

## **PART I: PROJECT IDENTIFICATION**

Project Title:	Sustainable management of mountainous forest and land resources under clim change conditions		
Country(ies):	Change conditions	GEF Project ID:	
GEF Agency(ies):	FAO	GEF Agency Project ID:	615696
-Other-Executing-Partner(s):	<ul> <li>Kyrgyz Republic State</li> <li>Agency on Environment</li> <li>Protection and Forestry</li> <li>Ministry of Agriculture</li> <li>of Kyrgyz Republic</li> </ul>	Submission Date:	-April 10,-2012
GEF Focal Area (s):	Multi-focal areas	Project Duration (months):	48
Name of parent program (if applicable):  • For SFM X		Agency Fee:	545,455

### A. FOCAL AREA STRATEGY FRAMEWORK:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Indicative Financing from Relevant TF (GEF, LDCF, SCCF)	Indicative Co- Financing <sup>a</sup>
,	-		(\$) a	(\$) b
CCM 5	1- Good management practices in LULUCF adopted both within the forest land and in the wider landscape	1-Carbon stock monitoring systems established	GEF TF 200,000	600,000
	2-Restoration and enhancement of carbon stocks in forests and non- forest lands, including peatland	2- Forests and nonforest lands under good management practices	1,531,602	4,600,000
LD 1	1- An enhanced enabling environment within the agricultural sector	1-National policies that guarantee smallholder and community tenure security	GEF TF 200,000	600,000
	2 - Improved agricultural management	2- Types of Innovative SL/WM practices introduced at field level 3-Suitable SL/WM interventions to increase vegetative cover in agroecosystems	1,431,602	4,300,000
	3- Sustained flow of services in agroecosystems	4- Information on SLM technologies and good practice guidelines disseminated	100,000	300,000
LD 2	1-An enhanced enabling environment within the forest sector in dryland dominated countries	1-National policies that guarantee smallholder and community tenure security	GEF TF 100,000	350,000
	2-Sustained flow of	2-Suitable SFM	765,801	2,650,000

	services in forestecosystems in drylands	interventions to increase/ maintain natural forest cover in dryland production landscapes		
SFM/REDD-1	1-Enhanced enabling environment within the forest sector and across	1. Types and quantity of services generated through SFM	200,000	700,000
	2-Good management practices applied in existing forests	2-Forest area (hectares) under sustainable management, separated by forest type.	665,800	2,400,000
		Sub-total	5,194,805	16,500,000
Project manage	ment cost (CC 86,580 + LD 1	29,870 + REDD 43,290)	259,740	600,000
Total project o	osts	,	5,454,545	17,100,000

### B. PROJECT FRAMEWORK

Project Objective: The objective of the project is to contribute to the sustainable management of mountainous silvo-agro-pastoral ecosystems in the Kyrgyz Republic by securing the flow of multiple ecosystem services

Project Component	Grant Type (TA/INV	Expected Outcomes	Expected Outputs	Financing from Relevant TF (GEF, LDCF, SCCF)	Indicative Co- Financing a
				(\$) a	(\$) b
1- Strengthening the enabling environment for sustainable forest and land management	TA	1.1 Enhanced policy, legal and institutional framework in forestry and land management for integrating SFM/SLM principles and practices	1.1.1 Forestry and land policy and legislation for SFM and SLM developed and/or improved. Specifically: - Appropriate agro-environmental policies to incentivize SFM/SLM at	CCM 5 200,000 LD1 300,000 LD2 100,000 SFM/REDD'+ 100,000	2,100,000
(agriculture, rangelands and transitional areas) (SFM/SLM)		into national and local level land use plans	local levels developed - SFM and SLM guidelines and standards developed - National soil fertility conservation strategy drafted, - Amendments to land code to promote SLM on abandoned agricultural lands - Amendments to forest code to	Total 700,000	
		1.2.Increased understanding and awareness on roles of SFM/SLM and LULUCF in carbon sequestration and GHG	promote SLM on degraded forest agricultural lands  1.2.2 Cross-sectoral strategies and/or strategic agreements between sectoral authorities on integrated land use management developed and foster cross-sectoral cooperation	,	
		balance  Which will result in:  Improved management of 661,200 ha forest lands, 611,100 million ha pasture lands, 776,000 ha arable lands in the pilot	1.3.3 Operational mechanism for ensuring better collaboration at national level (MoA,SAEPF, NASG, technical research institutes) and enhanced communication between national and local levels developed and implemented.  1.2.1.SFM/SLM based on resource user	;	
· .		areas over long-term,  -Improvement in capacity development	associations (pasture, forest, water) is effectively promoted in the project area/s and respective local resource management institutions are fully functional		

<sup>&</sup>lt;sup>1</sup> GEF will finance management cost that is solely linked to GEF financing of the project.

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			indicators as per FAO training kit capacity development requirements [baseline app. 27%, target 50%] 60 policy makers, 300 technical staff, 200 extension agents, 7000 farmers and shepherds applying SFM/SLM practices	1.2.2 Managerial and technical capacity building for local resource management institutions so key persons are aware of SFM/SLM technologies and approaches and continuously adopt and implement them  1.2.3 Training and awareness creation tool kit on roles of SFM/SLM and—LULUCF in carbon sequestration and GHG balance prepared and dissseminated		
				1.2.4 Training for relevant GoK staff on LULUCF, REDD+ and carbon monitoring and accounting under various land uses/management practices, including FAO EX- ACT tool on carbon calculation and monitoring		
	2 – Enhancing carbon stocks in dryland forest through innovative management and rehabilitation practices	TA	2.1.Management of existing forests and trees improved  - 20,000 ha of forestlands under improved multifunctional forest management.  - avoiding emissions from forest degradation of: 216,640 t CO2 eq/year	2.1.1 National LULUCF and REDD+ Strategy and Action Plan developed and operationalised: LULUCF sector assessment improved, national climate change mitigation standards in the LULUCF sectors drafted and submitted to approval by the GoK 2.1.2 Multifunctional and participatory forest management planning covering at least 20,000 ha forest pilotted 21.3 Carbon monitoring system established using EX-ACT based on field sampling of forests and various dryland land use systems	CCM 5 1,000,000 SFM/REDD + 765,801 LD 2 765,800 Total 2,531,601	7,800,000
			2.2.Dryland forest areas rehabilitated/afforested through introduction and demonstration of innovative technologies/ practices an presurres on forests reduced  -10,000 ha forestland rehabilitated/planted;  -contribute to approximately 65,531 tCO2 eq/year carbon sequestraion	2.2.1 8.000 ha of degraded forest land rehabilitated/afforested through successfully demonstrated innovative technologies and practices including agroforestry trials, controlled grazing, windbreaks and roadside plantations  2.2.2 2.000 ha of tree plantations established by local people with indigneous fast-growing forest trees, such as poplar, salix, etc. in order to reduce the wood demand from natural forests (forest degradation prevented in at least 8,000 ha forest areas)  2.2.3 Efficieny of fuelwood use improved by the introduction of		
	3- Promoting and demonstrating climate-friendly agriculture,	TA	3.1. Improved agricultural management and rehabilitation practices and techniques	improved cookstoves, home-based solar heating and home insulation activities  3.1. 1. 200 demonstrations of innovative agricultural practices covering a total of 5,000 ha of arable land including:	LD1 1,431,602 CCM 5 531,602	6,600,000

