



REQUEST FOR CEO ENDORSEMENT¹

PROJECT TYPE: Medium-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT INFORMATION

Project Title: Community Agricultural Resource Management and Competitiveness Project (CARMAC)			
Country(ies):	Republic of Armenia	GEF Project ID: ²	
GEF Agency(ies):	WB (select) (select)	GEF Agency Project ID:	P127791
Other Executing Partner(s):	Ministry of Agriculture	Submission Date:	2011-06-15
GEF Focal Area (s):	Land Degradation	Project Duration(Months)	48
Name of Parent Program (if applicable): For SFM/REDD+ <input type="checkbox"/>		Agency Fee (\$):	90,000

A. FOCAL AREA STRATEGY FRAMEWORK³

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
(select) LD-1	Outcome 1.2 : Improved agricultural management	Output 1.2 Types of Innovative sustainable pasture management practices introduced at field level	GEF TF	240,000	2,300,000
(select) LD-1	Outcome 1.3 Sustained flow of services in agroecosystems	Output 1.3 Suitable SL/WM interventions to increase vegetation cover in agroecosystems	GEF TF	485,000	13,060,000
(select) LD-3	Outcome 3.1 Enhanced cross-sector enabling environment for integrated landscape management	Output 3.1 Integrated land management plans developed and implemented	GEF TF	165,000	1,490,000
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others		(select)		
Subtotal				890,000	16,850,000
Project management cost ⁴			GEF TF	10,000	1,450,000
Total project costs				900,000	18,300,000

B. PROJECT FRAMEWORK

¹ It is important to consult the GEF Preparation Guidelines when completing this template

² Project ID number will be assigned by GEFSEC.

³ Refer to the [Focal Area/LDCF/SCCF Results Framework](#) when filling up the table in item A.

⁴ GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

Project Objective: Improve productivity and sustainability of pasture/livestock livelihood systems in selected communities						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Cofinancing (\$)
Component 1: Community pasture/livestock management system	Inv	(i) Enabling environment within the agricultural sector is enhanced through targeting three core areas: policy, legal framework and capable institutions, and knowledge transfer; (ii) Functionality and cover of agro-ecosystems maintained; (iii) Utilization of communal pasture areas is rational and sustainable; (iv) Increased livestock productivity; (v) Increased pasture management effectiveness.	(i) 46 pasture management plans developed and agreed by communities; (ii) 46 Pasture Users Associations established; (iii) 230,000 hectares under good/sustainable pasture/livestock management practices; (iv) Restoration of 275 ha of demonstrational fully degraded pastures; (v) Increased livestock productivity measured by milk - by 20% for cattle and by 10% for sheep; (vi) Increased livestock productivity measured by growth rate of animals - by 20% for cattle and by 5 % for sheep.	GEF TF	485,000	13,060,000
Component 1: Community pasture/livestock management system	TA	(i) Enabling environment within the agricultural sector is enhanced through targeting three core areas: policy, legal framework and capable institutions, and knowledge transfer; (ii) Increased pasture management effectiveness.	(i) Strengthened national legal framework and institutional capacity for the sustainable management and use of pastures; (ii) Efficiency of communal pasture management increased by 30%, as measured by increased communal budgetary revenues from lease of pastures.	GEF TF	355,000	2,300,000
Component 2: Strengthening Support Services (Agricultural Advisory Services)	TA	(i) Sustainable regional and local technical advisory system in place; (ii) Improved management of agricultural systems is achieved through the availability of good technologies	(i) 10 representatives from regional MASCS and from RASC are trained as trainers on sustainable land/pasture management; (ii) 50 representatives from participating communities provided training on sustainable	GEF TF	50,000	1,490,000

		and good practices for pasture management and livestock production.	land/pasture management; (iii) Improved outreach and performance of advisory services as measured by increased share of revenue from contracts - by 10%.			
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Subtotal						890,000 16,850,000
Project management Cost ⁵				(select)		10,000 1,450,000
Total project costs						900000 18300000

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
Others	International Development Association	Soft Loan	13,725,000
National Government	Government of the Republic of Armenia (Cash)	(select)	3,185,000
Others	Beneficiary contribution (Cash)	(select)	1,390,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Co-financing			18,300,000

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$)		
				Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
World Bank	GEF TF	Land Degradation	Republic of Armenia	900,000	90,000	990,000
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0

⁵ Same as footnote #4.

(select)	(select)	(select)				0
Total Grant Resources				900,000	90,000	990,000

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Estimated Person Weeks	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
Local consultants*	386.00	405,000	1,160,000	1,565,000
International consultants*	0.00	0	980,000	980,000
Total		405,000	2,140,000	2,545,000

* Details to be provided in Annex C.

F. PROJECT MANAGEMENT COST

Cost Items	Total Estimated Person Weeks/Months	Grant Amount (\$)	Co-financing (\$)	Project Total (\$)
Local consultants*	12.00	10,000	31,900	41,900
International consultants*	0.00	0	0	0
Office facilities, equipment, vehicles and communications*		0	212,000	212,000
Travel*		0	6,000	6,000
Others**	Specify "Others" (1)	0	793,000	793,000
	Specify "Others" (2)	0	407,100	407,100
Total		10,000	1,450,000	1,460,000

* Details to be provided in Annex C.

** For others, to be clearly specified by overwriting fields *(1) and *(2).

G. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

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

H. DESCRIBE THE BUDGETED M & E PLAN:

Monitoring and evaluation (M&E) activities would include field supervision of quality and safeguard compliance of works, surveys, mapping instruments, progress reporting, a baseline survey, a midterm evaluation and a final completion report to document results and outputs. The project will create a central database of all village pasture plans and rural investments, including qualitative and photographic data. The M&E surveys will be conducted in partnership with NGOs and research institutions to record, measure, and verify results in participating communities. As the M&E plan for the IDA operation doesn't directly specify measuring Global Environmental Benefits (GEBs) it was be modified in this regard, including two specific indicators - the pasture cover dynamics, and its Biomass - Net Primary Productivity (NPP). The budget allocated for these additional M&E of the GEBs activities is US \$60,000. For more details see section B2.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1. The GEF focal area/LDCF/SCCF strategies/NPIF Initiative:

The project is thematically consistent with the Land Degradation Focal Area and will contribute towards Strategic

Objective 1 - Maintain or improve flows of agro-ecosystem services to sustain livelihoods of local communities, and Strategic Objective 3 - Reduce pressures on natural resources from competing land uses in the wider landscape. Rural communities in Armenia will be supported in adopting sustainable land management practices aimed at restoring and improving pasture and grazing land while increasing economic opportunities for the rural population. The project also will strengthen participatory decision-making through capacity building among communities, farmers as well as Marz Agricultural Support Centers (MASCs) and the national-level Republican Agricultural Support Center (RASC), in particular in pastures management, to ensure maintenance of ecosystem services important for the global environment and peoples' livelihoods. A special focus of the project interventions are those related to improving pastures management through regulating livestock grazing, and improving/restoring pastures productivity.

