

PART I: PROJECT INFORMATION

GEFSEC PROJECT ID: 3369 GEF AGENCY PROJECT ID: P098538 COUNTRY(IES): Ghana PROJECT TITLE: Sustainable Land and Water Management Project GEF AGENCY(IES): World Bank, (select), (select) OTHER EXECUTING PARTNER(S): Ministry of Environment, Science & Technology (MEST) GEF FOCAL AREA(s): Land Degradation GEF-4 STRATEGIC PROGRAM(s): LD-SP1, LD-SP2 Submission Date: March 31, 2010 Resubmission: June 3 2010

Expected Calendar (mm/dd/yy)					
Milestones	Dates				
Work Program (for FSPs only)	June 2007				
	(SIP)				
Agency Approval date	Aug 2010				
Implementation Start	Nov 2010				
Mid-term Evaluation (if planned)	May 2013				
Project Closing Date	Oct 2015				

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: Strategic Investment Program for Sustainable Land Management in Sub-Saharan Africa (SIP)

A. PROJECT FRAMEWORK

Project Objective (PDO/GEO): To (a) demonstrate improved sustainable land and water management practices aimed at reducing land degradation and enhancing maintenance of biodiversity in selected micro-watersheds, and (b) strengthen spatial planning for identification of linked watershed investments in the Northern Savanna region of Ghana.

Project Components	Indicate whether Investm ent, TA,	Expected Outcomes	Expected Outputs	GEH Financi	ing ¹	Co-Final	ncing ¹	Total (\$) c=a+ b
Component1:Capacitybuildingforintegratedspatial planning1.1:Macro-watershedanalysis &planning	Inv & TA	Improved spatial planning to address land and water management needs	Flood and water management initiatives reviewed GIS-based flood mapping, modeling and monitoring developed (Integrated Spatial Master Plan) Integrated sub-basin plans developed	1,000,0 00	20	4,000,0 00	80	5,000,0000
Component 2: Water & Land Management				5,450,0 00	4	124,000 ,000	96	129, 450,000
2.1: Strengthening		Improved local-	Training workshops					

capacities of districts and rural communities for micro-watershed and land use planning	Inv & TA	level (district and community) watershed management planning	on micro-watershed and land use planning conducted for district teams Micro-watershed and land use planning exercises conducted			
		District/governm ent support towards implementation watershed and land use plans	At least five micro- watershed and land use plans developed and integrated into Area councils and District development plans			
2.2: Systems and capacity to promote SLWM.	TA & STA	Establish effective mechanism to support SLWM through individual land use agreements	Menu of SLWM options with environmental services index developed			
		Increased extension capacity for SLWM technologies in selected districts	District extension service providers trained on various SLWM options and PES Operational capacity of districts to promote			
		Increased community awareness about SLWM	SLWM supported Awareness created on the various SLWM options and PES			
2.3: Implementation of SLWM in micro- watersheds	Inv & TA	Communities adopting SLWM and benefiting from environmental services	Subproject agreements developed with farmers Farmers supported to acquire improved seed and other agricultural			
		Increased land productivity and improved livelihoods	inputs Communities/farmers trained on various			

			CLARA C					
 2.4: Management of riparian biological corridors 2.5: Monitoring SLWM & environmental services 	Inv& TA Inv & TA	Being developed as a GEF MSP Institutional and Policy barriers to SLWM identified and addressed Agreed role for PES in supporting replication of project activities	SLWM options Monitoring system for national SLWM policy implementation developed A monitoring system for verifying PES developed A strategy for attracting potential buyers of environmental services and continuation of PES developed.					
Project Management and M&E		Project resources are used effectively	Impact evaluation, supervision, documentation, dissemination of M&E findings	700,000	41	1,200,0 00	59	1,900,000
Total Project Cost	5	<u>L</u>	<u>.</u>	7,150,0 00	5.2	129,200 ,000	94.8	136,350,000

¹ List the \$ by project components. The percentage is the share of GEF and Co-financing respectively of the total amount for the component. ² TA = Technical Assistance; STA = Scientific & Technical Analysis.

B. SOURCES OF CONFIRMED **<u>CO-FINANCING</u>** FOR THE PROJECT

Name of Co-financier (source)	Classification	Туре	Project	%
Government of Ghana	Nat'l Gov't	Cash/In- kind	5,700,000	4.4
IDA *	Impl. Agency	Soft-loan	19,500,000	15
Others (NRGP)	Donor Program	Grant	104,000,000	80.6
Total Co-financing			129.200.000	100%

* The IDA contribution includes support from SOP and AgDPO

C. FINANCING PLAN SUMMARY FOR THE PROJECT (\$) – N/A

Project Project Total Agency Fee For comparison

¹ The total project amount differs from the amount indicated in the Project Document because the GEF BD component and its financing is not reflected here.