Total project costs*	1	· · · · · · · · · · · · · · · · · · ·		5,454,545	17,100,000
	Cost CC 86,	580 + LD 129,870 + REDD	43,290)	259,740	600,000
Sub total				5,194,805	16,500,000
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			capacity developed.		i
			- Agro-technical and erosion maps prepared in digital format and relevant		
•		storage of 142,765 tCO2 eq/year	- introduction of drought-resistant and salt- tolerant plant species		
		contribute to carbon	breaks		
		pasture restoration) non- forest SFF lands	- introduction of agro-forestry land management practices including wind		
		hectare (5,000 agro- forestry + 20,000 ha	water harvesting/irrigation techniques in drylands		
•	•	silvo-pastoral practices and restoration on 25,000	logged soils with innovative methods and protective measures		
٠		Improved SLM and agro-	pasture and rangeland - melioration of saline and water-		
• •		eq/year (15,000 ha in agricultural land) -	demonstrated: - improvement/rehabilitation of		
		storage of between 16,500 to 24,000 t CO2	rehabilitated using innovative technologies/practices successfully		
,		agricultural land contribute to carbon	3.1.2 35,000 ha of non-forest SFF lands/degraded agricultural lands		
		10,000 ha degraded	·		
		of 5.000 ha arable land and rehabilitation of	- small-holder composting techniques, etc.		
		-Improved management	- modern water-saving irrigation systems		
		in:	change conditions		
		degradation, and avoid GHG emissions, result	-integrated land rehabilitation for increasing soil fertility in climate		
drylands .		fertility, reduce soil	agriculture		
management (SL/WM) in		practices that increase vegetative cover and soil	degraded areas and introduction of live cycle management for organic	·	
and water		agro-forestry best	-introduction of bio-fertilizers into	1,963,204	•
pastures as part of sustainable land		demonstrating and adopting agricultural and	tillage, crop rotation, crop residue management, and vegetative cover)	į	
including		in drylands by	- conservation agriculture (reduced	Total	

## C. Indicative Co-financing for the project by source and by name if available, (\$)

Sources of Co-financing for baseline project	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	SAEPF	Grant	3,000,000
National Government	MoA	Grant	1,500,000
GEF Agency	FAO	Grant	1,500,000
Bilateral Aid Agency	IFAD	Grant	5.000,000

Bilateral Aid Agency	GIZ + ICI	Grant	500,000
Bilateral Aid Agency	TIKA	Grant	1,000,000
National Government	SAEPF	In kind	1,800,000
National Government	MoA	In kind	1,800,000
GEF Agency	FAO	In kind	300,000
Local resource users		In kind	700,000
Total Co-financing			17,100,000

### D. GEF RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES)

				(in_\$)				
GEF Agency	Type of Trust Funds	Focal Area	Country Name/ Global	Project amount (a) Excluded agency fee	Agency Fee (b)	Total c=a+b		
FAO	GEF TF	Climate Change	Kyrgyzstan	1,818,182	181,818	2,000,000		
FAO	GEF TF	Land Degradation	Kyrgyzstan	2,727,273	272,727	3,000,000		
FAO	GEF TF	Multi focal area (SFM/REDD+)	Kyrgyzstan	909,090	90,910	1,000,000		
Total GEF F	Fotal GEF Resources Excluding project preparation				545,455	6,000,000		

### **PART II: PROJECT JUSTIFICATION**

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

#### A.1.1. THE GEF FOCAL AREA STRATEGIES:

This project is in line with the Climate Change Mitigation (CCM-5), Land Degradation (LD-1 and LD-2) Focal Areas and is consistent with the SFM strategy of the GEF-5. The project addresses CCM-5: "Promote conservation and enhancement of carbon stocks" by enabling Kyrgyzstan to adopt good management practices in LULUCF including restoring and enhancing carbon stocks in forests and wider landscapes. The project addresses LD-1: "Elimination of main barriers to sustainable agriculture by improving policy, legal and regulatory environment, and human and institutional capacity and by facilitating the transfer of knowledge and technology relevant to the management of agricultural lands. The project has been designed in line with GEF Guidelines for SFM and REDD+ Program: Kyrgyzstan is committed to creating the legal, regulatory, scientific and practical grounds for inclusion of its forests in international forest markets; the project creates capacities for the proliferation of good management practices pertinent to SLM, LULUCF and REDD+. SFM challenge account funding will help to establish a sound policy environment to recognize the value of forest and agro ecosystems functions and reduce GHG emissions from deforestation and forest degradation as well as from agricultural practices.

# A.2 NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS, IF APPLICABLE, I.E. NAPAS, NBSAPS, NATIONAL COMMUNICATIONS, TNAS, NIPS, PRSPS, NPFE, ETC.: The proposed project is fully consistent with the relevant national development programmes and sector plans adopted by the Government of the Kyrgyz Republic (GoKR), as well as with the various programmes and action plans promulgated

The project proposal is in direct conformity with the following <u>national programmes and sector plans</u>:

by the GoKR pursuant to its commitments under the relevant international environmental conventions.

- The <u>Mid-term Development Programme of the Kyrgyz Republic 2012-2014</u>, which identifes among the national priorities (i) provision of ecological safety through, among other things, development of the forestry sector addressing emerging ecological problems, development of measures to prevent climate change and promote low-carbon development and (ii) development of the agricultural sector in order to reverse the degradation and combat the desertification of agricultural lands.
- The Forestry Sector Development Concept of the Kyrgyz Republic 2004 2025, which aims at sustainable and multi-functional use of forest resources with the participation of stakeholders, including the local population by improving forest policy and legislation in accordance with the changing need of the forest community, conducting appropriate rehabilitation and afforestation of degraded areas, and improving coordination of stakeholders at national and local levels.
- The <u>National Forest Program 2005 2015</u>, which defines a set of activities and measures to implement the Concept descirbed above, including preventing forest degradation and conservation of forest ecosystems, improving forestry protection on all forested lands and improving legislation for protection and use of forest resources (including flora and fauna).
- The <u>National Agricultural Development Strategy 2012 2020</u>, which is being developed currently wiith support of FAO experts. The Strategy will represent a concise vision on agricultural development, a statement on the role

of the state in agricultural development and priority areas for action, as well as a strategy on how the government intends to support agricultural development. Among seven priority areas for agricultural development, land and water management issues will be specifically addressed. The <u>Draft Programme for Soil Conservation and Increase in Soil Fertility in the Kyrgyz Republic 2012-2015, which addresses food security and ecological safety and defines the strategic directions for conservation of soil fertility.</u>

With respect to the <u>environmental conventions</u>, i.e. the UN Framework Convention on Climate Change (UNFCCC) and the UN Convention to Combat Desertification (UNCCD, the proposed project is fully consistent with and will contribute significantly to implementation of the following strategies, programs and action plans the GoKR has promulgated:

- Pursuant to the UNFCCC, the GoKR promulgated its <u>First and Second National Communications on Climate Change</u> (NCCC), which were approved in 2003 and 2009, respectively, and recognize the importance of agriculture and forests in both carbon sequestration and emission of green house gases (GHGs). Analysis of LULUCF?
- Pursuant to the UNCCD, the GoKR promulgated its <u>National Action Plan to Combat Desertification</u> (2000), which identifies as priority actions (i) raising public awareness, (ii) strengthening local community resource management systems, (iii) ameliorating degraded lands, (iv) preventing salinization, waterlogging and erosion of arable lands, (v) rehabilitating pasture lands and (vi) increasing the percentage of forest land in order to prevent landslides.

In Kyrgyzstan, <u>Agenda for XXI Century</u> (Action Program to 2010) made direct reference to the rational use of land resources, the restoration of soil fertility, and the regulation of land ownership relationships. The Action Program also recognizes the significance of forests in the country, which supply the fresh water flow for the whole of Central Asia and contribute to sustainable preservation of fresh water resources, the basis for reduction of landslide and mudflow risks, the source of development and preservation of biodiversity of mountain areas.