A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

N/A

A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund:

N/A

A.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The project is aligned with key national strategies that were articulated in the Second National Communication on Climate Change (2010), which was prepared in accordance with the United Nations Convention on Climate Change. The First National Communication of the Republic of Armenia was prepared and submitted to the Fourth Conference of Parties to the Convention in November 1998. The Second Communication highlights the problems associated with land degradation in agriculture by stating that “agriculture suffers from huge losses due to dangerous climatic phenomena, the frequency and duration of which have increased during the last decades” and pointing out that “80% of land plots are characterized by desertification processes and various levels of land degradation.” Armenia is also one of the countries where farming is at a high risk due to the fragmented mountainous terrain, active exogenous processes, limited land resources (0.14 ha arable land per capita) and inadequate moisture levels.

Furthermore, the project is consistent with the Second Poverty Reduction Strategy Paper (31 October 2008) that recognizes the importance of addressing environmental issues, including land degradation, for the country’s development and poverty reduction goals. The project is also aligned with the Strategy for Agricultural Development adopted by the RA Government Decree N 1476-N dated November 4 2010, which specifies the main directions of agricultural development for 2010-2020, emphasizing the issue of land degradation and indicating measures on rehabilitation of degraded lands and especially of pastures.

A key focus of the Bank’s assistance strategy in agriculture and rural development is to help the Government in its efforts to address the issues of the current scope of national land resource degradation. The project will contribute to this World Bank Group strategy by addressing the environmental challenge of land degradation to ensure sustainable agriculture development, reduce outward migration of rural populations, and reduce poverty. Finally, the Community Agricultural Resource Management and Competitiveness (CARMAC) Project, which the GEF grant is expected to co-finance, was included in the Country Partnership Strategy for the Republic of Armenia prepared for fiscal years 2009-2012.

Lastly, the proposed project is included in Armenia’s recent National Portfolio Formulation Document (2011), as a planned GEF-5 submission utilizing Armenia’s STAR allocations. Specifically, an indicative amount of US\$ 0,9 million under Armenia’s Land Degradation focal area is planned for this Community Agricultural Resources Management and Competitiveness Project. In addition, the issue of land degradation is listed as one of the main challenges negatively affecting the country’s livelihoods, ecosystems, and food security.

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

Armenia has a long history of using pastures for animal production and breeding. Historically, in mountainous areas, climatic and topographic factors have restricted agricultural activities to raising ruminants; most of

Armenia is mountainous, with altitudes of over 1,000m and more than two-thirds of the land has slopes of 6° or more. Grassland and pastures occupy about half of total agricultural land (1.1 out of 2.1 million ha) and about one third of the total country area. For some 186,000 rural households, pastures and raising livestock is the main source of livelihood. For the poorest rural people in mountainous communities, revenues from pastures and livestock production are essential for subsistence and a major source of cash income. Higher altitude small-scale farmers and livestock breeders are particularly vulnerable, as their livelihood often relies on combined subsistence agriculture and seasonal labor migration to the Russian Federation. The economic downturn has increased their vulnerability by making them more dependent on livestock and natural resources for their livelihoods.

However, pastures are degraded and unproductive. Armenian farmers and livestock producers have access to a vast pasture land for grazing; nonetheless, grazing practices over the last twenty years have led to land degradation and have reduced pasture productivity. This resource degradation is a major contributing factor to the contraction of Armenia's livestock sector, undercutting its role as a key source of economic growth and of rural livelihoods. Uncontrolled and unmanaged exploitation practiced over the last decades has resulted in unprecedented resource destruction clearly visible around most mountainous villages in Armenia. Following the collapse of the Soviet system of pasture management, these unsustainable practices led to the degradation of this important natural resource base. It is now estimated that about 15 percent of the pastures and grassland is degraded. The reduced use of seasonal grassland, the move to intensive use of pastures, and the poorly regulated access to nearby community land that is easier to access than more remote pastures, have together contributed to the excessive use of certain pastures. This unsustainable land management has led to the loss of soil fertility and vegetative cover, extensive soil erosion, and a general loss of biomass. Despite availability of vast pastures, grazing is excessively carried out in only 19 percent of that land (that is, the land in close vicinity, 0-7 km, to the livestock farmers' villages). This results in a grazing load of 5.7 and 2.5 head/ha for land which is 0-3 and 3-7 km away from villages, respectively. The remaining 81 percent of grazing land is underutilized with a grazing load of only 0.4 head/ha. The problem of overgrazing in nearby village pastures and under-grazing in remote areas had led, on one hand to degradation and erosion of nearby pastures, and on the other hand to under utilization of other remote pastures, resulting in a build-up of a soil crust and reduced water absorption and the displacement of valuable pasture flora by lichens. On the other hand, remote pastures are underused (because of distance and access), but still subject to degradation: in this case by the development of bushes, small trees and non interesting species for ruminants.

Farm advisory services are developing but need to be further strengthened to cover livestock and pasture-related issues. Presently, advisory services in Armenia are being carried out by 10 regional MASCs and a Republican Agriculture Support Center. The main role of the MASCs is the provision of professional advisory, scientific, informational and marketing services that include: (i) farmer consultations and farmer training programs; (ii) demonstrations and field trials, seminars and workshops; (iii) support and technical assistance in testing of innovative proposals (Technology Assessment Program (TAP)) and dissemination of experience of successfully implemented projects; (iv) preparation of leaflets, articles, local radio and television broadcasts; (v) market support activities; and (vi) support to associations and cooperatives. However, the existing services do not generally target small-scale mountainous producers and are thus not providing the necessary advisory support to help farmers increase productivity and develop sustainable natural resource management in these areas. Until now, these services have proven inadequate in providing necessary services to mountainous smallholders, especially with regards to sustainable natural resources management and increased productivity in the livestock sector.

Baseline Project. The Armenian Government requested the Bank's support to address the above problems. As a result, the Community Agricultural Resource Management and Competitiveness (CARMAC) Project has been developed and approved, consisting of 4 components. Component 3 (*Competitive Grants Program*) as well as subcomponent 2.2 (*Community Animal Health Services*) are not related to GEF project scope and objectives and were not included in the description below.

