through training of FFS master trainers, to enable them to provide this improved approach to farmer advisory services. Only small hand tools, items such as foot pumps and small-scale processing and packaging equipment will be included through the project.
As countries and the GEF Agencies conceptualize and implement their projects, STAP recommends, therefore, addressing the following points:		
7a	Identify monitoring and evaluation methods to measure the scaling-up impact and process	The project will use a wide range of tools for monitoring, assessment and evaluation to measure the scaling up of impact, including: In Outcome 2 - LADA-local, WOCAT and Collect Earth; In Outcome 3 – participatory methods, satellite imagery, the FAO SHARP tool (HH-BAT). Results will be shared widely including through the project-catalysed National SLM Learning Alliance (ACCESS-SLM) (Output 1.1.2)
7b	Determine the cost-effectiveness of scaling-up	It is concluded during the (PPG) that it is not in the interests of food insecure Burundian land users to accept top-down technical solutions imposed on their complex social-

		agricultural systems. Attention must remain focused on the use of SLM / INRM, including for example reduced tillage, agroforestry, conservation agriculture and grain-legume intercropping to build up soil health, with if necessary limited additions of inorganic fertilisers to support traditional (compost and manure) and non-traditional local materials. This is the opposite to the broad push from some quarters to increase use of inorganic fertiliser and other synthetic inputs through assisting with their purchase, if necessary using 'smart' subsidy programmes (see ACB, 2016b), which will serve to reduce resilience by encouraging land users to grow monocrops, most commonly of maize – risking the livelihoods of the rural populations – and the food security of Burundi's few urban areas which depend on them Rather than promoting the increased use of synthetic inputs to restore soil fertility (ACB 2014) and en route providing direct support to the establishment of agro-dealer networks, the project will support training and provision of information for government agricultural extension officers and others (NGOs and other projects, including co-financiers) to empowered them as transfer agents of technical knowledge and resources (ACB 2015b). This will increase production in a sustainable manner – and avoid such an increase in production having to come at the cost of a crippling dependency that forces small-scale farmers onto a technological treadmill: declining soil quality must be countered with a greater application of subsidized fertiliser, which leads to a further decline in soil quality, which leads to further debt. The project will recommend retaining and supporting the local agrobiodiversity – which remains high in the intervention areas, supporting land users and their advisers in countering pressure to change to dominant hybrid maize systems, which the ensuing loss of agrobiodiversity and dietary diversity, lower yields obtained over time, and the associated costs of production.
7c	Detail how partnerships, mechanisms for policy dialogue and uptake, and effective communication between multi-stakeholders will be developed	Outcome 1 of the project is "Multi-stakeholder and multi-scale platforms operational in supporting policy, institutional and knowledge sharing mechanisms for scaling out of sustainable agriculture systems and integrated natural resources management approaches". This will be achieved through: Output 1.1.1: Agriculture and Rural Development Sector Working Groups (GSADR) at national (1) and provincial (3) levels strengthened and watershed management committees and multi-year plans in place at project sites (9) Output 1.1.2: Functioning multi-stakeholder knowledge

		sharing mechanism in place at national (1) provincial (3) and local (4) levels, and promoting exchange of experiences and lessons learned (successes and failures) on scaling out of SLM / integrated natural resources / landscape management Output 1.1.3: Legal and regulatory frameworks on SLM, sustainable use of agrobiodiversity and agricultural and environmental strategies and plans are better known at national (1) and provincial level (1) and taken into account and applied in communal development plans and watershed management plans Output 1.1.4: Conduct community consultations through a participatory negotiated territorial development process (PNTD) and Free prior informed consent process (FPIC) Output 1.1.5 National strategy for harmonisation of FFS-INRM operationalised in the 3 provinces with particular attention to resilient and sustainable food and agricultural systems
7d	Define how cross-sectoral learning will be encouraged and achieved	See proceeding answer
8	STAP suggests adding the challenges of scaling up technologies and practices, and how the project intends to reduce this risk.	Many land users in the intervention areas already implement some SLM technologies (see Annex 14 , the HH-BAT Report) and those consulted during the PPG are anxious to be helped to make more use of these and a wider range of SLM technologies. The paramount remaining barrier to wide-spreading scaling-out is the lack of cross-sectoral and multi-stakeholder outreach knowledge sharing mechanism, combining financial / agricultural / environmental concerns, in order to increase the institutional capacity to scale-up the wider adoption of demonstrated best practices and landscape-level management efforts. The project will address this through extension approaches and action-learning-research through the farmer field schools approach, also better access to markets for target produce value chains.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[11]

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: **US$ 200,000**			
	GEF Amount ($)		
Account Description	***Budgeted Amount***	***Amount Spent To Date/Committed***	Balance
5011 Salaries Professional	11,321	0	11,321
5013 Consultants	109,000	119,448	-10,448
5014 Contracts	9,335	543	8,792
5020 Locally Contracted Labor	0	3,643	-3,643
5021 Travel	44,120	20,595	23,525
5023 Workshops	22,563	7,861	14,702
5024 Expendable Procurement	3,661	1,871	1,790
Total Budget (USD)	**200,000**	**153,961**	**46,039**

[11] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used**)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

N/A