#### **B. PROJECT OVERVIEW:**

#### B.1. DESCRIBE THE BASELINE PROJECT AND THE PROBLEM THAT IT SEEKS TO ADDRESS:

The Kyrgyz Republic is a mountainous country with 90 % of its area located at altitudes above 1,500 meters and a population of approximately five million people. Some 3.2 million people or almost 65 % of the total population live in villages in rural areas. The Kyrgyz economy is largely agricultural, with the agricultural sector, at 29 % in 2008, the largest contributor to the country's gross domestic product (GDP). The forestry sector, on the other hand, contributes less than one percent of GDP. Nevertheless, both sectors are important to rural livelihoods and play a critical role in protection of soil and water resources. A brief description of these two project-related sectors and their corresponding baseline projects follows.

Forestry Sector. The forest cover in the Kyrgyz Republic in 2011 is estimated at 954,000 ha, roughly 5.8 % of the total land area. Of this, 269,000 ha (28 %) are classified as primary forest; 57,000 ha are planted forest. Around 90 % of the Kyrgyz forests are located at an altitude of 700 to 3600 m above sea level. Kyrgyz forests consist of four main types: (1) spruce forests found in the eastern and central parts of the country and in the ranges north of the Fergana Valley; (2) walnut-fruit forests in the northern and northeastern slopes of the Fergana mountain ridge, of global biodiversity significance since the area it covers is the largest worldwide; (3) juniper forests growing under arid conditions and dispersed over the country; and (4) riverside forests. In addition, poplars have been planted near or within settled areas for timber production for construction and as windbreaks. All forests are owned by the state as part of the State Forest Fund (SFF), which comprises forest lands and lands not covered by forest but earmarked for forestry needs (e.g., mountain grasslands). In accordance with the Forest Code, all the forests of the country are considered to be especially valuable natural resources, exercising environmental, ecological, sanitary, curative and other protective functions. As of January 2003, the SFF amounts to 3.3 million hectares, including the forest-covered area of 864,000 ha, or 4.32 % of the country's total area.

Despite the fact that the Kyrgyz Republic is referred to as forest-poor, the Kyrgyz forests have their own unique features and play a great ecological role in the global processes of regulation of the environment and prevention of negative climate changes. Kyrgyz forests contain 56 million metric tons of carbon in living forest biomass. Growing on mountain slopes, these forests contribute to prevention of mudslides, impede the formation of landslides and avalanches in the mountains, and regulate the discharge of water into rivers proportionally during the year. Therefore, it is hardly possible to overestimate the significance of the Kyrgyz forests, both for Kyrgyzstan and for the whole of Central Asia, where so much of the agriculture is based on irrigation with water flowing from Kyrgyz mountains.

The Kyrgyz forests face severe degradation due to overharvesting for use as fuel wood and housing construction. The country's fragile mountain topography, combined with depletion of forest cover, results in wind and water soil erosion on sloping lands. Other interrelated problems relate to risks of landslides, mudflows and flooding due to poor storage basin management, irrational use of water resources and deterioration of water quality due to sedimentation. The intensity of erosion is primarily due to water-runoff, soil sedimentation and harmful agricultural practices

utilized on the sloping land. The mountain zones, especially in the southern regions (e.g. Tien Shan and Pamir-Alai) are more vulnerable and less durable with regard to excessive anthropogenic pressures in comparison to lands in the plains.

The Kyrgyz forestry sector confronts other threats as well. The lack of timber imports into the country, the overgrazing on forested lands and the steady growth of population, all put increasing pressure on Kyrgyz forests. Furthermore, the economic situation in Kyrgyz forestry is unsatisfactory, especially the lack of adequate financial resources for forest management and the failure to effectively engage the private sector. These problems are the driving force leading to a loss of precious forests, unique genetic resources and a dramatic worsening of environmental hazards such as mud flows, erosion and flooding.

The GoKR promulgated its Forestry Sector Development Concept in 2004 and has since undertaken implementation of its National Forest Program. But, the program's implementation has faced a number of constraints, including a poor forest inventory and insufficient funds to support monitoring activities, inadequate numbers of skilled personnel and poor information exchange, since there are no inter-agency or inter-sectoral cooperation mechanisms in the GoKR.

Baseline forestry project: Pursuant to the Forest Code, which confers exceptional nature protection status on all forests in the country, the GoKR has undertaken a major forest management and protection initiative in the National Forest Program 2011-2015. Under this five-year, USD 10 million program, the SAEPF is performing the following baseline forestry activities: (i) involving the local populations in joint forestry management and defining the role of the state in the forestry sector under changing conditions, (ii) increasing the effectiveness of current forest measures (taking into account ecological, economic and social factors), (iii) preventing degradation and protecting forest ecosystems, (iv) improving and developing the use of forest flora and fauna, (v) enforcing measures to improve forest conservation both on SFF lands and in other forest areas, (vi) defining technical norms for sustainable forest management, (vii) improving the legislation for the forestry sector, (viii) promoting the use of forest products as well as resources of flora and fauna and (ix) raising public awareness on forestry-related issues. The proposed GEF project will reinforce these National Forest Program activities by introducing innovative practices for both forest rehabilitation and sustainable forest management, raising awareness and capacities in the SAEPF on the global climate change benefits in calculating/monitoring carbon sequestration and reduction in GHGs from forest rehabilitation and sustainable management, and strengthening coordination and capacities among the local resource users associations (forest, pasture, water) in the management of forest areas. In addition, these GoKR-financed baseline activities are supported by the following donor-funded projects:

- With support from the <u>Kyrgyz-Swiss Programme of Support to Forestry</u>, SAEPF is working on decoding the satellite images of forest resources acquired under the programme. The results of decoding/deciphering these images have already shown the existence of significant areas of forests outside the SFF, with preliminary estimates of some 572,000 ha. Consequently, taking into account this information, the forest cover of the country comes up to 7 % of the country's total territory.
- With support from the FAO Project "Capacity Building for National Forest and Tree Resources Assessment and Monitoring", the SAEPF is undertaking a national forest inventory (NFI) for defining and completing the data on forests in the country. The NFI project, which adopted the IPCC guidelines and general recommendations for carbon estimations, has just been completed. The results have not yet been inserted into the process of carbon reporting. However, this NFI will be one of a number of consecutive NFIs, which will assess and monitor the extent of forest and land use areas (i.e. area changes), as well as the carbon density per hectare for the different forest types and land uses. For every NFI, the extent of forest (by forest type) and other land uses will be updated in order to monitor the area changes, e.g. deforestation (by forest type), afforestation (by forest type) and carbon stocking (by forest type) to indicate degradation of forest (by forest type) and/or enhancement of forest (by forest type). Additionally, the current NFI will be used as one of the references for a carbon emission scenario, where historical emission assessments (based on remote sensing studies and carbon models) be compared with the current NFI to establish a default future carbon emission scenario, to which a potential REDD+ financial mechanism could refer in order to provide financial compensation for avoided deforestation and forest degradation, and also for forest carbon enhancement. It is also implementing activities under the FAO National Forestry Program Facility (2004-2012) for the improvement of national forestry policy and development and implementation of the National Forestry Program. This facility support is an iterative process and aims to assist national stakeholders to prepare the forestry sector for the challenges and opportunities posed by climate change. The integration of climate change into national the forest program will take into consideration the wider land use context, which can help to ensure that climate change objectives are balanced with other forestry sector objectives and that trade-offs are weighed and synergies captured.
- With technical support from GIZ, SAEPF will undertake activities on conflict management for forest and pasture users in pilot project areas from 2012 through 2014.
- Under JICA's five-year project, <u>Support for Joint Forest Management in the Kyrgyz Republic (2009-2014)</u>, the SAEPF and the National Agency for the Affairs of Local Self-Governance (NALSG) are piloting joint forest management (JFM) practices at a number of sites throughout the country, following the JFM implementation guidelines designed for this purpose, engaging local community stakeholders (i.e. forest users associations) in

decision-making with respect to sustainable forest management, and actually delegating implementation of many forest management activities to the forest users themselves.