(1) Community Pasture/Livestock Management System. This component aims to introduce efficient and sustainable community-managed pasture/fodder-based livestock production systems in selected mountainous

communities, where livestock is the main source of livelihood and communities express a strong interest in improving their pasture production, through support for the development of pasture/livestock management plans and a community fund for the implementation of these plans. This would require reversing the trend of destructive grazing, implementing more efficient pasture use, improving systems of fodder production and animal feeding, and raising the efficiency of animal production.

a) Development of Pasture/Livestock management plans. This sub-component would finance the participatory preparation of sustainable pasture and livestock management plans based on comprehensive assessments of all pasture and fodder production areas. This preparation will take place in parallel to the mobilization of Pasture User Associations (PUAs) that will be formed at the village level. Throughout the process of plan development, groups of pasture users that will ultimately form the membership of the PUAs will be consulted and provide input on key aspects of the plan. Ultimately, the document will be finalized and adopted by the PUA once it has been registered as a legal entity. This bottom-up approach would allow target communities, through the PUAs, to select detailed investment needs and commit to management plan targets and principles. The planning process would be supported by Marz Support Teams (MSTs) and the technical experts working with groups of pasture users. Pasture assessments will be done in collaboration with pasture users, and will include soil tests, plant assessments, evaluations of productivity and production quality, and productivity estimates for grassland and fodder production areas in the context of the feed/fodder demand in villages (village-level fodder balances). Management plan development would use participatory approaches involving the groups of pasture users in target communities. The management plan objective would be to define options: (i) to increase quantity and quality of overall fodder production; (ii) reduce pressure on overgrazed degraded areas; and (iii) regenerate productive capacity to achieve sustainable resource management. It is expected that this will be achieved by (i) reducing grazing on nearby pastures; (ii) increasing the proportion of cultivated fodder and hay, and (iii) improving utilization of remote pastures. The plans would define measures to improve pasture productivity, such as implementing rotational grazing, protecting areas for complete regeneration, undertaking rehabilitation measures, providing additional fodder production opportunities, and improving access to remote pastures, among others. Management plans would also define basic requirements for animal health, such as timing and coverage of vaccinations, and provide simple monitorable indicators and implementation targets.

The Project will also finance a study on introducing cost recovery mechanisms by which beneficiary communities would repay the cost of equipment in installments. This study will be conducted within six months of project effectiveness.

b) Community Fund for implementation of Pasture/Livestock management plans. This sub-component will finance block grants for each Pasture User Association to implement their plan; grant amounts will depend on pasture area and existing number of livestock units but preliminary estimates are US\$100,000 to 300,000/village. Pasture User Associations will be able to select with guidance from an indicative open list of eligible investment activities: (i) *infrastructure* to access and use remote pastures, such as spot road improvements, stock watering points, shelters, milk cooling devices, among others; (ii) *machinery* to produce and harvest fodder, including grass cutters, haying machines, silage choppers, etc; (iii) *protective and natural resource rehabilitation measures* for degraded areas, including fencing, demarcation, weed and shrub control, supplementary seeding, etc; (iv) *fodder production support*, including seeds for leguminous plants and corn, etc; (v) *stock breeding improvements* through artificial insemination; (vi) *training and advisory services* supplied by both public and/or private service providers; and (vii) *support for Pasture User Associations*, such as office equipment and furnishings. Project funds could be used for financing between 50 and 100 percent of the costs of shared community investments depending on the nature of the investment ranging from partially public to fully public. Activities would be implemented as Community Grants, following implementation arrangements successfully tested under RESCAD, with the additional element of linking disbursements to measured improvements in community resource management performance.

(2) *Strengthening Support Services.* This component aims to increase livestock productivity and pasture health by improving the supporting services for farmers involved in livestock production. This will be achieved by providing support to: (a) improve agricultural advisory services in livestock-related topics; and (b) improve community animal health services.

a. Agricultural Advisory Services. The project would support advisory and extension programs aimed primarily at livestock-related activities of farmers, farmer associations and cooperatives, and small-scale processors,

through the existing network of the regional-level Marz Agricultural Support Centers (MASCs) and the national-level Republican Agricultural Support Center (RASC). The sub-component would strengthen capacity for the MASC/RASC system to deliver services to farmers in topics including farm-level livestock-related technologies; principles of food safety and hygiene; animal health care; pasture and fodder management; market requirements and other related topics. Sub-component activities would include: (i) improving advisory system effectiveness and outreach through training, technical support, and provision of essential equipment for the planned program; (ii) funding incremental tasks in line with the project livestock focus, including technology assessment projects (TAPs); (iii) livestock training programs, materials and demonstration activities for farmers; and (iv) improved information systems using modern information and communication technologies (ICT), including a pilot SMS messaging system that may potentially provide weather alerts and other information.

(3) *Project Management and Monitoring and Evaluation.* The project is managed by the same Project Implementation Unit (PIU) that implemented previous Bank-financed projects. This component is financing: (a) project management and training, including annual operational reviews and audits; and (b) monitoring and evaluation (M&E).

B. 2. incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The GEF incremental financing would support the Baseline Project Scenario by complementing and scaling up activities aimed at preventing land degradation and promoting best practices in pasture management in selected Marzs/rayons of the country. It will build upon the activities of the World Bank operation in tackling pastures productivity as important elements of food safety, sector productivity and ultimately agricultural competitiveness at the community level. It will help strengthening human, institutional and technical capacities (both locally and nationally) for the implementation of sustainable pasture management activities through preparing and implementing Pasture/Livestock Management Plans, regulating livestock grazing, and providing financial support for the improving/restoring pastures productivity. Such financial support will represent a key area for GEF incremental financing and will be provided to beneficiaries as grants for implementing demonstrational activities on restoring of degraded community pastures. Furthermore, the GEF incremental financing will support activities aimed at improving decision-making through capacity building among communities, farmers as well as Marz Agricultural Support Centers (MASCs) and the national-level Republican Agricultural Support Center (RASC). In addition to broad environmental benefits the GEF financing is expected to generate positive economic benefits for approximately 150.000 rural households. Last but not least, the GEF funding would be used for dissemination of SLM information, including best-practices with the highest potential for replication in the mitigation of land degradation risks.

Anticipated global environmental benefits will result from increased stability of ecosystems to increased Biomass - Net Primary Productivity (NPP), and respectively levels of carbon sequestration, and reduced soil erosion. As most of the SLM project interventions are demand driven and will be supported through the Community Fund for Implementation of Pastures/Livestock Management Plans to be developed at the initial stage of project implementation, at this stage of project development it is not possible to provide quantified data with regard to these Global Environmental Benefits (GEBs). This can be done only related to the Biomass – Net Primary Productivity potential increase (under the component 1.2 it is specified a minimum of 5 percent of the community grant should be allocated to protective and natural resource rehabilitation measures of degraded land, which could include: fencing; demarcation; weed/shrub eradication; supplementary seeding of community pastures; tree planting; and a demonstration and learning site no less than 4-5 hectares, fully protected from grazing to learn about natural re-vegetation and potential for regenerating land naturally). Such estimations were done based on field measurements according to “Peak Biomass Method.” NPP of grasslands is expressed in gC/m²/year, where 1.0 gram of carbon is equivalent to 2.2 grams oven-dry organic matter (organic matter = 45% carbon by weight, or 2.5 g air dried biomass = 40% carbon by weight). This corresponds to standards accepted by International Biological Programme (IBP) and described in: “Sims, P.L., J.S. Singh et al. (1978) – *The structure and function of ten western North American grasslands. Journal of Ecology* 66, pp. 251-285 and pp. 573-597”. The conducted estimations show a potential increase of Biomass (NPP) per ha for the whole area of rehabilitated pastures (275 ha) = 88,000 kg C. It is estimated that for a period of about 10 years the total Biomass increase would be at the level of 220,000 kg C/275

ha. The Project's field-level interventions and provided GEBs would be monitored on the basis of a baseline assessment and environmental M&E plans for each Pastures/Livestock Management Plan, and include the following parameters: a) improvements/extension of the vegetation cover; and b) Biomass increase.