	Preparation a	b	c = a + b		GEF and Co- financing at PIF
GEF financing	250,000	7,150,000	7,400,000	660,000	7,150,000
Co-financing	385,000	129,200,000	129,585,000		46,100,000
Total	635,000	136,350,000	136,985,000	660,000	54,250,000

D. GEF RESOURCES REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES)'- N/A

CEE Agener	F I (Country		(in \$)	
GEF Agency	Focal Area	Name/ Global	Project (a)	Agency Fee $(b)^2$	Total c=a+b

¹ No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

² Relates to the project and any previous project preparation funding that have been provided and for which no Agency fee has been requested from Trustee.

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Estimated person weeks	GEF amount(\$)	Co-financing (\$)	Project total (\$)
Local consultants*	740	785,000	620,000	1,405,000
International consultants*	80	310,000	500,000	810,000
Total	820	1,095,000	1,120,000	2,215,000

* Details to be provided in Annex C.

F. PROJECT MANAGEMENT BUDGET/COST

	Total Estimated	GEF		
Cost Items	person	amount	Co-financing	Project total
	weeks/months	(\$)	(\$)	(\$)
Local consultants*	140	150,000	200,000	350,000
International consultants*				
Office facilities, equipment,		338,000	600,000	938,000
vehicles and communications*				
Travel*		212,000	400,000	612,000
Others**				
Total		700,000	1,200,000	1,900,000

* Details to be provided in Annex C. ** For others, it has to clearly specify what type of expenses here in a footnote.

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? yes no (If non-grant instruments are used, provide in Annex E an indicative calendar of expected

(If non-grant instruments are used, provide in Annex E an indicative calendar of expected reflows to your agency and to the GEF Trust Fund).

H. DESCRIBE THE BUDGETED M&E PLAN:

MEST will have overall responsibility for M&E, collating outputs and data from all implementing agencies for a consolidated M&E report as part of the annual progress reports. Some M&E data (especially activities & outputs) will also be included in quarterly and bi-annual progress reports. Specific monitoring responsibilities will include the following:

- All implementing agencies will be required to keep detailed records of activities, outputs and expenditures against agreed work plans and following standard formats, including robust financial monitoring.
- District Agriculture Units will be responsible for collecting primary data on SLWM contracts signed, implementation of agricultural SLWM technologies on the ground, satisfaction with introduced SLWM technologies.
- A 3rd party verification system will be established by the TCO to cross-check recorded performance under SLWM contracts, based on a sampling approach.
- Specialized monitoring of vegetation cover and soil carbon in the project implementation areas will be outsourced under the supervision of EPA.
- Community Resource Management Committee members will be responsible for simple community wildlife and natural resource monitoring systems in CREMAs. The Wildlife Division will collate information and monitor management effectiveness via the METT tool.

In addition, the project will seek to encourage partners to engage in complementary monitoring activities. In particular: (i) other projects implementing SLWM technologies will be encouraged (and required in the case of those under MEST) to adopt compatible monitoring systems for comparison of approaches; (ii) institutional water users will be encouraged to conduct scientific water quality and flow monitoring to demonstrate impact of project activities on hydrological services and therefore the potential benefits of PES; and (iii) SADA is expected to conduct a rigorous impact evaluation for the project.

Results-based monitoring and learning systems will provide for adaptive management and to justify scaling up activities after project close. GEF financing among other things will support a modest GIS capacity based within the project areas to support spatial aspects of monitoring. The M&E costs are estimated to be US\$ 500,000 (GEF: US\$ 400,000 and Cofinancing: US\$ 100,000)

PART II: PROJECT JUSTIFICATION:

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

Ghana's land generates most of the country's income and employment, directly and indirectly, but is highly vulnerable to degradation. The agriculture sector contributes 38% of the GDP, employs about 60% of the rural labor force, accounts for about 75% of the export earnings, and contributes to meet over 90% of the food needs of the country. The majority of rural households (63% of the total population) directly depend upon land resources for their livelihoods. Ghana's agriculture is largely based on smallholder farm characterized by low input and output technologies. About 90% of farm holdings are less than 2 hectares in size. Agriculture's share of the economy decreased only three percentage points from 1997 – 2008, during which period agricultural GDP grew at an average annual rate of 4.5%, amongst the highest sector growth rates in sub-Saharan Africa (SSA). Much of the increased production has through expansion of agricultural land, combined and traditional bush-fallow systems, grazing practices and rising demands for water are becoming increasingly unsustainable. Illegal logging, bushfires, encroachment of reserves, poaching, and illegal mining also contribute to the degradation of forest and other natural habitats. It is estimated that about 69% of the total land surface is already prone to severe or very severe soil erosion (well above the average for degraded land area in Sub-Saharan Africa, i.e. 43%).

