



**FAO/GLOBAL ENVIRONMENT FACILITY  
PROJECT DOCUMENT**



<b>PROJECT TITLE: Sustainable management of mountainous forest and land resources under climate change conditions</b>	
<b>PROJECT SYMBOL: GCP/KYR/010/GFF</b>	
<b>Recipient Country: Kyrgyzstan</b>	
<b>Resource Partner: GEF</b>	
<b>FAO Project Entity No 615696</b>	<b>GEF/LDCF/SCCF Project ID: 4761</b>
<b>Executing Partner(s): State Agency for Environment and Forest Protection (SAEPF), Ministry of Agriculture and Melioration (MoA)</b>	
<b>Expected EOD (starting date): 1 February 2014</b>	
<b>Expected NTE (End date): 31 January 2018</b>	
<b>Contribution to FAO's Strategic Framework</b>	<p><b>a. Strategic Objectives/SO2:</b> Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner</p> <p><b>b. Regional Result/Priority Area:</b> Sustainable management of natural resources</p> <p><b>c. Country Programming Framework Outcome:</b>  <u>Priority area 3.2</u> Management of natural resources in the rural sector  <u>Priority area 3.1</u> Policies and activities to enhance growth of smallholder agriculture allowing for growth in rural incomes and poverty alleviation</p>
<b>GEF Focal Area/LDCF/SCCF: Land Degradation, Climate Change, Sustainable Forest Management</b>	
<b>GEF/LDCF/SCCF Strategic Objectives:</b>	
CCM-5: Promote conservation enhancement of carbon stocks through sustainable management of land use, land-use change, and forestry	
LD-1: Maintain or improve a sustainable flow of agro-ecosystem services to sustaining the livelihoods of local communities	
LD-2: Generate sustainable flows of forest ecosystem services in arid, semi-arid, and subhumid zones, including sustaining livelihoods of forest-dependent people	
SFM/REDD-1: Reduce pressures on forest resources and generate sustainable flows of forest ecosystem services.	
<b>Environmental Impact Assessment Category (insert <math>\checkmark</math>): A B <math>\checkmark</math> C</b>	
<b>Financing Plan: GEF/ allocation:</b>	<b>USD 5 454 545</b>
<u>Co-financing:</u>	
National contribution	USD 6 500 000
FAO	USD 2 400 000
Mountain Partnership	USD 1 716 850
IFAD (through Ministry of Agriculture)	USD 5 000 000
GIZ	USD 1 700 000
Local Resource Users	USD 1 183 300
WFP	USD 500 000

Subtotal Co-financing:	<b>USD 19 000 150</b>
<b>Total Budget:</b>	<b>USD 24 454 695</b>

## **EXECUTIVE SUMMARY**

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, unsustainable 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 sloping land. The mountain zones, especially in the southern regions, are more vulnerable and less resilient with regard to excessive anthropogenic pressures in comparison to lands in the plains. The lack of timber imports into the country, 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. 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 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. 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 as well as climate change.

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 of 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. 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, fallow periods 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; 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. Institutional capacities need to be urgently addressed. It is obvious that climate change poses a threat to agricultural activities as well.

The GoKR's baseline projects fall short of achieving sustainable forest and land management and deriving the benefits for building resilience to climate change in Kyrgyz mountain ecosystems due to the following fundamental and interlinked barriers :

- Inadequate legal framework for sustainable forest and land management
- Inadequate land tenure reforms
- Outdated approaches to sustainable forest and land management
- Limited Capacity of local institutions

The Project strategy is to bring about a shift in forest and land management practices in mountainous areas, by removing the above barriers to sustainable forest and land management (SFM/SLM). It aims to move towards a more integrated cross-sectoral approach that takes into account the role of land and forest resources in the carbon balance, while generating multiple global environmental and socio-economic benefits by sustaining flows of critical ecosystem services, such as climate and water regulation, soil erosion control and regulation of natural hazards. The project will promote new approaches and practices in sustainable forest management (SFM) and sustainable land management (SLM) that will also increase the productivity of healthy forest and agro-ecosystems leading to improved livelihoods of mountain people, including rural women and other disadvantage groups largely depending on agriculture based incomes.

In line with the GEF-5 Land Degradation and SFM/REDD+ strategies, the goal of the Project is an enhanced enabling environment in the forestry and agricultural sectors and sustained flow of ecosystem services, including enhancement of carbon stocks in forests and agro-ecosystems. The Project specific objective is to contribute to the sustainable management and improved productivity of mountainous silvo-agro-pastoral ecosystems and improved mountain livelihoods in the Kyrgyz Republic, which will be delivered through three project components on:

- (i) Strengthening of the enabling environment for sustainable forest and land management
- (ii) Enhancing carbon stocks in dryland mountain forests

- (iii) Promoting and demonstrating climate resilient agriculture
- (iv) Knowledge management, monitoring and evaluation

Cross-sectoral collaboration and integration between the forestry and agricultural sector will be supported at national, provincial and local levels through establishment of cross-sectoral mechanisms that will facilitate integrated land-use planning to up-scale innovative SFM and SLM practices that bring multiple benefits. This will be underpinned by the introduction of economic instruments and incentives to forest and land users to engage in SFM and SLM. The project will be led by the State Agency for Environment Protection and Forestry (SAEPF), in close collaboration with the Ministry of Agriculture and Melioration (MoA).

Key global environmental benefits to be generated by the Project include increase in land under SFM and SLM, which is expected to reach of 98,412 ha by the end of the project, and also lead to improvement in vegetative cover and increase in land productivity of around 18% over baseline, benefitting a total of 25,000 people, especially women and children of labour migrants. In addition, the Project will also generates substantial carbon benefits, leading to avoidance of emissions and total carbon sequestration of around 243,258 tCO<sub>2</sub> eq/year amounting to a total of 973,032 tCO<sub>2</sub> eq over four years, with lifetime indirect carbon benefits of 4.8 million tCO<sub>2</sub> eq on 1.3 million ha of forest land and forest pastures, and 3 million tCO<sub>2</sub> eq on 776,000 ha of agricultural land.

Total project financing amounts to USD24,454,695 of which GEF funds USD5,454,545 or 22% of total project cost. Co-financing is provided in cash and in kind from the Government of Kyrgyzstan, FAO, GIZ, WFP, the Mountain Partnership and local land users that are participating in the project.

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## LIST OF ACRONYMS

AFOLU	Agriculture, Forestry and Other Land Use
APAN	Asia-Pacific Agroforestry Network
AWP/B	Annual Work Plan and Budget
BH	Budget Holder
CACILM	Central Asian Countries Initiative on Land Management
CAREC	Central Asia Regional Environmental Centre
CEO	Chief Executing Officer (GEF)
CFA	Community Forest Association
CFM	Community-based Forest Management
CPF	Collaborative Partnership on Forests
CPF	Country Programming Framework
DEX	Direct Execution
EP	Executing Partner
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FAOSTAT	FAO Statistics Portal on Food and Agriculture
FFS	Farmer Field School
FLEG	Five-Year National Action Plan on Strengthening of Law Enforcement and Management of the Forestry Sector
FPMIS	Field Project Management Information System
FRA	Forest Resources Assessment
GDP	Gross Domestic Product
GEBs	Global Environmental Benefits
GEF	Global Environment Facility
GEFSEC	GEF Secretariat
GHG	Greenhouse Gas
GIS	Geographic Information System
GIZ	German Development Cooperation
GoKR	Government of Kyrgyzstan
GTOS	Global Terrestrial Observing System
ICARDA	International Centre for Agricultural Research in Dry Areas
IEG	Independent Expert Group
IFAD	International Fund for Agricultural Development
ISRIC	International Soils Resources and Information Centre
IPCC	International Panel on Climate Change
JFM	Joint Forest Management
JICA	Japan International Cooperation Agency
KOICA	Korean International Cooperation Agency
LADA	Land Degradation Assessment in Drylands
LRIS	Land Registration and Information Service
LTO	Lead Technical Officer
LTU	Lead Technical Unit
LULUCF	Land Use, Land-Use Change and Forestry
MoA	Ministry of Agriculture and Melioration
M&E	Monitoring and Evaluation

MP	Mountain Partnership
MPS	Mountain Partnership Secretariat
NALSG	National Agency for the Affairs of Local Self-Governance
NAMA	National Appropriate Mitigation Action
NAP	National Action Plan to Combat Desertification
NCCC	National Communication on Climate Change
NEX	National Execution
NFI	National Forest Inventory
NFMS	National Forest Monitoring System
NFP	National Forestry Program
NGO	Non-Governmental Organization
NPIU	National Project Implementation Unit
NSC	National Stakeholder Committee
NTFPs	Non-Timber Forest Products
PES	Payment for Ecosystem Services
PIF	Project Identification Form (GEF)
PIR	Project Implementation Review
PPG	Project Preparation Grant (GEF)
PPP	Public-Private Partnership
PPR	Project Progress Report
PRODOC	Project Document
PSC	Project Steering Committee
PUA	Pasture User Association
PY	Project Year
REDD+	Reducing Emissions from Deforestation and Forest Degradation and Conservation and Sustainable Management of Forests and the Enhancement of Forest Carbon Stocks
SAEPF	State Agency for Environment Protection and Forestry
SFF	State Forest Fund
SFM	Sustainable Forest Management
SLM	Sustainable Land Management
STAP	Scientific and Technical Advisory Panel
TCI	Investment Centre Division (FAO)
TERRASTAT	FAO Statistic Data Base on Soil and Land Resources
TIKA	Turkish Cooperation and Coordination Agency
TOR	Terms of Reference
UCA	University of Central Asia
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Framework
UNFCCC	United Nations Framework Convention on Climate Change
UNU	United Nations University
USD	United States Dollar
WATMANET	Participatory Watershed Management in Asia Network
WFP	World Food Programme
WM	Water Management
WOCAT	World Overview of Conservation Approaches and Technologies
WUA	Water User Association

## SECTION 1 – RELEVANCE (strategic fit and results orientation)

### 1.1 GENERAL CONTEXT

#### a) General development context related to the project

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.

Figure 1. Map of Kyrgyz Republic.



Source:

The forest cover in the Kyrgyz Republic was estimated at 954,000 ha in 2011, 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 precious natural resources, exercising environmental, ecological, sanitary, curative and other protective functions. As of January

2003, the SFF amounted 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 generate multiple ecosystem services and 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 the Kyrgyz mountains. High altitude areas as well as areas with limited rainfall due to topography and location are dominated by natural grasslands and pastures. Native pasture management is hence the primary land use (9.2 million ha, 87.3% of the agricultural land, or 44% of total land) in Kyrgyzstan; with only 6.8% of total land or 11.6% of the agricultural land used for crop cultivation. Sustainable management of agricultural land is also essential for maintaining regulating ecosystem services important to the entire region, such as carbon storage above and below ground, and water and sediment retention.

*b) Global Environmental Benefits (GEB) status, threats and causes*

The Kyrgyz forests face severe degradation due to overharvesting for use as fuel wood (mainly managed by women) 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, unsustainable 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 sloping land. The mountain zones, especially in the southern regions, are more vulnerable and less resilient 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, 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 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). According to the National Statistics Committee of KR, 30 percent of women are employed in agriculture. In 2012 the level of economic activity of rural women amounted to 53 percent, while employment rate in economy was 48 percent. Today, rural women of Kyrgyzstan are actively involved in agrarian sector: cattle breeding, plant growing, processing of fruit and vegetables, and other subsistence production. On average, 16 percent of farm households are run by women, but it reaches 25 percent in the Chui region. However, this rate is much higher in practice due to seasonal outmigration, especially in rural areas. 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.

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. This creates additional burdens to rural women who has the primary role in cooking, heating and other subsistence production. It is obvious that climate change poses a threat for farming as well. In 2008 hydrological drought and extreme cold combined with the vulnerability of the energy sector, created a serious food and energy crises. Climate change is also increasingly becoming a factor defining the future conditions of mountain ecosystems and adds to ongoing environmental pressures on sensitive habitats, flora and fauna. However, the next decade or two offer a window of opportunity to ensure that mountain development become more resilient. This effort will require improvements in water resources management, land use and biodiversity protection.

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 of 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.

Due to the fact that mountain people were nomadic until quite recently, small-holder farming often 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, fallow periods 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; 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. Institutional capacities need to be urgently addressed. Special attention should be given to rural women's role in this process as agriculture provides jobs for 44 percent of women while it is 30 percent for men. Women are employed mostly in labor-intensive or low-wage industries, not in capital-intensive industries where men prevail. Although women have equal rights as men in legal terms, the transition period and lack of control has weakened women's position in the labor market. Women in rural settlements are more exposed to unemployment than men, and often their work is paid less than men's work. They spend more time for housekeeping and childcare, and do not get reward or recognition for their work.

### *c) Institutional and policy framework*

#### *National Forest Policy*

The Project will support further reform of the National Forest Policy, which has four components: the Forest Code and environmental legislation defining the legal framework of the forest policy; the Concept for redrafting the long-term strategy for the development of the state forestry sector up to 2025; the National Forest Program with a current phase running until 2015 that defines a set of measures and activities to implement the Concept and; the Five-Year National Action Plan on Strengthening of Law Enforcement and Management of the Forestry Sector (FLEG) that was adopted in 2009.

The policy is characterized by having the three pillars of “State, Man and Forest” working together to manage forests in a sustainable manner. At the same time, for the past 20 years, the emphasis on preservation has continued strongly in policy and law overseen by the State Agency for Environment and Forest Protection (SAEPF). Policy does not allow for commercial activities involving timber harvesting, while Non-Timber Forest Products (NTFPs) are less regulated. Two policy elements have gained increasing importance, including the decentralization of decision-making by empowering local *leskhoz*, i.e. state forest management enterprises. The other aspect has been to seek the involvement of local communities in decision-making, based mainly on models for Community-Based Forest Management (CFM) and Joint Forest Management (JFM). The purpose of this policy is to shift from prohibitions on the use of forest resources to greater incentives and awareness among the population to utilize forest resources in a more sustainable manner. This shift in policy will need to be realized through innovative and gender sensitive approaches that are more inclusive of beneficiaries.

#### *Land and Agrarian Reform*

The agrarian reform started in 1991 and a package of laws regulating the agrarian reform process were introduced and adopted to strengthen the institution of private land ownership, including: the Land Code – land can be state owned, private, municipal and other forms of

property, except for pasture land that is not entitled to private ownership; the Law on peasant (farmer) households and; the law on agricultural land management adopted in 2000 which made it possible to purchase and sell land.

The main achievement of the land and agrarian reform was the formation of private ownership at the level of 98 percent, including land transfer to the private sector. The GoKR's current agricultural policies and programs are aimed at protecting soils (e.g. the national soil conservation program), managing pasturelands and water resources, and supporting the country's NAP commitments under the UNCCD. In terms of the institutional framework, the GoKR's legislation provides for the establishment of Water User Associations (WUAs) as non-profit organizations in charge of the operation and maintenance of irrigation systems and water distribution in rural areas for public benefit. For pastures, *Pasture Committees* – territorial public associations of pasture-users – are in charge of granting pasture use and can also agree to temporary transfer of pasture land for other purposes. To fulfill their duties most Pasture Committees need better equipment for communication and control, maps and special training on monitoring the carrying capacity of pastures. Furthermore the cooperation with government administration, forest administration, forest enterprises and protected area administration has to be improved. The Project will support further reform of the sector by developing the capacities of key institutions.

#### *Sustainable mountain development*

As the country is almost entirely mountainous, the project will moreover support the development and adoption of national policies to promote the sustainable development of mountain areas, looking at all economic sectors including tourism which is a high untapped resource. The governments of Kyrgyzstan, as well as several national and regional civil society organizations, are active members of the Mountain Partnership, a United Nations Alliance that was launched in 2002 at the World Summit for Sustainable Development. Through the Mountain Partnership Secretariat, based at FAO, a national committee for mountains will be formed

#### *d) Problems the project will address*

The Project will address the current shortcomings in the legal, regulatory and institutional framework for sustainable management of forest, land and water resources in Kyrgyzstan's mountains, and the resulting unsustainable use of natural resources. It will improve access to technical know-how on SFM and SLM and adapt current best practices to Kyrgyz mountainous conditions through pilot demonstrations in representative agro-ecosystems of the latest advances and tools, including participatory approaches with special attention to gender aspects, in SFM and SLM. The Project will contribute to the sustainable management of mountainous silvo-agro-pastoral ecosystems and secure the flow of multiple ecosystem services that generate both global environmental and local socio-economic benefits.

## **1.2 RATIONALE**

### *a) Baseline projects and investments for the next 3-5 years addressing the identified GEB threats and causes (main co-financing sources of the project)*

Baseline forestry projects: 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 in five pilot oblasts and 12 rayons, 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. The project will pay special attention to the representatives of women in resource user associations, as they are still dominated by men. The total baseline funding from SAEPF and local governments and beneficiaries to forest rehabilitation and sustainable forest management in the selected oblasts and rayons amounts to USD 4,300,000.

In addition, these GoKR-financed baseline activities are supported by the following donor-funded projects:

- Under JICA's five-year project, *Support for Joint Forest Management in the Kyrgyz Republic (2009-2014)*, the SAEPF and the National Agency for the Affairs of Local Self-Governance (NALSG) are piloting joint forest management (JFM) practices at 10 pilot areas of Chui and Issyk.kul oblasts involving planting of fast-growing fruit trees, support to nurseries and irrigation systems, 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 (USD900,000).
- With support from the Korean International Cooperation Agency (KOICA) project on *"Capacity Building on Forest Conservation in the Kyrgyz Republic"*, a Research Center on forest pests control is being established in Chui oblast, which will become a center of quality control for forest tree seeds, laboratory on pest and forest disease control, and transfer of technologies and know-how (USD1 million).
- With support from the German Development Cooperation (GIZ), the *"Forest Management Program"* implemented by SAEPF will support forest management in all the five oblasts participating in the proposed Project (USD 200,000).
- With support from the EU, the *"Forest Law Enforcement Governance (FLEG)"* program will also support forest management in all the five oblasts with the view to strengthen forest governance (USD 350,000).
- Under the program on *"Exchange of Debt for Environment Protection"*, support will be provided to planting of fast-growing trees in water protection areas and land prone to flooding under the aegis of ARIS Community Development and Investment Agency (USD 650,000).
- With support from the FAO Project *"Capacity Building for National Forest and Tree Resources Assessment and Monitoring"*, the SAEPF undertook 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.

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 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. The total baseline funding from MoA and local

governments and beneficiaries to rehabilitation and sustainable management of agricultural land in the selected oblasts and rayons amounts to USD 5,484,000.

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.
- FAO is also supporting MoA to increase food security and income of farmers under the project on Dairy Cattle Improvement (2012-2014) and the project on Strengthening of the National Food Security Information System (2011-2014) with total funding of more than USD 2 million). A project is also pipelined on Development of Farmer Field Schools to Promote Modern Crop Management and Pest Control Technologies (2013-2015) with funding around USD400,000.
- With the support of GIZ, the “Pasture Management Project” works on pastures in Jalala-bad (USD250,000)
- With support from the World Bank, the “Agricultural Investment and Services Project” supports reform of the pasture management system throughout the country to increase the productivity of livestock farmers (USD 33 million).
- “The Second On-Farm Irrigation Project”, also with support of the World Bank, is strengthening Water Users Associations throughout the country, which is important for improving governance of natural resources under the proposed Project (USD 22.55 million)
- IFAD supports a “Livestock and Market Development Programme” that will contribute to poverty reduction and development of pasture communities in Issyk-kul and Naryn oblasts. The programme objective is to generate livestock productivity gains reflected in improved and equitable returns to livestock farmers in the two oblasts (USD25.8 million).
- There are also numerous small-scale initiatives that will contribute to information dissemination and training that the proposed Project will capitalize on.
- ICARDA project on Knowledge Management supported by IFAD, which is a new initiative to streamline use and creation of knowledge on SLM in Central Asia in the face of climate change. This initiative is expected to lay the ground work of the larger multi-donor investment program Central Asian Countries Initiative on Land Management (CACILM) Phase II. The project targets four main agro-ecosystems: rainfed cropland, irrigated agriculture, mountain ecosystems and rangelands (1.4 million).

In summary, the total baseline investment in the forestry and agricultural sectors in activities that could form a foundation for introducing and scale up SFM and SLM in Kyrgyzstan amount to well over USD 80 million.

*b) Remaining barriers to address threats on GEB/CC vulnerabilities*

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 Kyrgyz mountain ecosystems due to the following fundamental and interlinked barriers:

- Inadequate legal framework for sustainable forest and land management
- Inadequate land tenure reforms
- Outdated approaches to sustainable forest and land management
- Limited Capacity of local institutions

**Inadequate legal framework for sustainable forest and land management, inadequate land tenure reforms, and limited capacity of local institutions.** 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.

#### *National forest policy*

The implementation of the National Forest Program 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. However, the National Forest Policy in Kyrgyzstan is not only the adopted laws and documents, but it is a process based on the participation of local authorities, local communities. The policy does not allow for commercial activities involving timber harvesting, while Non-Timber Forest Products (NTFPs) are less regulated. The ban on timber harvesting for commercial purposes is a major barrier to sustainable forest management and has in many cases led to use of classified forest land for agricultural purposes, exacerbating problems with land degradation, including loss of carbon stocks.

The Forest Code does not reflect all the aspects of the new national forest policy. Particular issues include transfer of economic functions to outside enterprises, new provisions for CFM and JFM that are of a very general nature, limited and unsecure rights of forest users, and limited access to information on forest resources. 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. This has been compounded by inadequate funding to support the implementation of the NAP, frequent re-organization of forestry management entities including changing its overall status from a ministry to an agency, frequent changes in leadership of the agency, which has impeded reforms in the sector, and lack of monitoring of implementation of adopted policies and action plans that has further decreased institutional incentives to undertake reforms.

The Project will support further reform of the National Forest Policy and its four components:

- The Forest Code and environmental legislation defining the legal framework of the forest policy;
- The Concept for redrafting the long-term strategy for the development of the state forestry sector up to 2025;
- The National Forest Program with a current phase running until 2015 that defines a set of measures and activities to implement the Concept;
- The Five-Year National Action Plan on Strengthening of Law Enforcement and Management of the Forestry Sector (FLEG) that was adopted in 2009.

#### *Land and Agrarian Reform*

Since the collapse of the Soviet Union, the agricultural sector has experienced a very complicated transition process in search of new management and ownership forms. The

agrarian reform that started in 1991 led to land redistribution and privatization, but the reform was implemented inconsistently due to lack of experience, legal framework and regulatory documents. Although men and women have equal rights for land registration, most private farms are owned by men. Currently over 90 percent of agricultural output is produced by the private sector and the main producers are the small individual peasant farms.

The legal and regulatory framework related to agriculture, however, remains weak. The MoA recognizes that there are no provisions in the Land Code providing incentives to promote sustainable land management practices on agricultural lands, nor is there authority in the Land Law to require landowners to bring abandoned agricultural lands back into production. Quality control of agricultural and food products are also missing. With respect to the implementation of the Pasture Law, a competent authority needs to be established for the transfer of land to other land categories. 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. The Project will support further reform of the sector to strengthen the policy and institutional framework, including:

- The Land Code covering state owned land, private land, municipal land and other forms of property rights
- The Law on peasant (farmer) households,
- The law on agricultural land management adopted in 2000 which made it possible to purchase and sell land.

In summary, in the context of SFM and SLM, special attention should be paid to the issue related to the tenure rights of use of forest, land and water resources, and the need for mechanisms for inter-sectoral coordination as well as the participation of NGOs, rural communities, water user associations, pasture committees CFM and credit unions, which is addressed under **Component 1** of the Project.

**Outdated approaches to sustainable forest and land 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 SAEFP 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 SAEFP 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. **Component 3** will focus on scaling up of SLM best practices that will enhance carbon stocks on agricultural land as well as the resilience of agro-ecosystems to climate change and agricultural

productivity using tools developed by the World Overview of Conservation Approaches and Technologies (WOCAT), including their climate change tools.

The project activities will be piloted in the Issyk-Kul, Naryn, Chui, Jalal-Abad and Osh provinces/oblasts (Table 1), which were selected by the GoKR according to the pilot site selection criteria developed for this purpose (see Appendix 7). The criteria used for the selection of project pilot areas to remove barriers to SFM and SLM include ecological and socio-economic criteria that take into consideration planned reforms of the forest management system, representation of the main forest types and agricultural regions - juniper, walnut-fruit, and spruce forests and riparian woodlands, the degree of land degradation associated with forest and agricultural land management, experiences with SLM best practices, potential to generate global environmental benefits, and relevant activities of donors or possible co-financing partners. During field visits gender aspects were always specially discussed with local stakeholders to ensure that not only women associations are included, but also attention is paid to women headed households which account to up to 25% in some pilot areas.

**Table 1.** Selected Project pilot areas and type of intervention.

Pilot areas	Forest management (ha)	Forest rehabilitation (ha)	Agroforestry (ha)	Rangeland/Pasture restoration (ha)	Agricultural land restoration (ha)	Demonstration sites (ha)
<i>Osh oblast</i>						
Nookat rayon	2650	1370	200		1350	52
<i>Jalal-Abad oblast</i>						
Nooken rayon	3200	1150	300	5000	1200	190
Suzak rayon	4000	1920	200		1225	0,03
<i>Chui oblast</i>						
Kemin rayon			900		400	
Jaiyl rayon	2150	1600	250		1500	
Moscow rayon			250		1000	
Sokuluk rayon			200		1000	300
Center of Education, Consultation and Innovation in Bishkek						4000
<i>Issyk-Kul oblast</i>						
Tuip rayon	2000	1300	450		500	
Aksuu rayon			300		300	360
Jety-Oguz rayon	2300	1200	300	10000	500	200
<i>Naryn oblast</i>						
Kochkor rayon	1700	650	1000		1290	
Ak-Tala rayon	2000	810	700	5000	500	
<b>Project total:</b>	<b>20000</b>	<b>10000</b>	<b>5050</b>	<b>20000</b>	<b>10765</b>	<b>5102,03</b>

**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 let alone 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. Pasture User Associations (PUAs), Water User Associations (WUAs), and Community Forest Associations (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.

