



Global Environment Facility

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February 6, 2008

Dear Council Member,

The Asian Development Bank (ADB) as the Implementing Agency for the project entitled *Kyrgyzstan: Integrated Agricultural Development and Land Improvement-under CACILM Partnership Framework, Phase 1* has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with the ADB procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council on August 28, 2006 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by the ADB satisfactorily details how Council's comments and those of the STAP have been addressed.

If by February 27, 2008, I have not received requests from at least four Council Members to have the proposed project reviewed at a Council meeting because in the Member's view the project is not consistent with the Instrument or GEF policies and procedures, I will complete the Secretariat's assessment with a view to endorsing the proposed project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Attachment: Project Document

cc: Alternates, GEF Agencies, STAP



REQUEST FOR CEO ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project

THE GEF TRUST FUND

Submission Date: 15 November 2007

Re-submission Date: 4 February 2008

PART I: PROJECT INFORMATION

GEFSEC PROJECT ID: 3233

GEF AGENCY PROJECT ID: 31196

COUNTRY(IES): Kyrgyz Republic

PROJECT TITLE: Southern Agricultural Area Development Project

GEF AGENCY(IES): Asian Development Bank

OTHER EXECUTING PARTNER(S): Ministry of Agriculture, Water Resources and Processing Industry (MAWRPI)

GEF FOCAL AREA(S): Land Degradation

GEF-4 STRATEGIC PROGRAM(S): LD-SP1, LD-SP3

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: CACILM

Expected Calendar	
Milestones	Dates
Work Program (for FSP)	Not Applicable
GEF Agency Approval	29 Jan 2007
Implementation Start	10 Sept 2007
Mid-term Review (if planned)	Jan 2010
Implementation Completion	30 June 2013

A. PROJECT FRAMEWORK (Expand table as necessary) See below

B. FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	<i>Project Preparation*</i>	<i>Project</i>	<i>Agency Fee</i>	<i>Total at CEO Endorsement</i>	<i>For the record: Total at PIF</i>
GEF	0	2,500,000	225,000	2,725,000	Not Applicable
Co-financing	800,000	28,734,000		29,534,000	Not Applicable
Total	800,000	31,234,000	225,000	32,259,000	Not Applicable

* Please include the previously approved PDFs and PPG, if any. Indicate the amount already approved as footnote here and if the GEF funding is from GEF-3. Provide the status of implementation and use of fund for the project preparation grant in Annex D.

C. SOURCES OF CONFIRMED CO-FINANCING, including co-financing for project preparation for both the PDFs and PPG. (expand the table line items as necessary)

<i>Name of co-financier (source)</i>	<i>Classification</i>	<i>Type</i>	<i>Amount (\$)</i>	<i>%*</i>
ADB	Exec. Agency	Soft Loan	15,000,000	51
ADB	Executing Agency	Grant	5,000,000	17
ADB	Exec. Agency	Grant	800,000	3
Government	National Government	Cash/In-kind	6,818,000	23
Beneficiaries	Beneficiaries	In kind	1,916,000	6
Total Co-financing			29,534,000	100

* Percentage of each co-financier's contribution at CEO endorsement to total co-financing.

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY(IES) OR COUNTRY(IES): NOT APPLICABLE

<i>GEF Agency</i>	<i>Focal Area</i>	<i>Country Name/ Global</i>	<i>(in \$)</i>			
			<i>Project Preparation</i>	<i>Project</i>	<i>Agency Fee</i>	<i>Total</i>
Total GEF Resources						

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

Project Objective: Region-wide adoption of introduced techniques in improved agricultural, orchard and pasture management in Batken, Jalalabad and Osh regions of Kyrgyz Republic								
Project Components	Indicate whether Investment, TA, or STA**	Expected Outcomes	Expected Outputs	GEF Financing*		Co-financing*		Total (\$)
				(\$)	%	(\$)	%	
1. Farm Development	Investment/TA	<p>Improved capacity and technical scope of existing advisory service providers</p> <p>Increased quality and outreach of advisory services</p> <p>Improved access to existing legal services</p> <p>Increased availability and access to credit by farmers</p>	<p>All advisory service staff trained in the delivery of the training materials and in methods appropriate for small farmers</p> <p>96 trainers graduated from farmer field schools</p> <p>750 village advisors trained</p> <p>10,800 additional farmers accessed advisory services</p> <p>4,200 additional poor and very poor farmers (disaggregated by gender) provided access to advisory services</p> <p>Increased use of legal services by farmers and agribusiness enterprises to resolve disputes satisfactorily</p> <p>Decreased number of legal disputes</p> <p>Repayment rate greater than 97.5%</p> <p>FIRR on the investment not less than 12%</p> <p>Increased percentage of farmers, including poor and women accessing finance services</p>	871,000	19	3,679,000	81	4,550,000
2. Agribusiness Development and Marketing	Investment/TA	<p>Increased and improved contractual arrangements between farmers and agribusiness enterprises</p> <p>Improved agribusiness performance</p> <p>Increased public investment in physical market infrastructure</p>	<p>Secured new contracts between 2,000 farmers and input supply, machinery services, wholesale and processing agribusinesses enterprises</p> <p>Secured new contracts between 38 input suppliers or machinery contractors with their buyers</p> <p>90% of contractual arrangements complied with by both parties</p> <p>38 input suppliers and/or machinery services contractors achieved improvements in business performance targets</p> <p>Improved business performance targets for 12 processors or agricultural produce wholesalers</p> <p>Repayment rate on leases greater than 97.5%</p> <p>FIRR to the lessee of not less than 12%</p>			4,334,000	100	4,334,000

E. PROJECT MANAGEMENT BUDGET/COST

<i>Cost Items</i>	<i>Total Estimated person weeks</i>	<i>GEF (\$)</i>	<i>Other sources (\$)</i>	<i>Project total (\$)</i>
Locally recruited Personnel	8,864	53,461	481,154	534,615
Internationally Recruited Personnel	172	197,800	791,200	989,000
Office Facilities, equipment		42,692	507,994	550,686
Travel		26,216	108,076	134,292
Staff Training		13,110	61,183	74,293
Recurrent Costs		108,905	1,069,457	1,178,362
Miscellaneous		39,816	157,936	197,752
Total	9,036	482,000	3,177,000	3,659,000

* Provide detailed information regarding the consultants in Annex C.

** Provide detailed information and justification for these line items.

Project Management Costs funded by GEF

<i>Component</i>	<i>Monitoring</i>	<i>Administration (\$)</i>	<i>Project total (\$)</i>
Locally Recruited Personnel/Consultants*	15,971	37,490	53,461
Internationally Recruited Personnel*	135,700	62,100	197,800
Office facilities, equipment	24,286	18,406	42,692
Vehicles, and communications**			
Travel	18,791	7,425	26,216
Staff Training	1,299	11,811	13,110
Recurrent Costs***	22,017	86,888	108,905
Miscellaneous	7,911	31,905	39,816
Total	225,975	256,025	482,000

* Local and international consultants in this table are those who are hired for functions related to the management of Project

** Expenditures on this line item cover office facilities, equipment and communications that are related to GEF-related activities only

*** Recurrent Costs in the above table refer to operation and maintenance costs associated with office facilities, equipment and other project management operation and maintenance

F. Consultants Working for Technical Assistance Components

<i>Component</i>	<i>Estimated weeks</i>	<i>GEF (\$)</i>	<i>Other Sources (\$)</i>	<i>Project total (\$)</i>
Personnel				
Local Consultants	1372		370,385	370,385
International Consultants	212	391,000	828,000	1,219,000
Total	1,584	391,000	1,198,385	1,589,385

G. DESCRIBE THE BUDGETED M & E PLAN:

The Project will be monitored and evaluated in two ways. First, as an ADB project, it will be subject to the standard M&E procedures of the principal lender, with most of its elements carried out jointly with the Government. Second, as part of the National Program developed under CACILM, the Project's M&E provisions will be integrated with the M&E provisions of the CACILM national and multicountry activities. In addition, the Project will prepare reports required by the GEF and will respond to monitoring and

evaluation studies that will be conducted by the GEF Secretariat and the GEF Evaluation Office. The monitoring and evaluation (M&E) plan for the project is described in Annex D of the Project Document.

ADB's standard monitoring procedures include financial and work progress monitoring, monitoring of compliance with environmental and social safeguards and monitoring of performance. The Government and ADB will review implementation of the Project at least once a year. After 3 years of implementation, the Government and ADB will jointly carry out a midterm review of the Project, to identify any problems or constraints encountered and assess the need for modification of project scope, implementation and financing arrangements. Project objectives will be measured against the performance criteria listed in Annex B of the Project Document. The parameters for assessing the implementation milestones will include (i) implementation status, (ii) design and construction standards, (iii) physical progress and disbursements related to the implementation schedule, (iv) status of compliance with loan covenants, (v) achievement of the Project's development objectives, (vi) progress of policy reforms, and (vii) the need for any changes in the project scope to achieve project impact. On completion, the Project will be evaluated according to a schedule and terms of reference to be agreed upon by the Government and ADB.

Under the CACILM Multicountry Partnership Framework, the performance of NPFs and their project components is furthermore monitored at a country-partnership (regional) level to generate a picture of the effectiveness of the CACILM program at that level. Secondly, at the same multicountry level, a mechanism has been created to facilitate the monitoring and evaluation of all GEF-cofinanced components of the National Programs. Besides communicating with GEF on all matters relating to GEF-cofinanced components, CACILM Secretariat will ensure that the formats of SAADP M&E are fully compatible with those of GEF.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE THE PROJECT RATIONALE AND THE EXPECTED MEASURABLE GLOBAL ENVIRONMENTAL BENEFITS:

Rationale

The Kyrgyz Republic's economy and agriculture are, to a considerable extent, influenced by its mountain ecosystems, covering some 90% of the territory and characterized by extremely fragile and diverse ecosystems. But the majority of its agricultural production comes from flat lands adjacent to rivers. Approximately 90% of agricultural lands can be defined as lands prone to desertification. Over 40% of farmlands are considered as already in a degraded state. Land degradation matters hugely in the Kyrgyz Republic given the fact that agriculture is the main activity of the rural population, which accounts for 75% of the country's poor and about 80% of the extremely poor. Land degradation processes lead to a decrease on fertility of arable lands and natural forage lands, as well as reduced animal breeding capacity, and therefore result in decreasing incomes, declining quality of life and migration from rural villages to urban areas of the Kyrgyz Republic and abroad.

Like most of Central Asia, a dynamic interplay of on-the-ground anthropogenic factors with increased climatic variability is driving land degradation processes in the Kyrgyz Republic. Soil quality, freshwater supplies, vegetation, and the health of crops, are easily degraded. The traditional practices have become less practical due to changing economic and political circumstances coupled with population growth. It is now generally acknowledged that current land and water management practices, which among other things have failed to consider the impacts of climate change and climatic variation, are among the primary causes of land degradation. Throughout Central Asia, the major risk of increased climatic variability associated with global climate change is the combination of thermal (i.e. higher temperatures) and water (i.e. less water available in the summer) stresses. Central Asian countries are already quite vulnerable to extreme climatic events such as

droughts and floods due to the region's topography and aridity. The frequency and magnitude of these extreme events may well increase. Agricultural productivity in Central Asia is likely to suffer losses because of higher temperatures, more severe drought, worsening flood conditions, and increased soil erosion.