More specifically, the GEF incremental financing *within subcomponent 1.1 Development of Pasture/Livestock management plans* will support, along with the village-level assessment of all pasture and fodder production areas a new activity – a special survey of availability in the community areas water resources, pipelines and water points, entering their coordinates and data as well as their digital mapping using GIS (with a cost of US\$150,000). Watering or provision of animals with drinking water facilities in pastures is being considered as one of the priority pasture improvement activities. Without watering points animals are forced to move several kilometers, with a negative impacts on the pasture vegetative covers which make the use of pastures less productive, as well as reduces livestock productivity. This causes patch grazing with areas over utilized, mostly nearby the settlements and watering points, with other pastures left ungrazed. Currently data on the existing watering points, water sources, amount of water and agencies that manage and operate them are not available and in this regard it is necessary to set a database containing information on existing systems and their conditions (including data on water source, amount of available water, etc.) linked to the GIS map, to ensure better management of pastures and decrease existing pasture load in the areas with the watering points.

Under subcomponent 1.2 “*Community Fund for Implementation of Pasture/Livestock management plans*” the GEF incremental financing would scale up the proposed activities related to “*Protective and natural resource rehabilitation measures for degraded areas.*” The following activities will be implemented for most degraded areas in each community: (i) fencing, demarcation, weed and shrub control, stone removal and supplementary seeding for community pastures (average size of land plots is about 4 to 5 ha); (ii) establishment of demonstration sites for pasture rehabilitation and renewal of no less than one hectare in size, fully protected from grazing, to learn about natural re-vegetation and potential for land to regenerate naturally. These activities will build on the support being provided by the baseline project by providing expanded support for creating demonstration plots for rehabilitation of degraded pastures. These activities would allow for improving the vegetative cover and increase pasture productivity and will be done in all participating 55 mountainous communities. The total GEF support for these activities is US\$485,000.

Under the same component the GEF will support *Monitoring and Evaluation of GEBs* of the implemented pastures rehabilitation activities described above. M&E plans for each Pastures/Livestock Management Plan would include the following parameters: a) improvements/expansion of vegetation cover; and, b) increased Biomass accumulation. These parameters will be estimated based on the baseline analysis done during the initial village-level assessment of all pasture and fodder production areas at midterm and the final stage of project evaluation. For that purpose a local company/scientific institution will be hired. Sound monitoring and evaluation is central to disseminating lessons learned among participating villages because the project is innovative and community-based natural resource management is new to Armenia. The GEF financial support is US\$ 60,000.

Finally under subcomponent 1.2 the GEF financing will scale up *capacity building activities* aimed at improving pasture management and promoting SLM among participating communities. The baseline project financing for these activities is proposed to be at the level of 5% of total costs for the implementation of Community Pasture/Livestock Plans (US\$490,000) while the GEF financing would be at the level of US\$145,000. The training topics for the GEF supported activities would include: causes and effects of land and pasture degradation; spectrum of SLM and pasture improvement options and technologies; implementation of pasture and livestock management and development plans; monitoring of pasture management, etc.

Within *subcomponent 2.1 (Agricultural advisory services)*, the GEF incremental financing would provide assistance and scaling up capacity building activities of representatives from Marz Agricultural Support Centres (MASC). These representatives would further act as trainers for providing capacity building at the lower level. The topics for the training of these trainers would be the same as those mentioned above. The total GEF financing would be US\$20,000.

Within the same subcomponent 2.1, the GEF financing would also support a *new activity on SLM awareness*

raising with a proposed financing at the level of US\$30,000. This activity is aimed at raising awareness about project benefits at local and global levels, and encouraging behavior changes on preventing land degradation and promoting better pasture management. This would be achieved by: (i) preparing and disseminating methodological materials (including manuals, brochures, posters); (ii) creating and maintaining a special web window on the project website dedicated to sustainable land and pastures management; and (iii) organizing two national information dissemination seminars on these issues.

Within *Component 3 (Project Management and M&E)*, the GEF support would be focused on co-financing the PIU Environmental Specialist that would organize implementation of proposed new GEF activities. The GEF co-financing for this component would be US\$10,000.

The implementation of these incremental activities would generate significant global environment benefits while supporting local and national, social and economic development through: reversing the current trend in pasture degradation and land desertification; reducing vulnerability of pastures and alpine meadows ecosystems to land degradation and other human-induced impacts; and sustaining livelihoods and reducing vulnerability to land degradation for people dependent on the use and management of natural resources.

In the absence of the proposed GEF Grant, the Government of Armenia would have limited funding to prevent pasture degradation, as well as to promote sustainable land and pasture management. Without the GEF Grant, the Government would also lack the needed incremental support to further develop a reliable, responsive and cost-effective agricultural knowledge system to demonstrate, disseminate and promote the appropriate technologies that prevent pasture degradation, increase sustainable agricultural production, and reduce degradation of natural resources. The preliminary results of the ongoing IDA project indicate the major demands for funding under the Pasture/Livestock Management Plans are focused on small scale infrastructure rehabilitation and purchasing of agricultural equipment and only to a small extent to improving pasture productivity. Furthermore, the training Program under subcomponent 2.1 is also focused primarily on capacity building for farm-level livestock-related technologies; principles of food safety and hygiene; animal health care; market requirements and other related topics and to a smaller extent on pasture management. The GEF project will contribute to strengthening the country's institutional capacities, as well as institutional capacities at the Marz and community level with respect to land and pasture degradation, as well as provide the resources for provision of advisory services to rural communities in these domains. Furthermore, the GEF resources will allow the participating communities to successfully implement the pilot projects, by fully rehabilitating degraded pastures as well as implementing new and more sustainable grazing techniques, and thus, preventing further land degradation.

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read [Mainstreaming Gender at the GEF.](#):

The total baseline financing is US\$18.30 million, comprising International Development Association (IDA) credit resources of US\$13.725 million, US\$3.185 million from the Government's contribution, as well as \$1.390 million from the project beneficiaries. Baseline project outcomes would include 230,000 ha under effective agricultural and land management practices. About 55 rural communities will be selected to benefit from project investments.

Generally, at the national level, the project will lay the groundwork for reversing the trend of land degradation and desertification, while encouraging the development of an environmentally and socially sustainable livestock sector. At the local level, the project is expected to bring tangible benefits to rural communities through improved productivity and sustainability of pasture/livestock livelihood systems in selected communities. This would be evidenced by: (i) increased livestock productivity as measured by milk productivity and increase in daily animal weight gain; (ii) increased efficiency of communal pasture management, as measured by increased communal budgetary revenues from lease of pastures; and (iii) increased farm sales from livestock.