*c) Incremental/additional reasoning (added value of the GEF/LDCF/SCCF financing)*

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 climate change, such as improving management of 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 across 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. Through better management of forest, land and pasture resources, the project will also improve the resilience of rural women to changing climatic conditions which is negatively impacting female farmers more than male farmers by further limiting their resources.

**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 carbon 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 in mountainous areas) including costs and benefits at local and wider landscape levels in terms of the range of ecosystem services using WOCAT tools. These trainings should be attended equally by women and men. 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.

**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, which will be supported by the establishment of a carbon monitoring system for forests and various dryland land use systems. 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 locally-adapted fast-growing trees by local people will be supported on 2,000 ha, which will reduce the emissions from deforestation. An attempt will be made to make these plantations certifiable. The project will also introduce energy efficient house insulation technologies, multipurpose 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 and water) in the management of agricultural areas. The project will give special attention to equal representation of women within resources users associations. This component will contribute to achieving multiple global environmental benefits through (i) improved agricultural management in drylands 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 socio-economic development and food security, increase sanitation, and improve employ adapted technologies to combat water logging and salinization of irrigated lands.

#### **Component 4: Knowledge Management, Monitoring and Evaluation.**

The project strategy, cross-sectoral collaboration and integration between the forestry and agricultural sectors, requires also the establishment of cross-sectoral knowledge management in order to improve the cooperation of various stakeholders and to guarantee the dissemination of information. The project will be integrated into already existing networks of FAO and other UN-organizations as well as international organizations and the FAO-supported Mountain Partnership Program, which hosts all relevant organizations of civil

society in Kyrgyzstan. The input of research results and the cooperation with national and international scientific institutions of forest and agricultural research will be led by ICARDA and their project on regional knowledge management.

In cooperation with other international organizations, knowledge platforms and systems for cross-sectoral information exchange, such as WOCAT, will be used and supported for the up-scaling of innovative SFM and SLM practices and lessons learnt.

### **1.3 FAO'S COMPARATIVE ADVANTAGES**

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.

FAO also hosts the Secretariat of the Mountain Partnership, a United Nations voluntary alliance of partners dedicated to improving the lives of mountain people and protecting mountain environments around the world. Currently, 52 governments, 16 intergovernmental organizations and 150 Major Groups (e.g. civil society, NGOs and the private sector) are members. FAO is working closely with the hub for Central Asia that is situated at the University of Central Asia's campus in Bishkek. 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, in a gender sensitive approach.

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 databases 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 (FAO's climate smart agriculture sourcebook website: <http://www.fao.org/climatechange/climatesmart/en/>).

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.

#### **1.4 PARTICIPANTS AND OTHER STAKEHOLDERS**

For the last 10 years, Kyrgyzstan has been decentralizing and devolving its management authority over natural resources. Local Self Governance, i.e. 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 determined 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 that recognizes that collective or community based resource use is more efficient to conserve resources on a landscape scale due to the fact that individual tenants tend to manage their own plots more 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 the executive body, with certain decisions made by the council only. At the moment the establishment of production cooperatives at the local level is also discussed in areas where the local population is living farther away from the forest resources. Introduced in 2001, the Joint Forest Management (JFM) approach (decree 377) has led to the establishment of boards at the local level with representatives from the community, the forest agency and women associations; 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 national agencies (SAEPF and MoA) and several donors, a Project Steering

Committee (PSC) will be established at the national level under the chairmanship of SAEPF. The PSC membership will be comprised of representatives of SAEPF, MoA, FAO, IFAD, GIZ, Mountain Partnership, WFP, and 5 Oblast representatives. Three members of relevant national NGOs and universities will be invited to attend as observers when appropriate. The terms of reference of the PSC are attached in Annex 7.

**Table 2. Summary of project stakeholders.**

Stakeholder	Relevant roles
The State Agency on Environment Protection and Forestry (SAEPF)	Government institution and implementing partner responsible for coordination of the state programs on forest management.
Ministry of Agriculture and Melioration (MoA)	Government institution and implementing partner responsible for coordination of the state programs on agriculture and land management.
Oblast Executive Authorities	<p>An oblast is the sub-national political entity in Kyrgyzstan. SAEPF and MoA have separate divisions under the each oblast representing their ministries at local level. The following oblast EAs will be actively involved in the Project:</p> <ol style="list-style-type: none"> <li>1. Issyk-Kul oblast;</li> <li>2. Naryn oblast;</li> <li>3. Chui oblast;</li> <li>4. Jalal-Abad oblast;</li> <li>5. Osh oblast</li> </ol>
Rayons	<p>A rayon is a second degree of administrative division below the oblast level. The following rayons will be actively involved in the project:</p> <ol style="list-style-type: none"> <li>1. Nookat rayon (Osh)</li> <li>2. Nooken rayon (Jalal-Abad)</li> <li>3. Suzak rayon (Jalal-Abad)</li> <li>4. Kemin rayon (Chui)</li> <li>5. Jaiyl rayon (Chui)</li> <li>6. Moscow rayon (Chui)</li> <li>7. Sokuluk (Chui)</li> <li>8. Tuip rayon (Issyk-Kul)</li> <li>9. Aksuu rayon (Issyk-Kul)</li> <li>10. Jety-Oguz rayon (Issyk-Kul)</li> <li>11. Kochkor rayon (Naryn)</li> <li>12. Ak-Tala rayon (Naryn)</li> </ol>
Resource user organizations (forest water, pasture etc), village administrations, farmers, local communities	<p>Key users and beneficiaries of the management and utilization of local forest and land resources that include both men and women involved living in this area.</p> <ul style="list-style-type: none"> <li>• <i>Leskhoz</i> – state forest enterprises that allocate leases and use rights, harvesting, felling and selling timber and NTPFs, collect revenue (8 in total)</li> <li>• <i>CMOs</i> – transfer of forest areas for long-term use of the local people residing in the forest area or its vicinity</li> <li>• <i>Water User Associations (WUAs)</i> – operation and maintenance of irrigation systems and water distribution</li> <li>• <i>Pasture Committees</i> – pasture committees granting pasture use rights</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Agricultural cooperatives</i></li> <li>• <i>Private farmers (at least 16% headed by women)</i></li> </ul>
NGOs	Provide funding and implement small-scale initiatives, lobby changes to policy and legislation (e.g. members of the Mountain Partnership: CAREC, CAMP-Alatoo)
Scientific/Academic institutions	Support research on applied SFM and SLM (University of Central Asia, Forestry Institute, Botanical Garden of the National Academy of Science, Soil Agrochemical Station under MoA, Agrarian Academy)
Multi-lateral organizations	Provide funding, facilitate reforms, (e.g. FAO, IFAD, World Bank, etc.)
Bilateral organizations	Provide funding and promote SFM and SLM (e.g. GIZ, TIKA, KOICA, etc.)

## 1.5 LESSONS LEARNED FROM PAST AND RELATED WORK, INCLUDING EVALUATIONS

Key lessons that have emerged from SLM and SFM projects in Central Asia point to a number of issues that require further attention in order to bring about a long-term shift that will make natural resources management more sustainable:

- **Continue legal, policy and institutional capacity-building and reforms for SLM and SFM** with increased involvement of stakeholders to introduce economic incentives for SLM/SFM and to ensure the rights of land users to be involved in policymaking concerning the use and management of land and forest resources they depend on for their livelihoods.
- **Strengthen the institutional base for SLM/SFM knowledge management and sharing** and for specialised farmer groups to access and disseminate SLM knowledge locally. It is also important to strengthen national coordination on strategic policy issues and to engage educational institutions in SLM/SFM knowledge synthesis, management and dissemination.
- **Mainstream participatory land-use planning** in local government decision-making processes and develop an integrated approach that facilitates coordinated decision-making and action. This needs to be coupled with strengthening of community and local government capacities for participatory land-use planning.
- **Stimulate investments in the up-scaling and replication of good SLM/SFM practices** that could involve development of micro-finance schemes and integration of mountain farmers in regional and global environmental markets such as the carbon market, certification for environmentally clean production, and payments for ecosystem services.

The proposed Project integrates these lessons in its three components that combine legal, policy and institutional reform and capacity building with up-scaling of SFM and SLM through mainstreaming into land-use planning of e.g. multifunctional forestry and economic incentives for land-users to engage in sustainable land and forest management practices. Although women have equal legal rights with men in terms of land ownership, acquisitions, access to credits and markets, rural women living in poverty often can't use these rights due to lack knowledge, education and other social and economic reasons. The project will pay special attention to the role of rural women in natural resources management and support this role through capacity building.

## **1.6 LINKS TO NATIONAL DEVELOPMENT GOALS, STRATEGIES, PLANS, POLICY AND LEGISLATION, GEF/LDCF/SCCF AND FAO'S STRATEGIC OBJECTIVES**

### *a) Alignment national development goals and policies*

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

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

- The Mid-term Development Programme of the Kyrgyz Republic 2012-2014, which identifies 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 National Forest Program 2005 - 2015, which defines a set of activities and measures to implement the Concept described 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 National Agricultural Development Strategy 2012 – 2020, which is being developed currently with 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 Draft Program 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.
- National Strategy of Kyrgyz Republic on the achievement of gender development till 2020 approved on June 27, 2012 by government resolution No. 443 which provides creation of conditions for access to informal education through improvement of technical infrastructure (development of internet access all over the country) and expansion of functions of the existing institutes (school, rural health post, the family medicine centers).

### *b) Alignment with NAPA, NAPs, NBSAP, NIPs, NAMA*

With respect to the environmental conventions, 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 First and Second National Communications on Climate Change (NCCC), which were approved in 2003 and 2009, respectively, and recognize the importance of agriculture and forests in both carbon sequestration and emission of greenhouse gases (GHGs). Analysis of LULUCF?
- Pursuant to the UNCCD, the GoKR promulgated its National Action Plan to Combat Desertification (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, Agenda for XXI Century (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.

*c) Alignment with GEF focal area and/or LDCF/SCCF 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, through adoption of a carbon stock monitoring system and promotion of innovative SFM practices.

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. Promotion of innovative SLM practices at the field level that increase vegetative cover will lead to a sustained flow of ecosystem services in the agricultural landscape.

The project has been designed in line with GEF Guidelines for the **SFM and REDD+ Program** in line with **LD-2** to generate sustainable flows of forest ecosystem services in arid-semi-arid and sub-humid zones, including sustaining livelihoods of forest-dependent people. 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.

*d) Alignment with FAO Strategic Framework and Objectives*

The Project is consistent with FAO Strategic Objective 2 – to increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner. Moreover, 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 designed to be consistent with UNDAF and the national priorities including those in the forestry, agriculture and land and water sectors. At the global level, FAO identified “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. More specifically, the Project will contribute to the following Priority Areas under the Country Programming Framework of FAO: 3.2 Management of natural resources in the rural sector, which includes improvement of forest resources, land and water resources management; and 3.1 Policies and activities to enhance growth of smallholder agriculture allowing for growth in rural incomes and poverty alleviation, which includes agriculture sector development policy, diversification of crop and farming system.

The project is in line with the FAO's new cross cutting Strategic Objective of Gender which is aiming to ensure that gender equality becomes a regular feature of work on standard setting and of regional, sub-regional and country-level programme and projects;

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## SECTION 2 – PROJECT FRAMEWORK AND EXPECTED RESULTS

### 2.1 PROJECT STRATEGY

The Project strategy is to bring about a shift in forest and land management practices, by removing remaining policy, institutional, technology and capacity related barriers to SFM/SLM, and move towards a more integrated cross-sectoral approach that take into account the role of land and forest resources in the carbon balance, while generating multiple global environmental and socio-economic benefits by sustaining flows of critical ecosystem services, such as climate and water regulation, soil erosion control and regulation of natural hazards. The project will promote new approaches and practices in SFM and SLM that will also increase the productivity of forest and agro-ecosystems leading to improved livelihoods of mountain people.

Cross-sectoral collaboration and integration between the forestry and agricultural sector will be supported at national, provincial and local levels through establishment of cross-sectoral mechanisms that will facilitate integrated land-use planning to up-scale innovative SFM and SLM practices that bring multiple benefits. This will be underpinned by the introduction of economic instruments and incentives to forest and land users to engage in SFM and SLM. The role of women in resources users associations will be strengthened by the project through their increased participation within these associations.

### 2.2 PROJECT OBJECTIVES

In line with the GEF-5 Land Degradation and REDD+ strategies, the goal of the Project is an enhanced enabling environment in the forestry and agricultural sectors and sustained flow of ecosystem services, including enhancement of carbon stocks in forests and agro-ecosystems. The Project specific objective is to contribute to the sustainable management and enhanced productivity of mountainous silvo-agro-pastoral ecosystems and improved mountain livelihoods in the Kyrgyz Republic, which will be delivered through four project components on (i) strengthening the enabling environment; (ii) enhancing carbon stocks in dryland forests; (iii) promoting and demonstrating climate friendly agriculture and (iv) knowledge management, monitoring and evaluation.

### 2.3 EXPECTED PROJECT OUTCOMES

#### **Component 1: Strengthening the enabling environment**

#### **Outcome 1.1 Enhanced policy, legal and institutional framework in forestry and land management for integrating SFM/SLM principles and practices into national and local level land-use plans**

The current baseline situation with a weak policy and legal framework for SFM and SLM and lack of economic incentives at local level to implement SFM/SLM and lack of systematic and long-term cross-sectoral collaboration in the LULUCF sectors will by the end of the project be replaced by a strong enabling environment that facilitates integration of SFM and SLM into land-use planning at national level, in 8 oblasts and 12 rayons leading to scaling up of SFM and SLM on 2 million ha of land over long-term and 7.8 million tCO<sub>2</sub> equivalent in indirect avoided emissions and carbon sequestration.

## **Outcome 1.2 Increased understanding and awareness on roles of SFM/SLM and LULUCF in carbon sequestration and GHG balance**

Policy makers and resource users that currently lack awareness and understanding of the role of SFM/SLM and LULUCF in the greenhouse gas balance will with GEF incremental support to capacity building, training and awareness creation be made fully aware of the role of SFM and SLM in climate change mitigation. 60 policy makers, 300 technical staff, 200 extension agents and 7,000 farmers and herders will be applying SFM/SLM practices by the end of the project, which will in the long term lead to improved management of around 2 million ha of land, including forests, crop land and pastures.

### **Component 2: Enhancing carbon stocks in dryland forests**

#### **Outcome 2.1 Management of existing forests and trees improved**

Existing management regimes for forests and trees in the landscapes of Kyrgyzstan do not take into consideration their roles as carbon sinks and importance for the greenhouse gas balance. GEF support to a national LULUCF and REDD+ Strategy and Action Plan, multifunctional and participatory land-use planning in combination with a carbon monitoring system will bring 20,000 ha of forestlands under improved management, avoiding emissions from forest degradation of 107,567 tCO<sub>2</sub> eq/year.

#### **Outcome 2.2 Dryland forest areas rehabilitated/afforested through introduction and demonstration of innovative technologies/practices and pressures on forests reduced**

Currently, Kyrgyz dryland forests are severely degraded and there is limited access to and knowledge of innovative SFM technologies that generate multiple environmental and socio-economic benefits due to its history of central planning and lack of economic incentives. Through REDD+ demonstration activities as referred to in the UNFCCC Decision 1/CP.16 of sustainable management of forest land, and enhancement of forest carbon stocks, such as agroforestry, establishment of tree plantations and use of non-timber forest products, 10,000 ha of forest land will be rehabilitated and 5,050 ha will be put under agroforestry, which will contribute to approximately 15,073 tCO<sub>2</sub> eq/year in carbon sequestration.

### **Component 3: Promoting and demonstrating climate friendly agriculture**

#### **Outcome 3.1 Improved agricultural management and rehabilitation practices and techniques in drylands practiced of target households, including women headed by demonstrating and adopting agricultural and agro-forestry best practices that increase vegetative cover and soil fertility, reduce soil degradation, and avoid greenhouse gas emissions**

Although 88% of Kyrgyzstan's farmland is considered degraded, new and innovative approaches to sustainable and climate friendly land management have not been widely introduced on cropland and pastures due to a history of central planning and lack of incentives for local land users to test new SLM practices. GEF support to demonstrations of innovative land management practices on cropland and pastures is expected to result in improved management of 10,907 ha of cropland that contribute to carbon storage of 58,530 tCO<sub>2</sub>

eq/year, and restoration of 20,000 ha of pastures that contribute to carbon storage of 62,088 tCO<sub>2</sub> eq/year.

#### **Component 4: Knowledge management, monitoring and evaluation**

##### **Outcome 4.1 Monitoring and evaluation of project progress for adaptive results-based management to mitigate risks and changing conditions.**

The objective of this outcome is to ensure systematic data collection from the field to effectively monitor and evaluate project progress indicators, monitor risk mitigation measures and design new measures to face unexpected risks, and to extract lessons learned (including successes and failures) that might be useful for future GEF initiatives. Financing under this component will address: i) the design and operation of the project's M&E system based on results-based management; ii) mid-term and final project evaluations, including defining response strategies to recommendations provided by these evaluations and, if necessary, adjustment of project implementation arrangements.

##### **Outcome 4.2 Dissemination of information and best practices through knowledge management platforms, national and international cooperation and awareness raising**

This outcome will focus on extraction and synthesis of results and lessons learnt, identification of best practices for wider sharing and dissemination, and cooperation within knowledge networks. The project will ensure both the collaboration with national and international institutions and organizations. Most important for the success will be the use and support of knowledge management platforms, which are under development by several organizations. The Regional project on Knowledge management of ICARDA will be sub-contracted for a substantial part of the implementation. Parts of this outcome are: i) synthesis of lessons learnt and generation of best practices; ii) application of research results and best practices of previous projects; iii) integration of the project into knowledge exchange platforms; iv) environmental education and awareness raising strategy. This outcome will also contribute to the realization of the REDD+ Information System that a country will have to establish to report on the REDD+ Safeguards (see Dec.1/CP.16 and "REDD+ Framework" CP.19).

## **2.4 PROJECT COMPONENTS AND OUTPUTS**

**Component 1:** Strengthening the enabling environment for sustainable forest and land management (agriculture, rangelands and transitional areas) (SFM/SLM)

The objective of component 1 is to strengthen the enabling environment for SFM and SLM through policy and institutional reform, enforcement of existing laws and regulations, and enhanced cross-sectoral coordination and collaboration. It will be delivered through the following outputs:

### 1.1.1 Forestry and land policy and legislation for SFM and SLM developed and improved.

This project output includes harmonization of legislation on SFM and SLM, evaluation of the National Forest Policy and revision of the strategic directions of development of the forest

sector as well as evaluation of the National Agricultural Policy and revision of the strategic directions of development of the agricultural sector. Necessary changes and additions to the existing legal and regulatory framework will also be undertaken including development of the missing mechanisms of the existing laws and to address the new international requirements related to REDD+. The draft Forest Code will be finalized and economic instruments and incentives will be developed to encourage the fight against degradation of land and forest resources. An in-depth analysis will be conducted of Kyrgyzstan's legal framework with respect to gender aspects and incentive-based mechanisms with the view to propose a draft law or amendments to existing laws to create an enabling environment for payment for ecosystem services. SAEPF and MoA will be jointly responsible for delivering this output and ensure integration with regular processes for policy formulation and implementation. In addition, NGOs and women associations included in the Mountain Partnership, such as CAREC will be involved in identifying incentive-based mechanisms. All this will lead to stricter legislation and development of technical regulations aimed at preventing land degradation. Finally, mechanisms for compensating damage to forest and agricultural land will also be developed.

#### 1.1.2 Cross-sectoral strategies and strategic agreements between sectoral authorities on integrated land use management developed and foster cross-sectoral cooperation

The first step is to strengthening forest law enforcement through the development of mechanisms for inter-ministerial and inter-sectoral collaboration related to integrated management of land resources and assessment of ecosystem services. Interface responsibilities will also be identified and competencies of all the players of land relations will be taken into consideration. The capacity to establish inter-sectoral collaboration and partnership between government, businesses, and NGOs will also be enhanced. SAEPF and MoA will take the lead in delivering this output in collaboration with CACILM that will assist with assessment of ecosystem services.

#### 1.1.3 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

This involves institutional reform in the forestry sector and the development of practical skills of MoA, SAEPF and National Agency for the Affairs of Local Self Governance (NALSG), on the application of the procedures and mechanisms for inter-sectoral collaboration. Mechanisms for public participation in decision-making in the field of land management will also be developed with support of the Mountain Partnership and especially CAMP-Alatoo. This will be coupled with training and refresher courses for all relevant stakeholders on enforcement of land and forest legislation as well as on conflict resolution in natural resources management at the local level.

#### 1.2.1.SFM/SLM based on resource user associations (pasture, forest, water) is effectively promoted in the project area/s and respective local resource management institutions are fully functional

The capacity of resource users will be increased through training seminars and workshops of key individuals and representatives of relevant resource management institutions through the development and implementation of targeted training programs on SFM and SLM in the 12 pilot rayons and 8 leskhoses, involving 31 pasture committees, and at least 4 WUAs. Design and educational seminars for representatives of various sectors on the territorial principle will also be conducted, the result of which will be action plans and specific projects with the support of donor funds. NGOs under the Mountain Partnership, such as CAMP-Alatoo and

mountain programmes of the Agha Khan Foundation (AKF) will be sub-contracted to assist with the training. It is expected that by the end of the project resource user association will be implementing SFM/SLM on 15,785 ha of land.

#### 1.2.2 Training and awareness creation tool kit on roles of SFM/SLM and LULUCF in carbon sequestration and GHG balance prepared and disseminated

Training on LULUCF, REDD+, GHG measuring and reporting system will be provided for all the relevant stakeholders in the context of forestry. In particular GoK technical staff will be trained in IPCC methodologies on national GHG inventory for the AFOLU sector. FAO EX-ACT and GEF Carbon Benefit tools on carbon calculation will also be used. 60 policy makers, 300 technical staff, and 200 extension agents will be trained, which will facilitate the mainstreaming of LULUCF and REDD+ carbon monitoring in relevant sectors of different land use and management practices. SAEPF and MoA will be responsible for delivering this output with the support of international and national carbon accounting experts.

### **Component 2: Enhancing carbon stocks in dryland forest through innovative management and rehabilitation practices**

The objective of component 2 is to enhancing carbon stocks in dryland forest through improved multifunctional management of existing forests and rehabilitation and planting of degraded forest, which will lead to both avoidance of emissions and enhanced carbon sequestration on forestland. This will be delivered through the following outputs:

#### 2.1.1 National LULUCF and REDD+ Strategy and Action Plan developed and operationalized: LULUCF sector assessment improved, national climate change mitigation standards in the LULUCF sectors drafted and submitted to approval by the GoKR

A National Strategy, as requested by UNFCCC Dec.1/CP16 (Cancun Agreement), to mitigate climate change through the LULUCF sector will be developed and operationalized under the new inter-sectoral mechanism to be established under Component 1. Training will also be provided at the local level by participating NGOs, such as CAMP Alatoo, on development of strategies and climate change mitigation measures at the local level. This will be followed by the development of the National Plan of Action to mitigate climate change and an assessment of the LULUCF sector coupled with development of national standards for climate change mitigation in the LULUCF sector. Activities linked to this output will be led by SAEPF with support from international and national LULUCF and carbon accounting experts. The operationalization of the REDD+ Strategy will be closely linked to the establishment of a National Forest Monitoring System under output 2.1.3.

#### 2.1.2 Multifunctional and participatory forest management planning covering at least 20,000 ha forest piloted

This output involves development of measures to improve conservation of existing forests, including strengthening of Joint Forest Management planning in 5 Oblasts and 8 Leskhos and development of integrated management plans in the same 5 Oblasts and 8 Leskhos. In addition, a method will be developed to measure and monitor forest-related ecosystem services, based on available data. First of all, viability and interest in PES schemes at the national level and by local stakeholders will be assessed and summarized, followed by economic valuation of ecosystem services provided by the forest of the 8 pilot Leskhos. A system for payment for ecosystem services will be created with the support of the Central Asia Regional Environmental Centre (CAREC) that is already implementing the first PES

scheme in Central Asia in a catchment in Issyk-Kul Oblast. Finally, monitoring of illegal activities in the forest sector will also be strengthened.

#### 2.1.3 Carbon monitoring system established for forests and various dryland land use systems

Kyrgyzstan will develop its National Forest Monitoring System, NFMS, as requirement for the country to participate in the REDD+ expected mechanism, The NFMS will be developed through the contribution of several institutions and initiatives, e.g. FAO-INPE ICI (<http://www.fao.org/forestry/nfms-for-redd/en/>), GIZ projects, etc. For the purpose of this SFM project, NFMS will be based on the IPCC guidelines and it will include the use of satellite remote sensing data for the estimation of the activity data (area and area change extensions) and field data for the estimation of the emission and removal factors. The NFMS will be developed also to assist in the calculation of the carbon removals in the forests of Kyrgyzstan included in this project. This specific activity will include the development of specific national removal and emission factors for above-ground net biomass growth in natural forest and above ground biomass in all forest types of Kyrgyzstan. A carbon monitoring system and database will also be created at national level under the auspices of SAEPF, including development of cartographic material and creation of a GIS on carbon benefits in the LULUCF sectors. Finally, estimates of emission reduction/increase in sinks and the cost of these achievements will be undertaken.

SAEPF's Department of Forest and Hunting Inventory has technical expertise and institutional capacity in land use mapping and was the lead institute in implementation of the FAO project on National Forest Inventory. It has considerable experience in working with databases on forest resources and forest mapping and with the help of training and capacity building that will be provided under Output 1.2.2 should be able to link mapping to carbon estimations and field sampling.

#### 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

The first step for this output is to develop a manual describing a number of good options for innovative SFM practices based on the WOCAT methodology. Permanent seed plots in forest plantations will be established at an early stage and tree nurseries will also be improved in the 8 pilot Leskhos. This will be followed by introduction of agroforestry practices in the 8 pilot Leskhos and planting of indigenous economic tree species, such as pistachio, almond, walnut, apricots and apples, as well as introduction of integrated forest and pasture management and community forestry, which could involve fencing (including live fencing using indigenous species) for control of grazing and planting of windbreaks as well as roadside plantations of indigenous trees.