Historical records suggest that over the past 100 years, the temperature in the Kyrgyz Republic has increased by 1.6°C. According to climate assessment results, it is anticipated that by the year 2100 the most probable scenario of climate change will be (for the whole area) – an average annual temperature increase of 3°C and a 10-40% increase in annual precipitation, compared to 1961–1990 levels¹. It is predicted that these climate changes will have adverse effects on the state of the water and biological resources, agriculture, and public health.

Land degradation processes are the products of both these anthropogenic and other natural factors and their combinations. Local causes of land degradation in the Kyrgyz Republic include: (i) unsustainable agricultural activities causing soil erosion; (ii), weak linkages between land users, state agencies and the private sector; (iii) increase of land use conflicts; (iv) excessive logging; and (v) overly intensive use of pasturelands without sustainable practices such as pasture rotation. Underlying causes exacerbating land degradation can be economic, social, or bio-physical, and include: (i) lack of application of sustainable land management (SLM) practices and of SLM advisory services to disseminate such practices and technologies; (ii) lack of sustainable land use planning, sustainable pasture lands management mechanisms, and unclear regulations on leasing; (iii) lack of enabling policy and incentive framework; (iv) weak institutional capacity; (iv) lack of mainstreaming of land degradation and SLM concerns into the planning and budgeting processes; (v) disincentives for investment in land; and (vi) lack of diversification in the rural economy.

The key problem areas of land degradation are: (i) soil degradation, which includes fertility depletion, soil erosion, loss of vegetative cover, and salinity; (ii) deteriorated irrigation systems, water loss and inefficient water utilization; (iii) degraded pasturelands; (iv) deforestation and inadequate regeneration and afforestation; (v) loss of genetic and biodiversity resources; (vi) floods and landslides; and (vii) deterioration in water and air quality and pollution. The area of arable land is 1.36 million hectares (ha), including almost 60% of sites subject to water erosion and wind erosion. In the case of lands used mostly as pastures which cover approximately 9 million ha and can support 11 million head of cattle), about 30% are already at the phase of manifested desertification, 27% are at middle stages, and 17% are at early stages of desertification. The areas of potentially erosive lands reach 85% within the whole of the Republic, which is mainly caused by mountain topography. In the majority of regions of the Republic, the content of humus has decreased by 20-45% in arable soils in comparison with their virgin analogues. The Government of the Kyrgyz Republic accords high priority to addressing these problems and the Southern Agriculture Area Development Project (SAADP) represents an important response in this direction.

Global Environmental Benefits

The Project will benefit an estimated population of 158,500 in 31,000 households in 17 *aiyl okmotu*. Improvements are expected on 28,500 of irrigated land, 15,000 ha of rainfed land, and access to 93,000 ha of village pastures and an additional area of midlevel and high mountain pastures that will be quantified during project implementation. Sustainable increases in land productivity and profitability through increased sustainable land management of arable and pasture lands will result in: (i) arrested/reduced land degradation and enhanced ecological stability; (ii) up-scaling of sustainable land management practices and land-use planning and environmental impact assessment systems. Local and global benefits will also be obtained through generation and dissemination of knowledge addressing current and emerging issues in Sustainable Land Management (SLM) and through capacity strengthening and replication.

¹ 1st National Communication of the Kyrgyz Republic under the UN Framework Convention on Climate Change (2003). Bishkek – 98 pp.

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

The project concept is consistent with the priorities of the Government as identified in the National Programming Framework (NPF) of the Central Asian Countries' Initiative for Land Management (CACILM). The responsibility for CACILM coordination and NPF oversight rests with a National Working Group (NWG). The NWG is chaired by the Minister of Agriculture, Water Resources and Processing Industry (MAWRPI), with the UNCCD Focal Point acting as the CACILM coordinator and convener of the NWG. The NPF provides a national programming platform to guide actions and activities, both nationally and externally funded, to address land degradation issues. It includes a reform and investment program (National Program), which is intended to be the instruments which would help the Kyrgyz Republic to realize the goal to restore, sustain, and enhance the productive functions of the Kyrgyz Republic's land resources, restore the loss of productivity of the natural resource base, so as to improve the economic and social well-being, and reduce poverty, of those who depend on these resources while preserving the biodiversity and resilience of the ecology and enhancing ecosystems stability and services. The proposed SAADP has been identified as one of the priorities in the Integrated Resource Management Program Area, to be funded in Phase 1 and implemented over six years.

The process of developing the NPF used key existing national documents as a starting point, such as the National Action Plan to Combat Desertification (NAPCD) which was approved in December 2000, the Agrarian Policy Concept of the Kyrgyz Republic to 2010, the National Forest Programme (2005-2015), the Strategy and Action Plan for Development of Mountain Territories and the Kyrgyz National Poverty Reduction Strategy (NPRS).

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH [GEF STRATEGIES](#) AND STRATEGIC PROGRAMS:

The SAADP is consistent with the strategic objectives under the Land Degradation focal area. In particular, the project addresses Strategic Objective 2: "To upscale SLM investments that generate mutual benefits for the global environment and local livelihoods". In GEF-4, it is primarily consistent with the Strategic Program on "Supporting sustainable agriculture and rangeland management". In particular, the project aims at demonstration and up-scaling of sustainable pastures land management practices, sustainable land-use planning and environment impact monitoring systems. The project would also disseminate knowledge generated by project interventions for their wider sharing and replication for the control of land degradation and desertification, and for promoting sustainable livelihoods of the rural populations through uptake of conservation friendly and sustainable land management practices.

The project contribution to the GEF strategic objectives in the Land Degradation area is inherent in the SAADP's objectives. These emphasize focus on improved sustainable land management of arable and pasture lands resulting in: (i) arrested/reduced land degradation and enhanced ecological stability; (ii) up-scaling of sustainable land management practices and land-use planning and environmental impact assessment systems. The SAADP would generate local and global benefits, also through generation and dissemination of knowledge addressing current and emerging issues in SLM and through capacity strengthening and replication. The Kyrgyz Republic is committed to strengthen enabling policy and institutional environment for the sustainable management of natural resources at the local and/or national level, through a variety of proposals included in its CACILM National Programming Framework.

The GEF Alternative would provide the needed support to the implementation of the current NAP/UNCCD. The GEF incremental cofinancing would enable the Government to implement elements of the NPF on integrated resource management, and to promote a more holistic and coordinated approach to land management, strengthening farm-level improvements in sustainable land management to eventually have an impact on the ecosystem level. This will entail an incremental and sequential approach with realistic

expectations of achievements. The GEF alternative also provides more opportunities in terms of coordination and cooperation among the development community and government agencies at all levels through adherence to the common understanding of priorities as identified under the NPF prepared as part of the CACILM process.

D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The proposed project is consistent with the ADB Country Strategy Program (CSP) for the Kyrgyz Republic, of which the overall objective is to reduce poverty. The CSP states that ADB will contribute to private sector-led growth by supporting three areas, the first being in the area of agricultural and rural development, to induce further productivity and to expand exports, second, the financial sector, and third, through regional cooperation. Based on the country environmental analysis, the CSP identified several priority areas of environmental management, which include land resources management. The CSP also recommends that mainstreaming of environmental considerations into ADB's operations constitute an important element of future activities. The most recent CSP Update (CSPU) for the Kyrgyz Republic (2006–2008), noted ADB has given continued support for strengthening environmental management through three grants funded technical assistance projects and has also provided support for sustainable mountain development.

The Government Commitment to the Project was confirmed through its request to ADB requesting loan and grant assistance for the Project. The Project is included in the Government's current Public Investment Program (PIP). The Project is consistent with Government's (i) Agrarian Policy Concept of the Kyrgyz Republic to 2010; (ii) the UNCCD National Action Program (NAP); (iii) Strategy and Action Plan for Development of Mountain Territories; and (iv) Kyrgyz National Poverty Reduction Strategy (NPRS). The Project is included in the Kyrgyz Republic Investment Program of its National Programming Framework (NPF) adopted by the Government as part of its commitment to the CACILM initiative and it forms part of the list of projects included in work program of the CACILM Multicountry Partnership Framework.

GEF's mandate, especially as articulated under the Sustainable Land Management Program, provides the basis for GEF's support of the Project. In the case of the Kyrgyz Republic and Central Asia, that support was translated into GEF Council's 2006 approval of CACILM Multi-Country Partnership Framework, as well as subsequent approval for CACILM Multi-Country Partnership Framework Support Project to support the implementation of national programming frameworks in each of the countries of Central Asia, including the Kyrgyz Republic. The SAADP is one of two projects in Kyrgyz Republic during initial phase (2006–2008) for which GEF support is being sought.

CACILM itself is built on the principles of partnership, inclusiveness and transparency, and the level of collaboration achieved to date establishes a solid foundation for this proposed project. Building on the strong foundation established through the SPA, the CACILM Partnership will actively seek to include all interested GEF Implementing and Executing Agencies and to maintain close coordination with both the UNCCD and GEF Secretariats. The preparation of the NPF was done in this mode of partnership and hence should reduce the risks of duplication of effort.

As SAADP implemented opportunities for further on the ground collaboration with other GEF implementing and executing agencies will be explored, for example, with the World Bank Water Management Improvement Project, a five year project, of which the four components are: (i) rehabilitation and modernization of irrigation infrastructure; (ii) management of resources; (iii) organization of beneficiaries; and (iv) project management.

E. DESCRIBE THE INCREMENTAL REASONING OF THE PROJECT:

The incremental cost analysis is added as Annex C below. The succeeding paragraphs provide a detailed description of how the GEF-financed activities will enhance the global environmental benefits to be derived from the project.

The GEF-financed activities will be integrated into three out of five project components covering: Farm Development, Land Improvement and Project Management. The three additional sub-components and their respective components are:

- *GEF Sub-component of Land Improvement: Community Based Pasture Land Planning, Mapping, and Monitoring*
- *GEF Sub-component of Farm Development: Sustainable Land Management Advisory Services and Field Schools*
- *GEF Sub-component of Project Management: Monitoring and Evaluation of Project Environmental Impacts*

In general, the incremental GEF finance for these sub-components will: (i) expand the technical scope of the advisory services beyond the enterprise specific training to include much greater emphasis on sustainable land management issues as soil conservation, improved efficiency of water management and pasture management; (ii) allow the replication and scaling-up of field schools which will develop a cadre of trainers with skills which include integrated pest management, integrated crop management, and fruit tree management; (iii) provide additional technical assistance to support preparation of community based pasture land management plans in each of the project *aiyl okmatu*, (iv) build local capacity (at the level of the *aiyl okmatu*, pasture user and livestock committee) in pasture mapping, monitoring and management, which will be critical for the implementation of the communities' pasture land management plans; and e) develop and implement environmental monitoring and evaluation systems within the *aiyl okmatu*, Water User Associations (WUA) and the Project Management Unit (PMU). More detail on the specific interventions follows.