Mainstreaming of sustainable pasture activities in order to strengthen community agricultural competitiveness will provide a series of *global environmental benefits* through: (i) reduced and prevented land degradation in agro-ecosystems (improvement of about 230 thousand hectares of pastures lands); (ii) full rehabilitation of about 275 hectares of pasture lands); (iii) increased Biomass of the pastures (as mentioned in B2 annual increase of Biomass (NPP) for the whole area of rehabilitated pastures (275 ha) = 88,000 kg C. For a period of about 10 years the total Biomass increase would be at the level of 220,000 kg C/275 ha); (iv) increased carbon sequestration in pastures' vegetation cover and in soils; and (v) maintained functional integrity and biodiversity in mountain pastures of the country.

The project will benefit women in rural areas. While the project is not directly targeting women, its implementation mechanisms ensure women's equitable access to resources and equitable representation in decision making. With male migration to urban areas or overseas in search of work, women became key actors in livestock production, especially milking and milk processing. This suggests that women and women's groups are likely to benefit from the project. Furthermore, a number of measures towards highlighting and intensifying women's role and involvement in the social and economic life of communities will be undertaken under the project. This will include alternative opportunities for women's entrepreneurship and employment through the Competitive Grant Program, which supports village-level agri-business and farmer groups to develop new business opportunities, improve marketing, promote food safety practices, and introduce and demonstrate new technologies that could benefit communities focused on livestock production.

B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

The *key risks* that may affect the project objective and proposed mitigation measures are described below.

Climate change. Variability in climate may generate important socioeconomic and environmental consequences. According to Armenia's Second National Communication on Climate Change (2010), predictions indicate that climate change will further aggravate by 2030. Due to higher temperatures and reduced precipitations, the areas needing irrigation will expand, increased evaporation from the soil will result in secondary salinization of land plots, heavy rains and floods will further worsen water induced erosion, and droughts and hot dry winds will further aggravate wind erosion of lands. The same forecast states that as a result of climate change, soil humidity in Armenia will reduce by 10-30%, moisture availability for various crops will decline by 7-13%, and the water deficit of land will increase by 25-30%. As a consequence, the rain-fed farming in pre-mountainous and lower mountainous areas of Armenia will become more vulnerable. Furthermore, climate change risks forecast a decline of 8-14% in the yields of the main agricultural crops (9-13% for cereals; 7-14% for vegetables; 8-10% for potato and 5-8% for fruits). A decrease of 4-10% is predicted for the total pasture area and its yields, including 19-22% in the most valuable pastures of sub-alpine and alpine zones. A 7-10% decrease in the yields of grasslands is possible, which, in turn, will result in lower levels of fodder production and decreased livestock production. The activities envisaged under this GEF grant would contribute to mitigating these risks.

Legal and institutional framework. Armenia's institutional capacity and technical expertise in the management of land degradation, pastures/grasslands and climate change is weak. There is no specific pasture management legislation or institution in place to support the sustainable use of pastures, and little experience and knowledge about carbon financing and the potential gains of participating in emerging international carbon markets. To mitigate this risk, the project will start within the existing legal framework, and during the course of the project, through policy dialogue and technical assistance, the legal and institutional framework will be strengthened.

Acceptance and sustainability of rural investments. Visible benefits of rural investments, in particular

those concerning the protective and rehabilitation measures required for degraded lands, may take longer than expected, thus impacting the local communities' acceptance and continuation of management regulations, which include access restrictions to areas for regeneration. To realize the project objectives, behavior changes are required from the beneficiaries, which might be difficult to achieve. In order to mitigate this risk, procedures developed under the baseline CARMAC project will be used under the incremental GEF activities as well. Mitigations measures will enable essential investments to mobilize communities and build capacity in community organizations for pasture resource management. The pasture management measures will be complemented with sufficient direct investments (e.g., for fodder production or for access to under-utilized resources and remote pastures) in order to generate short-term benefits. Village allocations for implementation of management plans will be released in tranches during the first three years of project implementation, and will be triggered by successful implementation of agreed management measures. The project will select communities with an up-front commitment to change resource use practices and with an acceptance of cost-sharing for investment activities. Improved pasture management practices will be decided with broad participation and full agreement by the communities, confirmed by village level referendum.

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

The project will follow the concept of community-driven development with rural communities taking responsibility for the choice, design and ownership of rural investments. Key stakeholders of the project will be the Ministry of Agriculture (MOA) and rural households. Other project stakeholders include the Republican Agricultural Support Center (RASC), Marz Agricultural Support Centers (MASCs), community-based Pasture User Associations (PUAs), local and international non-governmental organizations (NGOs), local and national government agencies and institutions, donors, and relevant members of the private sector. While the MOA will provide core funding for salaries and operating costs based on approved annual work plans and budgets, RASC and 10 regional-level MASCs will provide the required services and the capacity to deliver the MOA's programs.

The same Project Implementation Unit (PIU) that implemented the World Bank-financed Rural Enterprise and Small Scale Commercial Agriculture Development (RESCAD) and the Avian Influenza Preparedness Project (AIPP) projects (see project descriptions below) will provide daily management, administration and coordination of the project, including procurement, financial management, reporting and monitoring, as well as technical and other oversight.

RESCAD: The project objective was to support small and medium-scale rural business development in Armenia by improving the ability of farmers and rural entrepreneurs to access markets and by stimulating market-oriented private and public investments in rural areas. Primary project target groups were small- and medium-scale farmers and rural entrepreneurs who would benefit from improved information services, access to finance, improved inputs and technologies, and support for marketing activities. The RESCAD helped farmer advisory services reduce reliance on donor funding, and by 2010, all extension funding for operational costs and salaries came through the national budget. In addition, RESCAD set up an efficient and transparent system for a competitive grant scheme to support the development of small farm and rural businesses, and supported 141 communities to set up and finance their priority development needs through community-based interventions.

AIPP: The Armenian government requested the AIPP project in the wake of the Avian Flu outbreaks in the region in 2006. The project's original development objectives were to minimize the threat posed to humans by the highly pathogenic avian influenza (HPAI) and other zoonoses in domestic poultry, and to prepare for the control and response to an influenza pandemic and other infectious disease emergencies in humans. The project was designed to support three areas: (i) prevention; (ii) preparedness and planning; and (iii) response and containment. In 2008, as the risk of avian flu diminished worldwide, the development objectives were expanded to include other zoonotic diseases and provide more comprehensive support to animal and human health services. The project increased Government attention on improved animal health services and their importance to public health, and supported preparation of the national brucellosis control program framework, the national

animal disease surveillance system (NADSS), and the central veterinary reference laboratory.

A range of civil society organizations and donor and government agencies are expected to participate in project networking and dissemination activities.

B.6. Explain how cost-effectiveness is reflected in the project design:

The CARMAC project will have three major benefits: (i) promote increased diversification, competitiveness and economic growth; (ii) reverse the trend of land degradation; pastures and grassland occupy half of the total agricultural land and about 15 percent of this land is severely degraded; and (iii) increase incomes for the poorest rural people in mountainous communities, where revenues from livestock are essential for subsistence and the main source of cash income; currently one third of the rural people depend on raising livestock as their main source of livelihood.