Agricultural Sector. The Kyrgyz economy was, and still remains, primarily agricultural, with more than 50 % of the population engaged in agriculture (e.g. cotton, tobacco, potatoes, sugar beets, vegetables, fruits, etc.) and herding (e.g. sheep, goats cattle and horses). As much as 56 % of the country's land area is considered agricultural land, but only about 7 %, or about 1.4 million ha, is considered arable land (i.e. land under temporary crops, temporary meadows for pasture, kitchen gardens and land temporarily fallow). More than 70 % of the arable area depends on irrigation for its productivity. However, farm productivity is increasingly constrained by waterlogging and salinization of irrigated lands. The country's pasturelands, important for development of livestock, also face severe degradation, both from overgrazing near the villages and from degradation of vegetative cover by weeds in remote pastures. Furthermore, Kyrgyz soils also face a number of threats, including degradation resulting from depletion of soil fertility, soil erosion on steep slopes and increasing salinity and waterlogging problems due to deteriorated irrigation systems and inefficient water use (UNCCD 2006).

Many of the threats facing the agricultural sector are directly linked to climate change. Throughout the 20<sup>th</sup> century, climate change (particularly global warming) has resulted in the melting and disappearance of more than 1000 small and medium-sized glaciers in the mountains of Central Asia, thereby diminishing the region's main source of water for both domestic and irrigation purposes. This loss of strategic sources of freshwater makes the threat of food and ecological insecurity real in the country. It is obvious that climate change poses a threat for farming as well. Soil erosion and the decline of land productivity in the mountains of the country have already reached a critical level. Moreover, biological resources continue to be depleted in these mountain ecosystems; which are especially sensitive to natural and anthropogenic impacts.

In terms of land degradation, the last 10 years can be described as catastrophic for the country. As a result of both economic activities and environmental factors, destructive processes have occurred on a large part of the country's soils. At this point, some 10.7 million ha of existing farmland, more than 88%, is considered degraded and prone to desertification. The areas of secondary salinity have increased and now account for 75% of the total arable land; more than half the arable land is prone to wind and water erosion. About half of the grazing areas are classified as degraded, both in terms of vegetation and soil condition. As a result, the area under permanent crops and vineyards has significantly decreased.

In many cases, small-holder farming leads to the degradation of soil fertility, largely as a result of inappropriate agricultural practices and technologies. At present, 84 % of households have less than one ha of arable land. At this size of land holding, good agricultural practices, such as crop rotation and anti-erosion measures which contribute to maintaining and improving the fertility of arable lands, become highly problematic. As a result, the fertility of arable land has decreased from year to year. In addition, deteriorating irrigation and drainage systems in many parts of the country have increased the area of waterlogged soils in the country; more than 10,000 ha out of about 90,000 ha, or about 8.4 % of the irrigated area, now require reclamation. The main causes of this degradation of irrigated lands are insufficient natural drainage, the absence or deterioration of drainage networks, large losses of irrigation water from filtration in irrigation canals, and irregular irrigation regimes, all of which results in increased groundwater levels and the development of secondary salinity processes.

In addition, the mismanagement and overuse of pastures, particularly those close to settlements, have become a major environmental problem. The resulting degradation of pastures, most of which are on sloping land, is seen in diminishing vegetative cover, displacement of grasses and legumes by weeds, and weakened root systems. Too often this results in increased denudation of land and erosion of soils, which in turn lead to more frequent and destructive runoff, landslides, mud flows and downstream flooding. The consequences of this degradation are often devastating for the populations in settlements in the valleys below. Since the pastures comprise the vast bulk of the surface area of each watershed, their effective management by the local populations and users associations is the key to watershed management in Kyrgyzstan.

The GoKR does not currently have a <u>national agricultural development strategy</u> (one will be developed with support from FAO), but its current agricultural policies and programmes are appropriately aimed at protecting soils (see national soil conservation programme mentioned above), managing pasturelands and water resources, and supporting the country's NAP commitments under the UNCCD. The GoKR recognizes that much remains to be done in the agricultural sector, particularly in overcoming the major constraints the sector faces. These include: (i) limited interagency coordination, (ii) GoKR's lack of clarity in the delegation of responsibilities at various levels, (iii) inadequate capacity for resource management of GoKR agency staff and (iv) limited extension services.

Baseline agricultural project: In order to address the threats to agricultural lands described above, the GoKR has undertaken a number of land management and soil conservation activities through the Ministry of Agriculture (MoA). These activities are implemented within the framework of the relevant national legislation, including the Land Code (1999) and laws on Land Reform (1996), Farming (1999), etc. The MoA is also continuing to implement activities under the Agrarian Policy Concept of the Kyrgyz Republic to 2010 (2004), which recognizes that land degradation is a major threat to development of the agricultural sector and prescribes elaboration of a strategy for rehabilitation and maintenance of soil fertility, as well as measures for protection of water resources (including legal and institutional reform, rehabilitation of irrigation systems, etc.). The MoA will also initiate a new Soil Fertility

Conservation Programme 2012-2015, which will involve activities for (i) increasing and conserving soil fertility, (ii) promoting compliance with the norms under Kyrgyz legislation which regulate issues on rational use and conservation of soil fertility and (iii) building capacity at all levels for implementing these measures. Again, the proposed GEF project will reinforce the Agrarian Policy Concept and Soil Fertility Conservation Programme by introducing innovative practices for rehabilitation and sustainable management of agricultural lands, such as conservation agriculture; raising awareness and capacities in the MoA on the global climate change benefits in calculating/monitoring carbon sequestration and reduction in GHGs from sustainable land and pasture management, and strengthening coordination and capacities among the local resource users associations (pasture, water, forest) in the management of agricultural areas. In addition, these GoKR-financed baseline activities are supported by the following donor-funded projects:

- With the support of an FAO project on "Preparation of National Agriculture Development Strategy" (GCP/KYR/008/TUR, 2013-2014), the MoA will undertake formulation of a National Agricultural Development Strategy, which will present the GoKR's vision for agricultural development in the country, define the GoKR's role in promoting agricultural development, and identify seven priority areas for action, among which are sustainable land and water management.
- The On-Farm Water Management Project SEP (from the Kyrgyz words for "Efficient Use of Water" Suunu Effectivduu Paidalanuu) of Helvetas is a capacity building project for efficient water management in agriculture, targeted at farmers and extension workers. The project uses a demand-driven approach and collaborates with agricultural service providers and Water Users Associations in the South of Kyrgyzstan (Batken, Osh, Jalalabad oblasts).
- GEF/UNDP Multi-Country Capacity Building Project as part of the Central Asian Countries Initiative on Land Management (CACILM) is aimed at building system, institutional and individual capacity at local, national and regional levels for sustainable land and natural resource management needed to respond to country barriers for achievement of an adequate political environment, effective resource mobilization to combat land and natural resources degradation and improved interaction between state agencies and land users through human resource development and strengthening of dissemination and replication of best practices in collaborative SLM (will end at 2012, GEF 3 project). With the assistance of the donor community, the MoA will implement projects developed under its National Action Plan, included in the Central Asian Countries Initiative for Land Management (CACILM), which provides for better coordination of activities in combating land degradation and sustainable management of land and water resources on a programmatic basis.