The GEF Farm Development Sub-component will: (i) expand the technical scope of the advisory services beyond the enterprise specific training which they currently provide to address sustainable land management issues as soil conservation, improved efficiency of water management and pasture management; (ii) allow the replication and scaling up of field schools which will develop a cadre of trainers with skills which include integrated pest management, integrated crop management and fruit tree management. The incremental global environmental benefits that will be realized are of several kinds, partly inter-related: (i) improved efficiency of irrigated agriculture and sustainable practices in rainfed agriculture beyond the immediate project area, made possible by intensifying or supplementing certain project activities; (ii) revival of Central Asia's agricultural and cultural heritage (including conservation of agrobiodiversity) as indigenous know-how is combined with international advances in irrigated and rainfed agriculture; and (iii) reduction of GHG emissions through carbon sequestration from a more appropriate management of biomass and deliberate attention to capturing the underlying potential in this domain.

The GEF Land Improvement Sub-Component will provide additional international technical assistance to support the preparation of community-based pasture land management plans in each of the project *aiyl okmatu* and build local capacity (at the level of the *aiyl okmatu*, pasture user and livestock committee) in pasture mapping, monitoring and management which will be critical for the implementation of the communities pasture land management plans, thus contributing significantly to sustainable pasture land management. Under Sub-component B, the global benefits include: (i) reduced salt and pollutant run-off in parts of the Project area resulting in improvement of surface and groundwater quality in key transboundary river basins, and (ii) enhanced integrity of dryland landscapes and ecosystems in areas of global cultural importance.

These benefits will proceed from (i) the enhanced ability of Kyrgyz Republic's pasture land management institutions to share experience in introducing SLM activities that have significant positive global environmental impacts, and (ii) the improved ability to communicate with national and international stakeholders and galvanize opinion in favor of protecting the global environmental commons.

The GEF Project Management Sub-component will focus on monitoring and evaluation of project environmental impacts. The project design with GEF financing included will provide for a more comprehensive project management approach in which a common set of indicators will be used to monitor and evaluate variables measuring global impacts, such as: the nature and status of land degradation, carbon sequestration, biodiversity, on- and off-site environmental impacts, biodrain siltation, salinization, pollution, eutrophication and related socio-economic-factors. Further, the project will (i) develop an integrated system for monitoring the project's environmental impacts, (ii) develop a proposal for a unified salinity management database in the Kyrgyz Republic, and (3) mainstream the most suitable international practices of participatory monitoring of environmental impacts.

Broader global benefits over time will emerge in areas of (i) conservation agriculture and (ii) agrobiodiversity (such as generation, dissemination, and uptake of good practices for addressing current and emerging biodiversity issues), and (iii) climate change mitigation and adaptation, through SLM activities indirectly enhancing sequestration of greenhouse gas (GHG) emissions and actions supportive of adaptation such as promoting renewable energy for rural energy services. SAADP management structures and SLM advisory services would provide a platform and instruments for information dissemination on these issues. In this context, the UNCCD Focal Point (who also heads the CACLIM national secretariat) will cooperate with the national focal points for Biodiversity and Climate Change and the PMU – building on previous GEF/NSCA findings -- to help establish linkages through ongoing activities in these areas in project areas which have the potential to complement project interventions under the GEF Alternative.

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

The major assumption is that political and macro economic stability will be maintained and that the central and local governments will remain and decentralization will persist. Other important assumptions are that farmers will shift from subsistence to increased commercial agriculture and that farmers will use improved services and infrastructure and adopt improved farming practices. (See Appendix B for complete set of assumptions.)

The major risks to the Project's success are that the implementation of macro-economic policy reforms is slow to support agricultural sector reforms, and that the Kyrgyz Republic's reported problems with governance, transparency, and corruption may adversely affect Project implementation and outcomes.

It is now generally acknowledged that land and water management practices, which among other things have failed to consider climate change and climatic variation, are among the primary causes of land degradation. Throughout Central Asia, the major risk of climate change and its variability is the combination of thermal (i.e. higher temperatures) and water (i.e. less water available in the summer) stresses. Central Asian countries are already quite vulnerable to extreme climatic events such as droughts and floods. The frequency and magnitude of these events may well increase. Agricultural productivity in Central Asia is likely to suffer losses because of higher temperatures, more severe drought, worsening flood conditions, and increased soil erosion.

Historical records suggest that over the past 100 years, the temperature in the Kyrgyz Republic has increased by 1.6°C. According to climate assessment results, it is anticipated that by the year 2100 the most probable

scenario of climate change will be (for the whole area) – an average annual temperature increase of 3°C and a 10-40% increase in annual precipitation, compared to 1961–1990 levels². It is predicted that these climate changes will have adverse effects on the state of the water and biological resources, agriculture, and public health. The project will address these risks through the baseline component focusing on improved irrigation and drainage and the GEF co-financed component on land improvement through sustainable pasture and land management in a way that will anticipate climate variability. Environmental indicators, including those related to climate change will be monitored by the project as part of the proposed monitoring and evaluation plan. This will enable the project to anticipate changes in climate and their corresponding impacts and will subsequently improve the capability of the project to adapt to these changes as appropriate.

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

The overarching aim of this project is to foster the adoption of improved agricultural, orchard, and pasture management techniques throughout the region. This would be reflected in an increase in the productivity and profitability of farms and agribusinesses, better management of pasture lands and orchards in order to reduce land degradation and to enhance ecological stability; and an increase in the use and up-scaling of sustainable land management practices, sustainable land use planning and environment impact assessment systems. The beneficiaries would be the 158, 500 people living in the 31, 000 households located in the 3 oblasts, 58% of whom now live below the poverty line. The GEF Alternative would see better trained and better informed farmers, and ‘strengthened capacity of the Kyrgyz Republic for the dissemination of knowledge in sustainable arable and pasture land management practices and technologies across the region and beyond. An important incremental global environmental benefit potentially available would be the improved ecological functioning of the irrigated and pastureland ecosystems beyond the immediate project area’.

The Financial Analysis indicates that 39% of the project benefits will go to the poor. Provided that this is accompanied by improved ability of that sector of the population to manage their land more productively on an enduring basis, this is a very desirable outcome.

One important reason for having confidence in the potential cost effectiveness of this project in achieving OP 15 objectives rests on the fact that this project will be using the same area development concept and approach as those already being used in the Agricultural Area Development Project in Chui Oblast in the north of the Kyrgyz Republic. At the time of writing (June 2007) this project has been running for 110 months, with 19 still to run, and has achieved 79% of its intended physical progress. Three of the key lessons learned during the operation of this project were the need to establish a monitoring and evaluation programme very early in the project, the need to include advisers with expertise in social and environmental monitoring, and the need to diversify the range of financial institutions involved in providing credit.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. PROJECT IMPLEMENTATION ARRANGEMENT:

The project will draw heavily on the management structure that will be established for the SAADP, so as to promote an efficient, integrated and coherent approach to project management. The executing agency for the project will be the Ministry of Agriculture, Water Resources, and Processing Industry (MAWRPI) and a Project Implementation Unit will be established under that ministry. Executing agency arrangements similar to those of the Agricultural Area Development Project will be used, as staff members in the ministry are already familiar with overall responsibilities of project coordination and ADB procedures. ADB will be the GEF executing agency for the GEF component.


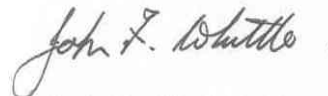
² 1st National Communication of the Kyrgyz Republic under the UN Framework Convention on Climate Change (2003). Bishkek – 98 pp.

The project is part of the Kyrgyz Republic NPF and will be coordinated by the NCC through the Kyrgyz Republic National Secretariat. As the project is part of the CACILM Multicountry Partnership Framework (CMPF), it comes under the CACILM Steering Committee and will be coordinated through the CACILM Multicountry Secretariat.

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

Not Applicable.

PART V: AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement.	
 David McCauley Senior Environmental Economist GEF Agency Coordinator	 John Whittle Principal Agricultural Economist Project Contact Person
Date: November 15, 2007 Tel: +(632) 632 4161 Email: dmccauley@adb.org	Tel: +(632) 632 5684 Email: jwhittle@adb.org

ANNEX A: PROJECT RESULTS FRAMEWORK

Refer to Part I.A – Project Framework of this form (CEO Endorsement) and also in the following annexes, which present the results framework in ADB format.

The Project Results Framework in ADB format is pasted below. Note that the Design and Monitoring Framework is has been inserted from Annex I of the appraised ADB Project Document (Report and Recommendation of the President).

DESIGN AND MONITORING FRAMEWORK (ADB FORMAT)