As a result natural habitats are being lost as part of the broader process of land degradation. The current area of intact forest is estimated at between 10.9 and 11.8% of the original cover and 6.9% of the country's total area. The current rates of deforestation average 22,000 ha/annum or about 1.3%, and remaining areas of increasingly degraded by bush meat trade, agricultural expansion, commercial logging, extraction of non-timber forest products, and mining. The underlying causes involve a similar complex of demographic, economic and policy influences and the immediate drivers include: forest industry over-

capacity; policy/market failures in the timber sector; burgeoning population in both rural and urban areas; increasing local demand for agricultural and wood products; high demand for wood and forest products on the international market; heavy dependence on charcoal and wood fuel for rural and urban energy; limited technology development in farming systems (i.e. continued reliance on cyclical 'slash and burn' methods despite increased population pressure) and fire as a tool in land management (see Annex 1 of the Project document).

These processes are severely compromising the provision of critical environmental services, including nutrient cycling, regulation of hydrological flows, provision of natural resources, and helps regulate climate and floods. Increasing climate variability due to climate change is expected to further exacerbate the problem. Initial assessments indicate that Ghana is very vulnerable to climate change, particularly the savanna regions. Increased rainfall variability and overall drop in rainfall and expected raising in temperatures would have negative impact on agricultural productivity, increase the chances of droughts and/or extreme climate events (e.g. floods), exacerbate the problem of desertification (particularly in the Northern regions), with consequences in terms increased migration (from North to South and from rural areas to urban centers).

Therefore a win-win vision for the environment and regional economy is to turn floodwaters into a productive asset through investing in flood control whilst exploiting green drivers of growth compatible with improved watershed management. This would need to be supported with appropriate commercial and social infrastructure. Tree crops are identified as a key economic driver, and thus the potentials for additional agricultural diversification and nature-based tourism need to be recognized for better land management.

However several barriers prevent a wider adoption of Sustainable Land Management practices including: (1) a weak policy, legislative and incentive framework; (2) weak institutional capacity and limited institutional coordination in an area that demands high degree of cross-sectoral coordination; (3) a limited body of knowledge and information on SLWM to support decision-making; and (4) lack of financial incentives. Often projects had considerable success in promoting certain SLWM technologies, but failed to make a last impact because they were implemented in isolation, and didn't provide a clear evaluation of the financial benefits of different SLWM technologies that might have encouraged further action. In addition, efforts to tackle land degradation mainly focused on provision of inputs (e.g. seedling, reforestation, etc.), rather than exploring the possibility of promoting SLWM through output-based incentives (e.g. payment to farmers and communities for the generation of environmental services such as lower sedimentation, less flooding, carbon sequestration, biodiversity conservation etc. generated by the adoption of SLWM).

The proposed project as designed presents a comprehensive approach to sustainable land and watershed management that combines soft and hard investments at the community level, including in maintenance of ecological infrastructure, with planning activities which would eventually integrate these into a much larger program of water and flood management infrastructure across the Northern Savanna eco-agricultural zone. The project aims to support the Sustainable Development Initiative for the Northern Savanna to realize the vision of "a diversified and resilient economic zone in the north" with significant regional environmental benefits by (i) piloting innovative models for grassroots watershed management, and (ii) providing technical tools and capacity for macro-level planning as a basis for eventual scale-up linked to a program of larger-scale flood and water management investments.

Global environmental benefits from SLWM technologies will include:

• Carbon sequestration through improvements in soil structure and organic content, as well as increase in standing biomass from sustainable land management practices.

- Improved fertility and climate resilience of agricultural land, reducing risk of desertification and pressure on surrounding natural habitats.
- Regulation of surface water flows and increased availability of groundwater.
- Enhanced biodiversity through (i) more complex agricultural ecologies favoring integration of native species (e.g. through agro-forestry, live mulches, etc), (ii) reduction of pressure on natural habitats through agricultural intensification, improved fire management and stemming loss of groundwater, and (iii) restoration of flows and reduction of siltation in aquatic environments.

These global environmental benefits will be intertwined with local economic benefits, which are expected to promote a much wider program of interventions.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL AND/OR REGIONAL PRIORITIES/PLANS:

Overall the proposed project supports the Ghana National Action Programme to Combat Desertification and Mitigate the Effects of Drought (2002) developed in the context of the United Nations Convention to Combat Desertification; the United Nations Framework Convention on Climate Change and the Kyoto Protocol (ratified by the Republic of Ghana in 2003) because it tackles the complex interrelation between climate change and land degradation; as well as the Agricultural Biodiversity, the Dry and Sub-humid Lands Biodiversity and the Forest Biodiversity Programmes of the Convention on Biological Diversity.