The economic internal rate of return (ERR) of the project is 83.1percent. The project net incremental benefits with an economic net present value at a discount rate of 12 percent are US\$58.5 million, or US\$412 per ha of pasture, US\$3,488 per farm household, and US\$ 1,439 per animal unit in participating communities. Switching values show that project benefits would have to fall by 81percent or costs to increase by 440 percent to reduce ERR below 12 percent. Given that the project analysis was conducted using conservative assumptions for accumulation of project benefits in participating communities, the project analysis did not show sensitivity to any reasonable lag of accumulation of benefits. The projected incremental annual net benefits per US\$1 of investments are US\$9.74.

The economic and sensitivity analysis is summarized in the tables below:

	<i>Basic assumptions</i>	<i>With 1 year delays in accruing benefits</i>	<i>With 2 year delays in accruing benefits</i>	<i>With 3 year delays in accruing benefits</i>
ERR	83.1 %	77%	58%	47%
Incremental net benefits	\$59.8 million	\$59.3 million	\$55.4 million	\$50.4 million

	<i>Appraisal value</i>	<i>Switching value</i>	<i>% change</i>
Incremental benefits	\$71,871,037	\$12,048,133	- 83%
Incremental costs	\$12,048,133	\$71,871,037	497%

Most project benefits are expected to occur within project communities. Benefits may also occur beyond project communities largely due to spillover effects and improved joint infrastructure projects, but these benefits were impossible to quantify. About 78,000 people live in the project communities, and most of them (97.6 percent) are engaged in livestock production and would benefit directly from this project. Overall, the project is expected to increase production of livestock products (primarily milk and meat) and contribute to increasing net income through a range of income-generating measures.

The spillover effects of introducing improved natural resource management practices are expected in nearby and other communities. The project investments are expected to improve the marketing of livestock production through improved access roads which will make remote pastures more accessible for commercial dairy processors. Small community level slaughtering facilities are expected to improve the safety of slaughtered meat. In the short-run, the re-introduction of fodder crops and short term employment opportunities for small infrastructure works will provide increased income support.

B.7. Outline the coordination with other related initiatives:

The project is coordinated with initiatives and support from the EU, USDA, and FAO. These international partners recognize the potential of livestock sector development and are supporting the sector through several programs. The EU is providing technical assistance for food safety, quality and standards within the framework of preparations for the Free Trade Agreement. In the past, the EU has also supported a pilot animal identification and registration program, which could be replicated in the future. The USDA has also supported rural development and livestock through its Marketing Assistance Program, which was re-organized into an Armenian NGO – the Center for Agribusiness and Rural Development (CARD). CARD has several programs for business generation in rural communities, including a Goat Industry Development Project to develop a sustainable dairy goat industry along the supply chain, and a pilot animal health control program in the Syunik Marz. The FAO has also provided assistance for the livestock sector, which included assistance for the control of the African swine fever and food and mouth disease, and support for slaughter house development and food safety capacity building. Incremental activities under the GEF grant would contribute to developing an environmentally and socially responsible livestock sector.

C. GEF AGENCY INFORMATION:

C.1 Confirm the co-financing amount the GEF agency brings to the project:

The International Development Association (IDA) has provided a credit in the amount of US\$16.0 million, of which US\$13.725 million would co-finance the project. Additional co-financing will also be provided by the Government (US\$3.185 million) and the project beneficiaries (US\$1.390 million). As such, the total project co-financing will be US\$18.30 million. The Bank's Board of Directors approved the IDA Credit on March 22, 2011.

C.2 How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

At a global scale, the World Bank has strong experience in all focal areas of GEF including land degradation. Within Armenia, the Bank's comparative advantage lies in sectors such as agriculture and natural resource management where it has a long-standing engagement and comparative advantage over other donors. In respect to the agricultural sector, the World Bank financed several projects in Armenia: the Rural Enterprise and Small-scale Agriculture Development Project (RESCAD), the Irrigation Rehabilitation Emergency Project (IREP), the Avian Influenza Preparedness Project (AIPP), and the Natural Resource and Poverty Reduction Project (NRMPPR). In addition, the Armenia Social Investment Fund (ASIF) is operating in rural areas. The projects were implemented satisfactorily. The proposed project is included in the World Bank's 2009-2012 Country Partnership Strategy (CPS) for the Republic of Armenia. The World Bank has a Country Office in Armenia that provides implementation support to national executing agencies in operational, financial management, procurement, safeguards and other technical aspects. For the purposes of this project, the bank will supplement this in-country capacity with experienced international and local consultants as needed.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. INSTITUTIONAL ARRANGEMENT:

The project implementation is the main responsibility of the Ministry of Agriculture which will be assisted by the Project Implementation Unit that has experience in implementing the WB projects.

B. PROJECT IMPLEMENTATION ARRANGEMENT:

The implementation arrangements are as follows:

Component 1: Community Pasture/Livestock Management System. This component will be implemented mainly by the PIU, through community-based Pasture User Associations. These associations will be mobilized with the support of Marz Support Teams using a model of community mobilization tested successfully under the RESCAD Project, and detailed in the operational manual for this component. The model of Pasture User Associations, where users agree on pasture management arrangements and key investments to improve productivity, is based on successful experience in other ECA Countries – such as under AISP in Kyrgyzstan, along with successful experience with watershed and pasture management projects in Mongolia and China. Furthermore, the PIU and Marz Support Teams already have significant experience in supporting Village Based Organizations that implement sub-project investments under RESCAD. These associations will be established as Legal Entities (Consumer Cooperatives)

under Armenian Law, and will sign an agreement with the local authorities to lease all available pastures and to take responsibility for pasture improvement and infrastructure.

Sub-component 2.1: Agricultural Advisory Services. Project-funded activities would be implemented using current advisory structures and systems consisting of 10 regional-level MASCs and the national-level RASC. The MOA budget would provide core funding for salaries and operating costs, based on approved annual work plans and budgets. Provisions of paragraph 1.11(c) of the Consultant Guidelines will be applied to enter into Single Source contracts with Marz Agricultural Support Centers (MASCs) and Republican Agricultural Support Center (RASC) for Livestock Interest Group Programs (with MASCs); TAPs (with MASCs and RASC); and technical assistance (with RASC/MASCs). These are the only institutions in Armenia with the relevant outreach and mandate to provide the required services, and that have the capacity to deliver the MOA's programs. Eventually, these activities will lead to the future development of an entirely autonomous system through which the MOA and donors will contract to provide public extension activities. Among the incremental project-funded activities, the RASC would organize the preparation of training modules and in-service training of MASC staff. The RASC would coordinate and monitor TAPs, using implementation arrangements as in the RESCAD project, including a 25 percent beneficiary contribution. The MASCs would implement incremental programs for farmer livestock interest groups based on agreed work plans; funds would be provided on an agreed schedule based on submission and verification of technical and financial reports. Selection of project-provided equipment would be based on MASC and RASC preferences, supported by a detailed justification including a cost-benefit analysis. The project would provide laptop computers to each MASC and advisors would assist farmers to access Internet information on an agreed schedule in the community advisory rooms. The MASCs would also introduce an SMS messaging system to provide information, potentially including weather information, initially on a pilot basis in one region. Each MASC and RASC would provide quarterly reports indicating progress. All activities and reports would be reviewed and approved by the MOA's Department for Research, Extension and Education. In addition to MOA oversight, coordination and monitoring of activities would be carried out by an Extension Specialist housed in the PIU, while financial management and procurement would be carried out by PIU specialists. The implementation of this sub-component will be guided by the detailed Operational Manual.