Design Summary	Performance Targets/ Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks																																																																																
<p>Impact Region wide adoption in Batken, Jalalabad and Osh, of the improved agricultural, orchard and pasture management techniques introduced</p>	<p>Household incomes increase by 30%.</p> <p>Agriculture value added increased by 5% per annum.</p> <p>Incidence of land degradation maintained or reduced.</p>	<p>Regional statistics</p> <p>Government reports</p> <p>CACILM annual reports</p>	<p>Assumptions Political and macro economic situation stable.</p> <p>Relative input / output commodity prices stable. Government commitment to SLM is mainstreamed</p> <p>Risk The gradual implementation of macro-economic policy reforms is slow to support agricultural sector reforms</p>																																																																																
<p>Outcomes Sustainable increase in land productivity and profitability</p>	<p>Yields on target farms increases as follows:</p> <table border="1" data-bbox="394 898 1044 1556"> <thead> <tr> <th colspan="2"></th> <th colspan="3">Irrigated</th> </tr> <tr> <th></th> <th>Unit</th> <th>Without</th> <th>With</th> <th>% change</th> </tr> </thead> <tbody> <tr> <td>Wheat</td> <td>T/ha</td> <td>2.6</td> <td>4.4</td> <td>25</td> </tr> <tr> <td>Maize</td> <td>T/ha</td> <td>4.3</td> <td>6.3</td> <td>25</td> </tr> <tr> <td>Sunflower</td> <td>T/ha</td> <td>1.3</td> <td>1.9</td> <td>25</td> </tr> <tr> <td>Cotton</td> <td>T/ha</td> <td>1.8</td> <td>3.8</td> <td>25</td> </tr> <tr> <td>Tomato</td> <td>T/ha</td> <td>33.0</td> <td>41.3</td> <td>25</td> </tr> <tr> <td>Lucerne Hay</td> <td>T/ha</td> <td>10.0</td> <td>12.0</td> <td>0</td> </tr> <tr> <td>Milk (lactation cows)</td> <td>L/lactation</td> <td></td> <td>1,893</td> <td>37</td> </tr> <tr> <td>Apricots, dried</td> <td>T/ha</td> <td>5.5</td> <td>6.0</td> <td>20</td> </tr> <tr> <td>Apples</td> <td>T/ha</td> <td>2.0</td> <td>22.0</td> <td>10</td> </tr> <tr> <th colspan="2"></th> <th colspan="3">Rainfed</th> </tr> <tr> <th></th> <th>Unit</th> <th>Without</th> <th>With</th> <th>% change</th> </tr> <tr> <td>Wheat</td> <td>T/ha</td> <td>1.5</td> <td>1.9</td> <td>25</td> </tr> <tr> <td>Sunflower</td> <td>T/ha</td> <td>0.8</td> <td>0.9</td> <td>10</td> </tr> <tr> <td>Lucerne</td> <td>T/ha</td> <td>6.0</td> <td>6.6</td> <td>10</td> </tr> </tbody> </table>			Irrigated				Unit	Without	With	% change	Wheat	T/ha	2.6	4.4	25	Maize	T/ha	4.3	6.3	25	Sunflower	T/ha	1.3	1.9	25	Cotton	T/ha	1.8	3.8	25	Tomato	T/ha	33.0	41.3	25	Lucerne Hay	T/ha	10.0	12.0	0	Milk (lactation cows)	L/lactation		1,893	37	Apricots, dried	T/ha	5.5	6.0	20	Apples	T/ha	2.0	22.0	10			Rainfed				Unit	Without	With	% change	Wheat	T/ha	1.5	1.9	25	Sunflower	T/ha	0.8	0.9	10	Lucerne	T/ha	6.0	6.6	10		<p>Assumptions Farmers shift from subsistence to increased commercial agriculture.</p> <p>Farmers use improved services and infrastructure and adopt improved farming practices.</p> <p>Reliable supply of irrigation water in the project areas is maintained.</p> <p>Risk Kyrgyz Republic reported problems with governance, transparency, and corruption may adversely affect Project implementation and outcomes.</p>
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Design Summary	Performance Targets/ Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
	<p>Gross margins increase about 40% from about \$512 to \$720 per hectare.</p> <p>Cash margin of target farms increases about 30% from \$314 to \$400 per 4 hectare.</p> <p>75% of targeted farms and agribusinesses adopt new techniques and practices.</p> <p>Beneficiaries include 28,500 households and 158,500 people.</p> <p>Area of agriculturally productive arable, pasture land and orchards in the target area is maintained or increased.</p> <p>Soil erosion and salinity decline on target arable land (targets to be identified).</p> <p>Carrying capacity of pastures is to be maintained or increased on target pasture lands (targets to be identified)</p> <p>Carbon storage per hectare increases (targets to be identified)</p> <p>Agro-biodiversity increases (indicators and targets to be identified)</p>	<p>Annual Project Farm Survey</p> <p>Provincial and district statistics on crop areas, yields and production</p> <p>DAWR reports</p> <p>Project environment monitoring program</p>	
<p>Outputs</p> <p>1. Farm Development Component</p> <p>1.1 Improved capacity and technical scope of existing advisory service providers</p> <p>1.2 Increased quality and outreach of advisory services.</p>	<p>All advisory service staff are trained in the delivery of the training material and in training methods appropriate for small farmers.</p> <p>96 trainers graduate from farmer field schools.</p> <p>750 village advisors trained.</p>	<p>PMU contract monitoring</p> <p>PMU contract monitoring</p> <p>Rapid survey</p> <p>PMU contract monitoring</p> <p>Rapid survey</p>	<p>Assumptions</p> <p>Advisory services willing to cooperate with Advisory and Training Center, the Center Asian Mountain Partnership or other similar service providers.</p> <p>Field Schools receive expanded assistance under the GEF Alternative</p>

Design Summary	Performance Targets/ Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
1.3 Facilitate access to existing legal services	<p>10,800 additional farmers access advisory services.</p> <p>4,200 additional poor and very poor farmers (disaggregated by gender) access advisory services.</p> <p>Increased use of legal services by farmers and agribusinesses to resolve disputes.</p> <p>Increased percentage of legal disputes satisfactorily resolved.</p> <p>The number of legal disputes decline.</p>	<p>PMU contract monitoring</p> <p>Rapid survey</p> <p>Socio-economic survey</p> <p>LARC reports</p> <p>Rapid survey</p> <p>Socio-economic survey</p>	<p>Advisory services provided by trainers will be accepted by farmers and result in productivity improvements.</p>
1.4 Increased availability and access to credit by farmers	<p>Repayment rate greater than 97.5%.</p> <p>FIRR on the investment not less than 12%.</p> <p>Increased percentage of farmers, including poor and women, accessing finance.</p>	<p>Financial institutions quarterly reports</p> <p>Rapid survey</p> <p>Socioeconomic survey</p>	<p>Assumptions</p> <p>Sufficient number of financially viable credit applications with adequate collateral required by financial institution.</p> <p>Financial institutions expand sufficiently to serve all target project areas.</p>
<p>2. Agribusiness Development and Marketing Component</p> <p>2.1 Increased and Improved contractual arrangements between farmers and agribusiness</p> <p>2.2 Improved agribusiness performance</p>	<p>2,000 farmers secure new contracts with input supply, machinery services, wholesale and processing agribusinesses.</p> <p>38 input suppliers or machinery contractors secure new contracts with their suppliers and/or buyers with improved terms of contract.</p> <p>12 processors or agricultural produce wholesalers secure new contracts with their buyers.</p> <p>90% of contractual arrangements are complied with by both parties.</p> <p>38 input suppliers and/or machinery services contractors achieve improvements in business performance targets.</p> <p>12 processors or agricultural produce wholesalers achieve improvements in business performance targets.</p>	<p>PMU contract monitoring</p> <p>Market survey</p> <p>PMU contract monitoring</p> <p>Market Survey</p> <p>Financial statements</p>	<p>Risk</p> <p>Either party or a contract defaults.</p>

Design Summary	Performance Targets/ Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<p>2.3 Increased availability and access to appropriate finance for agribusinesses</p> <p>2.4 Increased public investment in physical market infrastructure</p>	<p>Repayment rate greater than 97.5%.</p> <p>FIRR on the investment not less than 12%.</p> <p>Repayment rate on leases greater than 97.50%.</p> <p>FIRR to the lessee of not less than 12%.</p>	<p>Quarterly reports from financial institutions</p> <p>PMU monitoring</p> <p>Agribusiness financial statements</p> <p>Financial audits</p> <p>PMU monitoring</p> <p>Beneficiary contact monitoring</p>	<p>Assumptions Financially viable investment opportunities can be identified.</p> <p>Sufficiently strong cooperatives and agribusinesses can be identified as partners.</p> <p>Assumptions Financially viable opportunities for investment can be identified.</p> <p>Sufficient private sector interest in leasing facilities.</p>
<p>3. Irrigation and Drainage Component</p> <p>3.1 Improved WUA management</p> <p>3.2 Rehabilitated irrigation and drainage infrastructure</p>	<p>At least 17 legally established WUAs.</p> <p>All WUAs increase service fees and collection rates to ensure annual operation and maintenance plans are effectively implemented.</p> <p>WUA increase efficiency of water use and water management so that (i) an increased percentage of water users are receiving reliable irrigation water; (ii) the volume of water delivered to farm plots is satisfactory for crops grown; and (iii) the percentage of water users satisfied with WUA managerial and operational performance increases.</p> <p>Increased participation of women in WUA councils, directorate, and committees.</p> <p>Off farm and onfarm drainage and irrigation infrastructure serving at least 28,500 ha in at least 17 WUAs is successfully rehabilitated.</p>	<p>WUA Support Unit reports</p> <p>WUA water measurements</p> <p>Participatory survey</p> <p>Beneficiary contact monitoring</p> <p>PMU contract monitoring and reports</p> <p>PMU quarterly progress reports</p>	<p>Assumptions The Government makes continuing and sufficient annual budget allocations for O&M of off-farm drainage and irrigation systems.</p> <p>Farmers willing to pay increased irrigation service fee.</p> <p>Rehabilitated irrigation and drainage systems are properly managed by WUAs to equitably serve all farmers.</p>

Design Summary	Performance Targets/ Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<p>4. Land Improvement Component</p> <p>4.1 Sustainable Pasture Land Management</p>	<p>Appropriate institutional framework with designated roles and responsibilities agreed and formalized.</p> <p>Revenue sharing arrangements amongst oblast, raion, and <i>aiyl okmotu</i> established.</p> <p><i>Aiyl okmotu</i> pasture lease revenues reinvested in pasture land improvements.</p> <p>Integrated, coordinated and participatory planning process established and implemented.</p> <p>Communities mobilized to ensure effective participation (by both women and men) in pasture land planning and management.</p> <p>Community based pasture land management plans will be prepared for pastures serving farmers in selected <i>aiyl okmotu</i>. In these selected <i>aiyl okmotu</i>: (i) pasture conditions are surveyed and pasture maps prepared; (ii) pasture improvement plans prepared; (iii) pasture land management committees are established and trained; (iv) pasture monitoring system is established; and (v) pasture infrastructure rehabilitation plans are prepared.</p> <p>Pasture land management plans implemented and monitored with participation of the community.</p>	<p>Decree on institutional framework and responsibilities</p> <p>PMU contract monitoring</p> <p><i>Aiyl okmotu</i> financial audits</p> <p>Approval by relevant government agency</p>	<p>Assumptions Plans are flexible and responsive to the ongoing and changing needs of communities, managers and the environment.</p> <p>Stakeholders are willing to participate in pasture and orchard planning with <i>aiyl okmotu</i>.</p> <p>Risk Local government institutions' capacity remains inadequate.</p>

Design Summary	Performance Targets/ Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
4.2 Improved orchard management	In selected <i>aiyl okmotu</i> : (i) legal restrictions relating to tree planting and tree crop harvesting resolved; (ii) improved leasing arrangement for leasing orchards; (iii) orchards planted with new stock; (iv) farmers trained in orchard and tree crop management.	PMU monitoring Orchard monitoring report Beneficiary contact monitoring Data from various surveys CACILM annual reports	<p>Assumptions Rights and responsibilities of respective land leases are respected by Government agencies.</p> <p><i>Aiyl okmotu</i> develop sufficient capacity to prepare and implement plans.</p> <p>Willingness of forest farmers to cooperate with <i>aiyl okmotu</i> pasture and orchard planning group.</p> <p>Willingness of raion and oblast administration to delegate responsibility for orchard management to <i>aiyl okmotu</i>.</p> <p>Legal restrictions can be overcome.</p> <p>Risk Either party to a contract defaults.</p>
<p>5. Project Management</p> <p>5.1 Efficient and effective project management system established and operational.</p>	<p>Project implemented on schedule.</p> <p>Quarterly and annual work plans and reports submitted within one month of the relevant period.</p> <p>Annual audit, financial statements and management letter submitted by 30 June each year.</p> <p>Comprehensive monitoring of indicators of the status of land degradation, carbon sequestration, on-site and off-site environmental impacts are monitored</p>	<p>PMU reports</p> <p>CACILM annual reports</p>	<p>International technical expertise envisaged under the GEF Alternative is mobilized.</p>