<u>Barriers to achieving SL&FM</u>: The GoKR's baseline projects fall short of achieving sustainable land and forest management and deriving the benefits for building resilience to climate change in these ecosystems due to the following fundamental barriers:

Inadequate legal, regulatory and institutional framework that does not support sustainable forest and agricultural land management. While the Kyrgyz Republic has its basic legal framework for forest and land management in place, there are significant inadequacies in the current legal and regulatory system that need to be addressed in order to promote sustainable management of these forest and land resources. For example, the Forest Code does not reflect all the aspects of the new national forest policy. Therefore, the actual legislation does not fully follow all the needs of changing conditions and is not fully translated into a coherent set of normative legal acts, rules and practical regulations which could serve as a basis for concrete application. The National Forest Programme defines objectives and activities with little consideration of the realities and potentials on the ground, because bottom-up planning procedures were not correctly applied. Due to economic instability, the human pressure on the forests has increased and the link between foresters and local population is very poor, occasionally leading to conflict situations. The relations of foresters with local authorities and local populations have not yet reached a constructive level. Finally, the coordination of forestry sector collaboration with other related ministries and agencies, particularly at the local level, is not effective. There remain no institutional mechanisms for ensuring effective coordination.

With respect to agricultural land management, the MoA recognizes that there are no provisions in the <u>Land Code</u> providing incentives to promote sustainable land management practices on agricultural lands, nor is there authority in the <u>Land Law</u> to require landowners to bring abandoned agricultural lands back into production. Furthermore, under the current institutional framework, there are no mechanisms to ensure collaboration between the MoA and the various agricultural research institutes at the national level, much less effective communication between the national institutions and the local authorities and civil society organizations charged with resource management (e.g. pasture user associations, water user associations). Finally, with respect to soil conservation, the legal framework does not include any laws or regulations on soils.

Traditional approaches employed in SL&FM that do not reflect the latest advances and tools for enhancing resource management. The SAEFP's new National Forest Program (NFP) 2011-2015 continues the GoKR's traditional approaches to forest management (i.e. without the benefit of LULUCF/REDD+ techniques or carbon monitoring and reporting). But, the NFP also presents the SAEPF with the opportunity to incorporate the latest international strategies and tools to enhance its approaches to restoring and managing the country's forests. The NFP has set ambitious targets for reaching 6 % forest cover by 2025-2030 and 8 % cover by 2100. This would involve an

expansion of forested areas by 289,000 and 664,000 ha, respectively. But, the SAEPF has yet to develop an effective strategy to realize these significant expansions of forest cover and maximize the climate change benefits or to employ basic carbon monitoring as a tool for determining the climate change impacts of its forest management activities. For this reason, the proposed GEF project, in **Component 2** on enhancing carbon stocks in dryland forests, will reinforce the NFP by developing and operationalising a national strategy reflecting LULUCF and REDD+ approaches and practices for both forest rehabilitation and sustainable forest management and by establishing a carbon monitoring system for calculating/monitoring carbon sequestration and reduction in GHGs from forest rehabilitation and sustainable management. EX-ACT developed by FAO (<a href="https://www.fao.org/tc/exact/">www.fao.org/tc/exact/</a>) will be the main tool that will allow the integration of all land use changes for the monitoring of carbon stocks.

Limited capacity among national and local GoKR staff and civil society stakeholders that prevents them from implementing innovative SL&FM practices on the ground. With the recent world economic and financial crises and the political instability in the Kyrgyz Republic, the SAEPF and MoA have been challenged to maintain their budgetary authority and institutional capacity to carry out their existing responsibilities for forest and agricultural land management under the Kyrgyz legal framework much less pioneer new and innovative practices and technologies for sustainable forest and land management. At the local level, the relevant civil society organizations that manage much of the country's pasture lands, water and forest resources (i.e. PUAs, WUAs and CFAs) continue to employ traditional approaches to land and forest management. Thus the current state of affairs offers little chance that the existing capacity in Kyrgyz institutions, both GoKR and civil society, will enable the country to achieve sustainable management of its forest and land resources. For this reason, the proposed GEF project, particularly the activities proposed in Component 1 on strengthening the enabling environment for SL&FM, is designed to address one of the critical barriers to achieving this goal.

The project activities will be piloted in the Chui, Issyk-Kul, Talas, Djalal-Abad and Naryn oblasts, which were selected by the GoKR according to the pilot site selection criteria developed for this purpose. The criteria used for the selection of project pilot areas are; (i) areas where interaction between forestry and agriculture, mainly pasture use, will be identified in accordance with the planned reforms of the forest management system, (ii) areas that sufficiently cover and represent the main forest types and agricultural regions - juniper, walnut-fruit, and spruce forests and riparian woodlands, (iii) the degree of land degradation associated with forest and agricultural land management, and (iv) areas where donors or possible co-financing partner activities are ongoing or planned to be implemented.

Pilot implementation will be demonstrated on SFF and surrounding arable lands (see table on SFF lands below). There are more than 300 thousand entities of nature management (forest, pasture, land, farmer entities); geographically these entities are divided into the 450 rural districts (aiyl okmotus). 126 pilot demo areas (plots) have been selected in the five oblasts, which means that 300 ayil okmotus will be involved in project activities. There are all types of lands within the aiyl okomotu area: forest lands, arable lands, pasture lands. Each pilot demo plot will cover all existing issues in an integrated and participatory way. Then the developed practice will be disseminated to two-three neighbouring aiyl okmotus, which is so-called the "crease marks" method. This method will be applied in all oblasts despite the distance from each other since they have peculiar characteristics. The project will scale-up forest management system reform including re-classification and distribution of SFF lands into other areas.

		State Forest Fund (SFF) ('000 ha)						Agricult	
№	Oblasts	.Total SFF	Forest lands	Non-forest lands		,	ural		
312	Oblasts	area		Total area	Arable lands	Hayfields	Pastures	Other non- forest lands	lands (arable)
1	Chui	. 59,3	20,0	39,3	0,8	0,2	17,8	20,5	226
2	Issyk-kul	348,2	123,6	224,6	24,2	13,0	134,9	52,3	200
3	Talas	115,4	34,9	80,5	0,3	0,2	58,6	21,4	150
4	Djalal- Abad	732,2	368,5	363,7	5,3	30,5	208,7	119,2	120
5	Naryn	414,1	114,2	299,8	1,7	1,1	191,1	105,9	80
	Total:	1669,2	661,2	1007,9	32,3	45,0	611,1	319,3	776

State Forest Fund lands and arable lands in 5 pilot oblasts

# B. 2. INCREMENTAL REASONING: DESCRIBE THE INCREMENTAL ACTIVITIES REQUESTED FOR GEF FINANCING AND THE ASSOCIATED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED BY THE PROJECT:

The GEF-funded alternative will address barriers to sustainable forest and land management in the mountainous silvo-agro-pastoral ecosystems in the Kyrgyz Republic by securing the flow of multiple ecosystem services. In doing so, it will influence production practices employed by the forestry and agriculture sectors (including pastures) and will support measures to mitigate CC, such as improving management natural forests, rehabilitating degraded lands and promoting

conservation agriculture. This will halt land degradation through improved management of forest, arable and pasture lands in state forest fund lands and surrounding areas, avoid the emissions caused by such land and forest degradation, and increase carbon sequestration through enhanced biomass production (e.g. introduction of agro-forestry and agro-silvo-pastoral systems). The project will also strengthen human and institutional capacities and create an enabling environment among sectors (environment, forestry, agriculture, pasture, and water) for transforming unsustainable land practices that cause degradation to sustainable forest and land management in accordance with SLM, LULUCF and REDD guidance. Innovations and incentives through participatory monitoring, community driven approaches, knowledge management on SLM and PES schemes will be designed and piloted for mobilizing this change in paradigm. Through SFM challenge account funding the project will help to establish a sound policy environment to recognize the value of forest ecosystem functions, to enhance carbon sequestration and reduce GHG emissions from deforestation and forest degradation and land degradation in arable and pasture lands.

The global environmental benefits expected to be achieved with the incremental GEF support are shown in the following table.