#### 2.2.2 2,650 ha of tree plantations established by local people with indigenous fast-growing forest trees in order to reduce the wood demand from natural forests (forest degradation prevented in at least 10,000 ha forest areas)

Indigenous fast-growing species, such as poplar and salix, will be planted in 30 villages on 2,650 ha of land and multipurpose trees for wood and non-wood forest products will be planted on 8,000 ha. Support to up-scaling of viable and sustainable planting practices will be provided through testing of two Payment for Ecosystem Services (PES) schemes. The proposed PES activities will be based on an existing PES pilot developed initiated in 2011 by the Regional Environmental Center for Central Asia (CAREC) in a mountain watershed situated on the Northern shore of Issyk-Kul lake. This PES focuses on improving water

quality and aims at reducing upstream forest and pasture degradation for ensuring clean water provision (with reduced suspended sediments load) to downstream farmers. Ecosystem services buyers are mainly downstream water users while ecosystem services sellers are the local Leskhoz and the pasture committee. After discussions and negotiations between stakeholders, an in-kind reward was adopted i.e. without any cash transfer. More specifically, the reward consists of free working days provided by downstream water users (ES buyers) to upstream land users (ES sellers): every year, the water users association provides the Leskhoz and the pasture committee with an agreed number of man/day to support the development of land conservation activities. These activities consist of tree planting on degraded areas, creation of fenced plots for pasture regeneration, etc. The total forest area included in the PES scheme is 10,000 hectares but only around 1/10th of it is concerned by the PES activities. The mechanism has been sustainably operating for two years and a monitoring of water quality is being developed to verify the effectiveness of land conservation activities on water suspended sediments in the river.

This Project is proposed to develop two PES schemes in two different Leskhoz. The number of hectares of forest included in these PES schemes will be a minimum of 2,000 ha each. The Project will be focusing on four ecosystem services which are amongst the most valuable ones in the Kyrgyz Republic, namely:

- Landscape aesthetic
- Steady provision of clean water
- Natural risk reduction (through soil conservation)
- Biodiversity

### 2.2.3 Efficiency of fuel wood use improved by the introduction of improved cook stoves, home-based solar heating and home insulation activities

Micro-credit schemes will be introduced in collaboration with resource users' organizations including women associations where households can apply for funding to test ways of improving energy efficiency at home, including construction of energy-efficient stoves and new methods for thermal insulation of existing homes. This could involve testing of improved cook stoves and solar panels for heating by selected households in and in the vicinity of the 8 pilot leskhoses, and/or testing of innovative ways of improving home insulation. New knowledge and field experiences in the field of efficiency of fuel wood use will be more widely disseminated at the local level through training and awareness raising of local communities in and in the vicinity of the 8 pilot leskhoses. Since rural women are mainly dealing with these daily chores, the project will target women and women associations to achieve these activities. SAEPF will work closely with GIZ to implement activities under this output as well as with the Mountain Partnership (e.g. CAMP Alatoo) that have extensive experience in this area from previous projects and programs, such as the GEF funded project on SLM in the Pamir-Alai Mountains.

**Component 3:** Promoting and demonstrating climate-friendly agriculture, including pastures as part of sustainable land and water management (SL/WM) in drylands

The objective of component 3 is to implement climate-friendly agriculture and pasture management through introduction of improved land management and rehabilitation practices that will be scaled up through support to Farmer Field Schools (FFS), PES schemes and establishment of Public-Private Partnerships (PPPs). This component will be part of the national appropriate mitigation actions (NAMAs) that Kyrgyzstan will develop in order to

contribute to climate change mitigation. The component will be delivered through the following outputs:

3.1.1. 200 demonstrations of innovative agricultural practices covering a total of 10,907 ha of arable land:

The first step under this output is to develop of a manual describing a number of good options for innovative SLM technologies and practices based on the WOCAT and other appropriate methodologies. This will include SLM practices, such as conservation agriculture (e.g. reduced tillage, crop rotation, crop residue management, and vegetative cover), 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, and small-holder composting techniques, etc. Demonstration plots will be established in farmers' fields of male and female headed farms for the selected technologies in each of the 12 selected rayons. In addition, participatory monitoring will be undertaken in farmers' fields of soil condition, inputs, including labour, and outputs, including harvests. Wider dissemination and up-scaling of viable SLM practices will be promoted through Farmer Field Schools, for example on water-efficient agriculture in Naryn with support of the AKF, and establishment Public-Private Partnerships in selected rayons.

3.1.2 20,000 ha of non-forest SFF lands/degraded agricultural lands rehabilitated using innovative technologies/practices successfully demonstrated:

Similar to the previous output, the first step will be to develop a manual with detailed description of measures to address land degradation and improve pastures using the WOCAT methodology and others. This will be coupled with an assessment of soil conditions, including salinity, of pastures, and followed by the establishment of appropriate ameliorative measures for land degradation control on pastures, including melioration of saline and water-logged soils, water harvesting and rehabilitation of irrigation infrastructure, agroforestry, and introduction of drought resistant and salt tolerant plant species in the 12 selected rayons. The Project will also develop mechanisms for up-scaling of sustainable pasture management measures, which could involve PES schemes, FFS, etc. in collaboration with CAREC and ASK. GIS maps of land degradation and suitable ameliorative measures for the 12 selected rayons will also be prepared to serve as a basis for future decision-making on sustainable pasture management.

**Component 4: Knowledge management, monitoring and evaluation**

Financing under this component will address: i) the monitoring and evaluation of the project progress for adaptive management to respond to arising risks and unpredictable changes; ii) the dissemination of information and best practices through knowledge management platforms, national and international cooperation and awareness raising.

Output 4.1.1 M&E system operating and providing systematic information about meeting project outcome and output targets

The project will undertake monitoring and evaluation (M&E) at the site, local and national levels. This will include monitoring of ecological, social and economic variables. The project will develop and implement participatory monitoring that is compatible with the monitoring of LULUCF and REDD+ activities and impacts at the local level – including the monitoring of environmental impacts and biodiversity. The outcomes of this monitoring will be fed to national stakeholders to inform decision-making. This monitoring will be linked into the

emerging national forestry monitoring system and the country's developing LULUCF and REDD+ architecture. Overall, this will support national capacity to monitor environmental impacts and it will contribute to the REDD+ Information System.

#### Output 4.1.2 Midterm and final evaluations

By the end of the third and fifth years of project implementation, FAO's independent evaluation unit will arrange, in consultation with the project team and other partners, a mid-term and a final project evaluation, respectively. The provisions for these evaluations are discussed in greater detail in section 4.5 below.

#### Output 4.2.1 Synthesis of lessons learnt and generation of best practices

A high level priority for all project actions will be to capture lessons learned, disseminate these lessons, and establish protocols for this adaptive learning to continue well beyond project implementation. The project will create pathways to use project results to inform sector investment. This effort will include semi-annual formal reporting of project activity and results and the generation of a website as a portal for capturing best practices. This website will reflect data generated by the project sponsored activities, and lead to summaries and recommendations of existing policies and proposed improvements.

#### Output 4.2.2 Application of research results and best practices of previous projects

The project will built on results and lessons learnt of previous projects in Kyrgyzstan, Central Asia and other countries. In order to develop a ready-to-use program for capacity building of Pasture Committees, FAO will run a TCP, starting 4/2013. The project on Regional Knowledge Management (ICARDA) will further provide relevant research results and support the use of scientific knowledge products.

#### Output 4.2.3 Integration of the project into knowledge exchange platforms

A very important element of this programming will be the design of a comprehensive hand-over strategy. This will be completed prior to Project Year four. The strategy will detail implementation responsibilities and identify specific tracks for project implementation funding. Resulting recommendations will include how to best promote and expand the sustainable continuation of project successes, including national and local level activities, into the future. Of great importance for the project success will be the active participation and promotion of knowledge management platforms.

#### Output 4.2.4 Environmental education and awareness raising strategy

This output is going to address the lack of knowledge and awareness amongst PUUs and the rural population with a capacity building program, tailored to the local needs of the Pasture Committees. In addition, a nation-wide campaign on environmental education, sustainable use of natural resources and adaptation to climate change will build up awareness of the rural population. This will be done based on the results of the FAO-TCP project on Capacity Building and Awareness Raising and in cooperation with existing institutions, such as provincial schools, colleges and universities. Mass media will be included as well as NGOs under the Mountain Partnership with experience in environmental education and campaigning.

## **2.5 GLOBAL ENVIRONMENTAL BENEFITS**

Key global environmental benefit for the land degradation focal areas, include increase in ha of land under SLM/SFM. The Project will lead to the following increase in area under SFM/SLM in Kyrgyzstan:

- 2 million ha of land under SFM and SLM over long-term thanks to strengthening of the enabling environment for SFM/SLM that leads to scaling up of good practices
- 25,050 of forestland under improved multifunctional forest management, including agroforestry
- 10,000 ha of forest land rehabilitated and/or replanted
- Improved management and rehabilitation of 10,907 ha of degraded agricultural land
- Restoration of 20,000 of pastures

This increase in land under SFM and SLM, which comes to a total of 98,412 ha by the end of the project, also leads to improvement in vegetative cover and increase in land productivity of around 18% over baseline, benefitting a total of 25,000 people by the end of the project, both men and women. . In addition, it also generates substantial carbon benefits, which include:

- Reduction of emissions from forest degradation of 107,567 tCO<sub>2</sub> eq/year
- Carbon sequestration on forestland of 15,073 tCO<sub>2</sub> eq/year
- Carbon sequestration of 58,530 tCO<sub>2</sub> eq/year on agricultural land
- Carbon sequestration of 62,088 tCO<sub>2</sub> eq/year on pastures

The Project will in other words lead to reduction of emissions and total carbon sequestration of around 243,258 tCO<sub>2</sub> eq/year amounting to a total of 973,032 tCO<sub>2</sub> eq over four years, with lifetime indirect carbon benefits of 4.8 million tCO<sub>2</sub> eq on 1.3 million ha of forest land and forest pastures, and 3 million tCO<sub>2</sub> eq on 776,000 ha of agricultural land. The global environmental benefits expected to be achieved with the incremental GEF support are summarized in Table 3 below.

**Table 3.** Global Environmental Benefits of the project.

Current Practices	Improved practices introduced by project	Selected Global Benefits
<b>Forests/forest lands:</b> Illegal logging for fuel wood and construction, grazing in forests, agricultural encroachment leading to loss of carbon stocks.	<b>Sustainable forest management practices:</b> 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 multi-purpose afforestations and adapted agroforestry techniques	25,050 ha forestland under improved multifunctional forest management avoiding emissions from forest degradation of 107,567 tCO <sub>2</sub> eq/year  Increase in forest cover and tree density 10,000 ha forest land rehabilitated/planted contribute to sequestration of approximately 15,073 tCO <sub>2</sub> eq carbon  Less damages from floods and land slides  TOTAL: 122,641 tCO <sub>2</sub> eq/year
<b>Agricultural lands:</b> Inappropriate farming practices resulting in soil disturbance/ erosion, loss of vegetative cover, no crop rotation, release of	<b>Improved agricultural land management:</b> 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	Improved management and rehabilitation of 10,907 ha degraded agricultural land contribute to carbon storage of 58,530 t CO <sub>2</sub> eq/year Decrease in soil erosion and increase in soil productivity of around 18%.  Improved water quality

Current Practices	Improved practices introduced by project	Selected Global Benefits
<p>GHGs</p> <p><b>Pasture lands:</b> Overgrazing on pastures close to settlements and weed invasion on distant pastures, resulting in degradation of vegetative cover and quality, increased erosion, etc.</p>	<p>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 soil fertility Promotion of organic agriculture and certification</p> <p>Improved pasture management: Organised use of distant pastures to reduce pressure on rangelands close to settlements Reduced and/or rotational grazing to reduce pressure on vegetative cover Rehabilitation of degraded pasture through seeding Production of fodder to reduce pressure on pastures Soil conservation measures - improvement of soil fertility, water accumulation/preservation, windbreaks, buffer strips to reduce erosion Development of control mechanisms for reducing grazing pressure (e.g. control of livestock numbers) Capacity building for pasture user committees</p>	<p>Improved SLM and agro-silvo-pastoral practices and restoration of 20,000 hectare of non-forest SFF lands contribute to carbon storage of 62,088 t CO<sub>2</sub> eq/year</p> <p>TOTAL: 120,617 tCO<sub>2</sub> eq/year</p>

## 2.6 COST EFFECTIVENESS (ALTERNATIVE STRATEGIES AND METHODOLOGIES CONSIDERED)

In the absence of the proposed project, opportunities for sustainable forest and land management directly geared towards enhancing resilience of Kyrgyzstan's mountain ecosystems against climate change as well as mitigation of climate change through carbon sequestration and avoidance of emissions from land use, land use change and forestry would be limited, both because of awareness and capacity barriers, but also because of a lack of access to knowledge about new and innovative SFM and SLM practices and technologies, as well as mechanisms for scaling up of good practices across sectors. Investments made by communities at pilot sites would be small and piecemeal, and they would fail to capture efficiencies and up-scaling opportunities from coordination of policy implementation between the forestry and agricultural sectors, from rayon, oblast up to national level. Without the Project there would also be limited opportunities for harnessing of socio-economic benefits from out-scaling/horizontal spread of SFM and SLM best practices through exchange of experiences at community level through Farmer Field Schools, involvement of the private sector in Public-Private Partnerships, etc.

The proposed project approach is deemed to be the most cost-effective and most likely to lead to sustainable results, because the funds from the GEF will leverage substantial investment from both the forestry and agricultural sectors and the oblasts and municipalities involved in pilot site activities. The project aims to improve the livelihoods of around 25,000 people by improving productivity of their land by 18%. It will enhance carbon stocks on close to 100,000 ha of land and avoid emissions and sequester carbon of close to one million tCO<sub>2</sub> eq

over the duration of the project with indirect benefits due to barrier removal in the forestry and agricultural sectors of close to 8 million tCO<sub>2</sub> eq, which is deemed to be a very cost effective use of GEF resources.

## **2.7 INNOVATIVENESS**

The integrated and cross-sectoral approach to generating carbon benefits in the forestry and agricultural sectors is completely new to Kyrgyzstan that has not yet established a national forest monitoring system for REDD+ (carbon monitoring system in the LULUCF sectors). Such a system will be supported by this Project and underpinned by policy and institutional reform that will integrate carbon emission reduction and sequestration targets into integrated land-use plans at national, provincial and local levels. The Project will also use on-the-ground SFM and SLM approaches and technologies that have not previously been widely applied in Kyrgyzstan, such as technologies related to multifunctional forestry, integrated forest and pasture management and organic agriculture, and up-scaling approaches involving establishment of PES schemes, Farmer Field Schools and Public-Private Partnerships. In this context the project will be highly innovative and with powerful demonstration impact.

## **SECTION 3 – FEASIBILITY (FUNDAMENTAL DIMENSIONS FOR HIGH QUALITY DELIVERY)**

### **3.1 ENVIRONMENTAL IMPACT ASSESSMENT**

Category B-environmental and social considerations have been taken into consideration in the detailed design of the project and the risk analysis in Section 3.2.

### **3.2 RISK MANAGEMENT**

Project risks have been identified and analyzed during the full project preparation and mitigation measures have been incorporated in the project design. With the support from and under the supervision of FAO, the National Project Implementation Unit will be responsible for the day-to-day management of these risks and the effective implementation of mitigation measures. The NPIU will also be responsible for monitoring the effectiveness of mitigation measures and adjusting mitigation strategies as needed and identify and manage any eventual new risks not foreseen during project development in dialogue with FAO and other concerned project partners.

The six-monthly Project Progress Report (see section 4.5.3) is the main tool for project risk monitoring and management. The reports include a section on systematic following up on identified risks and mitigation actions in previous reporting periods and another section for identification of eventual new risks or risks that still needs attention, their rating and mitigation actions including by whom and by when they should be completed. FAO will monitor the project risk management closely and follow up if needed providing support for the adjustment and implementation of risk mitigation strategies. Reporting on risk monitoring and rating will also be part of the annual Project Implementation Review prepared by FAO and submitted to the GEF Secretariat (see section 4.5.3).

#### *Risks and mitigation measures*

Risk identified during the preparation of the PIF for the achievement of the project objectives and results have been further analysed and additional risks have been identified and analysed as part of the project risk assessment undertaken during the design of the project. Mitigation measures has in each case been developed and incorporated in the full project design. Appendix 4 summarizes all risks identified, their rating, and mitigation measures incorporated in the design of project components.

## SECTION 4 – IMPLEMENTATION AND MANAGEMENT ARRANGEMENTS

### 4.1 INSTITUTIONAL ARRANGEMENTS

#### *a) General institutional context and responsibilities*

The implementation of this multi-disciplinary project will be coordinated by SAEPF and implemented with the participation of the MoA, NALSG, Oblast Administration and Rayon Administration. In addition SAEPF and MoA will work closely with a wide range of stakeholders, including resource user associations, farmers and herders, the private sector, universities, research institutions, civil society organizations, etc. at the national, oblast and rayon levels. The roles and responsibilities of the key institutions involved in the Project are summarized below:

**SAEPF** is the government institution responsible for coordination of the state programs on forest management. It will be the lead implementing Partner of the Project and will host the National Project Implementation Unit. It will be in charge of Components 2 and 4 of the Project and share responsibility for Component 1 with MoA.

**MoA** is the government institution responsible for coordination of the state programs on agriculture and land management. It will be overall in charge of Component 3 of the Project and share responsibility for Component 1 with SAEPF.

**NALSG** is the new national agency responsible for coordinating local governance. This agency will be consulted from time to time to ensure cooperation and strengthening the institutional capacities at local government level. The PSC may be requested to consider enlarging the membership by including NALSG depending on the outcome of the inception workshop.

**Oblast Administrations** are the sub-national political entities in Kyrgyzstan. SAEPF and MoA have separate divisions under the each oblast representing their ministries at local level. The following oblast EAs will be actively involved in the Project:

1. Issyk-Kul oblast – that will host the Field Office for Issyk-Kul and Naryn
2. Naryn oblast
3. Chui oblast – that will establish a Field Office in the NPIU
4. Jalal-Abad oblast – that will host the Field Office for Osh and Jalal-Abad
5. Osh oblast

**Rayon** is a second degree of administrative division below the oblast level. The following rayons will be actively involved in the project implementing activities at pilot sites together with local communities:

1. Nookat rayon (Osh)
2. Nooken rayon (Jalal-Abad)
3. Suzak rayon (Jalal-Abad)
4. Kemin rayon (Chui)
5. Jaiyl rayon (Chui)
6. Moscow rayon (Chui)
7. Sokuluk (Chui)
8. Tuip rayon (Issyk-Kul)
9. Aksuu rayon (Issyk-Kul)

10. Jety-Oguz rayon (Issyk-Kul)
11. Kochkor rayon (Naryn)
12. Ak-Tala rayon (Naryn)

*b) Coordination with other ongoing and planned related initiatives*

The proposed GEF project will be implemented in coordination with a number of FAO ongoing and 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 FAO initiative on “Preparation of a National Agriculture Development Strategy (GCP/KYR/008/TUR, 2013-2014), and (iii) the FAO projects on Strengthening the Food Security Information System (2011-2014) and Development of Farmer Field Schools (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) and is coordinating with the partners (i.e. ICARDA and IFAD) of the expected second phase. 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 program. The WOCAT share fair in Kyrgyzstan 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 comprises the Centre for development and environment of the University of Berne (WOCAT Secretariat host), FAO and ISRIC (International Soils Resources and Information Centre). 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 the IFAD programme on Livestock and Market Development. The programme is designed to scale up the IFAD/World Bank-cofinanced Agricultural Investments and Services Project (AISP) and adopts its successful approaches in pasture management and veterinary services. It will be implemented by the Ministry of Agriculture that is also responsible for Component 3 of the current Project, and close cooperation will take place in implementation of pilot sites activities in Issyk-Kul and Naryn oblasts.

The project will draw on the experiences and lessons learned mainly by two previous projects, which worked in depth with local pasture committees and generated valuable results for using in a wider context. Also, both projects used different approaches to elaborate pasture user

plans and to monitor carrying capacity. While the project in Susamyry valley, implemented by UNDP, based their results on a more scientific input by GIPROSEM, who provided a geobotanic survey, Camp Alatau, supported by GIZ, in Naryn region built on awareness raising and the participatory elaboration of pasture management plans by the herders.

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 pasture committees, but the staff 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 will be 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.

## 4.2 IMPLEMENTATION ARRANGEMENTS

### *a) Roles and responsibilities of government partners*

**Lead project partner:** The SAEPF will be the lead implementing partner. At the request of the Government of Kyrgyzstan, the project will be executed by FAO in close consultation with SAEPF and the other project partners. SAEPF will carry out its responsibilities to support project execution through the National Project Director (NPD). The NPD will be designated by the national executing partner SAEPF, in consultation with the FAO Budget Holder and the Lead Technical Officer. The NPD will be a senior staff member of the SAEPF with relevant experiences, and will be able to devote sufficient time to take part in the project during its implementation. Among the many duties of the NPD, he/she will act as the responsible focal point at the political and policy level within SAEPF and he/she will ensure that all necessary support and inputs from Government personnel are provided by SAEPF to enable the project to implement all of the proposed component activities. His/her Terms of Reference can be found in Annex 6. For the first two years of the project, the NPIU will get professional backstopping by a CTA in all ecological and climate change aspects. The CTA will provide on-going support to the project for adaptive management, best practice assessment and implementation to enable the project to maintain strategic direction during implementation by helping project management remain focused on overall results in addition to the day-to-day implementation concerns. His/her Terms of Reference can be found in Annex 6.

**Other key partners:** Other partners supporting the execution will work closely with the SAEPF through their nominated technical focal points at the national, provincial and local

levels. A key partner is MoA that will play a key role in the project's agriculture related work and be the technical lead institution for component 3 of the project and its associated pilot demonstration activities. Other collaboration partners for the project will include 5 Oblast (Provincial) Executive Authorities, 12 pilot rayons and resource-users organizations at pilot sites. The project is designed to achieve many of its key outputs by means of letters of agreement (LoA) with key partners. These LoA are listed under the "Contracts" Budget Line of the project budget. Further detail on results-based LoA work plans and budgets will be developed during inception phase of the project. Specific Letters of Agreement (LoA) will be elaborated and signed between FAO and the respective collaborating partner. This will include inter alia, civil society organizations as appropriate. Funds received under a LoA will be used to execute the project activities in conformity with FAO's rules and procedures.

**National Project Implementation Unit (NPIU)** will be hosted by SAEPF and will be responsible for day-to-day project operations. The role of the NPIU will be, in close consultation with the PSC and Independent Expert Group (IEG) members (see below), to ensure the coordination and execution of the Project through the timely and efficient implementation of annual work plans. The NPIU will act as secretariat to the PSC. It will coordinate work and follow closely the implementation of project activities, handle day-to-day project issues and requirements, coordinate project interventions with other on-going activities and ensure a high degree of provincial/oblast and local/rayon inter-institutional collaboration, monitor project progress and ensure the timely delivery of inputs and outputs. It will organize workshops and annual meetings for the Project for monitoring project progress and develop results-based work plans with detailed budget for the next year to be approved by the PSC. It will be responsible for implementing the project's M&E plan, setting up and managing its monitoring system and communication programme, the elaboration of six-monthly Project Progress Reports and assist in the preparation of the annual Project Implementation Review (PIR) and midterm and final evaluations, which include gender reports. Project Progress Reports on implemented activities and progress in achieving project outputs and outcomes, and financial statements of expenditures and status for the previous year will be submitted together with the Annual Work Plan and detailed Budget (AWP/B) to the PSC and FAO via SAEPF's Project Director.

The NPIU will consist of the following SAEPF and MoA staff financed by the SAEPF and MoA co-financing: (i) a part-time Project Director (funded by SAEPF) in charge of overall coordination and supervision of the project and coordination with other sector departments; (ii) a full time SFM Technical Officer (funded by SAEPF); and a full time SLM Technical Officer (funded by MoA), managing project information and documentation, and distribution of project reports, newsletters and training materials to relevant stakeholders; managing project M&E, conducting regular field M&E visits to project sites, and assisting the National Project Manager (see below) in preparing six-monthly Project Progress Reports monitoring progress in achieving project outputs and outcome indicators, and in liaising with FAO Representation's Finance and Administrative Assistant (for preparing financial reports). SAEPF will also provide office space, equipment and utilities and part of travel as a counterpart contribution to project management.

To further strengthen the NPIU the GEF resources will finance (i) a full-time **National Project Manager** in charge of project daily management and technical supervision including, preparing AWP/B and allocating tasks to Field Offices, preparing TORs and technical requirements for consultancy services contracting documents and material and equipment procurement documents, providing technical supervision and guidance to the Field Offices in

implementing project activities, conducting regular field supervision visits and provide on-site guidance to oblast/rayon technical staff, day-to-day coordination and communication with Field Office staff in charge of the GEF project, and preparing the project progress reports; (ii) an **Administrative Assistant** (based in the FAO Representation) in charge of preparing visa and travel requests for the employees of the Project, consultants in accordance with FAO standard operating procedures, solution of organizational issues on project staff's travel; preparing of short-term contracts in accordance with FAO requirements and procedures and exercising control over observance of contract terms and periods; developing of a catalogue of materials on monitoring of the project and project activities (correspondence, reports, budget and financial expenses) in accordance with FAO requirements; preparing logistics of workshops, working meetings, delegations, field expeditions and etc.; (iii) a **National Finance Officer** (based in the FAO Representation) in charge of preparing detailed budgets for cash transfer requests based on the AWP/B and project account cash balance, keeping the financial records and regular review of the project account, reviewing the receipts and financial reports submitted by field offices and sub-contractors and preparing six-monthly financial statement of expenditures, preparing the personnel and services contracting and procurement documents and participate in contracting and procurement processes including of submission of documentation to FAO for ex-antes clearances, and preparing relevant documents for internal and external financial audits. (iv) **Project Assistant** will be based in NPIU in order to support National Project Manager on day-to-day coordination and communication with field offices, project partners and stakeholders; translate documents from/into Russian, English and Kyrgyz and work as a translator at meetings and workshops; perform all necessary secretarial services and maintain office equipment. (v) a **CTA** will provide for the first two years professional backstopping for all aspects of ecosystem-based approaches for climate change adaptation, organic farming, rangeland management and agroforestry as well as environmental awareness, education and capacity building. He/She has to ensure that the project is an active member of a broader knowledge management network on adaptation to climate change and natural resource and land management. This includes to emphasize a learning and adaptive approach to project management and implementation in close cooperation with the national partners. The Chief Technical Advisor will work closely with the National Project Manager and will deputize him/her when necessary.