Activities	Inputs
<p>1.1.1 Undertake situation assessment and prepare <i>aiyl okmotu</i> plans.</p> <p>1.1.2 Contract and monitor improvement of training materials.</p> <p>1.2.1 Contract for expansion of village advisory services.</p> <p>1.2.2 Contract and monitor implementation of field schools.</p> <p>1.3.1 Identify legal service needs.</p> <p>1.3.2 Sign memorandum of understanding with Legal Assistance to Rural Citizens.</p> <p>1.4.1 Identify, select, contract and monitor financial institutions.</p> <p>2.1.1 Identify and support contract between farmers and agribusinesses.</p> <p>2.2.1 Contract and monitor delivery of advisory services to agribusinesses.</p> <p>2.3.1 Identify, select, contract and monitor financial institutions.</p>	<p>ADB Loan: \$15.00 million</p> <p>ADB Grant: \$5.00 million</p> <p>GEF Grant : \$2.50 million</p> <p>Government: \$6.81 million</p> <p>WUAs: \$1.92 million</p>

Activities	Inputs
2.4.1 Identify facilities and private sector interest in market infrastructure. 2.4.2 Facilitate agreements and contract arrangements between parties. 2.4.3 Monitor the facilities and arrangements. 3.1.1 Monitor training of WUAs provided under World Bank projects. 3.2.1 Undertake joint assessment of WUA and rehabilitation needs. 3.2.2 Prepare design for rehabilitation works. 3.2.3 Engage contractor and supervise civil works. 4.1.1 Mobilize communities. 4.1.2 Conduct socioeconomic survey and survey of pasture conditions.	
4.1.3 Facilitate preparation of pasture land management plans. 4.1.4 Implement pasture management plans and monitor effects based on M&E system. 4.2.1 Assist in preparation of orchard management plans. 4.2.2 Assist <i>aiyl okmotu</i> in establishing and monitoring lease agreements with farmers. 5.1.1 Recruit international and national consultants. 5.1.2 Establish financial management system. 5.1.3 Prepare procurement documents for approval, tender and evaluation. 5.1.4 Establish monitoring and evaluation system. 5.1.5 Conduct baseline and regular surveys. 5.1.6 Submit quarterly progress and other required reports.	

ADB = Asian Development Bank; DWR = Department of Water Resources; FIRR = financial internal rate of return; GEF = Global Environment Facility; M&E = monitoring and evaluation; O&M = operation and maintenance; PMU = project monitoring unit; WUA = water users association.

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

STAP REVIEW

Project: Southern Agriculture Area Development Project
Country: Kyrgyz Republic
STAP Reviewer: Professor Martin Williams ScD, University of Adelaide, Australia.
Date: June 13, 2007

1. Introduction.

The Southern Agriculture Area Development Project in Kyrgyz Republic is one of a series of projects foreshadowed in the Central Asian Countries Initiative for Land Management (CACILM) 2005 proposal approved by the GEF Council in 2006. The CACILM proposal was given substance in the form of the Multi-country Partnership Framework (MCPF) through which the GEF supports national projects that fall within the rubric of the MCPF. The overall objective of the CACILM Multi-country Partnership Framework is specified as: ‘The restoration, maintenance and enhancement of the productive functions of land in Central Asia leading to improved economic and social well-being of those who depend on these resources while preserving the ecological functions of these lands in the spirit of UNCCD’

The Southern Agriculture Area Development Project (SAADP) reviewed here is located in the Kyrgyz Republic and was identified (albeit under a slightly different name) during the initial phase of the MCPF (2006-2008) for which GEF support under OP15 is now being sought.

The southern portion of the Kyrgyz Republic contains 47% of the population (2.6 million people) and 77% of the population in the three project oblasts is rural. 32% of the people live in the uplands and 68% in the lowlands. Of the 543,000 households who live in the highland villages, 11% are poor, 22% are very poor and 25% are extremely poor. Two thirds of the householders live in the lowlands. Of these, 11% are poor, 18% very poor and 19% extremely poor. At present, 80% or 1.1 million ha of the total arable area of 1.4 million ha are irrigated, but only 5% of commercial bank lending is for agriculture, storage and processing of agricultural products. Rural advisory services cover fewer than 6% of all farmers. In addition, 70% of the agricultural workforce in the south of the Kyrgyz Republic consists of women, who are also among the poorest members of the community.

As requested by ADB, the focus of this STAP review is on the proposal’s global priority in the area of GEF Operational Program 15, its cost-effectiveness in achieving OP 15 objectives, the adequacy of the project design, and the feasibility of its implementation, operation and maintenance. The second half of the review deals with the global significance and technical merits of the proposal, highlighting its strengths and potential weaknesses and suggesting appropriate improvements.

This review is based on three sets of documents: the Executive Summary, the Project Document, and the Annexes³. The overall clarity of exposition in each of these documents is excellent and there are very few typographical errors or words left out.

³ Including ADB Report and Recommendations of the President to Board of Directors (January 2007). ‘Proposed Loan and Asian Development Fund Grant Kyrgyz Republic: Southern Agricultural Area Development Project.’ ADB, Manila. 69 pp. and 9 Appendices.

As with my previous STAP reviews, I will take into account the following questions in evaluating this proposal:

- Will the approach taken in the project proposal achieve the objectives of addressing land degradation?
- What are the risks and constraints associated with the approach?
- Are there any gaps in the project? Are there any controversial aspects about the project?
- What aspects of the interventions proposed require further research?
- How will the model of sustainable use outlined in the project be developed?
- How effective will the proposed model be?
- Is there sufficient evidence in the document that the project offers the best long-term solutions?

2. Conceptual approach

The conceptual basis for the approach to be adopted in this project is that of Sustainable Land Management (SLM). This approach has been used with success in other poor, dry developing regions of the world and accords well with the principles of the Drylands Development Paradigm (DDP) as defined by Reynolds et al. (2007).⁴ In particular, it recognises the failure of top-down natural resource management interventions to achieve lasting and ecologically beneficial outcomes. Williams (2004) made a similar point in a discussion of desertification processes in various regions of the world, including Inner Mongolia, a region with land degradation problems very comparable to those afflicting the Kyrgyz Republic.⁵ Another basic principle underpinning the DDP is recognition that human and environmental systems are closely coupled. A final point stressed by Reynolds et al. (2007) is the need to place a much higher value on local environmental knowledge.

One of the five principles outlined by Reynolds et al. (2007) relevant to this proposal concerns the dynamics of dryland systems, which are determined by certain biophysical and socio-economic variables with an inherently slow response time. They observed that what they term ‘fast’ variables with relatively rapid turnover rates (e.g., crop yields or household disposable cash) are poor indicators of land degradation or the need for intervention. In the assessment of performance indicators in this proposal it might also be useful to draw a distinction between ‘slow’ and ‘fast’ variables. At present, a whole series of performance indicators are considered but there is no formal attempt to group them into those indicative of short-term economic responses and those more appropriate as indicators of long-term ecological trends. This point is repeated in section 8.2 below.

3. Global priority under GEF Operational Program 15

Operational Program 15 of the GEF deals with Sustainable Land Management (SLM) under the Land Degradation focal area. The project focus is on Strategic Objective 2: ‘To generate mutual benefits for the global environment and local livelihoods through the up-scaling of SLM investments’. The project deals specifically with the ‘demonstration and up-scaling of sustainable pastures land management practices, sustainable land-use planning and environment impact monitoring systems’. The supporting documents provided with this proposal show very clearly that this project is fully consistent with the objectives of GEF OP 15. The envisaged outcomes of an SLM approach to the management of arable and grazing lands would be an overall reduction in land degradation and an increase in ecosystem stability.

The proposal notes that in this region the ‘key problem areas of land degradation are: (i) soil degradation, which includes fertility depletion, soil erosion, loss of vegetative cover, and salinity; (ii) deteriorated irrigation

⁴ Reynolds, J.F. et al. (2007). Global desertification: building a science for dryland degradation. *Science* 316, 847-851.

⁵ Williams, M. (2004). Desertification in Africa, Asia and Australia: Human impact or climatic variability? *Annals of Arid Zone* 42, 213-230.

systems, water loss and inefficient water utilization; (iii) degraded pasturelands; (iv) deforestation and inadequate regeneration and afforestation; (v) loss of genetic and biodiversity resources; (vi) floods and landslides; and (vii) deterioration in water and air quality and pollution.’

Of the 1.36 million ha of arable land, nearly 60% are prone to accelerated soil loss from erosion by wind and water. In the case of the 9 million ha of rangelands, 30% are severely degraded, 27% partly degraded and a further 17% in the incipient stages of desertification. The humus content of arable soils has decreased by 20-45% relative to uncultivated soils. All of these problems are exacerbated by the steeply sloping mountainous topography in the upland areas.

Any improvement in current farming and grazing practices will yield short-term social and economic benefits. If the SLM practices are widely adopted and maintained, the project will have enduring environmental benefits. These are the long-term or slow-response changes identified by Reynolds et al (2007)⁶. Without such an approach there will be continued loss of productive land, a decline in soil structural stability, reduced infiltration capacity and soil water storage, further loss of organic matter and soil nutrients, leading to a reduction in plant biomass and species diversity and of ecosystem resilience in the face of extreme events. The long-term consequences would be a reduction in plant and animal productivity and a decline in human living standards.

4. Cost-effectiveness in achieving Operational Program 15 objectives

The overarching aim of this project is to foster the adoption of improved agricultural, orchard, and pasture management techniques throughout the region. This would be reflected in an increase in the productivity and profitability of farms and agribusinesses, better management of pasture lands and orchards in order to reduce land degradation and to enhance ecological stability; and an increase in the use and up-scaling of sustainable land management practices, sustainable land use planning and environment impact assessment systems. The beneficiaries would be the 158, 500 people living in the 31, 000 households located in the 3 oblasts, 58% of whom now live below the poverty line. The GEF Alternative would see better trained and better informed farmers, and ‘strengthened capacity of the Kyrgyz Republic for the dissemination of knowledge in sustainable arable and pasture land management practices and technologies across the region and beyond. An important incremental global environmental benefit potentially available would be the improved ecological functioning of the irrigated and pastureland ecosystems beyond the immediate project area’.

The Financial Analysis indicates that 39% of the project benefits will go to the poor. Provided that this is accompanied by improved ability of that sector of the population to manage their land more productively on an enduring basis, this is a very desirable outcome.

One important reason for having confidence in the potential cost effectiveness of this project in achieving OP 15 objectives rests on the fact that this project will be using the same area development concept and approach as those already being used in the Agricultural Area Development Project in Chui Oblast in the north of the Kyrgyz Republic. At the time of writing (June 2007) this project has been running for 110 months, with 19 still to run, and has achieved 79% of its intended physical progress. Three of the key lessons learned during the operation of this project were the need to establish a monitoring and evaluation programme very early in the project, the need to include advisers with expertise in social and environmental monitoring, and the need to diversify the range of financial institutions involved in providing credit.

5. Project design and feasibility

⁶ Reynolds, J.F. et al. (2007). Global desertification: building a science for dryland degradation. *Science* 316, 847-851.

5.1 General comment

The May 2007 ADP CACILM Project Document⁷ is critical of the present National Action Plan. It ‘lacks operational plans and is considered thin on program content.’ However, the chief strictures are reserved for over-reliance ‘on “stand-alone” projects or activities aimed at combating desertification.’ In particular, ‘issues such as soil erosion, salinization, water logging, wind erosion, and loss of vegetative cover need more comprehensive and cross-cutting approaches requiring involvement of a number of agencies.’