Component 3: Project Management and Monitoring and Evaluation. The same Project Implementation Unit (PIU) that implemented the RESCAD and the AIP projects was selected to manage this project based on its highly successful experience in managing ongoing projects, and prevailing Armenian institutional and ministerial regulations, which stipulate that ministries have primary responsibility for formulating policies, and policy implementation is carried out through structures external to the ministries. The central PIU staff will support daily project implementation activities and provide key fiduciary and technical inputs for communities and other entities involved in project implementation. This component will finance project management costs related to contracts for consultants, audits, and expenses for central PIU staff and facilitators in the MSTs.

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

N/A


PART V: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

- A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):** (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Aram Harutyunyan	Minister	MINISTRY OF NATURE PROTECTION	09/20/2011

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Karin Shepardson GEF Executive Coordinator The World Bank		6/15/2012	Angela Armstrong, GEF Regional Coordinator	(202) 458-0975	aarmstrong@worldbank.org
			Nicolas Ahouissoussi, Task Team Leader	(202) 473-2794	nahouissoussi@worldbank.org

ANNEX A: PROJECT RESULTS FRAMEWORK

PDO	Project Outcome Indicators	Use of Project Outcome Information
Improve productivity and sustainability of pasture/livestock livelihood systems in selected communities.	<p>Increased livestock productivity measured by: (a) milk production, and (b) increase in daily animal weight gain</p> <p>Increased effectiveness of communal pasture management, as measured by increased communal budgetary revenues from lease of pastures</p> <p>Increased farm sales from livestock</p> <p>Increased Pasture Management Effectiveness</p>	<p>YR1-YR2: Assess village-level acceptance with project approach.</p> <p>YR3: Determine if technical models need to be changed</p> <p>YR5: Feeds into Government strategy for mainstreaming project results in national livestock/pasture management policy. Scaling up project models for other villages</p>
Intermediate Outcomes	Intermediate outcome indicators	Use of Intermediate Outcome Indicators
<p>Component One: <i>Community Pasture/Livestock Management System</i></p> <p>Utilization of communal pasture areas is rational and sustainable</p> <p>Livestock feeding is improved on a year-round basis</p>	<p>Component One:</p> <p>Setting up Pasture User Associations</p> <p>Number of pasture management plans developed and agreed by the communities</p> <p>Areas of pastures and grasslands leased</p> <p>Percentage of winter-fodder requirements met</p> <p>Improvements of pastures vegetation cover</p> <p>Increased Biomass accumulation</p>	<p>Component One:</p> <p>YR1-YR2: Revise communication strategy and participatory approach if progress lower than expected</p> <p>YR2-YR5: Assess effectiveness of monitoring procedures and acceptance, revise if necessary</p> <p>YR2-YR5: Low levels flag wrong incentive structure</p> <p>YR2-YR5: Low levels flag poor understanding or technical problems to be addressed</p> <p>YR2: Assess the baseline vegetative cover and Biomass content</p> <p>YR 3-5: Assess dynamics of vegetation cover and Biomass increase</p>
<p>Component Two: <i>Strengthening Support Services</i></p> <p>Sustainable regional and local technical advisory system in place</p>	<p>Component Two:</p> <p>Increased adoption rate of new technologies by farmers in targeted communities</p> <p>Improved outreach and performance as measured by increased share of revenue from contracts</p>	<p>Component Two:</p> <p>YR2-YR5: Determine message effectiveness and reach. Realign delivery mechanism, etc. as needed</p> <p>YR2-YR5: Low levels require additional training of extension service providers</p>
Component Four: <i>Project</i>	Component Four:	Component Four:

<p>Management and M&E Effective project management system in place</p> <p>M&E system generates lessons for scaling up and transferring project experiences to other areas</p>	<p>Key staff appointed and annual work plans prepared</p> <p>M&E system developed</p> <p>Mid-term evaluation done</p> <p>End-project impact assessment done</p>	<p>YR1-YR5: Deficiencies affect overall project implementation effectiveness</p> <p>YR1: Essential for learning and scaling up results</p> <p>YR3: Identifies potential need to restructure</p> <p>YR5: Tool for mainstreaming project results in national livestock/pasture management policy. Scaling up project models for other villages</p>
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Arrangements for results monitoring

Outcome Indicators	Baseline	Target Values		Data Collection and Reporting		
		Mid-term	End-project	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
Increased livestock productivity measured by:						
(a) milk productivity (kg/year, for cattle and sheep)	100%(cattle) 100%(sheep)	107%(cattle) 105%(sheep)	120%(cattle) 110%(sheep)	Mid-term, end-project	Field Survey	PIU/Contracted monitoring team
(b) growth rates of animals (gram/day for cattle, sheep)	100%(cattle) 100%(sheep)	107%(cattle) 105%(sheep)	120%(cattle) 105%(sheep)	Mid-term, end-project	Field Survey	PIU/Contracted monitoring team
Increased efficiency of communal pasture management, as measured by increased communal budgetary revenues from lease of pastures	100%	115%	130%	Mid-term, end-project	Field Survey	PIU/Contracted monitoring team
Increased sales from livestock by livestock raising households (AMD/household)	100%	110%	120%	Mid-term, end-project	Field Survey	PIU/Contracted monitoring team
Pasture Management Effectiveness (scoring system)	0	25	60	Annually	Assessment	PIU
Increased pasture vegetation cover (%)	50-60%	70-80%	90-100%	Mid-term, end term	Field survey and using digital images	Contracted monitoring team

Outcome Indicators	Baseline	Target Values		Data Collection and Reporting		
		Mid-term	End-project	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
Increased Biomass Accumulation (KG C/ha/year)	320	390	450	Mid-term, end term	Field survey and estimations	Contracted monitoring team
Intermediate Outcome Indicators						
Component One: Community Pasture/Livestock Management System						
Number of pasture management plans developed and agreed by the communities	0	25	46	Annually	Project Reporting	PIU
Areas of pastures and grasslands leased (%)	100%	115%	140%	Mid-term, end-project	Field Survey	PIU/ Contracted monitoring team
Number of farmers associations established	0	25	46	Annually	Project Reporting	PIU
Percentage of winter fodder requirements met	45%	60%	80%	Annually	Project Reporting	PIU
Component Two: Strengthening Support Services						
Adoption rate by farmers in targeted communities	70%	75%	90%	Annually	Survey	PIU
Improved outreach and performance as measured by increased share of revenue from contracts	6%	8%	10%	Annually	Survey	PIU
Component Four: Project Management and M&E						
Key staff appointed and annual work plans prepared	Done	Done	Done	Semi-annual	Project Reporting	PIU
M&E system developed	Done			Project start	Project Reporting	PIU
Mid-term evaluation done		Done		Mid-term	Field Survey	PIU/Contracted monitoring team
End-project impact assessment done			Done	End-Project	Field Survey	PIU/Contracted monitoring team