**Field Offices** will be responsible for pilot site activities and work under supervision of the NPIU. Field Offices will be established in Issyk-Kul (also responsible for Naryn) and Jalal-Abad (also responsible for Osh). The NPIU will provide field office services for Chui Oblast. The Field Offices will work closely with local stakeholders and resource user associations and each consist of Field Site Coordinators and Technical assistants funded by GEF and reporting to the NPIU, other specialised national consultants that support pilot site activities and local Oblast/Rayon staff seconded to the project.

- b) *FAO's role and responsibilities, as the GEF Agency (and as an executing agency, when applicable), including delineation of responsibilities internally within FAO*

FAO will be the GEF implementing and executing agency. As the GEF Agency, FAO will be responsible for project oversight to ensure that GEF policies and criteria are adhered to, and that the project efficiently and effectively meets its objectives and achieves expected outcomes and outputs as established in the project document. FAO will report on project progress to the GEF Secretariat and financial reporting will be to the GEF Trustee. FAO will

closely supervise the project by drawing upon its capacity at the global, regional and national levels, through the concerned units at FAO-HQ, the Sub-Regional Office in Ankara and the FAO Representation in Kyrgyzstan. There is a complete separation between the GEF oversight responsibilities and project execution roles and responsibilities, as described below.

**Executing Responsibilities (Budget Holder):** Under FAO's Direct Execution modality, the FAO Representative in Kyrgyzstan will be the **Budget Holder (BH)** of this project. The BH, working in close consultation with the LTO, will be responsible for timely operational, administrative and financial management of the project. The BH will head the multidisciplinary Project Task Force that will be established to support the implementation of the project and will ensure that technical support and inputs are provided in a timely manner. The BH will be responsible for financial reporting, procurement of goods and contracting of services for project activities in accordance with FAO rules and procedures. Final approval of the use of GEF resources rests with the BH, also in accordance with FAO rules and procedures.

Specifically, working in close collaboration with the LTO, the BH will: (i) clear and monitor annual work plans and budgets; (ii) schedule technical backstopping and monitoring missions; (iii) authorize the disbursement of the project's GEF resources; (iv) give final approval of procurement, project staff recruitment, LoAs, and financial transactions in accordance with FAO's clearance/approval procedures; (v) review procurement and subcontracting material and documentation of processes and obtain internal approvals; (vi) be responsible for the management of project resources and all aspects in the agreements between FAO and the various executing partners; (vii) provide operational oversight of activities to be carried out by project partners; (viii) monitor all areas of work and suggest corrective measures as required; (ix) submit to the GEF Coordination Unit, the TCID Budget Group semi-annual budget revisions that have been prepared in close consultation with the LTO (due in August and February); (x) be accountable for safeguarding resources from inappropriate use, loss, or damage; (xi) be responsible for addressing recommendations from oversight offices, such as Audit and Evaluation; and (xii) establish a multi-disciplinary FAO Project Task Force to support the project.

The **FAO Lead Technical Unit (LTU)**. The Forest Assessment Management and Conservation Division (FOM) of FAO's Forestry Division will be the LTU for this project and will provide overall technical guidance to its implementation, particularly through the Mountain Partnership Secretariat. FOM will delegate the responsibility for direct technical supervision to the FAO Sub-regional Office for Central Asia in Ankara, under direct supervision of the FAO Sub-regional Coordinator for Central Asia.

**FAO Lead Technical Officer (LTO)** The Senior Forestry Officer) in the FAO Sub-Regional Office for Central Asia will be the LTO for the project. Under the general technical oversight of the LTU, the LTO will provide technical guidance to the project team to ensure delivery of quality technical outputs. The LTO will coordinate the provision of appropriate technical backstopping from all the concerned FAO units represented in the Project Task Force. The Project Task Force is thus composed of technical officers from the participating units (see below), operational officers, the Investment Centre Division/GEF Coordination Unit and is chaired by the BH. The primary areas of LTO support to the project include:

- (i) review and ensure clearance by the relevant FAO technical officers of all the technical Terms of Reference (TOR) of the project team and consultants;

- (ii) ensure clearance by the relevant FAO technical officers of the technical terms of reference of the Letters of Agreement (LoA) and contracts;
- (iii) in close consultation with SAEPF and MoA, lead the selection of the project staff, consultants and other institutions to be contracted or with whom an LoA will be signed;  
;
- (iv) review and clear technical reports, publications, papers, training material, manuals, etc.;
- (v) monitor technical implementation as established in the project results framework;
- (vi) review the Project Progress Reports (PPRs) and prepare the annual Project Implementation Review (PIR).

A multidisciplinary **Project Task Force** will be established by the Budget Holder and comprised of technical units in the Sub-regional Office for Central Asia and FAO Headquarters, the Investment Centre Division, the GEF Coordination Unit, Land and Water Division (NRL) and the Legal Office. Participating units from across FAO will be involved in supporting the project's work and in ensuring that the project stays on track to achieve its overall objectives and indicators of success. When appropriate, these units within the Sub-regional Office for Central Asia and HQ will provide technical support in areas such as: forest and sustainable land management, climate smart agriculture, gender, climate change vulnerability assessment and adaptation. The FAO Investment Centre Division will provide adaptive management support and results-based management oversight and guidance to the LTO and the participating units.

**FAO GEF Coordination Unit in Investment Centre Division** will review and approve PPRs, annual PIRs and results-based financial reports and budget revisions. The GEF Coordination Unit will organize annual independent supervision missions, in consultation with the LTU, LTO, the BH and TCIB. The PIRs will be included in the FAO GEF Annual Monitoring Review submitted to GEF by the GEF Coordination Unit. The GEF Coordination Unit will work closely with the FAO Evaluation Office (OEDD) to ensure that the project's mid-term review and final evaluations meet GEF requirements by reviewing evaluation ToRs and draft evaluation reports. Should the PIRs or mid-term review highlight risks affecting the timely and effective implementation of the project, the GEF Coordination Unit will work closely with the BH and LTO to make the needed adjustments in the project's implementation strategy.

The **Investment Centre Division Budget Group (TCID)** will provide final clearance of any budget revisions.

The **FAO Finance Division** will provide annual Financial Reports to the GEF Trustee and, in collaboration with the GEF Coordination Unit and the TCID Budget Group, call for project funds on a six-monthly basis from the GEF Trustee.

*c) Project technical, coordination and steering committees*

**Project Steering Committee (PSC):** A project PSC will be established and chaired by SAEPF with the participation of MoA, 5 Oblast representatives, and FAO, and WFP, Mountain Partnership, GIZ as observers. 50 % of members should be women. Observers from NGOs and the universities will also be invited to participate as appropriate. The PSC will meet minimally once a year and its specific responsibilities will be: (i) overall oversight of project progress and achievement of planned results as presented in the results-based annual work plan and budget (AWPB) and reported in six-monthly Project Progress Reports; (ii) take

decisions in the course of the practical organization, coordination and implementation of the project; (iii) facilitate cooperation between NPIU/SAEPF and project participating partners; (iv) advise the NPIU on other on-going and planned activities facilitating collaboration between the Project and other programmes, projects and initiatives in Kyrgyzstan; (v) facilitate that co-financing support is provided in a timely and effective manner; and (vi) review six-monthly Project Progress and Financial Reports/Budget Revisions and approve AWP/B.

**National Project Implementation Unit (NPIU)** will be hosted by SAEPF and will be responsible for day-to-day project operations. The role of the NPIU will be, in close consultation with the PSC and IEG members (see below), to ensure the coordination and execution of the Project through the timely and efficient implementation of annual work plans. The NPIU will act as secretariat to the PSC. It will coordinate work and follow closely the implementation of project activities, handle day-to-day project issues and requirements, coordinate project interventions with other on-going activities and ensure a high degree of provincial/oblast and local/rayon inter-institutional collaboration, monitor project progress and ensure the timely delivery of inputs and outputs. It will organize workshops and annual meetings for the Project for monitoring project progress and develop work plans with detailed budget for the next year to be approved by the PSC. It will be responsible for implementing the project's M&E plan, managing its monitoring system and communication programme, the elaboration of six-monthly Project Progress and Financial reports and assist in the preparation of the annual Project Implementation Review (PIR) and midterm and final evaluations. Project Progress Reports on implemented activities and progress in achieving project outputs and outcomes, and financial statements of expenditures and status for the previous year will be submitted together with the Annual Work Plan and detailed Budget (AWP/B) to the PSC and FAO via SAEPF's Project Director.

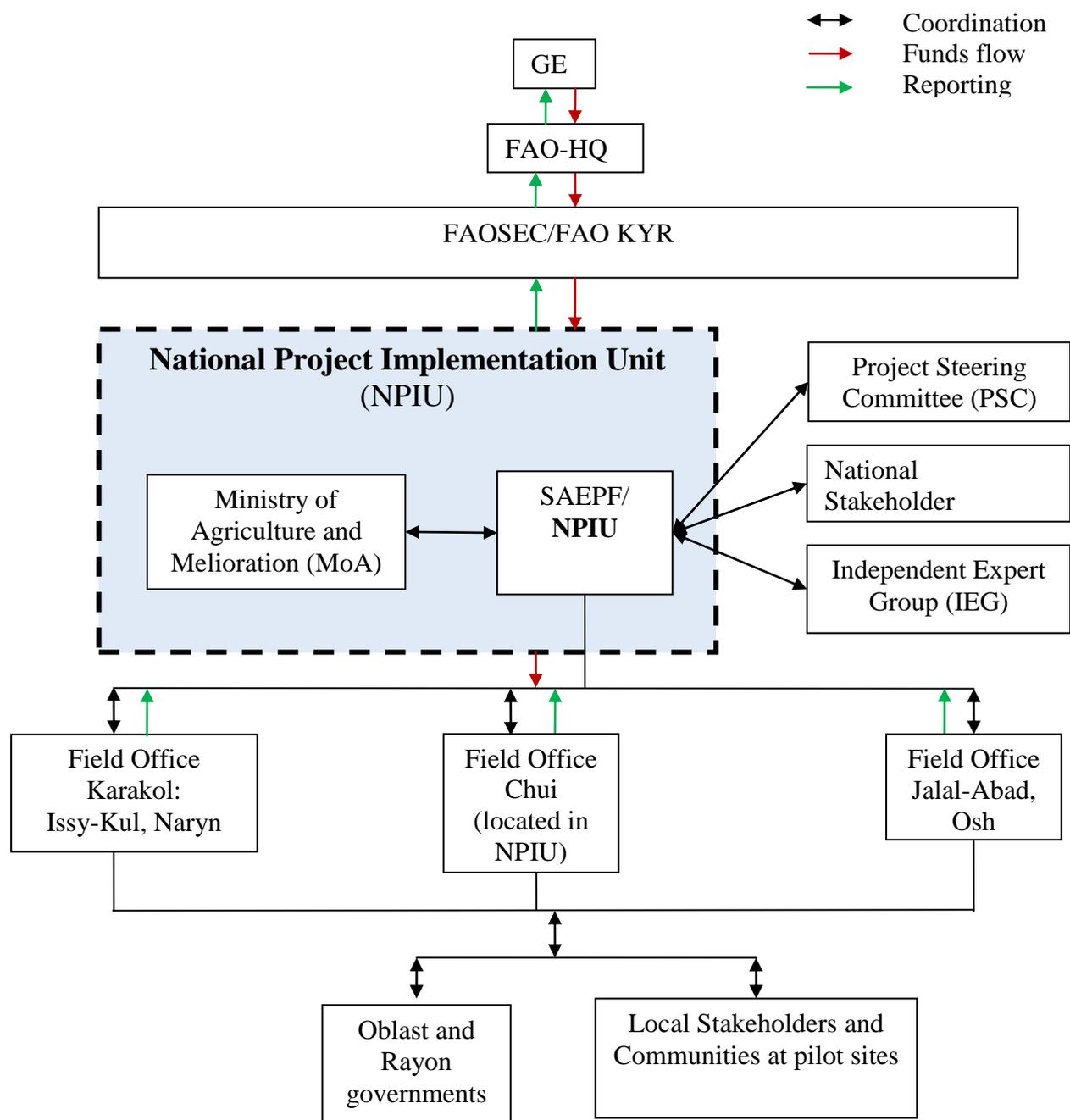
The NPIU will consist of the following SAEPF and MoA staff financed by the SAEPF and MoA co-financing: (i) a part-time Project Director (funded by SAEPF) in charge of overall coordination and supervision of the project and coordination with other sector departments; (ii) a full time SFM Technical Officer (funded by SAEPF); and a full time SLM Technical Officer (funded by MoA), managing project information and documentation, and distribution of project reports, newsletters and training materials to relevant stakeholders; managing project M&E, conducting regular field M&E visits to project sites, and assisting the National Project Manager (see below) in preparing six-monthly Project Progress Reports monitoring progress in achieving project outputs and outcome indicators, and in liaising with FAO Representation's Finance and Administrative Assistant (for preparing financial reports). SAEPF will also provide office space, equipment and utilities and part of travel as a counterpart contribution to project management.

**Field Offices** will be responsible for pilot site activities and work under supervision of the NPIU. Field Offices will be established in Issyk-Kul (also responsible for Naryn) and Jalal-Abad (also responsible for Osh). The NPIU will provide field office services for Chui Oblast. The Field Offices will work closely with local stakeholders and resource user associations and each consist of Field Site Coordinators and Technical assistants funded by GEF and reporting to the NPIU, other specialised national consultants that support pilot site activities and local Oblast/Rayon staff seconded to the project.

**National Stakeholder Committee (NSC):** The mandate of the NSC will be to: (i) provide advice on relevant policies, actions and measures in particular related to participation of local

communities at the pilot sites in the 5 selected oblasts and 12 rayons; (ii) provide new ideas and thinking on conflict resolution over management of natural resources, options for increased carbon sequestration and sustainable use, and creative initiatives on how to increase public awareness of socio-economic and global environmental benefits generated by SFM and SLM; and (iii) promote communications between the government agencies and local communities and the private sector. The composition of the NSC will include representatives from local farming and herding communities, municipal and oblast governments, *leskhoz*es, Water User Associations (WUA), *Pasture* Committees, involved in tree plantation, farming, pasture management and conservation. 50 % of members should be women. The National Stakeholder Committee will meet back-to-back with the PSC to provide consolidated advice on stakeholder participation and engagement.

d) *Organizational chart*



### 4.3 FINANCIAL PLANNING AND MANAGEMENT

The total cost of the project will be **USD24,454,695**, to be financed through a USD5,454,545 GEF grant and USD 19,000,150 in co-financing from: (i) SAEPF (USD 3,200,000); (ii) MoA (including IFAD funding) (USD8,300,000); (iii) FAO (USD2,400,000); (iv) farmers and herders associations (USD 1,183,300); v) GIZ,(USD 1,700,000); vi) Mountain Partnership (USD 1,716,850) and vii) WFP (USD500,000). The table below shows the cost by component and outputs and by sources of financing. The FAO will, as the GEF Agency, **only be responsible** for the execution of the GEF resources and the FAO co-financing.

### 4.3.1 Financial plan (by component, outputs and co-financier)

Component/output	National Contribution (including IFAD)	FAO	GIZ	WFP	Mountain Partnership	Local Land Users	Total Co-financing	% Co-financing	GEF	% GEF	Total
<b>Component 1: Strengthening of the enabling</b>	<b>900,000</b>	-	<b>600,000</b>	-	<b>500,000</b>		<b>2,000,000</b>	<b>79%</b>	<b>527,455</b>	<b>21%</b>	<b>2,527,455</b>
O 1.1: Enhanced policy, legal and institutional framework	523,000	-	600,000	-	400,000		1,523,000	86%	250,947	14%	1,773,947
O 1.2: Increased understanding and awareness of roles of SFM/SLM and LULUCF in carbon sequestration and GHG balance	377,000		-	-	100,000		477,000	63%	276,508	37%	753,508
<b>Component 2: Enhancing carbon stocks in dry</b>	<b>3,900,000</b>	<b>1,400,000</b>	<b>1,000,000</b>	<b>500,000</b>	<b>1,000,000</b>		<b>7,800,000</b>	<b>76%</b>	<b>2,414,549</b>	<b>24%</b>	<b>10,214,549</b>
O 2.1: Management of existing forests and trees improved	2,000,000	-	500,000	-	600,000		3,100,000	76%	1,005,941	24%	4,105,941
O 2.2: Dryland forest areas rehabilitated/afforested through introduction and demonstration of innovative practices and pressures on forests reduced	1,900,000	1,400,000	500,000	500,000	400,000		4,700,000	77%	1,408,608	23%	6,108,608
<b>Component 3: Promoting and demonstrating</b>	<b>6,200,000</b>	<b>600,000</b>	-	-	<b>216,850</b>	<b>1,183,300</b>	<b>8,200,150</b>	<b>83%</b>	<b>1,737,945</b>	<b>17%</b>	<b>9,938,095</b>
O 3.1: Improved agricultural management and rehabilitation practices and techniques in drylands	6,200,000	600,000	-	-	216,850	1,183,300	8,200,150	83%	1,737,945	17%	9,938,095
<b>Component 4: Knowledge Management, monitoring and evaluation</b>	<b>200,000</b>	<b>100,000</b>	<b>100,000</b>	-	-		<b>400,000</b>	<b>46%</b>	<b>465,860</b>	<b>54%</b>	<b>865,860</b>
O 4.1: Monitoring and evaluation of project progress for adaptive results-based management to mitigate unexpected risks and changes									210,860	100%	210,860
O 4.2: Dissemination of information and best practices through knowledge management platforms, national and international cooperation and awareness raising	200,000	100,000	100,000	-	-		400,000	61%	255,000	39%	655,000
<b>Project Management</b>	<b>300,000</b>	<b>300,000</b>	-	-	-		<b>600,000</b>	<b>66%</b>	<b>308,736</b>	<b>34%</b>	<b>908,736</b>
<b>Total Project</b>	<b>11,500,000</b>	<b>2,400,000</b>	<b>1,700,000</b>	<b>500,000</b>	<b>1,716,850</b>	<b>1,716,850</b>	<b>19,000,150</b>	<b>78%</b>	<b>5,454,545</b>	<b>22%</b>	<b>24,454,695</b>

### 4.3.2 GEF inputs

GEF grant resources totalling **USD5,454,545** over the four-year life of the project are allocated primarily for the provision of technical assistance, for capacity building and training, for technical assessments to support the pilot demonstration activities, and for the development and implementation of pilot demonstration activities. The GEF funds will finance inputs needed to generate the outputs and outcomes under the project. These include: (i) local and international consultants for technical support and project management; (ii) inputs for implementation of pilot site demonstration activities (e.g. seeds, saplings and plants, soil and water related equipment, minor construction materials and tools); (iii) LoAs/contracts with technical institutions and service providers supporting the delivery of specific project activities on the ground; (iv) travel, expendable and non expendable office equipment; and (v) training and awareness raising material.

### 4.3.3 Government inputs

**SAEPF** will provide USD1,600,000 in cash to multifunctional and joint forest management planning, restoration of degraded forest land, and planting of fast-growing native species in the five project oblasts. In-kind support to project implementation in the order of USD1,600,000 will be provided as staff-time, equipment, machinery, etc. In addition, SAEPP will provide support to the project within the framework of the National Forest Program 2013-2015 to an amount of USD3,846,200. The total co-financing from SAEPP to the GEF project thus comes to **USD3,200,000**.

**MoA** will provide support to multifunctional and joint planning activities for the restoration of degraded agricultural lands for development of appropriate agro-environmental policies to

incentivize SLM at local level. SLM practices to be supported include conservation agriculture (reduced tillage, crop rotation, crop residue management and improvement of vegetative cover), introduction of bio-fertilizers, modern water-saving irrigation systems, and small-holder composting techniques. USD1,500,000 will be provided in cash and USD1,800,000 will be provided in-kind, amounting to a total co-financing of **USD3,300,000**.

MoA will also use part of the IFAD loan and grant to the Kyrgyz Republic for the Livestock and Market Development Program to support the GEF project with a total amount of **USD5,000,000**. This funding will mainly be used to support local community involvement in more effective pasture management and rehabilitation.

#### **4.3.4 FAO inputs**

FAO will provide technical assistance, backstopping, training and supervision of the execution of activities financed by GEF resources. The GEF project will complement and be co-financed by several projects and activities implemented by the FAO Representation in Kyrgyzstan funded by the FAO Technical Cooperation Programme and by various donors through trust fund arrangements, as follows:

- Support Capacity Building for Sustainable Management of Mountain Watersheds in Central Asia (GCP/SEC/002/TUR)
  - Support to Wind Break Establishment and Road and River Side Plantations to Protect Agricultural Lands from Wind Erosion (TCP pipeline)
  - Preparation of National Agriculture Development Strategy (GCP/KYR/008/TUR)
  - Capacity Building Project for Efficient Water Management in Agriculture, Targeted at Farmers and Extension Workers (on-farm water management).
  - Support to Multi-Functional Forest Management Planning at District Levels
  - Piloting the Use of Land Tenure Guidelines in Selected Pasture Users Unions in the Kyrgyz Republic(TCP Pipeline)
- National Forest Monitoring and Information System for a transparent and truthful REDD-plus" (GCP/GLO/456/GER)

Total co-financing from FAO to the GEF project amounts to **USD2,400,000**.

#### **4.3.5 Other co-financiers inputs**

The **GIZ** is the key collaborating and co-financing partner under this project and the GEF project has been designed to build on the GIZ EU funded project *FELRMONECA* and to complement the upcoming project *Biodiversity Conservation and Poverty Reduction through Community-Based Management of Walnut Forests in Southern Kyrgyzstan*, which will be implemented on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). GIZ support will mainly go to components 1 and 2 and the total in-kind contribution amounts to **USD1,700,000**.

The Central Asian Hub of the **Mountain Partnership** that represents the Kyrgyz Government and 15 leading NGOs working in the field of natural resources management and sustainable mountain development, academia and Universities in Kyrgyzstan, will co-fund activities related to capacity building at local level, knowledge sharing, payment for ecosystem services, good SLM practices, including pasture management and soil and water conservation,

land-use change studies and monitoring, and replication of SLM practices. The total co-funding from its members amounts to **USD1,716,850**.

Representatives of **local resource users** that have committed to support the project include:

- The Agricultural Cooperative “Reina Kench” will support restoration of degraded agricultural lands and development of appropriate agro-environmental policies to incentives SLM at local level. Specifically, it will support conservation agriculture in Issyk-Kul oblast, Ak-Suu rayon for a total amount in cash and in kind of **USD765,200**.
- The Peasant Farm “Gadji” will also provide support in cash and in kind to conservation agriculture in Chui oblast, Sokuluk rayon for a total amount of **USD418,100**.

**WFP** will support the Project through its Protracted Relief and Recovery Operation in the Kyrgyz Republic. WFP has been implementing large-scale planting activities in forestry since 2010 through Food for Assets activities, which have proved extremely effective in terms of involving vulnerable households in forestry activities. WFP will mainly contribute to Outcome 2.2. on dryland forest areas rehabilitated/afforested through introduction and demonstration of innovative technologies and practices to a total amount of **USD500,000**.

#### **4.3.6 Financial management of and reporting on GEF resources**

**Financial Records.** FAO shall maintain a separate account in United States dollars for the project’s GEF resources showing all income and expenditures. Expenditures incurred in a currency other than United States dollars shall be converted into United States dollars at the United Nations operational rate of exchange on the date of the transaction. FAO shall administer the project in accordance with its regulations, rules and directives.

**Financial Reports.** The BH shall prepare six-monthly project expenditure accounts and final accounts for the project, showing amount budgeted for the year, amount expended since the beginning of the year, and separately, the un-liquidated obligations as follows:

1. Details of project expenditures on a component-by-component and output-by-output basis, reported in line with project budget codes as set out in the project document, as at 30 June and 31 December each year.
2. Final accounts on completion of the project on a component-by-component and output-by-output basis, reported in line with project budget codes as set out in the project document.
3. A final statement of account in line with FAO Oracle project budget codes, reflecting actual final expenditures under the project, when all obligations have been liquidated.

The BH will submit the above financial reports for review and monitoring by the LTO and the FAO GEF Coordination Unit. Financial reports for submission to the donor (GEF) will be prepared in accordance with the provisions in the GEF Financial Procedures Agreement and submitted by the FAO Finance Division.

**Budget Revisions.** Semi-annual budget revisions will be prepared by the BH in accordance with FAO standard guidelines and procedures.

**Responsibility for Cost Overruns.** The BH is authorized to enter into commitments or incur expenditures up to a maximum of 20 percent over and above the annual amount foreseen in the project budget under any budget sub-line provided the total cost of the annual budget is not exceeded.

Any cost overrun (expenditure in excess of the budgeted amount) on a specific budget sub-line over and above the 20 percent flexibility should be discussed with the GEF Coordination Unit with a view to ascertaining whether it will involve a major change in project scope or design. If it is deemed to be a minor change, the BH shall prepare a budget revision in accordance with FAO standard procedures. If it involves a major change in the project's objectives or scope, a budget revision and justification should be prepared by the BH for discussion with the GEF Secretariat.

Savings in one budget sub-line may not be applied to overruns of more than 20 percent in other sub-lines even if the total cost remains unchanged, unless this is specifically authorized by the GEF Coordination Unit upon presentation of the request. In such a case, a revision to the project document amending the budget will be prepared by the BH.

Under no circumstances can expenditures exceed the approved total project budget or be approved beyond the NTE date of the project. **Any over-expenditure is the responsibility of the BH.**

**Audit.** The project shall be subject to the internal and external auditing procedures provided for in FAO financial regulations, rules and directives and in keeping with the Financial Procedures Agreement between the GEF Trustee and FAO.