Both the Baseline Project and the GEF Alternative will provide a better-integrated and multi-sectorial approach to these problems.

The baseline project has five components: (a) farm development; (b) agribusiness development and marketing; (c) irrigation and drainage; (d) land improvement; and (e) project management. Three of these five components (a, d and e) are incorporated into the GEF Alternative in the form of three sub-components. These are:

- (i) sustainable land management advisory services and field schools;
- (ii) community based pasture land planning, mapping and monitoring; and
- (iii) monitoring and evaluation of project environmental impacts.

For each of these three sub-components there are listed a very specific set of actions, targets and performance indicators. The same is true of the five components identified for the Baseline Project. Provided the monitoring programme is finalised reasonably rapidly in the early stages of project implementation, there is some reasonable hope of success.

5.2 Questions relating to certain performance indicators

I note in section 6 below that the proposal indicates that targets and indicators are yet to be identified for four key aspects of the project:

- Reduction in soil erosion and soil salinity on target arable land
- Carrying capacity of pasturelands,
- Increases in carbon storage per hectare
- Increases in agro-biodiversity.

In order to demonstrate a relevant decrease or increase in these parameters, existing baseline data are needed for comparison. Are such data indeed available? If not (as I suspect) on what basis will improvements be demonstrated? Finally, just what is ‘agro-biodiversity?’

5.3 Project implementation, operation and maintenance

As always, the selection of team leader is crucial, as is the whole-hearted cooperation from the government agencies and ministries. A Project Management Unit will be responsible for running the project as specified in the Work Plan (Annexe E of the Baseline Proposal). Annexe F is a very detailed Stakeholder Participation Plan. So far, the attempts to involve stakeholders have been limited to two regional and one national workshop comprising 137 participants, 27% of whom were women. This hardly merits the description of ‘a wide participatory process’ but did involve a reasonably broad range of interested parties, including ‘representatives of the central Government, local governments, farming households, and development partners; members of cooperatives and water user associations; staff of credit unions and non-government

⁷ Asian Development Bank (May 2007). ‘Kyrgyz Republic: Southern Agricultural Area Development Project.’ ADB and Central Asian Countries Initiative for Land Management (CACILM).

organizations; and owners of agro-enterprises'. It is vitally important for the future success of this project that a far greater number of stakeholders be fully consulted and involved in the decisions that affect their long-term future.

6. Global significance of the proposal

The Executive Summary states that as a result of this project 'improvements are expected on 28,500 ha of irrigated land, 15,000 ha of rain-fed land, and ... 93,000 ha of village pastures and an additional area of midlevel and high mountain pastures that will be quantified during project implementation. Sustainable increases in land productivity and profitability through increased sustainable land management of arable and pasture lands will result in: (i) arrested/reduced land degradation and enhanced ecological stability; (ii) up-scaling of sustainable land management practices and land-use planning and environmental impact assessment systems. Local and global benefits will also be obtained through generation and dissemination of knowledge addressing current and emerging issues in Sustainable Land Management (SLM) and through capacity strengthening and replication.' The ES states further that the beneficiaries will be 158, 500 people living in 31, 000 households located in 17 different localities.

The proposal identifies, lucidly and concisely, the key land degradation issues. These are:

- Soil degradation, which includes fertility depletion, soil erosion, loss of vegetative cover, and salinity.
- Deteriorated irrigation systems, water loss and inefficient water utilization.
- Degraded pasturelands.
- Deforestation and inadequate regeneration and afforestation.
- Loss of genetic and biodiversity resources.
- Floods and landslides.
- Deterioration in water and air quality and pollution.

With the GEF Alternative, 'the outcome of the baseline Project will be enhanced in terms of better trained and informed farmers, and strengthened capacity of the Kyrgyz Republic for the dissemination of knowledge in sustainable arable and pasture land management practices and technologies across the region and beyond. An important incremental global environmental benefit potentially available would be the improved ecological functioning of the irrigated and pastureland ecosystems beyond the immediate project area.'

The Executive Summary makes mentions the potential global benefits of this project. There is passing mention of carbon sequestration and biodiversity, but no quantitative information is given anywhere as to how much carbon is presently stored in the soils and plants in the project area and how much additional carbon storage might be expected under the GEF alternative. The same criticism applies to the issue of biodiversity, a point reiterated in section 8.6.

7. Scientific and technical merits of the proposal

The scientific and technical merits of this proposal may be summarized as follows.

- 7.1 Accurate diagnosis of the local, regional and institutional causes of land degradation in the southern Kyrgyz Republic.
- 7.2 Approach based on already well tested methodology used in the Agricultural Area Development Project in Chui Oblast in the north of Kyrgyz Republic.
- 7.3 Integration into a well conceived and managed baseline project.
- 7.4 Project structure and monitoring procedures ensure financially responsible use of well-targeted

resources designed to achieve very specific outcomes in three GEF Alternative sub-components of the baseline project.

- 7.5 Management structures designed to achieve effective stakeholder involvement at local, regional and national levels.
- 7.6 Scope for application of lessons learned well beyond the targeted areas.
- 7.7 Some attention given to possible impacts of long-term regional climatic change.
- 7.8 Lies within the wider CACILM framework, with scope for regional exchanges of information and techniques.
- 7.9 Specific attention given to disseminate lessons learned more widely.

8. Weaknesses of the proposal and suggestions for improvement

The risks inherent in this project are lucidly identified and some apt counter-measures are mentioned. I do not construe these potential risks as proposal weaknesses.

- 8.1 Section 3 refers to the most probable scenario of climatic change for this region. During the past century the mean annual temperature in the Kyrgyz Republic has increased by 1.6°C and is likely to rise by 3°C by 2100. Precipitation is predicted to increase by 10-40% over this time interval relative to the 1961-1990 values. The proposal then states that ‘It is predicted that these climate changes will have adverse effects on the state of the water and biological resources, agriculture, and public health.’ It is not clear to me why an increase in mean annual precipitation in this dry part of the world is considered undesirable. Some clarification and further explanation are needed. In addition, glacier mass balance depends on the ratio of accumulation to ablation. Accumulation is a function of temperature and precipitation. Are the glaciers in this region limited more by temperature than precipitation?
- 8.2 E1 provides a list of quantitative indicators. One of the five principles outlined by Reynolds et al. (2007)⁸ relevant to this proposal concerns the dynamics of dryland systems, which are determined by certain biophysical and socio-economic variables with an inherently slow response time. They observed that what they term ‘fast’ variables with relatively rapid turnover rates (e.g., crop yields or household disposable cash) are poor indicators of land degradation or the need for intervention. In the assessment of performance indicators in this proposal it might also be useful to draw a distinction between ‘slow’ and ‘fast’ variables.
- 8.3 There is considerable overlap between sections 25 and 26 of the Executive Summary. The repetition in section 26 detracts from the impact of this section.
- 8.4 The basis for specifying certain increases in yield is not explained.
- 8.5 The monitoring and evaluation programme is given in very general terms. However, the proposal indicates that targets and indicators are yet to be identified for four key aspects of the project, namely, the reduction in soil erosion and soil salinity on target arable land, the carrying capacity of pasturelands, increases in carbon storage per hectare, and increases in ‘agro-biodiversity’, although what is meant by that term is not defined. Given that one of the lessons learned from the Agricultural Area Development Project in Chui Oblast in the north of KR is the vital need for rapid implementation of the M&E programme, this degree of uncertainty at this stage in the formulation of the project is disconcerting and needs rapid rectification.

⁸ Reynolds, J.F. et al. (2007). Global desertification: building a science for dryland degradation. *Science* 316, 847-851.

8.6 Frequent mention is made of the potential global benefits of this project. There is passing mention of carbon sequestration and biodiversity, but no quantitative information is given anywhere as to how much carbon is presently stored in the soils and plants in the project area and how much additional carbon storage might be expected under the GEF alternative. The same criticism applies to the issue of biodiversity.

Signed:

Date: June 13, 2007

Martin Anthony Joseph Williams

Response to STAP Review

Project: Southern Agriculture Area Development Project
Country: Kyrgyz Republic
STAP Reviewer: Professor Martin Williams ScD, University of Adelaide, Australia.
Date of STAP Review: June 17, 2007

The STAP reviewer summarized the main questions that need to be addressed in point 8. We have responded to each of these points.

8. Weaknesses of the proposal and suggestions for improvement

The risks inherent in this project are lucidly identified and some apt counter-measures are mentioned. I do not construe these potential risks as proposal weaknesses.

8.1 *Section 3 refers to the most probable scenario of climatic change for this region. During the past century the mean annual temperature in the Kyrgyz Republic has increased by 1.6°C and is likely to rise by 3°C by 2100. Precipitation is predicted to increase by 10-40% over this time interval relative to the 1961-1990 values. The proposal then states that ‘It is predicted that these climate changes will have adverse effects on the state of the water and biological resources, agriculture, and public health.’ It is not clear to me why an increase in mean annual precipitation in this dry part of the world is considered undesirable. Some clarification and further explanation are needed. In addition, glacier mass balance depends on the ratio of accumulation to ablation. Accumulation is a function of temperature and precipitation. Are the glaciers in this region limited more by temperature than precipitation?*

Response: The source of the information is the 1st National Communication of the Kyrgyz Republic under the UN Framework Convention on Climate Change (2003). However, our understanding of current predictions for Central Asia is that regional average annual temperature will increase and that the regional average annual precipitation will also increase. Although there may be increases in the average annual precipitation, it is likely that there will be a decline in summer precipitation, and hence increased likelihood of drought. Estimates of the availability of water in stream are confounded by the potential for increased flows due from continued reduction of glaciers volume.

8.2 *E1 provides a list of quantitative indicators. One of the five principles outlined by Reynolds et al. (2007)⁹ relevant to this proposal concerns the dynamics of dryland systems, which are determined by certain biophysical and socio-economic variables with an inherently slow response time. They observed that what they term ‘fast’ variables with relatively rapid turnover rates (e.g., crop yields or household disposable cash) are poor indicators of land degradation or the need for intervention. In the assessment of performance indicators in this proposal it might also be useful to draw a distinction between ‘slow’ and ‘fast’ variables.*

Response. We have modified (as below) the Monitoring and Evaluation plan (Annex D of the Project Document) to make the distinction between fast and slow variables.

“The proposed monitoring and evaluation plan is designed to track biophysical and socio-economic variables that are indicators of immediate (fast) and longer term (slow) changes. Indicators have been developed for two different but related purposes: (i) project performance, which requires the monitoring of many economic, social and environmental indicators; and (ii) monitoring changes in key environmental variables to ultimately estimate changes that may contribute to global environmental changes. Most of the variables monitored are “fast” variables (changes in income, crop yields); but some are “slow” variables. We have included four indicators at outcome level that tend to change slowly over time: (i) soil erosion and salinity on target arable lands; (ii) capacity of pasturelands; (iii) carbon stocks; and (iv) agro-biodiversity. Monitoring protocols and reporting will be adjusted accordingly for these “slow” indicators.”