Forests/forest lands: Illegal logging for fuel wood, building grazing in forests, agricultural intrusion Sustainable forest management practices
Forest exclusion zones
Reducing wood collecting pressures
Limits on grazing in forest
Restoration of degraded community forests
Reducing wood demands from natural forest
through fast growing plantations
Improving local livelihood through multipurpose afforestations

20,000 ha forestland under improved multifunctional forest management avoiding emissions from forest degradation of 216,640 t CO2 eq/year Increase in forest cover (to be determined) Tree density increased (tbd) 10,000 ha forest land rehabilitated/planted contribute to sequestration of approximately 65,531 tCO2 eq carbon Calculation:

 $G_{TOTAL} = 10,000 \text{ ha x 3 (t dm/ha) x}$  (1+0,24) (above and below ground) = 3,72 (d.m.)

 $\Delta_{CG} = 10,000 \times 3,73 \times 0,48 = 17,856$  tC/year x 3.67 (conversion factor) = 65,531 tCO2eq/year

Less damages from floods and land slides

Agricultural lands: Inappropriate farming practices resulting in soil disturbance/ erosion, loss of vegetative cover, no crop rotation, release of GHGs

Conservation agriculture on production lands (reduced tillage, crop residue management, vegetative cover, crop rotation)
Rehabilitation of degraded lands (salinity, waterlogging)
Restoration of abandoned lands to production Introduction of bio-fertilizers into degraded areas and introduction of live cycle management for organic agriculture
Integrated land rehabilitation for increasing soil fertility in climate change conditions
Modern water-saving irrigation systems to reduce waterlogging and soil salinity
Small-holder composting techniques to improve

Improved agricultural land management:

-Improved management of 5.000 ha arable land and rehabilitation of 10,000 ha degraded agricultural land contribute to carbon storage of between 16,500 to 24,000 t CO2 eq/year (15,000 ha in agricultural land) Decrease in soil erosion (baseline will be determined in preparation stage)

Improved water quality
Improved SLM and agree

Pasture lands:
Overgrazing on
nearby pastures
resulting in
degradation of
vegetative cover,
increased erosion, etc.

Improved pasture management:
Reduced and/or rotational grazing to reduce pressure on vegetative cover
Rehabilitation of pastures with improved vegetative cover
Production of fodder to reduce pressure on pastures
Soil conservation measures - improvement of soil fertility, water accumulation/preservation,

windbreaks, buffer strips to reduce erosion

soil fertility

Improved SLM and agro-silvo-pastoral practices and restoration on 25,000 hectare (5,000 agro-forestry + 20,000 ha pasture restoration) non-forest SFF lands contribute to carbon storage of 142,765 t CO2 eq/year Calculation: 5,000 ha agro-forestry plantation:

32,765 tCO2eq/year (taken as half of the above calculation)

20,000 ha pasture restoration:

20,000 ha x 5.5 tCO2 eq/year (based on international best estimates) = 110,000 tCO2 eq/year

		TOTAL: 142,765 tCO2 eq/year
l	1	'

The project is organized in three components:

Component 1: Enabling environment for sustainable forest and land management strengthened (SFM/SLM). This component will develop and improve a set of forestry and land policy and legislation for SFM and SLM specifically SFM and SLM guidelines and standards and draft soil law/policy. It will also develop capacity of institutions and human resources in the range of government institutions for multidisciplinary interventions for SFM and SLM and climate change mitigation through the preparing and dissemination of a training and awareness tool kit on SFM/SLM and LULUCF roles in C sequestration and GHG balance and REDD+ and for carbon monitoring and accounting under various land uses/ management practices. Training will also be provided in assessment of SLM practices in the range of land use systems (forest, pasture, rangeland and rainfed and irrigated cropland) including costs and benefits at local and wider landscape levels in terms of the range of ecosystem services. Besides awareness raising and training on these various opportunities, this will also contribute to strengthened capacities for integrating SFM/SLM practices and principles into national and local level land use plans.

And so forth

Component 2: Innovative management and rehabilitation practices to enhance carbon stocks in dryland forest demonstrated. The proposed GEF project will reinforce the National Forest Program activities by introducing innovative practices for both forest rehabilitation and sustainable forest management, raising awareness and capacities in the SAEPF on the global climate change benefits in calculating/monitoring carbon sequestration and reduction in GHGs from forest rehabilitation and sustainable management, and strengthening coordination and capacities among the local resource users associations (forest, pasture, water) in the management of forest areas. This component will support the development and operationalization of National LULUCF and REDD+ Strategy and Action Plan, national climate change mitigation standards in the LULUCF sectors for integrating carbon sequestration into forestry, agriculture and pasture land uses and practices and decision-making. A carbon monitoring system will be established for forests and various dryland land use systems on the basis of the FAO EX-ACT tool and field sampling of forest and other dryland usesystems. REDD+activities will be piloted on 8,000 ha of forest land focusing on enhancing the carbon storage potential of forests and increasing the multiple functions forests provide. In order to respond to acute wood demand and reduce the pressures on natural forests, plantations with natural fast-growing trees by local people will be supported on 2,000 ha, which will reduce the emissions from deforestation. The project will also introduce energy efficient house insulation technologies multiporpuse stoves and small solar devices for cooking.

Component 3: Promoting and demonstrating climate-friendly agriculture, including pastures as part of SLM/WM in drylands. The proposed GEF project will reinforce the Agrarian Policy Concept and Soil Fertility Conservation Programme by introducing innovative practices for rehabilitation and sustainable management of agricultural lands, such as conservation agriculture; raising awareness and capacities in the MoA on the global climate change benefits in calculating/monitoring carbon sequestration and reduction in GHGs from sustainable land and pasture management, and strengthening coordination and capacities among the local resource users associations (pasture, water, forest) in the management of agricultural areas. This component will contribute to achieving multiple global environmental benefits through (i) improved agricultural management in dry lands by demonstrating and adopting agricultural and agro-forestry practices, such as conservation agriculture, in order to reduce GHG emissions and increase vegetative covers; and (ii) rehabilitation of degraded agricultural lands, including pastures and transitional zones, using innovative technologies/practices and introduction of soil, water and crop management practices in drylands to increase soil organic carbon concentration and carbon sequestration. The component will also increase the resilience of agro-ecosystems to climate change, contribute to sustainable rural development and food security, increase sanitation, and improve water quality.

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) OR ADAPTATION BENEFITS (LDCF/SCCF).

The rural population, women and youth in particular, lack employment opportunities, and overall unemployment and underemployment are raising in the country. Unsustainable management of forest and land resources is also significantly exacerbating the situation. This process is resulting in increased internal and external labor migration. About 1 million workers, mainly men, are leaving their homes for permanent and seasonal work leaving behind women, children, old and disabled people to tackle the daily works, including agriculture and forestry matters, including cropping, supply of fuelwood for heating and cooking, collecting non-wood forest products, etc. For many households, energy needs for heating and cooking are primarily met from biomass sources, which have resulted not only in deforestation but also economic costs, such as time, labor and health costs for the main resource users. The proposed project will have

immediate socio-economic benefits to and impact on the well-being of vulnerable local people, particularly women, in project areas. The project will tackle the gender issue by promoting SFM/SLM based resource user associations (forest, crop, land, water) in the project areas and respective national and local resource management institutions.

Without any action, the potential social and economic impact of existing unsustainable forest and land management practices could be profoundly negative as further environmental degradation and declines in land productivity would reduce livelihood options and increase vulnerability to short-term economic, social and environmental problems, such as ethnic tensions, malnourishment, water scarcity, and vulnerability to climate change (frequent droughts, flooding). By improving the provision of goods and services of agro-ecosystem and forest ecosystems, the project will have significant implications for food production, rural development, productivity of sustainable economic activities, such as forest products, and economic-costs of addressing environment-related natural disasters, such as landslides and flooding.