For details please refer to Section A.1 and Annex 1 of the project document

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH <u>GEF STRATEGIES</u> AND STRATEGIC PROGRAMS:

Consistency with GEF programming. The Project will directly contribute to the implementation of the GEF-4 Land Degradation Focal Area Strategy in particular SO-1 and SO-2 under SP-1:

- SO-1: An enabling environment will place SLM in the mainstream of development policy and practice at regional, national and local levels;
- SO-2: Mutual benefits for the global environment and local livelihoods through catalyzing SLM investments for large-scale impact.
- SP-1: support to sustainable agriculture and rangeland management

See Annex 15, Incremental Cost Analysis, for further details.

Consistency with the GEF Strategic Investment Program for SLM in Sub-Saharan Africa (SIP). The GEF financing will be drawn from the envelope secured for Sub-Saharan Africa by the Bank-led multi-agency SIP, which is a key activity of the AU-NEPAD TerrAfrica partnership. As such, the Project conforms to the SIP principles The SIP principles are: (i) Country has demonstrated commitment to the SLM related objectives of NEPAD's environment and agriculture programs (CAADP, EAP) and the ECOWAS Implementation Action Plan; (ii) The operation contributes to reaching SIP results; (iii) The operation commits to using harmonized indicators and benchmarks to measure SLM scale up and progress toward established goals at regional program level; (iv) The operation exceeds the 1:4 financial leveraging ratio for SIP operations (GEF: non-GEF). The SIP is a key activity in the TerrAfrica joint work program, in which the Bank, Uganda, GEF and NEPAD actively participate. Uganda sits on the Executive Committee of TerrAfrica.

It delivers on the SIP goal, objectives, and SIP intermediate results 1, 2, 3, and 4, as follows:

- Alignment with SIP result 1 (upscaling SLM on the ground): GEF incremental support will cofinance SLM by communities engaged with NAADS and/or NARO. Baseline financing funds the vast majority of on-the-ground investment.
- Alignment with SIP result 2 (enabling environment): Institutions at federal, state, and local levels are better equipped to manage SLM programs and projects, plan and monitor across sectors on integrated approaches, and partner with communities to implement SLM.
- Alignment with SIP result 3 (extension): Advisory services have greater capacity to promote SLM practice.
- Alignment with SIP result 4 (knowledge and M&E): Better support given for benchmarking, and decision-making at all levels, via the development and implementation of an integrated knowledge management and M&E system with associated monitoring tools, and communication/dissemination strategy and materials.

D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES.

The GEF funding will be in the form of technical assistance, particularly for: environmental and institutional monitoring tools, institutional capacity building at regional, state and local levels, and outreach and advocacy on SLWM practice and policy and, as small investments for promoting payment of environmental services. Investment financing from GEF will also fund competitive award of grants to support partnerships between research institutions, NGOs, private sector organizations, and farmers, herders, and other stakeholders to develop and deploy in the field innovative sustainable land and water management practices and technologies.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

Consistency with TerrAfrica GPP and the GEF-SIP. The proposed operation is consistent with the approach advocated under the **TerrAfrica** Global Partnership Program (GPP), coordinating by the World Bank, as it contributes to creating the enabling conditions for SLWM scale-up. It would contribute to the SIP's objectives as detailed above. The Project will exchange experiences with other projects in the SIP portfolio through the NEPAD knowledge platform being established with UNEP and TerrAfrica multi-donor support managed by the World Bank.

Consistency with Programmatic Approach to SLWM in Ghana. The Bank is supporting the Government' SLWM agenda through a coordinated wide range of instruments: (1) the Natural Resource and Environmental Governance (NREG) Development Policy Operation (DPO) addresses land degradation policy issues in the environment, forestry and mining sectors; (2) the Agriculture Development Policy **Operation** (Ag DPO) supports sustainable development of the agricultural sector, including promotion of SLWM policy (the development of the Agriculture SLWM Strategy and Action Plan was a trigger for Ag DPO II); (3) the Land Administration Project (LAP) deals with land tenure and legislative aspects of land use and management; (4) the Community Based Rural Development Project (CBRDP) has included a natural resource management component based on integrated land and water resource management at the community level; (5) the Social Opportunities Project (SOP) (under preparation) will support labor-intensive small rural infrastructure, including for water resource management; (6) the Global Facility for Disaster Reduction and Recovery proposal (GFDRR) grant is aligned with the SDI and is supporting a flood management study and strategy with the National Disaster Management Organization (NADMO), analysis of flood management and response is also being conducted at the regional level; (7) Technical Assistance provided through TerrAfrica Trust Fund is being used to strengthen the analytical underpinnings and the capacity of the various institutions to develop and implement SLWM activities within a programmatic framework, and the Bank is also engaged in supporting the government in the identification of REDD opportunities; (8) Water Resources ESW a note on Water Resources Management in Ghana is being developed in anticipation of a potential broader

sectoral engagement. The proposed project has been designed to synergize and ensure complimentarity with these various initiatives.