⁹ Reynolds, J.F. et al. (2007). Global desertification: building a science for dryland degradation. *Science* 316, 847-851.

8.3 *There is considerable overlap between sections 25 and 26 of the Executive Summary. The repetition in section 26 detracts from the impact of this section.*

Response: The overlap is noted, however, it seemed necessary given that the paragraphs focused on different aspects; that is: (i) what GEF would finance (paragraph 25) and (ii) what the expected global benefits would be (paragraph 26).

8.4 *The basis for specifying certain increases in yield is not explained.*

Response: The increases in yield are based on preliminary yield increases obtained under the Agriculture Area Development Project where increases have been 50% for wheat, 70% for maize, 25% for lucerne; and 40% for cabbage. The expected increase in yield for the project may be considered conservative in comparison.

8.5 The monitoring and evaluation programme is given in very general terms. However, the *proposal indicates that targets and indicators are yet to be identified for four key aspects of the project, namely, the reduction in soil erosion and soil salinity on target arable land, the carrying capacity of pasturelands, increases in carbon storage per hectare, and increases in 'agro-biodiversity', although what is meant by that term is not defined. Given that one of the lessons learned from the Agricultural Area Development Project in Chui Oblast in the north of KR is the vital need for rapid implementation of the M&E programme, this degree of uncertainty at this stage in the formulation of the project is disconcerting and needs rapid rectification.*

Response: Given below under point 8.6

8.6 *Frequent mention is made of the potential global benefits of this project. There is passing mention of carbon sequestration and biodiversity, but no quantitative information is given anywhere as to how much carbon is presently stored in the soils and plants in the project area and how much additional carbon storage might be expected under the GEF alternative. The same criticism applies to the issue of biodiversity*

Response: Sub-component C: Monitoring and evaluation of Project environmental impacts of the GEF Alternative will provide for a more comprehensive monitoring in which a common set of indicators will be used to monitor and evaluate such variables as the nature and status of land degradation; carbon sequestration; biodiversity; on- and off-site environmental impacts, biodrain siltation, salinization; and socio-economic-factors.

The proposed expansion of the monitoring for environmental impacts for the Southern Agriculture Area Project will also be coordinated with the Sustainable Land Management Information System (SLMIS) being developed as part of the CACILM Multicountry Partnership Support Project. The SLMIS will provide the methodological guidance for indicators, data collection and management.

The CACILM team has been closely following the work of the GEF STAP work on "Ensuring Impacts for SLM – Development on Global Indicator System, including the results of the recent discussions in Rome in January 2007. In particular, we have taken note of the proposed indicator for measuring the impact of SLM on Climate Change, Biodiversity, International Waters, and human well-being. We have adopted the following climate change and biodiversity indicators.

Focal Area	Indicator	Reference
Climate Change	Carbon Stock	Niemeijer, David, 2007. Measuring the Impacts for SLM Interventions – Technical Discussion Paper for and Expert Meeting on "Ensuring Impacts from SLM – Development of Global Indicator System". Rome Italy ,8 -10 January 2007.

Biodiversity	Agricultural Biodiversity	Neimeijer - above Bunning, Sally & Lane, Annie Proposed framework for indicators of biodiversity, land and socio-economic condition FAO, Rome, July 2003.
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Carbon Sequestration

Our basic approach will be to establish a baseline estimate of carbon (t/ha) and then use monitoring of net primary productivity to estimate annual carbon sequestration rates (t/ha/yr).

Agricultural Biodiversity

Our approach will first focus on agrobiodiversity and consider using a range of measurement indicators, for example: total crop production, number of crop varieties/species diversity, area under cultivation, number of species that are cultivated, incidence and spread of pests and diseases and changes in tillage and sowing methods.

The project management unit will be responsible for putting into place the necessary monitoring system. The terms of reference (Annex H) includes positions for a pasture land management specialist, a monitoring and evaluation specialist and a GIS specialist. It will be their collective responsibility to ensure that carbon sequestration, biodiversity changes, and other relevant indicators are adequately identified, measured, and monitored.

**Responses to GEF Secretariat Review
Review Sheet Dated November 29, 2007**

7. Is the global environmental benefit measurable?

Improvements are expected on 28,500 of irrigated land, 15,000 ha of rainfed land, access to 93,000 ha of village pastures, and an additional area of midlevel and high mountain pastures that will be quantified during project implementation.

Furthermore, the project is expected to have:

- (i) arrested/reduced land degradation and enhanced ecological stability; and*
- (ii) up-scaled sustainable land management practices and land use.*

The logframe lists the following key performance indicators:

- soil erosion and salinity decline;*
- carrying capacity of pastures maintained or increased;*
- carbon storage per hectare increased; and*
- agro-biodiversity increased.*

Please clarify if the baseline for these indicators has been established. The logframe says 2008 and "baseline established".

Also, more information on what carbon and agro-biodiversity will be measured would be helpful. Since the project will focus on irrigation and drainage, a water-related indicator needs to be established to monitor the water-use efficiency/ groundwater recharge in order to avoid negative tradeoffs.

Response:

We understand the importance of a rigorous monitoring and evaluation framework, and the monitoring of global benefits has been included into the project monitoring and evaluation framework. However, monitoring for global environmental benefits requires additional data collection and monitoring beyond that normally necessary for Asian Development Bank national project performance monitoring. Our approach is defined below (and see also strengthened text in the main body of the endorsement request).

The Southern Area Agricultural Development is a sub-project under the Central Asian Countries Initiative for Land Management (CACILM) and was approved by the ADB Board of Directors in late 2007. Project preparation began in 2005 and was completed in August 2006. During project preparation, the proposed GEF-funded activities were integrated with other project components to generate maximum leverage for GEF cofinancing. It was realized that significant incremental financial resources would be needed to monitoring global environmental benefits throughout the project area. The project work plan and budget make provision for this monitoring.

It was never the intention to conduct a full baseline data collection exercise as part of the project preparation process (nor was this budgeted during project preparation), and it is impractical to begin a separate initiative

to collect baseline data prior to CEO endorsement. Project impacts were estimated using existing government data, and these were found to be sufficient for this purpose. We believe that our approach is sound – we will establish the project area baseline and the targets at the start of project implementation using project resources.

With respect to environmental indicators listed in the log frame, the establishment of the baseline for these indicators is an expected output of the project during 2008.

We agree that the monitoring of irrigation and drainage interventions needs an indicator for water use efficiency and changes in water table depth. These will be added to during the design of the monitoring system.

Approach to Monitoring and Evaluation

In the GEF alternative design, Sub-component C: Monitoring and Evaluation of Project environmental impacts will provide a more comprehensive monitoring program in which a common set of indicators will be developed and used to monitor and evaluate both local and global benefits. Anticipated variables include: the nature and status of land degradation; carbon sequestration; change in biodiversity; on- and off-site environmental impacts, biobrain siltation, salinization; and socio-economic-factors.

The proposed expansion of monitoring activities of environmental impacts of the Southern Agriculture Area Project will also be coordinated with the Sustainable Land Management Information System (SLMIS) being developed as part of the CACILM Multicountry Partnership Support Project. The SLMIS will provide methodological guidance for indicators, data collection and management and is being developed in consultation with the global K:Land Project of UNDP/GEF.

The CACILM team also has been closely following the GEF work on "Ensuring Impacts for SLM – Development on Global Indicator System," including the results of recent discussions. In particular, we have taken note of the proposed indicator for measuring the impact of SLM on Climate Change, Biodiversity, International Waters and human well-being and have adopted the following climate change and biodiversity indicators.

Focal Area	Indicator	Reference
Climate Change	Carbon Stock	Niemeijer, David, 2007. Measuring the Impacts for SLM Interventions – Technical Discussion Paper for and Expert Meeting on "Ensuring Impacts from SLM – Development of Global Indicator System". Rome Italy ,8 -10 January 2007.
Biodiversity	Agricultural Biodiversity	Neimeijer - above Bunning, Sally & Lane, Annie Proposed framework for indicators of biodiversity, land and socio-economic condition FAO, Rome, July 2003.

Carbon Sequestration

Our basic approach will be to establish a baseline estimate of standing vegetative biomass/carbon (t/ha) and then monitor net primary productivity to estimate annual carbon sequestration rates (t/ha/yr). At this time there is no intention of estimating or monitoring soil carbon, though this may be considered later.

Agricultural Biodiversity

Our approach will first focus on agro-biodiversity and consider using a range of measurement indicators. These may include: total crop production, number of crop varieties/species diversity, area under cultivation by variety, number of species/varieties cultivated, incidence and spread of pests and diseases, and changes in tillage and sowing methods.

Management of Monitoring

The project management unit will be responsible for putting into place the necessary monitoring system in coordination with the CACILM SLIMIS network. The terms of reference (Annex H) includes positions for a pasture land management specialist, a monitoring and evaluation specialist and a GIS specialist. It will be their collective responsibility to ensure that global indicators such as carbon sequestration, biodiversity changes, water-related indicators, and other relevant indicators are adequately identified, measured, and monitored.

12. Has the cost-effectiveness sufficiently been demonstrated in project design?

The beneficiaries would be the 158, 500 people living in the 31, 000 households located in the 3 oblasts, 58% of whom now live below the poverty line.

Please indicate the hectares that will be put under sustainable agriculture.

Response

The total numbers of hectares to be placed under SLM practices is expected to be at least 136,500 ha (i.e. 28,500 ha of irrigated land, 15,000 ha of rainfed land, and 93,000 ha of village pastures).

15. Is the value-added of GEF involvement in the project clearly demonstrated through incremental reasoning

11/27/2007:

The endorsement template notes that the incremental reasoning for this project may be gleaned from Annex A of the Project Executive Summary. Please note that for CEO endorsement, no executive summary is requested nor will be posted. Hence, the section on incremental reasoning needs to be adapted with a business-as-usual scenario and the GEF value added as outlined in the project.

Response:

The Incremental Cost Analysis is added in the CEO endorsement form as Annex C. The section on incremental cost analysis has been expanded.

17. Is the GEF funding level of project management budget appropriate?

No. The project management budget is above the agreed 10% since monitoring costs are currently listed under project management. Monitoring should be covered from core project means and not through the project management budget. M&E should be an integral part of the project and mainstreamed in government M&E efforts.

Response

As noted above, M&E is indeed a core project activity. However, ADB considers environmental monitoring of global environmental benefits an incremental cost over and above ADB project performance monitoring costs.

ADB prepares detailed budgets for projects that include budgeting by component and budgeting by expenditure category. In budget preparation for this project, the GEF-financed costs for monitoring of global environmental benefits were included within the overall project management component. This is illustrated in the Table below.

Project Management Component

	GEF (\$)	Other Sources	Total
Locally Recruited Personnel	53,461	481,154	534,615
Internationally Recruited Personnel	197,800	791,200	989,000
Office facilities, equipment, Vehicles, and communications	42,692	507,994	550,686
Travel	26,216	108,076	134,292
Staff Training	13,110	61,183	74,293
Recurrent Costs	108,905	1,069,457	1,178,362
Miscellaneous	39,816	157,936	197,752
Total	482,000	3,177,000	3,659,000

However, only \$256,000 (within the norm of 10% maximum) is actually used for project administration, as is illustrated in the Table below.