The audit regime at FAO consists of an external audit provided by the Auditor-General (or persons exercising an equivalent function) of a member nation appointed by the Governing Bodies of the Organization and reporting directly to them, and an internal audit function headed by the FAO Inspector-General who reports directly to the Director-General. This function operates as an integral part of the Organization under policies established by senior management, and furthermore has a reporting line to the governing bodies. Both functions are required under the Basic Texts of FAO which establish a framework for the terms of reference of each. Internal audits of imprest accounts, records, bank reconciliation and asset verification take place at FAO field and liaison offices on a cyclical basis.

#### **4.4 PROCUREMENT**

Careful procurement planning is necessary for securing goods, services and works in a timely manner, on a "Best Value for Money" basis, and in accordance with the Rules and Regulations of FAO. It requires analysis of needs and constraints, including forecast of the reasonable timeframe required to execute the procurement process. Procurement and delivery of inputs in technical cooperation projects follow FAO's rules and regulations for the procurement of supplies, equipment and services (i.e. Manual Sections 502 and 507). *Manual Section 502*: "Procurement of Goods, Works and Services" establishes the principles and procedures that apply to procurement of all goods, works and services on behalf of the Organization, in all offices and in all locations, with the exception of the procurement actions described in Appendix A – Procurement Not Governed by Manual Section 502. *Manual Section 507* establishes the principles and rules that govern the use of Letters of Agreement (LoA) by FAO for the timely acquisition of services from eligible entities in a transparent and impartial manner, taking into consideration economy and efficiency to achieve an optimum combination of expected whole life costs and benefits ("Best Value for Money").

As per the guidance in FAO's Project Cycle Guide, the BH will draw up an annual procurement plan for major items which will be the basis of requests for procurement actions during implementation. The first procurement plan will be prepared at the time of project start-up, if not sooner. The plan will include a description of the goods, works, or services to be procured, estimated budget and source of funding, schedule of procurement activities and proposed method of procurement. In situations where exact information is not yet available, the procurement plan should at least contain reasonable projections that will be corrected as information becomes available.

## **4.5 MONITORING AND REPORTING**

Monitoring and evaluation of progress in achieving project results and objectives will be done based on the targets and indicators established in the Project Results Framework (Appendix 2 and described in section 2.3 and 2.4). The project Monitoring and Evaluation Plan has been budgeted at USD 190 000 (see table in section 4.5.4). Monitoring and evaluation activities will follow FAO and GEF monitoring and evaluation policies and guidelines. Supported by component 1 will also facilitate learning and mainstreaming of project outcomes and lessons in relation to monitoring of carbon benefits, and mainstreaming of SFM and SLM in sector policies and development plans.

### **4.5.1 Oversight and monitoring responsibilities**

The M&E tasks and responsibilities clearly defined in the Projects detailed Monitoring Plan (see below) will be achieved through: (i) day-to-day monitoring and supervision missions of project progress (NPIU and OPIUs); (ii) technical monitoring of carbon benefits and ecosystem "status" indicators (NPIU and OPIUs in coordination with other relevant participating technical units at oblast level); (iii) specific monitoring plans for carbon sequestration and emissions avoided (NPIU and OPIUs with support from local communities and other stakeholders); (iv) midterm and final evaluations (independent consultants and FAO Evaluation Office); and (v) continual oversight, monitoring and supervision missions (FAO).

At the initiation of implementation of the GEF Project, the NPIU will set up a project progress monitoring system strictly coordinated with subsystems in each of the Oblasts. Participatory and gender sensitive mechanisms and methodologies for systematic data collection and recording will be developed in support of outcome and output indicator monitoring and evaluation. During the inception workshop (see section 4.5.3 below), M&E related tasks to be addressed will include: (i) presentation and clarification (if needed) of the project's Results Framework with all project stakeholders; (ii) review of the M&E indicators and their baseline; (iii) drafting the required clauses to include in consultants' contracts to ensure they complete their M&E reporting functions (if relevant); and (iv) clarification of the respective M&E tasks among the Project's different stakeholders. One of the main outputs of the workshop will be a detailed monitoring plan agreed by all stakeholders based on the monitoring and evaluation plan summary presented in section 4.5.4 below.

The day-to-day monitoring of the Project implementation will be the responsibility of the NPIU driven by the preparation and implementation of an AWP/B followed up through six-monthly PPRs. The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project partners. As tools for results-based-management (RBM), the AWP/B will identify the actions proposed for the coming

project year and provide the necessary details on output targets to be achieved, and the PPRs will report on the monitoring of the implementation of actions and the achievement of output targets. Oblast-specific inputs to the AWP/B and the PPRs will be prepared based on participatory planning and progress review with local stakeholders and coordinated through the NPIU and Field Offices, facilitated through project planning and progress review workshops. These inputs would be consolidated by the respective Field Office before forwarding them to the NPIU who will consolidate into a draft AWP/B and PPRs. An annual project progress review and planning meeting should be held with the participation of the SAEP/NPIU and the Oblast Executive Authorities to finalize the AWP/B and PPRs. Subsequently the AWP/B and PPRs are submitted to the PSC for approval (AWP/B) and Review (PPRs) and to FAO for approval. The AWP/B will be developed in a manner consistent with the project's Results Framework to ensure adequate fulfilment and monitoring of project outputs and outcomes.

Following the approval of the Project, the project's first year AWP/B will be adjusted (either reduced or expanded in time) to synchronize it with an annual reporting calendar. In subsequent years, the FSP work plan and budget will follow an annual preparation and reporting cycle as specified in section 4.5.3 below.

#### **4.5.2 Indicators and information sources**

To monitor project outputs and outcomes including contributions to global environmental benefits specific indicators have been established in the Results Framework (see Appendix 1). The framework's indicators and means of verification will be applied to monitor both project performance and impact. Following FAO's monitoring procedures and progress reporting formats data collected will be of sufficient detail to be able to track specific outputs and outcomes and flag project risks early on. Output target indicators will be monitored on a six-monthly basis and outcome target indicators will be monitored on an annual basis if possible or as part of the mid-term and final evaluations. The project output and outcome indicators have been designed to monitor on-the-ground impacts and progress in implementing SFM and SLM both at SAEPF and MoA, through creation of an enabling environment, and at the level of the oblast, rayon and farming and herding communities, and the private sector using and safeguarding ecosystem services from forests, pastures and agricultural land.

##### On-the-ground impact indicators will track:

*The level of adoption by farmers and herders of environmentally and climate friendly production practices, productivity increase, and hectares covered* to be monitored in a gender disaggregated way to ensure adequate participation of women. Specific indicators include hectares covered and communities involved in rehabilitation and planting of trees on forest land, and the resulting income increase; hectares covered and farmers involved in conservation agriculture and landscape-based management of natural resources and resulting income increase; and hectares covered and herders involved in sustainable management of pastures and the resulting income increase. The baseline and target for these indicators are established in the Project Results Framework and will be fine-tuned and included in the plan for each pilot site model. Their systematic monitoring will be done with the involvement of participating Oblast Administrative Bureaus, rayons and farming and herding communities.

*Increase in carbon sequestration and avoided emissions on forest and arable land including improved provision of ecosystem services*— The baseline and target for these indicators are established in the Project Results Framework and will be monitored as part of the Oblasts'

carbon stock monitoring systems. Other indicators for provision of ecosystem services are tracked in the GEF Land Degradation, Climate Change, and Sustainable Forest Management Tracking Tools and include improved irrigation flow and increased water availability on land under SFM and SLM (see attachment).

The indicators for strengthening the enabling environment for SFM and SLM will capture:

*Legal, policy and planning instruments developed* - Integrated land-use management plans incorporating carbon benefits from SFM and SLM; amendments to land code and forest code; national soil fertility conservation strategy drafted; local decrees for oblasts.

*Level of mainstreaming of SFM and SLM in policies and legal instruments* – sector policies (i.e. forestry, agriculture, and environment) aligned with SFM and SLM principles and cross-sectoral strategies on integrated land-use management; operational mechanism for cross-sectoral collaboration; and resource user associations and local resource management institutions are fully functional.

*Levels of created human capacities and awareness (by gender)* – number of policy makers, technical staff and extension agents with enhanced capacities in SFM/SLM, including carbon stock monitoring and SFM/SLM measures, law enforcement and co-management mechanisms, and public communication and awareness raising; number of farmers and herders trained and participating in: a) SFM, including improved use of fuelwood, improved cookstoves, solar heating and home insulation activities, and b) SLM, including conservation agriculture, integrated forest and pasture management, Farmer Field Schools, PES schemes and Public-Private Partnerships.

The main sources of information to support the M&E program will be: (i) the carbon stock monitoring systems at national and oblast level; (ii) participative progress monitoring and workshops with beneficiaries; (iii) on-site monitoring of the implementation of SFM and SLM best practices; (iv) project progress reports prepared by the NPIU with inputs from the Field Offices; (v) consultants' reports; (vi) participants' training tests and evaluations; (vii) mid-term and final evaluations completed by independent consultants under the supervision of the FAO Evaluation Office; (viii) financial reports and budget revisions; (ix) Project Implementation Reviews prepared by the FAO Lead Technical Officer supported by the Project Task Manager in the FAO Sub-regional Office for Central Asia and the NPIU; and (ix) technical support/backstopping and FAO supervision mission reports.

#### **4.5.3 Reporting schedule**

Specific reports that will be prepared under the M&E program are: (i) Project inception report; Annual Work Plan and Budget (AWP/B); (iii) Project Progress Reports (PPRs); (iv) annual Project Implementation Review (PIR); (v) Technical Reports; (vi) co-financing reports; and (vii) Terminal Report. In addition, assessment of the GEF Monitoring Evaluation Tracking Tools (METTs) against the baseline (completed during project preparation) will be required at midterm and final project evaluation.

**Project Inception Report.** Immediately after the Inception Workshop (IW), the NPIU will prepare a project inception report in consultation with the LTO, BH and other project partners. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project

implementation. It will also include a detailed first year AWP/B, a detailed project monitoring plan based on the monitoring and evaluation plan summary presented in section 4.5.4 below. The draft inception report will be circulated to the LTO and for review and comments before its finalization, no later than one month after project start-up. The report should be cleared by the FAO BH, LTO and the FAO GEF Coordination Unit and uploaded in FPMIS by the BH.

**Results-based Annual Work Plan and Budget (AWP/B).** The draft of the first AWP/B will be prepared by the NPIU in consultation with the Project Task Force and reviewed at the project Inception Workshop. The Inception Workshop (IW) inputs will be incorporated and the NPIU will submit a final draft AWP/B within two weeks of the IW to the BH. For subsequent AWP/B, the NPIU will organize a project progress review and planning meeting for its review. Once comments have been incorporated, the BH will circulate the AWP/B to the LTO and the GEF Coordination Unit for comments/clearance prior to uploading in FPMIS by the BH. The AWP/B must be linked to the project's Results Framework indicators so that the project's work is contributing to the achievement of the indicators. The AWP/B should include detailed activities to be implemented to achieve the project outputs and output targets and divided into monthly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The AWP/B should be approved by the Project Steering Committee and uploaded on the FPMIS by the BH.

**Project Progress Reports (PPR):** PPRs will be prepared based on the systematic monitoring of output and outcome indicators identified in the project's Results Framework (Annex 1). The purpose of the PPR is to identify constraints, problems or bottlenecks that impede timely implementation and to take appropriate remedial action in a timely manner. In consultation with the Project Task Force, the NPIU will prepare semi-annual PPRs and submit them to the BH and LTO in a timely manner. PPRs will be prepared based on the systematic monitoring of output and outcome indicators identified in the Project Results Matrix. They will also report on projects risks and implementation of the risk mitigation plan. The BH and LTO will review the progress reports and circulate them to the FAO Project Task Force and GEF Coordination Unit for comments and clearance. In the event of LTO/GEF Coordination Unit comments, the PMO will incorporate them and the revised PPR is re-submitted to the LTO for final endorsement. The BH will submit the draft final version of each PPR to the GEF Coordination Unit for final approval and uploading on the FPMIS. The six-monthly PPRs will be submitted to the GEF Coordination Unit as follows:

- the period 1 January – 30 June and to be submitted no later than 31 July;
- the period 1 July – 31 December to be submitted no later than 31 January.

**Annual Project Implementation Review (PIR):** The LTO supported by the NPIU and BH, will prepare an annual PIR covering the period July (the previous year) through June (current year) to be submitted to the GEF Coordination Unit for review and approval **no later than 31 July**. The FAO GEF Coordination Unit will clear and submit it to the GEF Secretariat and GEF Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The GEF Coordination Unit will provide the updated format when the first PIR is due. PIRs will be uploaded on the FPMIS by the GEF Coordination Unit.

**Technical Reports:** Technical reports will be prepared as part of project outputs and to document and share project outcomes and lessons learned. The drafts of any technical reports

must be submitted by the NPIU to the BH who will share it with the LTO. The LTO will be responsible for ensuring appropriate technical review and clearance of said report. The BH will upload the final cleared reports onto the FPMIS. Copies of the technical reports will be distributed to project partners and the Project Steering Committee as appropriate.

**Co-financing Reports:** The BH, with support from the NPIU, will be responsible for collecting the required information and reporting on in-kind and cash co-financing as indicated in the Project Document/CEO Request. The NPIU will compile the information received from the executing partners and transmit it in a timely manner to the LTO and BH. The report, which covers the period 1 July through 30 June, is to be submitted on or before 31 July and will be incorporated into the annual PIR. The format and tables to report on co-financing can be found in the PIR.

**GEF-5 Tracking Tools:** Following the GEF policies and procedures, the tracking tools for the land degradation and climate change (LULUCF) focal areas, and the REDD+ tracking tool will be submitted at three moments: (i) with the project document at CEO endorsement; (ii) at the project’s mid-term evaluation; and (iii) with the project’s terminal evaluation or final completion report. At project mid-term and end, the tracking tool will be completed by the NPIU in close consultation with the NPD and the LTO.

**Terminal Report:** Within two months before the end date of the project, the NPIU will submit to the BH and LTO a draft Terminal Report. The main purpose of the Terminal Report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the project, and to provide the donor with information on how the funds were utilized. The Terminal Report is accordingly a concise account of the main products, results, conclusions and recommendations of the project, without unnecessary background, narrative or technical details. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results. Work is assessed, lessons learned are summarized, and recommendations are expressed in terms of their application to Kyrgyzstan’s ongoing work on SFM and SLM under climate change conditions in the context of its development priorities as well as in practical execution terms. This report will specifically include the findings of the final evaluation. A final project review meeting should be held to discuss the draft Terminal Report before it is finalized by the NPIU and approved by the FAO LTO and the GEF Coordination Unit.

#### 4.5.4 Monitoring and evaluation plan summary

Table 4.4 below provides a summary of the main M&E reports, responsible parties and timeframe.

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs
Inception Workshop	NPIU supported by the FAO LTO, BH, and the GEF Coordination Unit	Within two months of project start up	USD 19 000
Project Inception Report	NPIU cleared by FAO LTO, BH, and the GEF Coordination Unit	Immediately after workshop	-
Field based impact monitoring	NPIU	Periodically – to be determined at inception workshop	USD 70 000

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs
Supervision visits and rating of progress in PPRs and PIRs	NPIU, FAO LTO and TCI/GEF Coordination Unit	Annual or as required	The visits of the FAO LTO and the GEF Coordination Unit will be paid by GEF agency fee. The visits of the NPM/NPIU will be paid from the project travel budget
Project Progress Reports	NPIU, with inputs from Field Offices and other partners	Six-monthly	USD 6 000
Project Implementation Review report	LTO supported by the NPIU and BH and cleared and submitted by the GEF Coordination Unit to the GEF Secretariat	Annual	Paid by GEF agency fee
Co-financing Reports	BH with inputs from NPIU	Annual	USD 5 000
Technical reports	NPIU, LTO and uploaded on the FPMIS by the BH	As appropriate	-
GEF LD, LULUCF and REDD+ Tracking Tools	NPIU and LTO	Updated at the time of the mid-term evaluation and final evaluation	GEF fee
Mid-term Evaluation	FAO Evaluation Office (OEDD) in consultation with the FAOR/Kyrgyzstan, GEF Coordination Unit and project team	At mid-point of project implementation	USD 40 000 for external consultant. In addition the agency fee will pay for expenditures of FAO staff time and travel
Final evaluation	FAO Evaluation Office (OEDD) in consultation with the FAOR/Kyrgyzstan, GEF Coordination Unit and project team	At the end of project implementation	USD 40 000 for external consultant. In addition the agency fee will pay for expenditures of FAO staff time and travel
Terminal Report	NPIU, LTO, GEF Coordination Unit, TCSR Report Unit	At least two months before the end date of the Execution Agreement	USD 10000
<b>Total Budget</b>			<b>USD 190 000</b>

#### 4.6 PROVISION FOR EVALUATIONS

An independent Mid-Term Evaluation (MTE) will be undertaken when the project has been operational for 2 years to review progress and effectiveness of implementation in terms of achieving project objective, outcomes and outputs. Findings and recommendations of this evaluation will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term if necessary. FAO Evaluation Office will arrange for the MTE in consultation with project management. The evaluation will, *inter alia*:

- (i) review the effectiveness, efficiency and timeliness of project implementation;
- (ii) analyse effectiveness of partnership arrangements;
- (iii) identify issues requiring decisions and remedial actions;
- (iv) propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
- (v) highlight technical achievements and lessons learned derived from project design, implementation and management.

An independent Final Evaluation will be carried out three months prior to the terminal review meeting of the project partners. The final evaluation would aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This Evaluation would also have the purpose of indicating future actions needed to expand on the existing Project in subsequent phases, mainstream and up-scale its products and practices, and disseminate information to management authorities responsible for sustainable forest and land management in Kyrgyzstan to assure continuity of the processes initiated by the Project.

Some critical issues to be evaluated in the midterm and final evaluations will be: (i) progress in carbon benefit monitoring, carbon sequestration and avoided emissions, ecosystem services, and socioeconomic indicators through oblast and national monitoring systems and the level of data and information accessibility; (ii) the functioning and effectiveness of the cross-sectoral coordination mechanism in developing and implementing integrated land-use planning in support of climate friendly SFM and SLM; (iii) the level of capacities and involvement of oblast staff in promoting SFM and SLM technologies and approaches and progress in outcomes in terms of pilot site establishment; (iv) the level of involvement of farmers and herders in pilot site management and their increased capacities and local socio-economic benefits to sustain the SFM and SLM practices at medium and long term and assess opportunities for out-scaling; (v) progress in building capacities on climate friendly production practices in the forestry and agricultural sectors and the mainstreaming of SFM and SLM in sector policies, regulations and development plans; (vi) the level of local awareness on the value of ecosystem services and involvement of men as well as women in pilot site activities.

#### **4.7 COMMUNICATION OF PROJECT RESULTS AND VISIBILITY**

Giving high visibility to the Project and ensuring effective communication of Project results and impacts has been addressed in a number of activities that have been incorporated into its design. These include: (i) the enhanced policy, legal and institutional framework as well as increased understanding and awareness of SFM and SLM under component 1 which will give visibility of the project from high-level sector decision-makers to local communities; (ii) national LULUCF and REDD+ Strategy and Action Plan under component 2 that will be widely disseminated through brochures, videos, audio-visual media, etc.; and (iii) for the more distant communities including other stakeholders in Kyrgyzstan and beyond, the establishment of a project website, issuing of periodic project newsletter, and three specific “best practices and lessons learned” publications supported under component 1. These publications will include “best practices and lessons learned” in: a) SFM implementation; b) SLM implementation; and c) in SFM and SLM mainstreaming and scaling up.

## **SECTION 5 – SUSTAINABILITY OF RESULTS**

### **5.1 SOCIAL SUSTAINABILITY**

*Local socioeconomic benefits link to GEB including food security, gender equality and mainstreaming, and indigenous people*

The rural population, women and youth in particular, lack employment opportunities, and overall unemployment and underemployment is on the rise 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, which affect the economic and social life of women and children. 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. 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.

### **5.2 ENVIRONMENTAL SUSTAINABILITY**

To ensure that project activities are continued and benefits sustained beyond the time frame of this GEF funded project the project approach and strategy will be internalized by state-level and local institutions. The Project will lead to enhancement of carbon stocks on forest and agricultural land, which in turn will lead to improved land cover and productivity and provision of important regulating ecosystem services related to erosion control, water retention and control of natural hazards. The Project will also enhance the resilience to climate change of sustainable forest and land management technologies by applying existing tools for screening of climate change sensitivity and vulnerability developed by e.g. WOCAT.

### **5.3 FINANCIAL AND ECONOMIC SUSTAINABILITY**

The preliminary analysis of the returns to land and forest under existing and improved technologies which would help address land degradation and deforestation indicates that from a community point of view, improved practices will often yield greater returns per hectare than the current degrading practices. In addition, support with diversifying the income base for communities (income from multifunctional forestry, including fodder and fuel plantations, NTFP-based SMEs, regeneration of degraded areas, etc.) will contribute to greater economic diversification and an estimated increase in income of local communities in the order of 18 by the end of the project.

#### **5.4 SUSTAINABILITY OF CAPACITIES DEVELOPED**

The project will dedicate significant resources to capacity building efforts to overcome barriers to adoption of SFM and SLM which currently prevent moving to improved practices. All capacity building activities will be implemented on the basis of a training-of-trainers approach through Farmer Field Schools, etc., which is deemed more sustainable. Once the new SFM and SLM approaches and technologies are adopted it is expected that local herders and farmers will continue to apply them to see greater profitability while at the same time generating environmental benefits.

#### **5.5 APPROPRIATENESS OF TECHNOLOGY INTRODUCED**

The selected SFM and SLM practices on e.g. planting of multifunctional and economic tree species, integrated management of forests and pastures, community forestry as well as introduction of organic agriculture have already been documented and analysed by WOCAT for their environmental and socio-economic sustainability and appropriateness for different types of natural environments and socio-economic contexts. Moreover, the final selection of SFM and SLM technologies were undertaken in close consultation with local stakeholders, including leskhos, resource user associations, women associations, local communities and individual farmers, depending on the type and nature of the technology.

#### **5.6 REPLICABILITY AND SCALING UP**

It is expected that the integrated and cross-sectoral approach to forest and land management promoted by the Project will lead to both scaling up and out of SFM and SLM in Kyrgyzstan. It supports scaling up through support to policy and institutional reform in the forestry and agricultural sectors that will integrate carbon benefits and monitoring into integrated land-use plans at national, regional and local levels. Out-scaling or replication will be driven by spontaneous adoption and replication, by individuals and communities participating in e.g. Farmer Field Schools, of practices that are seen as viable and effective by them. The participatory methodologies adopted for pilot sites in partnership with communities will also support continuity of the process. Further, the adaptation of technologies to local realities via experimentation by the beneficiaries themselves will also help sustain spontaneous adoption and replication. Finally, the promotion of economic instruments and incentives, such as PES schemes, and support to establishment of PPPs will further support the scaling up and out of SFM and SLM in Kyrgyzstan.