# B.4 INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND IF POSSIBLE, PROPOSE MITIGATION MEASURES THAT WILL BE FURTHER DEVELOPED DURING THE PROJECT DESIGN:

Risk type	Risk level	Mitigation measure
Institutional	Medium	National institutions capacity and technical expertise in SFM/SLM are weak. Two
framework		executing ministries have limited organizational, technical and financial resources, and
and project		qualified personnel. To mitigate this risk, the project will support the institutional
coordination	7	framework and technical capacity development at national and local levels and establish
		steering committee and project implementation unit in order to improve coordination and
	,	collaboration between central organizations and local organization.
Slow Uptake	Medium	As it is the case in several developing countries, policy uptake of recommendations is
of Policy	•	slow as a result several factors including lack of financial capacity to follow policy
Recommenda		advice, short term expectations and political priorities etc. The project will eliminate the
tions		risk through; (i) demonstration of new approaches, technologies and practices at the field,
		(ii) training of relevant staff and stakeholders on sustainability measures, and (iii)
		awareness creating activities in support of relevant policy reforms directed at both key
		decision makers as well as the public at large and may include site visits.
Climatic	Medium	The territory of the Kyrgyz Republic as a high-mountainous landscape is exposed to
change		dangerous processes such as landslips, landslides, rockfalls, mud-flows, high water,
		impounding (of subsoil waters outcrop), and other hazards. The damage caused by these
		emergency situations is rather great. According to Kyrgyzstan's Second National
		Communication on Climate Change (2009), climate change will worsen the situation with
		additional social, economic and environmental costs. The activities envisaged under this
		project would not only contribute to mitigating and adapting for these natural disasters,
		land degradation and increased GHG emission risks but also increase the resilience of
		agro-ecosystems to climate change. The project will support the mainstreaming of
		disaster risk reduction strategies into the national forestry program (which is currently
		being done by FAO in other regions) and other relevant strategies as well as provide
		support for a multi sector national platform for disaster risk assessment and reduction.
·		
Wood deficit	Medium	The existing situation in the country is forcing rural communities to rely on firewood and
coupled with		other local fuel sources for heating and cooking. In addition to reflecting material
energy crisis		hardships, reliance on wood fuels exacerbates problems of deforestation and land
especially in		degradation, and causes indoor air pollution as well as greenhouse gas emissions. In order
winter season		to mitigate negative effects of the wood deficit on forest and tree resources, the project
		will introduce a combination of alternatives to ensure synergetic effects for mitigating
		wood deficit in the short, medium and long term. The approach will be twofold: (i)
	ډ	reduce fuelwood demands in rural areas through introduction of alternatives such
		multipurpose stoves, home-based solar heating and practical insulation measures in the
		short term, and (ii) increase the supply of wood in a sustainable way through introduction
-		of agro-forestry, agro-silvo-pastoral systems, and plantations with fast growing native
		trees on degraded forest areas and agricultural lands and improve the management of
		rehabilitation and management of forest resources in the mid and long terms.

# B.5. IDENTIFY KEY STAKEHOLDERS INVOLVED IN THE PROJECT INCLUDING THE PRIVATE SECTOR, NGOS, CIVIL SOCIETY ORGANIZATIONS, AND THEIR RESPECTIVE ROLES, AS APPLICABLE:

STAKEHOLDER RELEVANT ROLES	

The State Agency on Environment	Government institution and implementing partner responsible for				
Protection and Forestry (SAEPF)	coordination of the state programs on forest management.				
Ministry of Agriculture (MA)	Government institution and implementing partner responsible for				
1	coordination of the state programs on agriculture and land management.				
Oblast Executive Authorities	An oblast is the sub-national political entity in Kyrgyzstan. SAEPF and				
`	MA have separate divisions under the each oblast representing their				
	ministries at local level.				
Resource user organizations (forest water,	Key users and beneficiaries of the management and utilization of local				
pasture etc), village administrations,	forest and land resources that include both men and women involved				
farmers, local communities	living in this area.				

For the last 10 years, Kyrgyzstan has been decentralizing and devolving its management authority over natural resources. Local Self Governance (village administrations) has been empowered in their governance tasks. Several resource user associations have been established at the local level and have been delegated natural resources management tasks, such as water user associations, pasture user associations, forest user association, or achieved long-term user rights over large territories, like the hunters association. Other resource user associations serve as support and lobbying organizations of individual users, like the association of bee keepers, tourism organizations, collection and processing companies of medicinal herbs, but at the same time they are proactively participating in decision-making processes on wider resource use planning.

The use of forest, fish and hunting resources is still partly fulfilled by state organizations. The latter are now being handed over to the private sector. The delegation of forest management to forest user associations and forest tenants (forest communities) is clearly envisaged by the government recognizing the fact that collective or community based resource use proves its applicability and efficiency in order to conserve resources on a wider landscape due to the fact that individual tenants tend to manage their own plots quite sustainably, and areas not allocated to any user become more intensively exploited.

In areas where the local population is living historically inside the forests, the reform of the forest management system foresees handing over the mandate for management and production to the local communities. Usually councils are formed which elect then the executive body, with certain decisions made by the council only. At the moment the establishment of production cooperatives on the local level is also discussed in areas where the local population is living farther away from the forest resources. Introduced in 2001, the JFM approach (decree 377) has lead to the establishment of boards at the local level with representatives from the community, the forest agency and women; these boards are authorized to jointly decide on allocation of forest plots to tenants and extension of contracts. Such mechanisms and instruments will be further developed and replicated during project implementation.

Taking into account the above stakeholder structure and for the coordination of activities of the two main executing agencies (SAEPF and MoA) and several donors, a <u>project steering committee</u> will be established at the national level under the overall coordination and secretariat of SAEPF, which will include representatives of SAEPF, MoA, donors (IFAD, GIZ, TIKA, UNDP, etc.), relevant national NGOs, and universities. CACILM with its governance structures national secretariats – to be revitalized in the first half of 2012 may serve as coordinating structure of donor activities. But at this stage, it is not clear.

The project will be implemented through national and local level Project Implementation Units. At the national level the unit will consist of SAEPF and MoA staff under the overall coordination of SAEPF. SAEPF will be responsible for the implementation of component 2 and MoA for component 3, while component 1 will be jointly implemented. At each oblast level, a project implementation unit will be established, which will include the representatives of local staff of relevant GoKR agencies, local farmer organisations and NGOs, as mentioned above. The SAEPF and MoA will work closely with a wide range of stakeholders, including resource user associations, private farmers, the private sector, universities, research institutions, civil society organizations, etc. at the national and oblast levels.

#### **B.6. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:**

The proposed GEF project will be implemented in coordination with a number of FAO ongoing or pipelined projects in Kyrgyzstan: (i) the ongoing National Forestry Program Facility (2004-2012) on the improvement of national forestry policy and development and implementation of National Forestry Program, (ii) the ongoing FAO on "Preparation of a National Agriculture Development Strategy (GCP/KYR/008/TUR, 2013-2014), and (iii) the pipelined FAO GCP project on "Development of Service-oriented Management to Improve the Performance of Irrigation Sector of the Kyrgyz Republic (2013-2015)", which are all consistent with and complementary to the project objectives and outputs.

The proposed project falls under and is in conformity with the aims and priorities of the GEF regional SLM Initiative, the "Central Asian Countries Initiative for Land Management" (CACILM). Experiences and lessons learned will be actively incorporated from existing CACILM projects and activities, both in Kyrgyzstan and in the region. The project will be built on and help consolidate a number of ongoing initiatives by the government and donor community in this context.