Significantly the proposed project has been strategically designed towards maximum mainstreaming and leveraging impact related to the following specific World Bank investments including the SOP and AGDPO. Understanding that coordination with other ongoing and pipeline projects is critical, the GEF project aims to both influence a wider set of rural and watershed investments, and to benchmark its performance in rolling out implementation of SLWM technologies against others. The Northern Rural Growth Programme (NRGP) which focuses on developing profitable and inclusive agricultural commodity chains is engaged in complimentary work promoting dry season irrigated farming systems, including some irrigation measures. During implementation, activities will be carried out in close collaboration with the program to leverage the maximum potential for sharing lessons, and for the project to add value to NRGP through strengthening SLWM aspects of their models. Programs and initiatives that are also engaged in land management interventions include the Integrated Drylands Development Programme (IDDP II) funded by UNDP with financial assistance from Danish Government, the Ghana Environmental Management Project / Natural Action Programme to control and combat desertification in Ghana funded by CIDA and the Volta River Program funded by Denmark.

F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING :

Please refer to Annex 15 of the project document

G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MANAGEMENT MEASURES:

Please refer to Section C.5 of the project document for the detailed risk analysis.

H. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:

The USD 7.15 million in GEF funding requested is leveraging a substantial USD 131.3 million in cofinancing for sustainable land management activities in Ghana. The project places strong emphasis on cost effectiveness as the aim is to generate marketable environmental services that can support further scaling up of SLWM technologies, which involves identifying minimal costs of service delivery. As a pilot project, there will be a significant investment in experimentation and monitoring, which will add to direct project costs, but also lay the foundation for future investments:

- The project will work with local communities to identify the constraints to uptake of SLM technologies and efficient incentive packages needed to overcome them. The voluntary and fixed-price nature of the SLWM contracts, through which reciprocal obligations of participants and the project will be agreed, will select for those most willing and able to implement SLWM.
- Variation in incentive packages and extension service delivery models will be deliberately encouraged between districts for the purpose of identifying the most effective approaches.
- Investments will be linked to environmental service delivery through the establishment of an environmental services index, to which maximum incentive values will be linked, and through competitive financing of Districts based on the efficiency of SLWM contract development and delivery.
- Project monitoring systems will include measurement of environmental services generated and fixed and variable transaction costs in implementation.

The project has been designed to exploit opportunities for a wider impact by linking to synergistic programs, specifically the Social Opportunities Project, which provides financing of complementary small water infrastructure investments, and the Sustainable Development Initiative, which provides a platform for much broader application of successful project activities. The cost-effectiveness of the considerable investments that the project is making in capacity is strongly related to the ability to catalyze a wider program of investment in SLWM.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. INSTITUTIONAL ARRANGEMENT:

Project management will be under the leadership of the Ministry of Environment, Science & Technology (MEST) with oversight and guidance provided by a small Project Steering Committee. A small secretariat to the Project Steering Committee will be appointed within MEST. Fiduciary management will be carried out within the Finance & Administration of MEST, and fiduciary capacity will be built to support the project, and to enhance the broader project management capacity of the Ministry. To ensure local ownership and coordination of activities between project Districts, a Local Steering Committee will be established, including Chief District Coordinators and representatives of Regional Coordinating Councils.

SADA will implement Component 1. Consultants will be recruited by MEST under terms of reference prepared / cleared and supervised by SADA.

The Environment Protection Agency (EPA) of MEST will provide technical input and support Districts in the coordination of cross-sectoral activities under this component. At the national level, as secretariat to the NSLMC, EPA will be responsible for development of the menu of SLWM, and defining the environmental services index and related incentive system. This will be done in consultation with MoFA, and involve convening an expert workshop. EPA will also take the lead in national policy monitoring & development of PES strategy. Within the project area, EPA (as the local representative of MEST) will provide coordination and technical support through a Technical Coordination Office (TCO) based at the Regional EPA office in Bolga.

Following the participatory micro-watershed planning, and agreement on the overall program of project activities within each District, MoFA will implement most SLWM activities in agricultural lands through District Agriculture Units and Extension Agents, including capacity strengthening under subcomponent 2.2, and contract development & monitoring and support for contracts under subcomponent 2.3. The Directorate of Crop Services will be provide oversight of these activities at the national level, including technical backstopping from the Environment, Land and Water Management Unit, as necessary.

Experienced local NGOs will be mobilized to support community engagement in both corridors and agricultural lands, providing extra capacity for community planning and institutional development exercises, including discussion and drafting of SLWM agreements with Farmer Groups, and complementing the technical expertise of District and Regional staff.

For more detail, please refer to Section C.2 of the Project Document.

B. PROJECT IMPLEMENTATION ARRANGEMENT:

Please refer to Section C.2 and Annex 6 of the Project Document.

PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:

The Project is in line with the original design proposed in the PIF. However during the preparation phase it was noted that there were a number of contextual changes that had occurred in terms of the presence of other programs and institutional structures that provided new opportunities to incorporate a more comprehensive approach to land and watershed management issues. Specifically:

(i) The Sustainable Development Initiative (SDI) for Northern Ghana was approved by Parliament at the end of 2009, and its coordinating agency, the Savanna Accelerated Development Authority (SADA) is expected to be formally established early in 2010. The SDI contains a vision for green development of the north, which would combine improved management of watersheds and water resources with development of sustainable economic activities, particularly diversified commercial agriculture and agro-forestry.

(ii) The World Bank Social Opportunities Project (SOP) is at a mature stage of preparation, and would provide IDA funds for labor-intensive works in the three northern regions, including investments in community-scale water management infrastructure.

Therefore the project has evolved into a stronger design since PIF approval due to association of the project with the activities of the IDA supported Social Opportunities Project (SOP) and the need for a wider scope of activities in preserving/rehabilitating critical ecosystems in the Northern region based on consultations during the preparation phase. The final project design moves beyond a focus on just payments to promote uptake on land management technologies to focusing on a comprehensive approach to sustainable land and watershed management that combines soft and hard investments at the community level, including in maintenance of ecological infrastructure, with planning activities which would eventually integrate these into a much larger program of water and flood management infrastructure across the Northern Savanna eco-agricultural zone.

Overall the scope of the GEF financed activities still remain the same, albeit merging of PIF components 2 and into a single component for a clearer project design. The subcomponents designed within capture all the activities previously envisaged. Consequently the GEF funds preliminarily estimated at the PIF stage by component also needed readjustments to reflect the actual costs and also due to the fact that support from the IDA resources are able to cover some of the costs originally planned for GEF support. These changes reflect only, the effort to better define and focus the activities for greater impact on the ground.

	PIF Stage	CEO Stage	Justification for Change
Project Title	SIP: Sustainable	SIP: Sustainable Land	The title was slightly revised in line
	Land Management	and Water	with the new preferred usage of
		Management	SLWM over SLM within the focal
			area, and to reflect the integration
			of the project within the wider
			context of watershed management
			in Northern Ghana.
Project Objective	<i>PDO/GEO:</i> To	<i>PDO/GEO</i> : To (a)	The objectives have been rephrased
	increase agricultural	demonstrate improved	following input from the regional
	productivity and	sustainable land and	Quality & Knowledge unit in line
	generate ecosystem	water management	with more rigorous Bank guidelines
	services by	practices aimed at	for defining specific and
	promoting the	reducing land	quantifiable outcomes., The
	adoption of	degradation and	objective now better and strongly
	sustainable land	enhancing	reflects the incremental nature of
	management (SLM)	maintenance of	the GEF grant in terms of

The refined elements of the project are summarized below.

	technologies and practices.	biodiversity in selected micro-watersheds, and (b) strengthen spatial planning for identification of linked watershed investments in the Northern Savanna region of Ghana.	reinforcing capacities of stakeholders, improving the enabling environment, outreach & advocacy on SLWM practice and policy and supporting on-the- ground activities to scale-up SLWM applications.
Project Components	C1: Strengthening the Enabling Environment (policy framework, incentive system, institutional capacity and M&E)	C1: Capacity Building for integrated spatial planning Subcomponent 1.1: Macro-watershed analysis & Planning	C1: The title and design of this component is new owing to the need for a wider approach for watershed management and planning. The preparation of the SDI and the emergence of SADA as a dynamic agency expected to lead a major program of investment in green growth provides opportunities for a much wider impact. The design has therefore incorporated a complementary activity to support SADA with spatial planning for large-scale watershed investments. Macro-level planning is complemented by participatory micro-watershed planning for community level activities to (i) provide a solid basis for community activities under this project and (ii) demonstrating synergies of the two levels of planning and implementation. The activities envisaged under the PIF C1 have been largely moved to C2 to link more strongly with the development of local level capacity and extension approach.
	C2: Strengthening extension services/ farmer organizations for SLM	C2: Water & Land Management Subcomponent 2.1: Strengthening capacities of districts and rural communities for micro- watershed and land use planning Subcomponent 2.2:	C2: the component has been reorganized and activities now include those previously under the PIF C1. In addition, new opportunities are taken to link (i) hard and soft watershed management investments, but linking with support for small infrastructure under SOP, and (ii) community management of agricultural land and natural habitats in a landscape-level

		Systems and capacity to promote SLWM.Subcomponent2.3:ImplementationofSLWMinmicro- watershedsSubcomponent 2.4: Management of riparian biodiversity corridorsSubcomponent 2.5: Monitoring SLWM & environmental services	approach to SLWM, through integrating the biodiversity MSP as a subcomponent.
	C3: Support on-the- ground activities to scale-up SLM applications through the establishment of an Ecoservice Payment mechanism	N/A	Activities of the PIF C3 have been merged with C2 above. Overall the scope and activities remain the same in the current project document except that support to farmers will involve a more flexible package of incentives.
	C4: Project management (including M&E)	C3: Project Management and M&E	C3: The component remains the same but has become C3.
Financing Plan	GEF: US\$ 7.15 M Cofinancing: US\$ 41 M	GEF: US\$ 7.15 M Cofinancing: US\$ 129.2 M	The overall financing plan has increased due to identification of new baseline programs and better integration with the IDA resources. Some cofinancing sources initially identified at the PIF stage have been replaced with the new baseline program (NRGP) and some additional IDA resources.