## **APPENDICES**

**Appendix 1:** Results Matrix

**Appendix 2:** Work Plan

**Appendix 3:** Results Budget

**Appendix 4:** Risk Matrix

**Appendix 5:** Procurement Plan

**Appendix 6:** Terms of Reference for Project Staff

**Appendix 7:** Terms of Reference for the Project Steering Committee

## APPENDIX 1: RESULTS MATRIX

### Project outcomes and impacts: <sup>1</sup>

Objective/Impact	Baseline	Outcome indicators	Assumptions
<p><u>Global Environmental Objective:</u> To enhance the enabling environment in the forestry and agricultural sectors and sustain the flow of ecosystem services, including enhancement of carbon stocks in forests and agro-ecosystems</p> <p><u>Project Development Objective:</u><sup>2</sup> To contribute to the sustainable management and enhanced productivity of mountainous silvo-agro-pastoral ecosystems and improved mountain livelihoods in the Kyrgyz Republic</p>	<p><u>Component 1:Strengthening of the enabling environment for SFM and SLM</u> Weak policy and regulatory framework for SFM and SLM and absence of mechanisms for cross-sectoral collaboration. Weak enforcement of existing laws and regulations leading to illegal activities on forest and agricultural land.</p> <p>Weak capacity in responsible government agencies on integrated approaches to SFM and SLM, such as JFM, CFM and organic agriculture.</p>	<p><u>Component 1:</u> Strong enabling environment facilitates integration of SFM and SLM into land-use planning leading to scaling up of SFM and SLM on 2 million ha of land over long-term and 7.8 million tCO<sub>2</sub> eq in indirect avoided emissions and carbon sequestration</p>	<p><u>Component 1:</u> Policy, institutional and regulatory reform processes in the forestry and agricultural sectors continue to receive government support at the highest level</p> <p>Relevant training and capacity building of government staff delivered in a timely manner and low turn-over of trained staff.</p> <p>Farmers and herders have economic incentives to apply SFM/SLM practices through improvement in incomes due to increased productivity and/or payment for ecosystem services delivered by land under SFM/SLM</p>
	<p><u>Component 2:Enhancing carbon stocks in dryland forest</u> Kyrgyz forests face severe degradation due to overharvesting for use as fuel wood, housing construction and overgrazing. This degradation will continue under SAEPF's traditional approach to forest management that does not integrate the benefits of LULUCF and REDD+ techniques in monitoring and reporting.</p> <p>New and innovative approaches to multifunctional forestry management and forest rehabilitation that could</p>	<p><u>Component 2:</u> 25,050 ha of forest land under improved multifunctional forest management leading to avoidance of emissions from forest degradation of 107,567 tCO<sub>2</sub> eq/year</p> <p>10,000 ha of forest land rehabilitated/planted contributing to approximately 15,073 tCO<sub>2</sub> eq/year of carbon sequestration</p> <p>18% increase in land productivity over baseline from SFM and SLM activities benefitting 25,000 people [together with Component 3]</p>	<p><u>Component 2:</u> The GoKR is committed to integrating LULUCF and REDD+ benefits into its monitoring and reporting, a decision-making.</p> <p>State-owned forest farms (leskhos), resource user associations and other key stakeholders at oblast and local level have the required capacity and are willing to implement new approaches to sustainable forest management</p>

<sup>1</sup> Please insert/delete rows for components as needed

<sup>2</sup> In line with FAO SOs

	<p>provide solutions to the problems faced have not been widely tested and implemented in Kyrgyzstan due to its history of central planning</p> <p><u>Component 3: Promoting and demonstrating climate-friendly agriculture</u> Of 10.7 million ha of existing farmland, more than 88%, is considered degraded and prone to desertification. In addition, the mismanagement and overuse of pastures, particularly those close to settlements, have become a major environmental problem. These problems are exacerbated by climate change</p> <p>New and innovative approaches to sustainable and climate friendly land management, and SLM technologies for arable land and pastures, have not been widely tested and implemented in Kyrgyzstan due to its history of central planning.</p>	<p><u>Component 3:</u> Improved management and rehabilitation of 10,907 ha of degraded agricultural land contribute to carbon storage of between 58,530 t CO<sub>2</sub> eq/year</p> <p>Improved SLM and agro-silvo-pastoral practices and restoration of 20,000 ha of pasture contribute to carbon storage of 62,088 tCO<sub>2</sub> eq/year</p> <p>18% increase in land productivity over baseline from SFM and SLM activities benefitting 25,000 people [together with Component 2]</p>	<p><u>Component 3:</u> Pasture committees and other resource user associations as well as other key stakeholders at oblast and local level have the required capacity and are willing to implement new approaches to sustainable land management</p>
	<p><u>Component 4: Knowledge management, monitoring and evaluation</u> There is no systematic data collection, extraction and synthesis of lessons learnt on SFM and SLM in SAEPP and MoA and the linkages to knowledge platforms and national and international level are weak.</p>	<p><u>Component 4:</u> Functioning M&amp;E system, and synthesis of lessons learnt and generation of best practices in SFM and SLM contributing to the realization of the REDD+ Information System</p> <p>Application of research results and best practices of previous projects</p> <p>Integration of the project into knowledge exchange platforms</p> <p>Enhanced environmental education and awareness</p>	<p>The GoKR and other stakeholder support M&amp;E processes, and are committed to continuous learning and exchange of knowledge on SFM and SLM</p>

**Project outputs and outcomes:<sup>1</sup>**

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
<b>Component 1: Strengthening of the enabling environment for sustainable forest and land management (agriculture, rangelands and transitional areas) (SFM/SLM)</b>								
<b>Outputs and targets</b>								
<b>Outcome 1.1 Enhanced policy, legal and institutional framework in forestry and land management for integrating SFM/SLM principles and practices into national and local level land-use plans</b>	Weak policy and legal framework for SFM and SLM and lack of economic incentives at local level to implement SFM/SLM.  Lack of systematic and long-term cross-sectoral collaboration in the LULUCF sectors and integration into land-use plans, as no agreed mechanism for this exists.	25%	50%	75%	Strong enabling environment facilitates integration of SFM and SLM into land-use planning at national level, in 8 oblasts and in 12 rayons		GEF LD and REDD+ Tracking Tools, PIR, Midterm and Final Evaluations  National and local level land-use plans	SAEPP, MoA and FAO  Participating oblasts and rayons
1.1.1 Forestry and land policy, and legislation for SFM and SLM developed and improved:		Appropriate agro-environmental policies to incentivize SFM/SLM at local levels developed	SFM and SLM standards and guidelines developed	National soil fertility conservation strategy drafted	Amendments to land code to promote SLM on abandoned agricultural lands  Amendments to forest code to promote SFM on degraded forest agricultural lands		Policy documents, minutes from meetings, amendments to land and forest code and their proclamation	NPIU, SAEPP and MoA
1.1.2 Cross-sectoral strategies and/or strategic agreements between sectoral authorities on integrated land-use management developed and foster cross-sectoral cooperation		Cross-sectoral strategies and agreements between SAEPP and MoA on integrated land-use management drafted	Cross-sectoral strategies adopted	Cross-sectoral strategies operationalised	Cross-sectoral cooperation in place		Strategy documents, minutes from consultation meetings  Land-use plans from project areas	NPIU, SAEPP and MoA  Participating oblasts and rayons

<sup>1</sup> Please insert/delete columns for project years and rows for outputs and outcomes as needed.

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
1.1.3 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		Scoping completed	Membership and operational modalities of mechanism agreed	Mechanism implemented	Enhanced cross-sectoral communication between national and local levels		Scoping report, Budget assigned for Secretariat; operations procedures, annual implementation progress reports; minutes of meetings; PPR	NPIU, SAEPF, MoA
<b>Outcome 1.2 Increased understanding and awareness on roles of SFM/SLM and LULUCF in carbon sequestration and GHG balance</b>	Policy makers as well as resource users have a very low level of awareness and lack understanding of the role of SFM/SLM and LULUCF in GHG balance and climate change mitigation. No training has been provided so far on this issue and no LULUCF, REDD+ and GHG measuring and reporting system has been established..	25%	50%	75%	60 policy makers, 300 technical staff, 200 extension agents, and 7,000 farmers and herders applying SFM/SLM practices leading to improved management of 661,200 ha of forest lands, 611,100 ha of pasture land and 776,000 ha of arable lands in the target areas in the long term		GEF LD and REDD+ Tracking Tools, FAO Capacity Development Tool, PIR, Midterm and Final Evaluations  National land-use statistics	NPIU and FAO
1.2.1: SFM/SLM based on resource user associations (pasture, forest, water) is effectively promoted in the project areas and respective local resource management institutions are fully functional		Resource user associations trained on SFM and SLM (31 pasture committees, 8 leskhos and at least 4 WUAs)	Resource user associations are implementing SFM and SLM on 5,000ha of land	Resource user associations are implementing SFM and SLM on 10,000 ha of land	Resource user associations are implementing SFM and SLM on 15,073 ha of land		Reports from trainings, including attendance, Resource user association annual reports	NPIU and Field Offices
1.2.2 Training and awareness creation tool kit on roles of SFM/SLM and LULUCF in carbon		Tool kit developed on role of SFMSLM in LULUCF, REDD+ and GHG balance	Training of 60 policy-makers and 300 technical staff on IPCC	Training of 200 extension agents	Policy-makers and technical staff fully aware of the roles of SFM/SLM in		Published tool kit, reports from trainings, including	NPIU, SAEPF, MoA

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
sequestration and GHG balance prepared and disseminated			methodologies on national GHG inventory for the AFOLU sector		climate change mitigation		attendance, awareness survey, PPR	

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
<b>Component 2: Enhancing carbon stocks in dryland forest through innovative management and rehabilitation practices</b>								
<b>Outputs and targets</b>								
<b>Outcome 2.1 Management of existing forests and trees improved</b>	Existing management regimes for forests and trees in the landscapes of Kyrgyzstan do not take into consideration their roles as carbon sinks and importance for GHG balance. No national LULUCF and REDD+ Strategy and Action Plan exist and no carbon monitoring system is in place.	25%	50%	75%	25,050 ha of forestlands under improved multifunctional forest management  Avoiding emissions from forest degradation of 107,567 tCO <sub>2</sub> eq/year		GEF LD, REDD+ and CC-5 Tracking Tools, PIR Midterm and Final Evaluations  National forest statistics	SAEPF and FAO
2.1.1 National LULUCF and REDD+ Strategy and Action Plan developed and operationalized: LULUCF sector assessment improved, national climate change mitigation standards in the LULUCF sectors drafted and submitted for approval by the GoK		National LULUCF and REDD+ Strategy and Action Plan drafted	LULUCF sector assessment improved,	National climate change mitigation standards in the LULUCF sectors drafted	National LULUCF and REDD+ Strategy and Action Plan operationalized: national climate change mitigation standards in the LULUCF sectors approved by the GoK		LULUCF and REDD+ Strategy and Action Plan documents and climate change mitigation standards	NPIU and SAEPF
2.1.2 Multifunctional and participatory forest management planning		Multifunctional and participatory forest management planning	Multifunctional and participatory forest management planning	Multifunctional and participatory forest	Multifunctional and participatory forest		Technical reports from participating oblasts, rayons	Oblasts, rayons and leskhos with initial support

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
covering at least 25,050 ha of forest piloted		with 5 oblasts, 12 rayons and 8 leskhos	covers 5,000 ha of forest	management planning covers 10,000 ha of forest and PES schemes in two pilot Leskhos established on a total of 4,000 ha	management planning covers 25,050 ha of forest		and leskhos on forest management planning  PPR	from Field Offices
2.1.3 Carbon monitoring system established for forests and various dryland land use systems		Review of carbon monitoring systems and development of a National Forest Monitoring System (NFMS)	Establishment and testing of NFMS using satellite remote sensing data and field data for the estimation of the emission and removal factors	Carbon monitoring system and database operationalized	Carbon monitoring system for the LULUCF sector in Kyrgyzstan fully functional and linked to implementation of National LULUCF and REDD+ Strategy and Action Plan		Carbon Monitoring Review Report, Field Assessment Report, annual monitoring reports	SAEPF, NPIU
<b>Outcome 2.2 Dryland forest areas rehabilitated/afforested through introduction and demonstration of innovative technologies/practices and pressure on forests reduced</b>	Kyrgyz dryland forests are severely degraded and there is limited access to and knowledge of innovative SFM technologies that generate multiple environmental and socio-economic benefits due to a history of central planning, lack of economic incentives to engage in new SFM practices and energy subsidies during Soviet times. Mechanisms for scaling up of SFM, such as PES, are also new to Kyrgyzstan that is in the process of testing its first PES scheme in a catchment in Issy-Kul oblast.	25%	50%	75%	10,000 ha of forestland rehabilitated/planted  Contribute to approx. 15,073 tCO <sub>2</sub> eq/year carbon sequestration		GEF LD, REDD+ and CC-5 Tracking Tools, PIR, Midterm and Final Evaluations	NPIU, FAO

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
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	13 SFM pilot demonstrations established on planting of e.g. pistachio, almond, walnut, apricots and apples; integrated forest and pasture management; and community forestry	3,000 ha of degraded forest land rehabilitated/afforested	5,000 of degraded forest land rehabilitated/afforested	8,000 ha of degraded forest land rehabilitated/afforested		Technical report on innovative SFM technologies, monitoring reports from participating leskhos, field survey report	Leskhos, SAEPF, Field Offices, NPIU
2.2.2	2,650 ha of tree plantations established by local people with indigenous 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 of forest)	Plantation of fast growing species, e.g. poplar and salix, with 30 villages on 2,650 ha of land	Planting of multipurpose trees for wood and non-wood forest products on 8,000 ha	Up-scaling of viable planting practices in two PES schemes that protect carbon stocks and water resources covering 2,000 ha of land each	2,650 ha of tree plantations in place and 8,000 ha of multipurpose trees sustainably managed		Monitoring reports from participating rayons, PES feasibility study, project field survey reports	Rayons, Field Offices, NPIU
2.2.3	Efficiency of fuelwood use improved by introduction of improved cookstoves, home-based solar heating and home insulation activities	Micro-credit schemes (in collaboration with resource users organizations) introduced where households can apply for funding to test ways of improving energy efficiency	Improved cookstoves and solar panels for heating by selected households in and in the vicinity of the 8 pilot leskhoses	Improved home insulation by selected households in and in the vicinity of the 8 pilot leskhoses	Efficiency of fuelwood use improved in and around 8 leskhoses		Feasibility study of micro-credit scheme, technical reports on appropriate cookstoves, solar heaters and home insulation, Field Survey and monitoring reports	NPIU, Field Offices, SAEPF

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
<b>Component 3: Promoting and demonstrating climate-friendly agriculture, including pastures as part of sustainable land and water management (SL/WM) in drylands</b>								
<b>Outputs and targets</b>								

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
Outcome 3.1 Improved agricultural management and rehabilitation practices and techniques in drylands by demonstrating and adopting agricultural and agro-forestry best practices that increase vegetative cover and soil fertility, reduce soil degradation, and avoid GHG emissions	More than 88% of Kyrgyzstan's farmland is considered degraded. New and innovative approaches to sustainable and climate friendly land management, and SLM technologies for arable land and pastures, have not been widely tested and implemented in Kyrgyzstan due to its history of central planning and lack of economic incentives. Mechanisms for scaling up of SLM, such as PPPs, are also in their infancy.				Improved management of 5,102 ha of arable land and rehabilitation of 10,907 ha degraded agricultural land contribute to carbon storage of 58,530 tCO2 eq/year  Improved SLM and agro-silvo-pastoral practices and restoration on 20,000 ha non-forest SFF lands contribute to carbon storage of 62,088 tCO2 eq/year		GEF LD and CC-5 Tracking Tools, PIRs, Midterm and Final Evaluations	NPIU and FAO
3.1.1 200 demonstrations of innovative agricultural practices covering a total of 5,102 ha of arable land		Good options for innovative SLM practices based on WOCAT methodology identified, including e.g. conservation agriculture, 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,	Demonstration plots established in farmers' fields for selected SLM options in each of the 12 selected rayons	Up-scaling of viable SLM practices through Farmer Field Schools and Public-Private Partnerships in selected rayons	200 demonstrations of innovative agricultural practices on 5,102 ha of arable land		WOCAT report on SLM options on cropland, participatory monitoring reports of SLM, meeting and attendance reports from FFS, report on options for PPP establishment field survey reports	NPIU, Field Offices ,participating Rayons and private farmers

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
		and small-holder composting technique.						
3.1.2 20,000 ha of non-forest SFF lands/degraded agricultural lands rehabilitated using innovative technologies/practices successfully demonstrated:		Measures to address land degradation and improve pastures using the WOCAT methodology identified	Ameliorative measures established for land degradation control and pasture management, including melioration of saline and water-logged soils, water harvesting and irrigation, agroforestry, and introduction of drought resistant and salt tolerant plant species in the 12 selected rayons	Mechanisms for up-scaling of sustainable pasture management measures established, including PES, and FFS	35,000 ha of non-forest SFF lands/degraded agricultural lands rehabilitated		WOCAT report on SLM options on pasture land, participatory monitoring reports, minutes from Pasture Committee meetings, meeting and attendance reports from FFS, PES feasibility study, field survey reports	NPIU, Field Offices, participating Rayons and Pasture Management Committees

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
<b>Component 4: Knowledge Management, monitoring and evaluation</b>								
<b>Outputs and targets</b>								
<b>Outcome 4.1 Monitoring and evaluation of project progress for adaptive results-based management to mitigate risks and changing conditions</b>	There is no systematic data collection, monitoring and evaluation of SFM and SLM and no REDD+ Information System in SAEPF and MoA				Adaptive results-based M&E			SAEPF, MoA and FAO
4.1.1 M&E system operating and providing systematic information about meeting project outcome and output targets		System in place for annual M&E of SFM and SLM indicators that feed into REDD+ Information System	Annual monitoring report	Annual monitoring report	Annual monitoring report		Annual monitoring reports	NPIU and SAEPF
4.1.2 Midterm and final evaluations			Midterm evaluation		Final evaluation		Mid-term and final evaluation	Oblasts, rayons and leskhos with

	Baseline	Target Values					Data Collection and Reporting	
		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsible for Data Collection
							reports	initial support from Field Offices
<b>Outcome 4.2 Dissemination of information and best practices through knowledge management platforms, national and international cooperation and awareness raising</b>	SAEPF's and MoA's linkages to knowledge platforms and national and international level are weak.	Integration of the project into knowledge exchange platforms	Application of research results and best practices of previous projects		Environmental education and awareness raising strategy		PIR reports  Strategy document  Networked project website	NPIU, FAO
4.2.1 Synthesis of lessons learnt and generation of best practices		Protocols for adaptive learning	Website for capturing best practices	Best practices results are used to upscale SFM and SLM in participating oblasts	Best practices results on SFM and SLM are disseminated to new oblasts and projects		Technical documents on best practices  Best practices website	NPIU, SAEPF, Field Offices
4.2.2 Application of research results and best practices of previous projects		Identification of relevant research results and best practices for implementation at pilot sites	Implementation of relevant best practices at pilot sites	Implementation of relevant best practices at pilot sites	Evaluation of appropriateness the tested best practices		Project survey and monitoring reports	Rayons, Field Offices, NPIU
4.2.3 Integration of the project into knowledge exchange platforms				Design of project hand-over strategy			Number of links between Project website and knowledge exchange platforms	NPIU, SAEPF, FAO
4.2.4 Environmental education and awareness raising strategy		Draft strategy developed and capacity building initiated	Strategy endorsed by GoKR	Nationwide awareness raising campaign	Evaluation of impact of campaign		Strategy document  Brochures and information material tailored to different users	NPIU, SAEPF, MoA, Field Offices

**APPENDIX 2: WORK PLAN (RESULTS BASED)**

Output	Activities	Responsible institution/ entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
<b>Component 1: Strengthening of the enabling environment for sustainable forest and land management (agriculture, rangelands and transitional areas) (SFM/SLM)</b>		SAEPF/MoA																
Output 1.1.1: Forestry and land policy, and legislation for SFM and SLM developed and improved; Appropriate agro-environmental policies to incentivize SFM/SLM at local levels developed; SFM and SLM standards and guidelines developed; National soil fertility conservation strategy drafted; Amendments to land code to promote SLM on abandoned agricultural lands; Amendments to forest code to promote SFM on degraded forest agricultural lands	<i>Activity1: Harmonization of legislation on SFM and SLM</i>																	
	<i>Activity2: Evaluation of the National Forest Policy and revision of the strategic directions of development of the forest sector</i>																	
	<i>Activity 3: Evaluation of the National Agricultural Policy and revision of the strategic directions of development of the agricultural sector</i>																	
	<i>Activity 4: Changes and additions to the existing legal and regulatory framework</i>																	
	<i>Activity 5: Development of the missing mechanisms (laws) of the existing laws</i>																	
	<i>Activity 6: Finalize the draft Forest Code</i>																	
	<i>Activity 7: Review of and development of economic instruments to encourage the fight against degradation of land and forest resources</i>																	
	<i>Activity 8: Stricter legislation aimed at preventing land degradation</i>																	
	<i>Activity 9: Develop mechanisms for compensating damage to forest and agricultural land</i>																	
Output 1.1.2: Cross-sectoral strategies and/or strategic agreements between sectoral authorities on integrated land-use management developed and foster cross-sectoral cooperation	<i>Activity 1: Strengthening forest law enforcement through the development of mechanisms for inter-ministerial and inter-sectoral collaboration</i>																	

Output	Activities	Responsible institution/ entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
	<i>Activity 2: Developing mechanisms for inter-ministerial and inter-sectoral cooperation related to integrated management of land resources and assessment of ecosystem services</i>																	
	<i>Activity 3: Legislate interface responsibilities and competences of all the players of land relations</i>																	
	<i>Activity 4: Increase the capacity to establish inter-sectoral collaboration and partnership with government, businesses, and NGOs</i>																	
Output 1.1.3: 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	<i>Activity 1: Institutional reform in the forestry sector</i>																	
	<i>Activity 2: The development of practical skills of MoA, SAEPF and NASG, on the application of the procedures and mechanisms for inter-sectoral collaboration</i>																	
	<i>Activity 3: Develop mechanisms for public participation in decision-making in the field of land management</i>																	
	<i>Activity 4: Conduct training and refresher courses for all relevant stakeholders on enforcement of the land and forest legislation</i>																	
Output 1.2.1: SFM/SLM based on resource user associations (pasture, forest, water) is effectively promoted in the project areas and respective local resource management institutions are fully functional	<i>Activity 1: Increase the capacity of resource users through training seminars and workshops on the principles of SFM and SLM</i>																	
	<i>Activity 2: Design and educational seminars for representatives of various sectors of the territorial principle, the result of which will be action plans and specific projects supported by donor funds</i>																	
Output 1.2.2: Training and awareness creation tool kit on roles of SFM/SLM and LULUCF in carbon sequestration and GHG balance prepared and disseminated	<i>Activity 1: Training for relevant GoK staff on LULUCF, REDD+ and carbon measuring and reporting system, including FAO EX- ACT</i>																	

Output	Activities	Responsible institution/ entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
	and GEF Carbon Benefit tools on carbon calculation																	
	<i>Activity 2: Mainstreaming of LULUCF and REDD+ carbon monitoring in relevant sectors of different land use and management practices</i>																	
<b>Component 2: Enhancing carbon stocks in dryland forest through innovative management and rehabilitation practices</b>		<b>SAEPF</b>																
Output 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	<i>Activity 1: Development of a National Strategy to mitigate climate change in the LULUCF sector</i>																	
	<i>Activity 2: Development of the National Plan of Action to mitigate climate change</i>																	
	<i>Activity 3: Assessment of LULUCF sector</i>																	
	<i>Activity 4: Development of national standards for climate change mitigation in the LULUCF sector</i>																	
Output 2.1.2: Multifunctional and participatory forest management planning covering at least 20,000 ha of forest piloted	<i>Activity 1: Development of improvement measures for conservation of existing forests</i>																	
	<i>Activity 2: Strengthening of Joint Forest Management planning in 5 Oblasts and 8 Leskhos</i>																	
	<i>Activity 3: Development of integrated management plans in 5 Oblasts and 8 Leskhos</i>																	
	<i>Activity 4: Economic valuation of environmental services of the forest for 8 pilot Leskhos</i>																	
	<i>Activity 5: Creating a system for payment of environmental services in 8 pilot Leskhos</i>																	
	<i>Activity 5: Strengthened monitoring of illegal activities in the forest sector</i>																	
Output 2.1.3: Carbon monitoring system established for forests and various dryland land use systems	<i>Activity 1: Adaptation of the IPCC methodology for the calculation of the absorption of carbon in forests of Kyrgyzstan</i>																	

Output	Activities	Responsible institution/ entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
	<i>Activity 2: Development of national coefficients in increasing biomass</i>																	
	<i>Activity 3: Carbon monitoring and creation of database at national level</i>																	
	<i>Activity 4: Development of cartographic materials, creation of GIS on Carbon</i>																	
	<i>Activity 5: Evaluation of emission reduction) / (increase sinks) and the cost of these achievements</i>																	
Output 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	<i>Activity 1: Development of a manual describing a number of good options for innovative SFM practices based on WOCAT methodology</i>																	
	<i>Activity 2: Creating permanent seed plots in forest plantations and improvement of tree nurseries in 8 pilot Leskhos</i>																	
	<i>Activity 3: Introduction of agroforestry practices at in 8 pilot Leskhos</i>																	
	<i>Activity 4: Fencing (including live fencing) for control of grazing of in 8 pilot Leskhos</i>																	
	<i>Activity 5: Planting of windbreaks and roadside plantations of indigenous trees in 8 pilot Leskhos</i>																	
Output 2.2.2: 2,650 ha of tree plantations established by local people with indigenous 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 of forest)	<i>Activity 1: Plantation of fast growing species (poplar, salix) with 30 villages on 2,650 ha of land</i>																	
	<i>Activity 2: Planting of multipurpose trees for wood and non-wood forest products on 8,000 ha</i>																	
	<i>Activity 3: Support to up-scaling of viable planting practices through testing of two PES scheme that protect carbon stocks and water resources</i>																	

Output	Activities	Responsible institution/ entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
Output 2.2.3 Efficiency of fuelwood use improved by introduction of improved cookstoves, home-based solar heating and home insulation activities	<i>Activity 1: Introduction of micro-credit schemes (in collaboration with resource users organizations) where households can apply for funding to test ways of improving energy efficiency</i>																	
	<i>Activity 2: Testing of improved cookstoves and solar panels for heating by selected households in and in the vicinity of the 8 pilot leskhoses</i>																	
	<i>Activity 3: Testing of innovative ways of improving home insulation by selected households in and in the vicinity of the 8 pilot leskhoses</i>																	
	<i>Activity 4: Training and awareness raising of local communities in and in the vicinity of the 8 pilot leskhoses in improving energy efficiency</i>																	
<b>Component 3: Promoting and demonstrating climate-friendly agriculture, including pastures as part of sustainable land and water management (SL/WM) in drylands</b>		<b>MoA</b>																
Output 3.1.1: 200 demonstrations of innovative agricultural practices covering a total of 5,000 ha of arable land	<i>Activity 1: Development of a manual describing a number of good options for innovative SLM practices based on WOCAT methodology, including e.g. conservation agriculture, 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, and small-holder composting technique.</i>																	
	<i>Activity 2: Establishment of demonstration plots in farmers' fields for the selected options in each of the 12 selected rayons</i>																	

Output	Activities	Responsible institution/ entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
	<i>Activity 3: Participatory monitoring in farmers' fields of soil condition, inputs, including labour, and outputs (harvests)</i>																	
	<i>Activity 4: Wider dissemination and up-scaling of viable SLM practices through Farmer Field Schools, Public-Private Partnerships in each of the 12 selected rayons</i>																	
Output 3.1.2: 20,000 ha of non-forest SFF lands/degraded agricultural lands rehabilitated using innovative technologies/practices successfully demonstrated:	<i>Activity 1: Assessment of soil conditions, including salinity; development of a manual with detailed description of measures to address land degradation and improve pastures using the WOCAT methodology</i>																	
	<i>Activity 2: Establishment of appropriate ameliorative measures for LD and pastures, including melioration of saline and water-logged soils, water harvesting and irrigation, agroforestry, and introduction of drought resistant and salt tolerant plant species in the 12 selected rayons</i>																	
	<i>Activity 3: Develop mechanisms for up-scaling of sustainable pasture management measures, such as PES, FFS, etc.</i>																	
	<i>Activity 4: Preparation of GIS maps of land degradation and suitable ameliorative measures for the 12 selected rayons</i>																	
<b>Component 4: Knowledge management, monitoring and evaluation</b>																		
Output 4.1.1: M&E system operating and providing systematic information about meeting project outcome and output targets	<i>Activity 1: Establishment of M&amp;E system linked to REDD+ Information System</i>																	
	<i>Activity 2: Annual monitoring</i>																	
Output 4.1.2: Midterm and final evaluations	<i>Activity 1: Midterm evaluation</i>																	
	<i>Activity 2: Final evaluation</i>																	