GEF Comments and Team Responses (Review dated April 12, 2012)

<i>Comments</i>	<i>Team Response</i>
<p>14. Is the project framework sound and sufficiently clear? a) Please insert as much as possible quantitative figures instead of "number of". As this is a CEO endorsement document, the project framework needs to be more elaborate. Moreover, as the baseline project is already ongoing, quantitative figures for expected outputs should be available. It is understood that some outputs are demand-driven, but good estimates might be available by now. b) It is slightly misleading that the text refers to components 1 - 4, but Table B only shows 2 components. Please clarify this in the text and Table B. c) Please improve consistency of Table B with the incremental reasoning provided in the text (see also comment to #15 below).</p>	<p>Project framework has been updated to reflect expected, quantitative outputs.</p> <p>Project description has been updated to reflect the project's two primary components, as well as project management.</p> <p>Table B and section B.2 have been updated.</p>
<p>15. Are the applied methodology and assumptions for the description of the incremental/additional benefits sound and appropriate? a) As the baseline project is already ongoing and appears to be making satisfactory progress towards the outcomes, the incremental reasoning needs to be very clear of why additional GEF support is required now. This is stated in the text under B2 to a certain extent. However, this is not fully reflected in Table B, which appear to be somewhat generic. Please bring text and table better in line, providing a clear justification of GEF support on top of the ongoing baseline activities. Moreover, it might be helpful to indicate why the baseline funding cannot be used to cover those incremental activities. In other words, it would be helpful to include a sentence of what would happen without GEF support. b) The monitoring of GEBs focuses on biomass (NPP). However, the project objective is "to increase productivity of pasture/livestock livelihood systems....". Therefore, productivity indicators such as livestock productivity or increased efficiency of communal pasture management as well as vegetative cover should be included into the methodology and assumptions as well as into the monitoring system and tracking tool.</p>	<p>Table B and section B.2 have been updated accordingly.</p> <p>The increased productivity of livestock is included as one of the main indicators for the baseline project (see Annex 1 with the project results framework). Per GEF's recommendation, it was also included in the Monitoring tracking tool. Also, pasture productivity already is included in both the Results Framework and Monitoring tracking tool.</p>
<p>24. Is the funding and co-financing per objective appropriate and adequate to achieve the expected outcomes and outputs? It is not fully clear whether the entire loan can be counted a co-financing. The loan also finances a component 3, the competitive grants program. But in Table A, the entire amount of \$16 million is assigned to components 1, 2, and 4. Please clarify.</p>	<p>In the revised document, only the amount of the IDA credit that relates to the project's objectives is accounted for (that is, not the full</p>

	<p>amount of the IDA credit, US\$16.0 million, but US\$13.725 million). Specifically, Component 3 of the IDA project, supporting a small grant program oriented to new business development opportunities in rural areas, is not included as project co-financing. While to some extent this indirectly will reduce pressure on pastures, the amount provided for this purpose was not included as GEF project co-financing. Similarly, subcomponent 2.2 of the IDA project supports Animal Health activities, and as such, these allocated resources were considered GEF project co-financing.</p>
<p>25. At PIF: comment on the indicated co financing; At CEO endorsement: indicate if confirmed co-financing is provided. Please adjust discrepancies in co financing commitment letter of the GoA and Table C in the CEO document.</p>	<p>The co-financing figures have been corrected in the document, presenting only those portions which specifically support the GEF grant objectives - the GoA provides US\$3.185 million (from the total US\$3.53 million). Additionally, the beneficiaries would also provide \$1.390 Million (from their total contribution of \$ 1.800 million).</p>
<p>27. Have the appropriate Tracking Tools been included with information for all relevant indicators, as applicable? Please revise the following points: - 4. PMAT completion date: enter only current date in line 4a - Part I, 1.1b & 1c: please enter the figures and no letters (th ?) - Part I, 5. GEBs: in line with comments on #15, I think that measurement of livestock productivity is relevant and needs to be included somehow in the tracking tool. - please also check other quantitative data that might be relevant in this project and for which data might easily be available, e.g. income, vegetative cover.</p>	<p>Done Done Done</p> <p>Done (see added point (c) and (d) under section 6)</p>
<p>28. Does the proposal include a budgeted M&E Plan that monitors and measures results with indicators and targets? Yes. But please refer to comments made under #15 and address them where appropriate.</p>	<p>There is no need to reallocate money for the monitoring of the proposed new indicators as they will be financed under the baseline project.</p>

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF/LDCF/SCCF/NPIF RESOURCES

<i>Position Titles</i>	<i>\$/ Person Week*</i>	<i>Estimated Person Weeks**</i>	<i>Tasks To Be Performed</i>
For Project Management			
Local			
Cofinancing PIU Environmental Specialist	833	12	Supervision of implementing pasture improvements and rehabilitation activities and reporting on Global Environmental Activities (GEBs); designing TORs for: SLM capacity building; monitoring of GEBs; and information dissemination activities
International			
Justification for travel, if any:			
For Technical Assistance			
Local			
Component 1.1 NGO/company	1,200	125	Survey of water pipelines existng in the communities and entering of these coordinates and data into digital maps by GIS for pasture watering. This would supplement Component 1 of the baseline project
Component 1.2 NGO/Scientific institution	625	96	Conducting M&E including field trips and evaluation of the project GEBs and in particular on: (a) dynamics of the pastures cover vegetation; and (b) Biomass increase
Component 1.2 NGO/Individual consultants	1,450	100	Conducting training activities on sustainable land and pasture management for: members of communities, members of pasture user associations, village mayor's office and representatives of other interested organizations, services), CPMLDC and MST
Component 2.1 NGO/Individual consultants	500	40	Conducting training activities on sustainable land and pasture management for representatives from RASC and MASCs
Component 2.1 NGO/Individual consultants	1,200	25	Conducting sustainable land and pasture management information dissemination activities
International			

Justification for travel, if any:			

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

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.

B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:

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

<i>Project Preparation Activities Approved</i>	<i>Implementation Status</i>	<i>GEF/LDCF/SCCF/NPIF Amount (\$)</i>				<i>Cofinancing (\$)</i>
		<i>Amount Approved</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>	<i>Uncommitted Amount*</i>	
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
Total		0	0	0	0	0

* Any uncommitted amounts should be returned to the GEF Trust Fund. This is not a physical transfer of money, but achieved through reporting and netting out from disbursement request to Trustee. Please indicate expected date of refund transaction to Trustee.

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

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