The project will be coordinated the WOCAT initiative. The WOCAT share fair demonstrated several valuable baseline activities on efficient water resources management at field and watershed levels to manage scarce water resources by FAO, ICARDA and Helvetas and experiences on sustainable pasture management and innovations on energy efficiency by NCCR North South and CAMP Alatoo, as well as knowledge sharing by UCA's Mountain Societies Research Centre. The WOCAT management team comprising the Centre for development and environment of the University of Berne (WOCAT Secretariat host), FAO and ISRIC (International Soils Resources and Information Centre), was involved in the Share Fair and the Annual workshop and Steering committee meeting which took place immediately after in Naryn, North Kyrgyz Republic as well as GIZ and the Swiss Development Corporation. The share fair and workshop confirmed the need to strengthen networking among SLM specialists; to develop and use standardized tools and methods for SLM knowledge management and decision support at local and national levels and to enhance capacity of the range of actors in SLM—from land users, to extension, research, education and policy in assessing and identifying options for sustainable and productive land management to address the interlinked problems of land degradation, water scarcity, climate change impacts, poverty and food insecurity.

The project will be coordinate with IFAD project on the pasture development which is one of the LULUCF sector that IFAD will provide co-financing as a follow up of existing World Bank project.

The project will draw on the experiences and lessons learned by the GEF/UNDP SLM Medium Sized project on Demonstrating Sustainable Mountain Pasture Management in the Susamyr Valleyis being implemented by the Kyrgyz NGO CAMP-Alatoo on behalf of GTZ.

The project is aiming to train experts in participative and sustainable pasture management in the communities. The main target group is the newly founded local pasturing committees, but the staffs of local administrative bodies are also included. Once they have been successfully tested in practice, the grazing planning methods and management methods drawn up at local level are made available to the Kyrgyz ministry of agriculture for use in other regions.

The project will also draw on the experiences and lessons learned by the JICA project on Support for Joint Forest Management in the Kyrgyz Republic (2009-2014) which is being implemented in Leshozes and Ail-Okumotues by the State Agency for Environment Protection and Forestry (SAEPF) and National Agency for the Affairs of Local Self-Governance (NALSG).

In cooperation with the Turkish Ministry of Forestry and Water Affairs, TIKA will implement the project on "Support Plantation with Fast Growing Natural Forest Trees" during 2012-2016. The objective of the project is to contribute to protection of natural forests through encouraging private plantations with fast growing natural forest trees, which includes support to capacity development and training, home based nursery development and demonstrations on farm lands (wind breaks, agro-forestry trails and plantations for wood production). The Turkish project will contribute to component 2 of the proposed project.

### C. DESCRIBE YOUR AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

FAO has considerable experience and expertise and a proven comparative advantage in the sustainable forest and land management and climate change focal areas of the GEF. In the field of SLM, FAO (i) promotes sustainable forest management by placing technical expertise in forestry at the disposal of member countries through field projects, (ii) chairs the Collaborative Partnership on Forests (CPF) which brings together 14 major forestry-related international organisations, institutions and convention secretariats to support the implementation of SFM, (iii) through its Committee on Forestry and Regional Forestry Commissions, provides primary venue for countries, civil society and private sector to come together to address common global and regional issues related to forests and forestry, and (iv) implements the National Forestry Program (NFP), National Forest Monitoring and Assessment Program, Global Forest Resources Assessment (FRA), Forest Sector Outlook Study, Forests and Climate Change, and GEF projects such as rehabilitation of forests and degraded lands in Iran and sustainable forest management in Brazil. Regarding land degradation, sustainable land management and agriculture, FAO has gained a rich base of best practices and lessons learned from a diversity of ecosystems and contexts by implementing hundreds of projects and programs. FAO supports member countries on a wide range of complementary SLM technologies and approaches (such as conservation agriculture, integrated land and water management, local land planning, and farmer field schools) through providing training, information, communications, tools and equipment, and advisory services for institutional strengthening, policy reform and national programming.

FAO is the leading agency in gathering and disseminating data and information related to land degradation and SLM, which are built upon scientific knowledge, local experience and farmer innovation, which are available through FAO's web sites and information systems such as FAOSTAT, TERRASTAT, LRIS, and GTOS. FAO is also a leading partner in several international initiatives, such as the Land Degradation Assessment in Drylands (LADA), the World Overview of Conservation Approaches and Technologies (WOCAT), the Asia-Pacific Agro-forestry Network (APAN), and the Participatory Watershed Management in Asia Network (WATMANET). Regarding climate change mitigation, FAO also has proven experience in climate change mitigation in agriculture and forestry through carbon sequestration, substitution and conservation, assessing carbon stocks and modelling win-win scenarios of carbon sequestration through land use change, and capacity development in developing countries.

Finally, FAO's work on sustainable land and water management in the Kyrgyz Republic and the wider region includes projects for capacity development on the assessment and systematic development of modernization plans for irrigation schemes, including training on irrigation management transfer to improve performance and tools and methods to improve water productivity, and identification of priorities for investment on water saving technologies in watersheds and training in the development of national drought preparedness plans and projects. FAO has also piloted its tools and methods for assessing and mapping land use systems, land degradation and SLM (LADA-WOCAT) through training on national mapping and assessment with CACILM (Central Asia Countries Initiative on Land Management) and on local level assessment and analysis with the Palm Alai SLM project of UNU shared by Tajikistan and Kyrgyz Republic.

### C.1 INDICATE THE CO-FINANCING AMOUNT YOUR AGENCY IS BRINGING TO THE PROJECT:

FAO's comparative advantages lie in its technical staff capacity at headquarters, regional and sub-regional offices and in its project development and implementation experience, either through its technical cooperation program or trust funds. Accordingly, FAO will provide USD 900,000 in co-financing through implementing technical cooperation and trust fund projects in the field of forestry, agriculture and land and water management. In addition, FAO's in-kind contribution will be about USD 300,000, which will be the added value and technical expertise provided FAO by technical staff working in the field of forestry, agriculture, land and water management.

# C.2 HOW DOES THE PROJECT FIT INTO YOUR OWN AGENCY'S PROGRAM (REFLECTED IN DOCUMENTS SUCH AS UNDAF, CAS, ETC.) AND YOUR STAFF CAPACITY IN THE COUNTRY TO FOLLOW UP PROJECT IMPLEMENTATION:

In the preparation of UNDAF (2012-2016), sustainable management of natural resources has been recognised as a priority area for UN support to the Government. The proposed project is consistent with the UNDAF and specifically contributes to the achievement of Outcome 2: (i) integration of the ecosystem approach into national and local development strategies, (ii) efficient use of water resources for the agriculture sector, and (iii) increase the agriculture and forestry production. FAO is drafting a Country Priority Framework (CPF) for Kyrgyzstan, in order to optimize the impact of FAO's support in the country. The CPF is being designed consistent with UNDAF and the national priorities including those in the forestry, agriculture and land and water sectors. At the global level, FAO indentified "sustainable management of land, water and genetic resources and improved responses to global environmental challenging affecting food and agriculture" as one of the eight pillars of its 2010-2019 Strategic Framework.

FAO will implement the project through its technical and operational staff in the country and Sub-regional Office for Central Asia (in Ankara, Turkey), with strong support from the Regional Office for Europe and headquarters staff. FAO will support the implementation of the project with its own technical staff working under forestry, crop, and land and water management departments,..

# PART III: 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 country endorsement letter(s) or regional endorsement letter(s) with this template).

NAME	Position	MINISTRY	DATE (Month, day, year)
Baianbek Kadyrov	Director	STATE AGENCY OF ENVIRONMENT PROTECTION AND FORESTRY	NOVEMBER 30, 2011
	-		

### B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
-Charles Riemenschneider- Director, Investment Centre Division Technical Cooperation Department FAO	D. Paswaut	April-10, 2012	-Ekrem Yazici	+90-312 3079518	_Ekrem.Yazici_ @fao.org
Barbara Cooney GEF Coordinator Email: Barbara Cooney@fao.org Tel: +3906 5705 5478					

for