PART V: AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Steve Gorman, Executive Coordinator, The World Bank	Dave Domin	March 31, 2010	Paola Agostini	202 473 7620	pagostini@worldbank.org

ANNEX A: PROJECT RESULTS FRAMEWORK

PDO / GEO Outcomes	Project Outcome Indicators	Use of Project Outcome Information			
Demonstrated improved sustainable land and water management practices aimed at reducing land degradation and enhancing maintenance of biodiversity in selected micro-watersheds. Strengthened spatial planning for identification of linked watershed investments in the Northern Savanna region	 Area of land in selected micro- watersheds under new sustainable land and watershed management (SLWM) technologies (ha). Management effectiveness according to METT score in Gbele Resource Reserve and Wuru Kayero & Wahabu Wiasi corridor sites (score, disaggregated). Pre-feasibility studies conducted for new large-scale multipurpose water storage investments (number). 	Assess success in stimulating broader watershed investments			
Intermediate Outcomes	Intermediate Outcome Indicators				
Component 1- Capacity building for integrated spatial planning Improved spatial planning to address land and water management needs	 Integrated spatial master plan produced for Northern Savanna zone. Integrated sub-basin plans developed (number). 	Inform needs for large scale multipurpose waters storage infrastructure			

Component2: Water & Land Management	Community I and Use Plans	Will be used to assess the		
Improved local-level watershed management planning	developed (number).	capacity of districts to conduct micro-watershed land use planning		
Increased extension capacity for SLWM technologies in selected districts	• Demonstration plots established in the project area (number)	Inform additional investment needed for comprehensive coverage		
Establish effective mechanism to support SLWM through individual land use agreements	• Farmers benefiting from improved land management in accordance with agreements [direct project beneficiaries] (number), of which female (percentage)	Assess effectiveness of the extension & incentive models used [Core indicator]		
Improved management of Community Resource Management Areas	• Targeted CREMA communities implementing management activities according to criteria defined in CREMA plans ² (number)	Assess demand for and functionaility of the CREMA model		
Established feasibility of environmental service markets	• Feasibility study on financial contribution of environmental service markets to implementation costs of SLWM conducted	Inform strategy for future SLWM scale up		
Component 3: Project Management, Monitoring and Coordination	• M&E system providing required reports and data in a timely manner	This will be used to assess the effectiveness of project management and M&E arrangements and whether a change is needed to ensure results.		

 $^{^{2}}$ Likely to include NRM activities such as patrolling, establishment & monitoring of local resource use regulations, and fire management.

Arrangements for results monitoring

		Target Values					Data Collection and Reporting		
Outcome Indicators	Baseline	2011	2012	2013	2014	2015	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
PDO/GEO									
Area of land in selected micro- watersheds under new sustainable land and watershed management (SLWM) technologies (ha).	0	0	500 ha	1,000 ha	1,500 ha	2,000 ha	Annual	Records of fulfilled SLWM contracts	District extension services
Management effectiveness according to METT score in Gbele Resource Reserve and Wuru Kayero & Wahabu Wiasi corridor sites (score, disaggregated).	Gbele: 45 W-K: 28 W-W:34					Gbele: 55 W-K: 50 W-W: 50	End of project	Management Effectiveness Tracking Tool	Wildlife Division
Pre-feasibility studies conducted for new large-scale multipurpose water storage investments (number).	0	0	0	1	2	2	Annual	SADA progress reports	SADA
Results Indicators for Each Component									
Component 1- Capacity building for integrated spatial planning									
Integrated spatial master plan produced for Northern Savanna zone.	N/A	Initial mappin g	Plan complet ed				Annual	SADA progress reports	SADA
Integrated sub-basin plans developed (number).	0	0	0	1	2	2	Annual	SADA progress reports	SADA
Component2: Flood & Land Management									
Community Land Use Plans developed (number).	0	40	80	80	80	80	Annual	District Agric. progress reports	MoFA