Output	Activities	Responsible institution/ entity	Year 1				Year 2				Year 3				Year 4			
			Q1	Q2	Q3	Q4												
Output 4.2.1: Synthesis of lessons learnt and generation of best practices	<i>Activity 1: Capture and dissemination of lessons learnt</i>																	
	<i>Activity 2: Establishment of protocols for adaptive learning</i>																	
	<i>Activity 3: Semi-annual formal reporting of project activity</i>																	
Output 4.2.2: Application of research results and best practices of previous projects	<i>Activity 1: Identification of relevant research results and best practices</i>																	
	<i>Activity 2: Application at pilot sites</i>																	
	<i>Activity 3: Evaluation of impact</i>																	
Output 4.2.3: Integration of the project into knowledge exchange platforms	<i>Activity 1: Development of hand-over strategy</i>																	
Output 4.2.4: Environmental education and awareness raising strategy	<i>Activity 1: Capacity building and development of strategy</i>																	
	<i>Activity 2: Nation-wide campaign</i>																	
	<i>Activity 3: Evaluation of campaign</i>																	
<b>Project Management</b>																		
	<i>Activity 1: Recruitment of operational, financial and administrative staff</i>																	
	<i>Activity 2: Establishment and operation of NPIU</i>																	
	<i>Activity 3: Establishment and operation of 2 Field Offices</i>																	

### APPENDIX 3: RESULTS BUDGET

<b>Component 1: Strengthening of the enabling environment for SFM/SLM</b>	<b>Component 2: Enhancing carbon stocks in dryland forest through innovative management and rehabilitation practices</b>	<b>Component 3: Promoting and demonstrating climate-friendly agriculture, including pastures</b>	<b>Component 4: Knowledge Management, monitoring and evaluation</b>
O 1.1: Enhanced policy, legal and institutional framework	O 2.1: Management of existing forests and trees improved	O 3.1: Improved agricultural management and rehabilitation practices and techniques in drylands	O 4.1: Monitoring and evaluation of project progress for adaptive results-based management to mitigate unexpected risks and changes
O 1.2: Increased understanding and awareness of roles of SFM/SLM and LULUCF in carbon sequestration and GHG balance	O 2.2: Dryland forest areas rehabilitated/afforested through introduction and demonstration of innovative practices and pressures on forests reduced		O 4.2: Dissemination of information and best practices through knowledge management platforms, national and international cooperation and awareness raising

Oracle code and description				BUDGET in USD									Total	Expenditures by year						
	Unit	No. of units	Unit cost	Component 1:			Component 2:			Component 3:		Component 4			PM	GEF	Year 1	Year 2	Year 3	Year4
				1.1	1.2	Total	2.1	2.2	Total	3.1	Total	4.1	4.2	Total						
<b>5300 Salaries professionals</b>																				
National Operational Officer	month	48	2 922	-	-	-	-	-	-					-	140,256	140 256	35 064	35 064	35 064	35 064
National Finance Officer	month	48	3 510			-			-	-	-			-	168 480	168 480	42 120	42 120	42 120	42 120
<b>5300 Sub-total salaries professionals</b>				0	0	0	0	0	0	0	0	0	0	0	308,736	308 736	77 184	77 184	77 184	77 184
<b>5570 International Consultants</b>																				
1 Chief Technical Advisor	month	24	15 000			0	90 000	90 000	180 000	180 000	180 000			-		360 000	180 000	180 000		
1 Carbon monitoring expert	month	5	13 000		65 000	65 000			0		0			-		65 000	32 500	32 500		
1 SFM demo expert	month	6	13 000			0		78 000	78 000		0			-		78 000	26 000	26 000	26 000	
1 SLM demo expert	month	6	13 000			0			0	78 000	78 000			-		78 000	26 000	26 000	26 000	
1 Farmer Participation Expert	month	3	13 000			0			0	39 000	39 000			-		39 000	39 000			
1 Policy and institutional expert	month	5	12 961	64 804		64 804			0		0			-		64 804	32 402	32 402		
1 M&A expert	month	3	12 800			0	38 400		38 400		0			-		38 400	12 800		12 800	12 800
<b>Sub-total international Consultants</b>				64 804	65 000	129 804	128 400	168 000	296 400	297 000	297 000	0	0	0	0	723 204	348 702	296 902	64 800	12 800
<b>National consultants</b>																				
National Project Manager	month	48	2 430	29 160		29 160	29 160		29 160	29 160	29 160	29 160		29 160	0	116 640	29 160	29 160	29 160	29 160
Project assistant	month	48	1 200	14 400		14 400	14 400		14 400	14 400	14 400	14 400		14 400	0	57 600	14 400	14 400	14 400	14 400
Field site Coordinator Osh-Jalal-Abad	month	48	1 200			0		57 600	57 600		0			-		57 600	14 400	14 400	14 400	14 400
Field Site Coordinator Issy-Kul- Naryn	month	48	1 200			0		57 600	57 600		0			-		57 600	14 400	14 400	14 400	14 400
Field site Technical Assistant Osh-Jalal-Abad	month	48	1 000			0			0	48 000	48 000			-		48 000	12 000	12 000	12 000	12 000
Field site Technical Assistant Issy-Kul-Naryn	month	48	1 000			0			0	48 000	48 000			-		48 000	12 000	12 000	12 000	12 000
Field site Technical Assistant Chui	month	48	1 000			0			0	48 000	48 000			-		48 000	12 000	12 000	12 000	12 000
Driver in Chui	month	48	600			0		28 800	28 800		0			-		28 800	7 200	7 200	7 200	7 200
Driver in Karakol	month	48	600			0		28 800	28 800		0			-		28 800	7 200	7 200	7 200	7 200
Driver in Jalal-Abad	month	48	600			0		28 800	28 800		0			-		28 800	7 200	7 200	7 200	7 200
Expert on community participation	month	24	1 917			0		46 008	46 008		0			-		46 008	23 004	23 004		
Expert on carbon monitoring	month	24	1 917		46 008	46 008			0		0			-		46 008	11 502	11 502	11 502	11 502
Policy and institutional expert	month	24	1 917	46 008		46 008			0		0			-		46 008	23 004	23 004		

Oracle code and description				BUDGET in USD									Total	Expenditures by year						
	Unit	No. of units	Unit cost	Component 1:			Component 2:			Component 3:		Component 4			PM	GEF	Year 1	Year 2	Year 3	Year4
				1.1	1.2	Total	2.1	2.2	Total	3.1	Total	4.1	4.2	Total						
Pasture management expert	month	24	1 917			0			0	46 008	46 008			-		46 008	11 502	11 502	11 502	11 502
Agro-forestry expert	month	24	1 917			0			0	46 008	46 008			-		46 008	11 502	11 502	11 502	11 502
Organic agriculture expert	month	24	1 917			0			0	46 008	46 008			-		46 008	11 502	11 502	11 502	11 502
Translator	month	12	1 200			0	14 400		14 400		0			-		14 400	3 600	3 600	3 600	3 600
Sub-total national Consultants				89 568	46 008	135 576	57 960	247 608	305 568	325 584	325 584	43 560	0	43 560	0	810 288	225 576	225 576	179 568	179 568
<b>5570 Sub-total consultants</b>				<b>154 372</b>	<b>111 008</b>	<b>265 380</b>	<b>186 360</b>	<b>415 608</b>	<b>601 968</b>	<b>622 584</b>	<b>622 584</b>	<b>43 560</b>	<b>0</b>	<b>43 560</b>	<b>0</b>	<b>1 533 492</b>	<b>574 278</b>	<b>522 478</b>	<b>244 368</b>	<b>192 368</b>
<b>5650 Contracts</b>																				
Technical studies of soils and land properties	Lump sum	1	100 000			0			0	100 000	100 000			-		100 000	25 000	25 000	25 000	25 000
Integrated forest management planning	Lump sum	1	75 000			0			0	75 000	75 000			-		75 000	37 500	37 500		
Carbon monitoring	Lump sum	1	100 000			0		100 000	100 000		0			-		100 000	50 000	50 000		
Knowledge management and up-scaling of best practices in SFM/SLM	Lump sum	1	145 000	0		0			0		0		145 000	145 000		145 000		72 500	72 500	
PES establishment	Lump sum	1	75 000			0	75 000		75 000		0			-		75 000		37 500	37 500	
Training on WOCAT methodology & documentation	Lump sum	1	50 000			0			0		0		50 000	50 000		50 000	25 000	25 000		
Midterm and final evaluation independent consultants	Lump sum	2	40 000			0			0		0	80 000		80 000	0	80 000		40 000		40 000
Analysis of Salinization and ameliorative actions	Lump sum	1	100 000			0			0	100 000	100 000			-		100 000	50 000	50 000		
Biofertilizers and biogas	Lump sum	1	75 000			0			0	75 000	75 000			-		75 000		75 000		
Energy efficiency scheme for local communities (alternative energy & insulation)	Lump sum	1	150 000			0		150 000	150 000		0			-		150 000	37 500	37 500	37 500	37 500
<b>5650 Sub-total Contracts</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>75 000</b>	<b>250 000</b>	<b>325 000</b>	<b>350 000</b>	<b>350 000</b>	<b>80 000</b>	<b>195 000</b>	<b>275 000</b>	<b>0</b>	<b>950 000</b>	<b>225 000</b>	<b>450 000</b>	<b>172 500</b>	<b>102 500</b>
<b>5900 Travel</b>																				
CTA PM and Chui Field Office (National and local incl DSA, fuel&maintenance)	Lump sum year	4	95 000			0	190 000	190 000	380 000		0			-		380 000	95 000	95 000	95 000	95 000

Oracle code and description				BUDGET in USD									Total	Expenditures by year						
	Unit	No. of units	Unit cost	Component 1:			Component 2:			Component 3:		Component 4			PM	GEF	Year 1	Year 2	Year 3	Year4
				1.1	1.2	Total	2.1	2.2	Total	3.1	Total	4.1	4.2	Total						
Local travel (Jallala-bad and Issy-kul field Offices)	Lump sum year	4	50 000			0			0	200 000	200 000			-		200 000	50 000	50 000	50 000	50 000
Student volunteers for 6 months each	lump sum	10	6 550		65 500	65 500			0		0			-		65 500		32 750	32 750	
International consultants' travel	Trips	12	5 000			0	30 000	30 000	60 000		0			-		60 000	20 000	20 000	20 000	
<b>5900 Sub-total travel</b>				0	65 500	65 500	220 000	220 000	440 000	200 000	200 000	0	0	0	0	705 500	165 000	197 750	197 750	145 000
<b>5020 Training and workshops</b>																				
Project coordination and annual work planning meetings	Meetings	4	15 000			0			0		0	60 000		60 000	0	60 000	15 000	15 000	15 000	15 000
Training on enforcement of SFM and SLM legislation and educational seminars on the territorial principle	WS.	3	25 525	76 575		76 575			0		0			-		76 575	25 525	25 525	25 525	
Training on LULUCF and carbon monitoring	Lump sum	1	68 000			0	68 000		68 000		0			-		68 000	68 000			
Capacity building on organic agriculture	WS.	1	100 000			0			0	100 000	100 000			-		100 000		100 000		
Capacity building on multi-functional forestry	WS.	2	100 000			0		200 000	200 000		0			-		200 000	100 000		100 000	
Capacity building on cross-sectoral coordination and partnership building with NGOs and private sector	WS.	1	100 000		100 000	100 000			0		0			-		100 000	100 000			
Capacity building on PES	WS.	2	50 000			0	100 000		100 000		0			-		100 000		50 000	50 000	
<b>5020 Sub-total training</b>				76 575	100 000	176 575	168 000	200 000	368 000	100 000	100 000	60 000		60 000	0	704 575	308 525	190 525	190 525	15 000
<b>6000 Expendable procurement</b>																				
Brochures design and printing	Copy	4	1 500			0			0	0	0	6 000		6 000		6 000	1 500	1 500	1 500	1 500
Six-monthly project news letter 500 copies	Issue	8	1 100	0		0			0		0	8 800		8 800		8 800	2 200	2 200	2 200	2 200
Best practices and lessons learned publications	Publication	3	20 000			0		0	0	0	0		60 000	60 000		60 000		20 000	20 000	20 000
Bi-annual status report	Report	8	1 000			0	0		0		0	8 000		8 000		8 000	2 000	2 000	2 000	2 000
Posters	Poster	6	750,0			0			0	0	0	4 500		4 500		4 500	1 500	1 500		1 500
Seeds for tree nurseries	Lump		216			0	216 611		216 611		0			-		216 611	108 306	108 306		

Oracle code and description				BUDGET in USD									Total	Expenditures by year						
	Unit	No. of units	Unit cost	Component 1:			Component 2:			Component 3:		Component 4			PM	GEF	Year 1	Year 2	Year 3	Year4
				1.1	1.2	Total	2.1	2.2	Total	3.1	Total	4.1	4.2	Total						
	sum		611,0																	
Support to tree plantations	Lump sum		245 000,0			0		245 000	245 000		0					245 000	122 500	122 500		
Seeds, compost material, etc. for agricultural plots	Lump sum	1	198 961,0			0			0	198 961	198 961					198 961	99 481	99 481		
Support to pasture rehabilitation (seeds, fences, etc.)	Lump sum	1	200 000			0			0	200 000	200 000					200 000	100 000	100 000		
<b>6000 Sub-total expendable procurement</b>				0	0	0	216 611	245 000	461 611	398 961	398 961	27 300	60 000	87 300	0	947 872	437 486	457 486	25 700	27 200
<b>6100 Non-expendable procurement</b>																				
Vehicles for field work at pilot sites	Car	3	26 000			0		78 000	78 000		0					78 000	78 000			
Tractors for field work	Tractor	3	25 000			0	75 000		75 000		0					75 000	75 000			
Binoculars	Binocular	3	500			0	1 500		1 500		0					1 500	1 500			
Digital cameras	Camera	3	500			0			0	1 500	1 500					1 500	1 500			
Laptops	Laptop	12	1 500			0	12 000		12 000	6 000	6 000					18 000	18 000			
GIS software	GIS	1	6 000			0	6 000		6 000		0					6 000	6 000			
Printer	Printer	3	500			0			0	1 500	1 500					1 500	1 500			
Server	Server	1	5 470			0	5 470		5 470		0					5 470	5 470			
Color printer	Color Printer	1	1 500			0			0	1 500	1 500					1 500	1 500			
Billboard signs -info and demarcation	Signs	36	300			0			0	10 800	10 800					10 800	10 800			
Desktop computer	Desktop	3	1 700			0			0	5 100	5 100					5 100	5 100			
<b>6100 Sub-total non-expendable procurement</b>				0	0	0	99 970	78 000	177 970	26 400	26 400	0		0	0	204 370	204 370	0	0	0
<b>6300 GOE budget</b>																				
Miscellaneous including contingencies				20 000		20 000	40 000		40 000	40 000	40 000				0	100 000			50 000	50 000
<b>6300 Sub-total GOE budget</b>				20 000	0	20 000	40 000	0	40 000	40 000	40 000	0		0	0	100 000	0	0	50 000	50 000
<b>TOTAL</b>				250 947	276 508	527 455	1 005 941	1 408 608	2 414 549	1 737 945	1 737 945	210 860	255 000	465 860	308 736	5 454 545	1 991 843	1 895 423	958 027	609 252



#### APPENDIX 4: RISK MATRIX

<b>Risk description</b>	<b>Category*</b>	<b>Impact (H, M, L)</b>	<b>Likelihood (H, M, L)</b>	<b>Mitigation action(s)</b>	<b>Owner (Unit in charge to monitor risk)</b>	<b>Status (No change, reduced, etc.)</b>
Institutional framework and project coordination		Medium	M	National institutions capacity and technical expertise in SFM/SLM are weak. SAEPF and MoA have limited organizational, technical and financial resources, and qualified personnel. To mitigate this risk, the project will support the institutional framework and technical capacity development at national and local levels and establish a steering committee and project implementation unit in order to improve coordination and collaboration between central organizations and local organization.	FAO	
Insufficient funding to sustain SFM and SLM activities		Medium	M	Low capacity or lack of techniques for operating and maintaining drainage systems, lack of agricultural inputs, such as fertilizers, seeds, machinery and materials for testing of innovative technologies at pilot sites pose a risk to the pilot site activities. The risk will be mitigated through support to resource user associations to help them improve the coordination of activities supported by public funds, NGOs, local departments of self-governance and departments of SAEPF and MoA.	SAEPF and MoA	
Slow Uptake of Policy Recommendations		Medium	M	As it is the case in several developing countries, policy uptake of recommendations is slow as a result of several factors including lack of financial capacity to follow policy advice, short term expectations and political priorities etc. The project will eliminate the 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.	FAO	
Climate change		Medium	M	The territory of the Kyrgyz Republic as a high-mountainous landscape is exposed to 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	SAEPF, MoA, FAO	

				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 <u>disaster risk reduction strategies</u> 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 <u>disaster risk assessment and reduction</u> .		
Wood deficit coupled with energy crisis especially in winter season		Medium	M	The existing situation in the country is forcing rural communities to rely on firewood and other local fuel sources for heating and cooking. In addition to reflecting material hardships, reliance on wood fuels exacerbates problems of deforestation and land degradation, and causes indoor air pollution as well as greenhouse gas emissions. In order 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) 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.	NPIU/SAEPF	

\*Risk categories: Clear intended purpose (impact & outcome), Effective delivery strategy, External stakeholder support, Internal stakeholder support, Right resources, Viable delivery structures, Strong delivery management.

## APPENDIX 5: PROCUREMENT PLAN

*Project Document Appendix V*

### Procurement Plan

**Date:**

**Project Title and symbol:**

Ref. No.	Requirement (Item Description)	UNIT (Lts, MT, Kg., etc.)	Estimated quantity	Estimated cost	Unit price <sup>1</sup>	Solicitation method (RFP, RFQ, ITB)	Procurement method (Direct Proc, re-use of tender results, UN, Framework, etc.)	Buyer (CSAP, Non-HQ Location, PM)	Targeted tender launch date	Targeted contract award date	Targeted delivery date	Final destination and delivery terms	Status <sup>2</sup>	Other constraints/considerations
	Brochures design and printing	sets	4	6 000	1500 set price	ITB	ITB sealed submission	Buyer at Non-HQ Location	Year I	Year I	Year I		Planned	
	Six-monthly project news letter 500 copies	copies	8	8800	1100 set price				Every 6 months	Every 6 months			Planned	

<sup>1</sup> To be completed during the project cycle implementation and monitoring phase

<sup>2</sup> Planned, Requested, Tendered, Order Placed, Delivered, Completed.

	Best practices and lessons learned publications		3	20 000	6 666	ITB sealed bid	ITB sealed submission	Buyer at Non-HQ Location	Year 2,3,4	Year 2,3,4	Year 2,3,4		Planned	
	Bi-annual status report		8	1000	8 000	ITB	ITB open submission	Buyer at Non-HQ Location	Every 6 months	Every 6 months	Every 6 months		Planned	
	Posters		6	4500	750	RFQ	RFQ	Buyer at Non-HQ Location	Year 2,3,4	Year 2,3,4	Year 2,3,4		Planned	
	Seeds for tree nurseries			216 831		ITB	ITB	CSAP HQ	Year 1,2	Year 1,2	Year 1,2		Planned	
	Support to tree plantations			245 000		LoA	LoA	CSAP HQ	Year 1,2	Year 1,2	Year 1,2		Planned	
	Seeds, compost material, etc. for agricultural plots			198 961		ITB	ITB	CSAP HQ	Year 1,2	Year 1,2	Year 1,2		Planned	
	Support to pasture rehabilitation (seeds,			200 000		ITB	ITB	CSAP HQ	Year 2,3,4	Year 2,3,4	Year 2,3,4		Planned	

	fences, etc.)													
	Vehicles for field work at pilot sites		3	78 000		ITB	ITB	CSAP HQ	Year 1	Year 1	Year 1		Planned	
	Tractors for field work		3	75 000					Year 1	Year 1	Year 1		Planned	
	Binoculars		3	1500	500	RFQ	RFQ	Buyer at Non-HQ Location	Year 1	Year 1	Year 1		Planned	
	Digital cameras		3	1500	500	RFQ	RFQ	Buyer at Non-HQ Location	Year 1	Year 1	Year 1		Planned	
	Laptops		12	18000	1500	ITB	ITB sealed submission	Buyer at Non-HQ Location	Year 1	Year 1	Year 1		Planned	
	GIS software		1	6000		ITB	ITB open submission	Buyer at Non-HQ Location	Year 1	Year 1	Year 1		Planned	
	Printer		3	1500	500	ITB	ITB open submission	Buyer at Non-HQ	Year 1	Year 1	Year 1		Planned	

	Server		1	5470				Location	Year 1	Year 1	Year 1		Planned	
	Color printer		1	1500					Year 1	Year 1	Year 1		Planned	
	Billboard signs -info and demarcation		36	10800	300	ITB	ITB sealed submission	Buyer at Non-HQ Location	Year 1	Year 1	Year 1		Planned	

RFQ: Request for Quotation

RFP: Request for Proposal

ITB: Invitation to Bid

PM: Procurement Mission

MT: Metric tonnes

Lt.: Litre

Kg: Kilogram

## APPENDIX 6: TERMS OF REFERENCE (TORS)

### TORs for Project Staff

#### 1. National Project Director (NPD)

The National Project Director (NPD) will be designated by the national executing partner SAEPF, in consultation with the FAO Representation in Kyrgyzstan and the LTU. The NPD will be a senior staff member of the SAEPF with relevant experiences, and will be able to devote sufficient time to oversee the project during its implementation. S/he would specifically perform the following duties and responsibilities:

- Act as the responsible focal point at the political and policy level within SAEPF;
- Ensure that all Government inputs committed to the project, particularly co-financing are available to the project in a timely manner and in accordance with the project Work Plan;
- Ensure all necessary support from Government personnel is provided to enable the project to implement all of the proposed component activities;
- Ensure that appropriate and adequate office space and utilities are provided to the national project office in SAEPF, and that these offices are empowered to implement the project;
- Work collaboratively with the FAO Representation, the National Project Manager and other members of the project team to resolve implementation problems, as necessary;
- Facilitate signature of the GCP Agreement between FAO and the Government of Kyrgyzstan, the Letters of Agreement between FAO and Government partners, and the clearance of financial reports and other reports and correspondence in line with the project document;
- Leverage support and inputs from the SAEPF, research centres and other partners and concerned institutions;
- Promote the mainstreaming of project results into sectoral plans and policies;
- Represent SAEPF in official meetings related to the project when required and ensure regular communication between the Project Steering Committee and all project partners;
- Review Annual Work Plans and Budget (AWP/B) prepared by the NPIU and provide any additional inputs before submission to FAO and the PCC for approval;
- Provide general guidance and support in the implementation of project activities and monitoring of project progress;
- Promote close collaboration between the project and relevant ongoing and planned Government initiatives, local partners and organizations and other initiatives in the region;
- Mobilize and report on co-financing from the Government;
- Perform other related duties as required

2. **SFM Technical Officer** (funded by SAEPF) and **SLM Technical Officer** (funded by MoA),

The SFM Technical Officers will be designated by the national executing partner SAEPF and the SLM Technical Officer by MoA, in consultation with the FAO Representation in Kyrgyzstan and the LTU. The SFM and SLM Technical Officers will be staff members of SAEPF and MoA, respectively, with relevant experiences, and be able to allocate sufficient time for providing technical support in SFM and SLM to the project during its implementation. S/he would specifically perform the following duties and responsibilities:

- Managing project information and documentation
- Distribution of project reports, newsletters and training materials to relevant stakeholders
- Managing project M&E, conducting regular field M&E visits to project sites, and assisting the National Project Manager (see below) in preparing six-monthly Project Progress Reports monitoring progress in achieving project outputs and outcome indicators
- Liaising with FAO Representation's Finance and Administrative Assistant (for preparing financial reports for SAEPF's and MoAs co-financing)

3. **National Project Manager (NPM)**

Background

The NPM, will be a locally recruited national selected based on an open competitive process. He/She will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The NPM will be tasked with the day-to-day management of project activities, as well as with financial and administrative reporting. The NPM's prime responsibility is to ensure that the project produces the planned outputs and achieves the planned indicators and indicator targets by undertaking necessary activities specified in the project document to the required standard of quality and within the specified constraints of time and cost. This will require linking the indicators to the work plan to ensure Results-Based Management.

The NPM will report to FAOR for all of the project's substantive and administrative issues. The NPM will be responsible for meeting government obligations under the project and will perform a liaison role with the Government, FAO and other UN Agencies, NGOs and other project partners.

Duties and Responsibilities

- Supervise and coordinate the project to ensure its results are in accordance with the Project Document and the rules and procedures established by FAO
- Assume primary responsibility for daily project management - both organizational and substantive matters – budgeting, planning and general monitoring of the project
- Ensure adequate information flow, discussions and feedback among the various stakeholders of the project
- Ensure adherence to the project's work plan, prepare revisions of the work plan, if required

- Assume overall responsibility for the proper handling of logistics related to project workshops and events
- Prepare, and agree with FAO on terms of reference for national and international consultants and subcontractors
- Guide the work of consultants and subcontractors and oversee compliance with the agreed work plan
- Maintain regular contact with FAO Country Office and the National Project Director on project implementation issues of their respective competence
- Monitor the expenditures, commitments and balance of funds under the project budget lines, and draft project budget revisions
- Assume overall responsibility for meeting financial delivery targets set out in the agreed annual work plans, reporting on project funds and related record keeping
- Liaise with project partners to ensure their co-financing contributions are provided within the agreed terms
- Assume overall responsibility for reporting on project progress vis-à-vis indicators in the Project Results Framework
- Undertake any other actions related to the project as requested by FAO or the National Project Director
- Act as a Secretary of the PSC and invite for meetings on behalf of the National Project Director as stated in the ToR of PSC
- Provide technical assistance and co-ordination for sustainable forest management criteria & indicators, LULUCF and REDD+ activities, integration into forest and land management plans and carbon monitoring
- Assuring technical co-ordination among consultants to be hired

#### Qualifications

- Proven management expertise – must be able to fluidly handle the political, technical, and people management challenges that will face the NPM on a daily basis. This is first and foremost the most important qualification.
- A university degree in Engineering, Management or Environmental Sciences or related fields;
- At least 8 years of experience in natural resource management or project/programme management;
- At least 5 years of project/programme management experience;
- Working experience with ministries, national institutions and forestry sector in Kyrgyzstan;
- Ability to effectively coordinate a large, multi-stakeholder project;
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
- Strong drafting, presentation and reporting skills;
- Strong computer skills, in particular mastery of all applications of the MS Office package and internet search;
- Strong knowledge of sustainable forest management issues in Kyrgyzstan, including the political, institutional and socio-economic contexts;
- Strong knowledge and experience on regional and international forestry strategies, programmes and implementations
- Excellent writing and communication skills in English and Russian.