Demonstration plots established in the project area (number)	0	0	20	50	80	80	Annual	District Agric. progress reports	MoFA
Farmers benefiting from improved land management in accordance with agreements [direct project beneficiaries] (number), of which female (percentage)	0	0	2,000 40%	3,000 40%	4,000 40%	4,000 40%	Annual	Survey of participant satisfaction	District extension services
Targeted CREMA communities implementing management activities according to criteria defined in CREMA plans ³ (number)	0	0	0	10	15	20	Annual	Annual progress reports	Wildlife Division
Feasibility study on financial contribution of PES markets to implementation costs of SLWM conducted	N/A			Buyers identifie d		PES strategy complet ed	End of project	Annual progress reports	EPA
Component Three: Project Management and M&E									
M&E system providing required reports and data in a timely manner	N/A	Satisfa ctory annual report	Satisfac tory annual report	Satisfac tory annual report	Satisfac tory annual report	Satisfac tory annual report	Annually	Annual progress reports	MEST

³ Likely to include NRM activities such as patrolling, establishment & monitoring of local resource use regulations, and fire management.

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)

1. GEF Review Sheet date January 16, 2008

Comment: *The project should at CEO endorsement revise the management costs to be proportionate to GEF overall contribution of 16.2% to the project budget.*

Response: The project management costs have been revised to be under the 10% ceiling and are proportionate to the overall cost for management.

Comment: *Confirm component project budgets including cofinancing.* **Response:** The component budgets are provided in Annex 4 and the incremental costs annex (Annex 15) of the document.

Comment: Confirm the M&E framework of the project consistent with the SIP results framework. **Response:** The M&E framework of the project is based on the Project Results Framework which has been developed in alignment with the SIP indicators. See Annex 3 of the project Document.

2. <u>STAP REVIEW COMMENTS</u>

STAP reviewed the SIP program framework which included this sub-project. There were no additional STAP Comments.

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF RESOURCES⁴

	\$/	Estimated person	
Position Titles	person week*	weeks**	Tasks to be performed
For Project Management			
Local	•	•	
Short term management TA	2000	20	Development of monitoring & reporting formats, TORs, etc
Procurement officer	375	80	Build fiduciary capacity in MEST, manage large procurement packages & oversee other project procurement early in project
Auditor	2000	40	Annual independent project audit
International			
Justification for Travel, if any: expense estimates are related to	Given the extent o the fundamental j	f the Northern region participatory and mo	n the travel distances are long and the travel nitoring aspects of the project.
For Technical Assistance			
Local			
Mapping	2000	50	Spatial mapping activity & development of GIS monitoring tools
GIS	500	200	Provide routine GIS support to SADA
Spatial planner	750	120	Provide spatial planning support to SADA
Watershed infrastructure pre- feasibility	1500	100	Conduct pre-feasibility studies for identified large multipurpose water storage infrastructure
TSO Technical supervisor	1000	100	Support districts in planning & implementing SLWM systems
PES Expert	2000	40	Provide advice on PES systems & assist in strategy development
Community engagement & SLWM contract verification	500	190	Support establishment of SLWM contracts with community members & independent sampling to verify performance
Monitoring of vegetation cover	2000	20	Monitoring of vegetation cover by remote sensing
Monitoring of soil carbon	1500	20	Sampling & analysis of soil carbon content
International			
Watershed infrastructure pre- feasibility	4000	50	Conduct pre-feasibility studies for identified large multipurpose water storage infrastructure
PES Expert	3500	20	Provide advice on PES systems based on international experience
Monitoring of vegetation cover	4000	10	Monitoring of vegetation cover by remote sensing
Justification for Travel, if any:			

* Provide dollar rate per person week. ** Total person weeks needed to carry out the tasks.

⁴ Subject to detailed review and confirmation with counterparts at appraisal

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.

Activities under the PPG are ongoing and will be completed before project effectiveness. Upon completion they are expected to achieve the objectives.

B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY: None

C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:

Project Preparation Activities Approved	Implementa tion Status	Amount Approved	Amount Spent To date	Amount Committed	Uncom mitted Amount *	Co-financing (\$)
Costs/Benefit Analysis of different technologies and packages in all ecological zones of Ghana	completed	28,770.76	28,770.76			
Criteria for different geographical zone for piloting the project established and areas agreed selection of indicators, and establishment of baseline for M&E (land use baseline/economic baseline_maps)	completed	27 579 61	18 496 13			
Analytical Studies on L and	completed	27,377.01	10,470.15			
Degradation Assessment in all Ecological zones of Ghana	completed	67,858.72	47,597.10			
Environmental and Social Management Framework	on-going	10,000.00				
External Auditing of Accounts	on-going	4,000.00				
Ghana Strategic Investment Framework for Sustainable Land Management	completed	31,316.51	24,071.51			
Learning workshop	completed	34,171.34	34,171.34			
Capacity building in PES	completed	15,217.00	15,217.00			
Field Consultations	on-going	31,086.06	23,925.26			
Total		250,000.00	192,249.10	250,000.00	0	385,000

* There are no uncommitted funds. All funds will be disbursed before project effectiveness.

ANNEX E: CALENDAR OF EXPECTED REFLOWS

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