#### **4. Chief Technical Advisor (CTA)**

##### **Background:**

The CTA will be responsible for the technical backstopping of all ecological and climate change aspects of the project. He/She will provide on-going support to the project for adaptive management, best practice assessment and implementation to enable the project to maintain strategic direction during implementation by helping project management remain focused on overall results in addition to the day-to-day implementation concerns. He/She will ensure that the project is an active member of a broader knowledge management network on adaptation to climate change and natural resource and land management. This includes emphasizing a learning and adaptive approach to project management and implementation in close cooperation with the national partners. The Chief Technical Advisor will work closely with the National Project Manager and will delegate some task to him/her when necessary. He/she will work under the overall guidance of the FAO Representative and the technical supervision of the Regional Forestry Officer and GEF Focal Person, based in Ankara.

##### **Duties and Responsibilities:**

1. Technical backstopping for all aspects of ecosystem-based approaches for climate change adaptation, organic farming, rangeland management and agroforestry as well as environmental awareness, education and capacity building.
2. Provide support to the National Project Manager (NPM) in implementing adaptive management by working to facilitate effective monitoring of project activities and an ongoing, reflective evaluation of the project's progress.
3. Promote cross-project knowledge management and up-scaling of best practices in SFM/SLM and assist the NPM to establish cross-project linkages, where this project can learn and share lessons effectively from/with other initiatives in the region and worldwide.
4. Support and facilitate reflective practice on the part of project staff and Government partners by taking part in and contributing to workshops/round table discussions and conferences that tackle natural resource management and climate change adaptation issues.
5. Identify, analyze and communicate lessons learnt that may be useful in design and implementation of similar projects.
6. Assist NPM in compiling annual project progress reports and other monitoring and evaluation report requirements.
7. Establish a continuous and firm link between local communities and the project and provide advice on energy efficiency schemes for local communities;
8. Render advice on the establishment of PES and integrated forest management planning.
9. Facilitate linkages with other projects on SRM in the region for the purpose of exchange of knowledge and experience, and applying the latest technologies in SRM including use and training on WOCAT methodology and documentation;
10. Support NPIU in implementing technical studies of soils and land properties, analysis of salinization and ameliorative actions, biofertilizers and biogas.
11. Prepare TORs for organizations and partners such as an NGO or a community based organization to which the NPIU will subcontract specific tasks in terms of participatory analysis and planning, participatory monitoring and evaluation and learning and knowledge sharing.
12. Define and propose to the NPIU TOR and profiles of short term expertise necessary for the project.
13. Any other tasks assigned by the FAO Representative.

## **Professional Skills and Experience**

1. Rural development specialist with hands-on experiences in natural resources management in a rural context, especially in sustainable management of silvo-agro-pastoral ecosystems;
2. A university degree in Biology, Ecology or Environmental Sciences or related fields.
3. At least 8 years of experience in natural resource management including participatory planning techniques, adaptive management, project monitoring and evaluation processes.
4. Familiarity with ecosystem-based adaptation to climate change and integrated land-use planning in Central Asia.
5. Familiarity with knowledge management systems on SRM;
6. Good knowledge of organic farming, rangeland management and agroforestry techniques in dry areas, especially Central Asia;
7. Good knowledge in organizing public relations, environmental awareness, education and capacity building activities;
8. Familiarity with the socio-economic and political context of Kyrgyzstan;
9. Familiarity with the institutions related to forestry, agriculture, rangeland and livestock management in Kyrgyzstan;
10. Strong interpersonal and communication, reporting and presentation skills.
11. Work experience with projects funded by international donors;  
Excellent knowledge of Russian and English.

## 5. **National Operations Officer (NOO)**

### Background

The NOO, will be a locally recruited national selected based on an open competitive process. He/She will be responsible for the operational aspects of the project. The NOO will be tasked with the day-to-day management of project operations, as well as with financial and administrative reporting. The NOOs prime responsibility is to ensure that the project activities specified in the project document are facilitated to the required standard of quality and within the specified constraints of time and cost.

The NOO will report to FAOR for all of the project's substantive and administrative issues. The NOO will be responsible for liaison with the project partners.

### Duties and Responsibilities

Under the overall supervision of the FAOR, the direct supervision of the Deputy FAOR, and in close collaboration with the NPD and the NPM, the incumbent will perform duties related to the support of the implementation of project activities. In particular s/he will:

- ensure the day-to-day operation of the project activities;
- establish and organize project task forces and ensure timely provision of suitable inputs (personnel, training, equipment and supplies) including preparing initial and regular budget revisions and providing overall technical, administrative and operational support to the project;
- liaise with donors and government authorities as required;

- ensure timely submission of regular project progress and implementation reports including identification of project follow up requirements and project closure including reporting;
- ensure timely and complete information data entry into the Field Programme Management Information System (FPMIS) throughout the whole project cycle;
- monitor the project in close collaboration with the technical officers, the Assistant FAO Representations and other units at Headquarters and at country level;
- monitor delivery estimates and contribute to regular reports at the request of the BH and NPM;
- supervise project consultants and support staff in relation to the assigned tasks;
- carry out financial management and supervision of project budgets on behalf of the budget holder;
- lead, in collaboration with the NPD and NPM, the preparation of the preparation of AWP/B;
- appraisal and operational clearance of project documents, preparation of budgets and active participation in project discussions.

### **Qualifications**

- University degree in agriculture or a subject directly related to the field work of the Organization;
- Experience in planning and operating development cooperation programmes in developing countries;
- Working knowledge of English and Russian;
- Experience in the UN system

## **6. National Finance Officer**

### Background

The National Finance Officer will be a locally recruited national selected based on an open competitive process. He/She will be responsible for the operational and logistic aspects of the project. The National Finance Officer will be tasked with the day-to-day management of project operations. The National Finance Officer prime responsibility is to ensure that the project activities specified in the project document are facilitated to the required standard of quality and within the specified constraints of time and cost.

### Duties and responsibilities:

- prepare detailed budgets for cash transfer requests based on the AWP/B and project account cash balance
- maintain the project's disbursement ledger and journal
- keep the financial records and regular review of the project account
- review the receipts and financial reports submitted by field offices and sub-contractors
- prepare six-monthly financial statement of expenditures,
- prepare the personnel and services contracting and procurement documents
- participate in contracting and procurement processes including of submission of documentation to FAO for ex-antes clearances
- prepare relevant documents for internal and external financial audits

## **7. Project Assistant (PA)**

### Background

The PA will be a locally recruited national selected based on an open competitive process. He/She will report to the National Project Manager (NPM) and assist the NPM in the daily administration of the project work. She/he will be responsible for coordination and communication with field offices, project partners and stakeholders; translate documents from/into Russian, English and Kyrgyz and work as a translator at meetings and workshops; and perform all necessary secretarial services and maintain office equipment.

### Duties and Responsibilities

- Assist the NPM in managing the administrative and finance matters and ensure that all information is accurate
- Provide logistical support to the NPM and project consultants in conducting different project activities (training workshops, stakeholder consultations, arrangements of field visits, etc.)
- Assist in organizing control of budget expenditures by preparing payment documents, and compiling financial reports
  
- Perform any other duties as requested by the NPM
- Assist in organizing and coordinate the procurement of services and goods under the project

### Qualifications

- A university degree in business administration, management planning or related fields.
- Full proficiency in English and Russian (Kyrgyz is an asset).
- Excellent command of office software, such as word processors, spread sheets and databases.
- At least 3 years of proven experience in the relevant field.
- Proven experience in administration, programme planning, monitoring and reporting.

## **8. Field Site Coordinator Osh-Jalal-Abad/Issu-Kyl-Naryn**

### Background

The Project Field Site Coordinator (FSCs) will be a locally recruited nationals selected based on an open competitive process. He/She will report to National Project Manager (NPM) and assist the NPM in the coordination of the FAO-GEF project in pilot oblasts and rayons. S/he will oversee project implementation at field level including procurement, recruitment and operations logistics. S/he will assess support requirements against project objectives and operating environment.

### Duties and Responsibilities

- Assist the NPM in managing project staff and consultants working at field sites and ensure that their reports and results are delivered on time
- Assist the NPM to prepare GEF quarterly project progress reports, as well as any other reports requested by the Executing Agency and FAO
- Act as NPM in case of his/her absence

- Overall, provide all necessary support to the NPM in field implementation of the project
- Provide general administrative support to ensure the smooth running of the Field Offices
- Monitor the use of non-expendable equipment (record keeping, drawing up regular inventories)
- Provide technical assistance and co-ordination for capacity building activities at field sites on carbon-focused forestry activities and sustainable forest and land management

#### Qualifications

- University degree in Engineering, Management or Environmental Sciences or related fields;
- 6 years of experience in the area of implementation of natural resources management projects at medium and small scale in the field
- Solid experience of planning and reporting on foreign funded projects;
- Good secretarial skills and good organizational capacity;
- Good computer skills in common word processing (MS Word), spread sheet (MS Excel), and accounting software.
- Appropriate English and Russian language skills, both spoken and written.

### **9. Field Site Technical Assistant Osh-Jalal-Abad/Issu-Kyl-Naryn/Chui**

#### Background

The Project Field Site Technical Assistants (FSTs) will be a locally recruited nationals selected based on an open competitive process. He/She will report to the Project Field Site Coordinator (FSC) and assist the FSC in the implementation of field site activities of the FAO-GEF project in pilot oblasts and rayons. S/he will assist in project implementation at field level including technical advice and operations logistics.

#### Duties and Responsibilities

- Provide all necessary support to the FSC in field implementation of project activities
- Provide general support to oblast and rayon staff, leskhos and resource user associations to ensure the smooth implementation of field activities at their pilot sites
- Assist the FSC in providing technical assistance and co-ordination for capacity building activities at field sites on carbon-focused forestry activities and sustainable forest and land management

#### Qualifications

- University degree in Engineering, Management or Environmental Sciences or related fields;
- 2 years of experience in the area of implementation of natural resources management projects at medium and small scale in the field
- Appropriate Russian, Kyrgyz and English language skills, both spoken and written.

## **APPENDIX 7: TERMS OF REFERENCE FOR THE PROJECT STEERING COMMITTEE (PSC)**

### **Role of the PSC**

The PSC will be the policy setting body for the project; as and when required, the PSC will be the ultimate decision making body with regard to policy and other issues affecting the achievement of the project's objectives. The PSC will be responsible for providing general oversight of the execution of the Project and will ensure that all activities agreed upon under the GEF project document are adequately prepared and carried out. In particular, it will:

- Provide overall guidance to the Project Management Unit in the execution of the project.
- Ensure all project outputs are in accordance with the Project document.
- Review, amend if appropriate, and approve the draft Annual Work Plan and Budget of the project for submission to FAO.
- Provide inputs to the mid-term and final evaluations, review findings and provide comments for the Management Response
- Ensure dissemination of project information and best practices

### **Meetings of the PSC**

1. The Project Steering Committee meetings will normally be held annually, but the Chairperson will have the discretion to call additional meetings, if this is considered necessary. Meetings of the PSC would not necessarily require a physical meeting and could be undertaken electronically. No more than 13 months may elapse between PSC meetings.

2. Invitations to a regular PSC meeting shall be issued not less than 90 days in advance of the date fixed for the meeting. Invitations to special meetings shall be issued not less than forty days in advance of the meeting date.

### **Agenda**

1. A provisional agenda will be drawn up by the National Project Manager and sent to members and observers following the approval of the Chairperson. The provisional agenda will be sent not less than 30 days before the date of the meeting.

2. A revised agenda including comments received from members will be circulated 5 working days before the meeting date.

3. The Agenda of each regular meeting shall include:

- a) The election of the Vice-Chairperson
- b) Adoption of the agenda
- c) A report of the National Project Manager on Project activities during the inter-sessional period
- d) A report and recommendations from the National Project Manager on the proposed Annual Work Plan and the proposed budget for the ensuing period
- e) Reports that need PSC intervention
- f) Consideration of the time and place (if appropriate) of the next meeting;
- g) Any other matters as approved by the Chairperson

4. The agenda of a special meeting shall consist only of items relating to the purpose for which the meeting was called.

#### The Secretariat

The National Project Implementation Unit (NPIU) will act as Secretariat to the PSC and be responsible for providing PSC members with all required documents in advance of PSC meetings, including the draft Annual Work plan and Budget and independent scientific reviews of significant technical proposals or analyses. The PMU will prepare written report of all PSC meetings and be responsible for logistical arrangements relative to the holding of such meetings.

#### Functions of the Chairperson

1. The Chairperson shall exercise the functions conferred on him elsewhere in these Rules, and in particular shall:

- a) Declare the opening and closing of each PSC meeting
- b) Direct the discussions at such meetings and ensure observance of these Rules, accord the right to speak, put questions and announce decisions
- c) Rule on points of order
- d) Subject to these Rules, have complete control over the proceedings of meetings
- e) Appoint such ad hoc committees of the meeting as the PSC may direct
- f) Ensure circulation by the Secretariat to PSC members of all relevant documents
- g) Sign approved Annual Work Plans and Budgets and any subsequent proposed amendments submitted to FAO
- h) In liaison with the PSC Secretariat, the Chairperson shall be responsible for determining the date, site (if appropriate) and agenda of the PSC meeting(s) during his/her period of tenure, as well as the chairing of such meetings

#### Participation

The PSC members will include representatives of SAEPF (Chair), MoA, 5 Oblast representatives and FAO. , GIZ, IFAD, Mountain Partnerships, WFP will be invited to participate as observers. The Project management will also be represented on the PSC, in ex-officio capacity. The Project Manager will also be the Secretary to the PSC. Other active institutions may be requested to participate as observers.

#### Decision-making

1. All decisions of the PSC shall be taken by consensus.

#### Reports and recommendations

1. At each meeting, the PSC shall approve report text that embodies its views, recommendations, and decisions, including, when requested, a statement of minority views.

2. A draft Report shall be circulated to the Members as soon as possible after the meeting for comments. Comments shall be accepted over a period of 20 days. Following its approval by the Chairperson, the Final Report will be distributed and posted on the Workspace as soon as possible after this.

#### Official language

The official language of the PSC shall be English and Russian.

## APPENDIX 8: PILOT SITE SELECTION CRITERIA

### *Pilot oblasts selection*

#### 1. ECOLOGICAL

##### 1.1. Extent of ecological problems availability in the country by oblasts

##### 1.2. Land degradation

Surveys on defining ecological problems were held within FAO project. FAO guidelines “Comprehensive assessment of natural resources of Kyrgyzstan” (2008-2010) differs 20 main kinds of ecological problems (drought, flood, degradation, fire, mud slide, resources overdevelopment, overstocking and etc.), being observed in field conditions.

Data on extent of availability of ecological problems and land degradation in certain oblasts is given in table.

**Ecological problems and land degradation**

№	Oblasts	Forest lands with ecological problems	Agricultural lands with ecological problems	Forest lands subject to degradation	Agricultural lands subject to degradation
1	Naryn	14,5%	74,2%	7,1%	54,9%
2	Jalalabat	11,6%	71,5%	3,3%	32,7 %
3	Chui	3,6%	57,9%	2,5%	30,0%
4	Talas	34,1%	52,6%	10,2%	25,06 %
5	Issyk-Kul	3,3%	41,0%	2,8%	29,1 %
6	Osh	8,0%	24,6%	4,9%	23,4 %
7	Batken	10,3%	7,9%	4,0%	20,65 %

\*Source: National forest inventory of Kyrgyzstan, 2010.;  
Soil survey materials SDI «Kyrgyzgiprozem», 2011.

##### 1.3.Landscaping

##### Availability of landscaping elements

Land resources category	Total area		including:			
	Thous. ha	% of territory of oblast	plough land		Pastures	
			Thous. ha	%	Thous. ha	%
<i>Talas oblast</i>						
Farmlands	91169	80,9	85293	93,6	2975	3,3
Settlement lands:	12918	11,5				
Industry lands, transport lands, communication lands, defense lands, and etc	222	0,2				

Natural area of preferential protection:	602	0,5				
Forest reserves lands:	5100	4,5				
Water reserve lands:	81	0,1				
Reserve lands:	2564	2,3				
<b>Total lands for Talas oblast:</b>	<b>112656</b>	<b>100,0</b>				
<b><i>Osh oblast</i></b>						
Farmlands total:	96983	76,5	86550	89,2	3070	3,2
Settlement lands total:	24985	19,7				
Industry lands, transport lands, communication lands, defense lands, and etc	285	0,2				
Natural area of preferential protection:	63	0,0				
Forest reserves lands:	1293	1,0				
Water reserve lands:	9	0,0				
Reserve lands:	3125	2,5				
<b>Total lands for Osh oblast:</b>	<b>126743</b>	<b>100,0</b>				
<b><i>Naryn oblast</i></b>						
Farmlands total:	110777	92,0	102808	92,8	4982	4,5
Settlement lands total:	8245	6,8				
Industry lands, transport lands, communication lands, defense lands, and etc	18	0,0				
Natural area of preferential protection:	0	0,0				
Forest reserves lands:	745	0,6				
Water reserve lands:	0	0,0				
Reserve lands:	616	0,5				
<b>Total lands for Naryn oblast:</b>	<b>120401</b>	<b>100,0</b>				
<b><i>Batken oblast</i></b>						
Farmlands total:	40370	70,5	30438	75,4	25	0,1
Settlement lands total:	13583	23,7				
Industry lands, transport lands, communication lands, defense lands, and etc	157	0,3				
Natural area of preferential protection:	48	0,1				

Forest reserves lands:	1094	1,9				
Water reserve lands:	18	0,0				
Reserve lands:	1968	3,4				
<b>Total lands for Batken oblast:</b>	<b>57238</b>	<b>100,0</b>				
<b><i>Issyk-Kul oblast</i></b>						
Farmlands total:	138350	89,1	127817	92,4	3031	2,2
Settlement lands total:	13834	8,9				
Industry lands, transport lands, communication lands, defense lands, and etc	142	0,1				
Natural area of preferential protection:	210	0,1				
Forest reserves lands:	933	0,6				
Water reserve lands:	0	0,0				
Reserve lands:	1878	1,2				
<b>Total lands for Issyk-Kul oblast:</b>	<b>155347</b>	<b>100,0</b>				
<b><i>Chui oblast</i></b>						
Farmlands total:	278418	89,3	264442	95,0	2221	0,8
Settlement lands total:	27800	8,9				
Industry lands, transport lands, communication lands, defense lands, and etc	1505	0,5				
Natural area of preferential protection:	809	0,3				
Forest reserves lands:	2282	0,7				
Water reserve lands:	212	0,1				
Reserve lands:	781	0,3				
<b>Total lands for Chui oblast:</b>	<b>311807</b>	<b>100,0</b>				
<b><i>Jalalabat oblast</i></b>						
Farmlands total:	95182	76,1	87914	92,4	3375	3,5
Settlement lands total:	24501	19,6				
Industry lands, transport lands, communication lands, defense lands,	110	0,1				

and etc						
Natural area of preferential protection:	98	0,1				
Forest reserves lands:	1737	1,4				
Water reserve lands:	145	0,1				
Reserve lands:	3230	2,6				
<b>Total lands for Jalalabat oblast:</b>	<b>125003</b>	<b>100,0</b>				

\*Source: Kyrgyzgiprozem data, 2011.

## 2. SOCIAL-ECONOMIC

### 2.1. Social and economic standard of living

At present time poverty rate in Kyrgyzstan amounts to 34%.

№	Oblasts	Poverty rate, %
1	Naryn	54
3	Jalalabat	45
3	Talas	42
4	Osh	42
5	Issyk-Kul	38
6	Batken	34
7	Chui	22

### 2.2. Population density by oblasts

№	Oblasts	Area, km2	Population(2009)	Population density for 1 km2
1	Batken	17023	380300	22,3
2	Chui	18684	790500	42,3
3	Jalalabat	33674	938600	27,9
4	Naryn	46706	245300	5,3
5	Osh	29165	1000000	34,3
6	Talas	11445	219600	19,2
7	Issyk-Kul	43114	425100	9,9

## THE PARTIES CONCERNED (ON-GOING AND PLANNED PROJECTS)

### 2.3. Availability of Government Programs on SFM, SLM

### 2.4. Availability of international projects on SFM, SLM

№	Title of Programme/	Duration	Total funding	Funding source (e.g. GOK, foreign donors, etc.)	Key activities linked to the proposed project (indicate to which component)	Oblast
	<i>Forestry sector</i>					
1	Government Regulation of the KR dated 26 July 2011. №407 "On approval of results of the National forest inventory of the Kyrgyz Republic "	2011-2023	913,0 thous. USD	Government of the Kyrgyz Republic	Forest management of Unified Forestry Fund and Natural area of preferential protection (development of forest management plans)	Over republic
2	Japan International Cooperation Agency project (JICA) «Support to joint forest resources management in the Kyrgyz Republic»	2009-2014	900,0 thous.. USD	JICA	Involvement of local population into co-management of forests in 10 pilot areas of Chui, Issyk-Kul oblasts; Planting of fast-growing and fruit trees in 10 pilot areas of Chui and Issyk-Kul oblasts; Support to forest nursery and irrigation system	Chui, Issyk-Kul oblasts

3	Korean International Cooperation Agency project (KOICA) «Strengthening of forest conservation potential in the Kyrgyz Republic»	2012-2014	1000,0 thous. USD	KOICA	Establishment of "Science and research center of forest seed farming and monitoring of forest pests "; provision of equipment required, technologies and know how and knowledge for modernization of forest nursery, centers on forest tree seeds quality measurement, laboratories on pest management and forest diseases; передача transfer of necessary technologies and know how and knowledge on forest breeding and pest management	Chui oblast
4	Turkish International Cooperation Agency project "Development of forest management plans, improvement of forest mapping system "	2013-2014		TICA	Development of spruce and nut-bearing forests management plans, improvement of system on forest maps development, introduction of remote sensing and mixed technology	Issyk-Kul , Jalalabat oblasts
5	Turkish International Cooperation Agency project "Planting of fast-growing species "	2013-2014		TICA	Planting of poplar plantation	Chui
	Turkish International Cooperation Agency project "Forest pest management "	2013-2014		TICA	Biological control over nut-bearing forests pests	Jalalabat
5	Forest management	2013-2014	200 thous .USD	GIZ	Forest management	

6	FLEG		350 thous. USD	European Union	Forest management	
7	ARIS	2013-2016	500 thous euro	Ministry of Finances of the KR, Germany	In the frameworks of program on debt-for-ecology swap, planting of fat-growing trees (willow) in water conservation zone, in flood plains	Over the whole territory of the republic
<i>Sector of agriculture</i>						
1	Project of pasture management	2013-2014	250.000 USD	GIZ	Pastures management	Jalalabat
2	«Agricultural investments and services».	2008 – 2014	33,0 mln. U.S \$	World Bank	Reform of pastures management system	Over the whole republic
3	«Second on-farm irrigation project»	2007-2015	20,55 mln. U.S. dollars	World Bank	Project if designed for strengthening of Water Users Associations (WUA), rehabilitation and modernization of infrastructure	Over the whole republic
4	Pastures management	2013 -2018	25,8 mln. USD (half loan, half grant)	IFAD	Contribution to poverty reduction and to development of pastures communities	Issyk-Kul, Naryn
5	Newspaper «Ayil Demi»	Since 2011 to present time	24020 U.S. dollars	Mountain Partnership	Dissemination of newspaper in all villages and remote areas of Kyrgyzstan	
6	Conference Alliance of Central Asian mountain communities AGOCA	September 2013	8000 Euro	Federal ministry of ecology, nature protection and nuclear reactors security of Germany	Holding of conference for members of AGOCA	
7	Bee-farming as alternative source of income	March 2013- November 2013.	4600 euro	Alpine Convention	Holding of seminars and trainings, equipping; monitoring and consulting support; Holding of fair	Naryn oblast

### 3. GOOD PRACTICE EXPERIENCE ON SFM, SLM (COMPLETED PROJECTS)

#### 3.1. Availability of governmental programs, assessment of activities outcomes

#### 3.2. Availability of international projects, assessment of activities outcomes

<b>№</b>	<b>Title of project</b>	<b>Oblast</b>
	<b><i>Forestry sector</i></b>	
1	Kyrgyz-Swiss Program on support to forestry	Issyk-Kul, Jalalabat
2	European Union Project "JUMP Multi-purpose management of juniper forests "	Osh, Batken
3	Japan International Cooperation Agency project (JICA) «Support to co-management of forest resources in the Kyrgyz republic »	Issyk-Kul, Chui
4	FAO project "National inventory of forests "	Over republic
5	FAO project " Pistachio ..."	Jalalabat
6	TICA project "Forest pest management "	Jalalabat
7	Rural Development Fund	Batken, Chui
8	GEF project 4/UNEP/UNU PALM	Osh
9	National forest inventory, forestry management, development of forest management plans, forest maps	All over republic
	<b><i>Agricultural sector</i></b>	
1	GEF project ГЭФ 4/UNEP/UNU PALM	OSh
2	WB project "Soil management "	All over republic
3	WB project "Special program on livestock and pastures "	All over republic
4	GEF project /UNDP «Pastures management in Susamyr»	Chui

#### 4. SELECTION OUTCOMES

Estimation was held according to three-point scale: 1- low estimation, 2- average estimation, 3- high estimation. Outcomes are given in table.

№	Oblasts	Ecological			Social and economic		Parties concerned		Good practice experience		Global ecological benefits	Total points
		1.1.	1.2.	1.3.	2.1.	2.2.	3.1.	3.2.	4.1.	4.2.		
1	Naryn	3	3	3	3	1	3	3	1	2	3	<b>25</b>
2	Jalalabat	3	3	3	3	2	1	3	1	3	3	<b>25</b>
3	Issyk-Kul	2	2	3	2	1	3	3	1	3	3	<b>23</b>
4	Chui	2	2	3	1	3	1	3	1	2	3	<b>21</b>
5	Talas	2	2	2	2	2	1	1	1	1	2	<b>16</b>
6	Osh	1	1	2	2	3	1	1	1	1	2	<b>15</b>
7	Batken	1	1	2	1	2	1	1	1	1	2	<b>13</b>

Group of experts has selected first four oblasts (Naryn, Jalalabat, Issyk-Kul, Chui), for implementation of project.