GEF Costs Budgeted Under the Project Management Component

	GEF (\$)	Monitoring	Administration
Locally Recruited Personnel	53,461	15,971	37,490
Internationally Recruited Personnel	197,800	135,700	62,100
Office facilities, equipment, Vehicles, and communications	42,692	24,286	18,406
Travel	26,216	18,791	7,425
Staff Training	13,110	1,299	11,811
Recurrent Costs	108,905	22,017	86,888
Miscellaneous	39,816	7,911	31,905
Total	482,000	225,975	256,025

In principle, it would be possible to re-budget the cost of environmental monitoring for global environmental benefits under another component, but we do not see the merit. In any case, at this stage, this would need to be discussed with Government and necessary changes made to ALL project budgets. As this would only involve a reallocation of costs amongst components and will not change the overall budget or actual activities implemented during the project, we would prefer to avoid this exercise.

18. Is the GEF funding level of other cost items (consultants, travel, etc.) appropriate?

About 30% of the GEF resources will go into consultant fees. It suggested to lower this amount in favor of more on-the-ground investments.

Travel costs are moderate.

Response

During project negotiations with the Government, the consulting services were carefully reviewed and the originally proposed level of international consultants was reduced. The final estimates for consulting services are part of the allocation and withdrawal tables in the ADB project agreement. Any change in these amounts would need to be renegotiated with the Government.

During project preparation and subsequent negotiations, GEF funds were allocated to support technical assistance tied to the achievement of incremental global benefits, namely for: sustainable land management advisory services and field schools, community based pasture land planning, mapping, and monitoring and evaluation of global environmental benefits. Other project resources are to be used in support of civil works on-the-ground investments, and the GEF financing complements and leverages these resources. Because of the nature of the GEF-financed project components, there is need for significant consulting inputs to generate the anticipated project outputs. ADB shares GEF's and the Government of the Kyrgyz Republic's strong interests in minimizing consultant inputs in the project.

We believe the allocation of consultant services fairly reflects the requirements according the GEF vs non-GEF financed activities. Reallocation of expenditure categories amongst the financiers at this stage will have no impact on the overall implementation and impacts of the project, and we believe the consultant costs to be reasonable within the design of the project. On this basis, we do not see the need to approach the Government to renegotiate GEF's contributions to the project.

E. Secretariat's Response to various comments from:

STAP

11/27/2007:

A STAP review has been attached to the document.

Issues listed under 8.5 and 8.6 coincide with the comments made in this review. Hence, the provided response is not satisfactory.

As a rule, at CEO endorsement stage, indicators need to be specified and baseline data collected.

Response

Our response is provided above in discussion of point 7.

ANNEX C: INCREMENTAL COST ANALYSIS

Baseline	GEF Alternative <i>(elements of design generating global benefits in italics)</i>	Domestic benefits of enhanced ("GEF") alternative	Global benefits of GEF alternative	Incremental cost of GEF alternative (US\$)
Main features of Project baseline and the alternative design				
Project Component				
1: Farm Development.	<p>1.1 Baseline activity of technology development to promote SLM through:</p> <ul style="list-style-type: none"> (i) increased quality and outreach of village advisory services; (ii) development of quality training materials; and (iii) field schools to enhance skills of farmers <p>The GEF alternative will assist with considerably expanding the depth and outreach of the above capacity building activities. With GEF alternative, a Sub-Component A will be added to the baseline activities of Component 1 - Farm Development.</p> <p><i>Sub-component A will: expand the technical scope of the advisory services beyond the enterprise specific training which they currently provide to address sustainable land management issues as soil conservation, improved efficiency of water management and pasture management; b) allow the replication and scaling up of field schools which will develop a cadre of trainers with skills which include integrated pest management, integrated crop management and fruit tree management</i></p>	<p>The GEF financed component will focus on the creation of additional local capacity to deliver the global benefits listed in col.4, and on introducing novel land rehabilitation activities that promise to have wide-ranging environmental benefits. Specifically, the GEF grant will: (i) introduction of and demonstration of novel and improved land management techniques to supplement traditional practices, (ii) new and enhanced capacity building and institutional strengthening for mainstreaming sustainable land management and integration of land-use planning systems; (iii) promotion of up-scaling and replicability of Project results for wider implementation, and (iv) development and implementation of meaningful indicators and monitoring and evaluation systems.</p>	<p>Under Sub-component A, the global benefits include the social and global environmental benefits of future investments in SLM in Kyrgyz Republic and in the region that more reliably target such environmental benefits while delivering local livelihood improvements.</p> <p>The incremental global environmental benefits potentially available are of several kinds, partly inter-related: (1) improved ecological functioning of the irrigated and rainfed ecosystem(s) beyond the immediate project area, made possible by intensifying or supplementing certain project activities; (2) revival of Central Asia's agricultural and cultural heritage (including conservation of agrobiodiversity) as indigenous know-how is combined with international advances in irrigated and rainfed agriculture; and (3) reduction of GHG emissions and additional carbon sequestration through a more appropriate management of biomass and deliberate attention to capturing the underlying potential in this domain.</p>	<p><i>Cost of the additional measures to enhance ability to formulate and support investments that generate global benefits (column 2)</i></p> <p>\$871,000</p>
2. Agribusiness Development and Marketing	<p>The component is not covered by the GEF Alternative support.</p> <p>Though highly useful from the viewpoint of the national economy, the component does not have any direct spillovers in terms of global environmental benefits.</p>			

Baseline	GEF Alternative <i>(elements of design generating global benefits in italics)</i>	Domestic benefits of enhanced ("GEF") alternative	Global benefits of GEF alternative	Incremental cost of GEF alternative (US\$)
Main features of Project baseline and the alternative design				
Project Component				
3. Irrigation & Drainage	<p>This component is not covered by the GEF Alternative support.</p> <p>However, investments in this component (strengthening of Water Users Associations' management of water resources and improving their financial viability) are important in the local and regional context. Even though focus is on certain selected WUAs, their outcomes would have some indirect cross-border benefits.</p>			
4. Land Improvement	<p><i>The baseline activities of the component will design and implement pasture land interventions within the existing policy and legal framework, concentrating its effort at building local capacity for planning and management, collaborating with the World Bank's ongoing and planned operations.</i></p> <p><i>With the GEF Alternative a new Sub-component B will be grafted on the component 4.</i></p> <p><i>Sub-Component B will provide additional international technical assistance to support the preparation of community based pasture land management plans in each of the project aiyl okmatu; d) build local capacity (at the level of the aiyl okmatu, pasture user and livestock committee) in pasture mapping, monitoring and management which will be critical for the implementation of the communities pasture land management plans, thus contributing significantly to sustainable pasture land management.</i></p>	<p>With GEF alternative:</p> <p>i) capacity for identifying remedial actions to address policy, legislative and institutional barriers to sustainable pasture development are enhanced.</p> <p>(ii) Pasture land information system development and surveys, including Socioeconomic surveys, geobotanical surveys, pasture infrastructure surveys, remote sensing satellite imagery, and GIS system development.</p> <p>(iii) Preparation and implementation of annual pasture management and investment plan.</p> <p>(iv) The capacity of local government and community for management and leasing of lands under the control of the <i>aiyl okmatu</i>, raion and oblast administrations will be improved and NRM plans will be prepared for each <i>aiyl okmatu</i> but under the baseline scenario these plans will be rather narrower in scope than would be possible with the guidance and training from the international consultancy to be financed by GEF.</p> <p>(v) Design, production and dissemination of pasture land best practices.</p>	<p>Under Sub-component B, the global benefits include (1) reduced salt and pollutant run-off in parts of the Project area resulting in improvement of surface and groundwater quality in key transboundary river basins, and (2) enhanced landscapes and ecosystems in areas of global cultural importance</p> <p>(i) The enhanced ability of Kyrgyz Republic's pasture land management institutions to share experience in introducing SLM activities that have significant positive global environmental impacts;</p> <p>(ii) Improved ability to communicate with national and international stakeholders and galvanize opinion in favor of protecting the global environmental commons;</p>	<p><i>Cost of the additional measures to enhance ability to formulate and support investments that generate global benefits (column 2)</i></p> <p>\$ 1,147,000.</p>

Baseline	GEF Alternative <i>(elements of design generating global benefits in italics)</i>	Domestic benefits of enhanced ("GEF") alternative	Global benefits of GEF alternative	Incremental cost of GEF alternative (US\$)
Main features of Project baseline and the alternative design				
Project Component				
5. Project Management	<p>The baseline outcome of improved Project Management would be the operational and strengthened project management and monitoring systems.</p> <p><i>With the GEF Alternative, a Sub-component C will be grafted to the Component 5.</i></p> <p><i>The Sub-component C will focus on the "Monitoring and evaluation of Project environmental impacts.</i></p> <p><i>The Alternative will provide for a more comprehensive Project management in which a common set of indicators will be used to monitor and evaluate such variables as the nature and status of land degradation, carbon sequestration; biodiversity; on- and off-site environmental impacts, biodrain siltation, salinization, pollution and eutrophication; and socio-economic-factors.</i></p> <p><i>The Alternative will (1) develop a system for monitoring of the Project's environmental impacts; (2) develop a proposal for a unified salinity management database in the Kyrgyz Republic; and (3) mainstream the most suitable international practices of participatory monitoring of environmental impacts.</i></p>	<p>Improved knowledge of environmental impacts and resulting ability better to calibrate SLM investments.</p> <p>Inclusion of a common set of indicators in the Project's M&E system to monitor environmental variables of local and global relevance.</p> <p>Design of a unified land degradation and desertification monitoring database in the Kyrgyz Republic.</p>	<p>Improved knowledge by the global community of the incidence of land degradation in arid ecosystems of Central Asia and the effectiveness of countervailing measures.</p> <p>Mainstreaming the most suitable practices of participatory monitoring of environmental impacts.</p>	<p><i>Cost of the additional measures to enhance ability to formulate and support investments that generate global benefits (column 2)</i></p> <p>\$ 482,000.</p>
			Total incremental cost:	\$2,500, 000.

ANNEX D: CONSULTANTS TO BE HIRED FOR THE PROJECT

<i>Position Titles</i>	<i>\$/ person week</i>	<i>Estimated person weeks</i>	<i>Tasks to be performed</i>
For Project Management			
Local			
Project Manager	\$138 average for all consultants	312	<p>The Project Manager will lead the PMU in implementation and development of the Project to ensure that it achieves the objectives and outputs defined in the Project design. The Project Manager will stay abreast of changing circumstances in the agricultural sector and related institutions in the Project area, will advise the EA of the continued relevance of the Project design in meeting the needs of the beneficiaries and will recommend any necessary adjustment to the Project design during the life of the Project.</p> <p>The Project Manager will bear overall responsibility for the establishment and management of all Project management systems including: (i) Annual and quarterly work planning; (ii) Financial management systems including budgeting, payments, accounting, internal control, financial reporting and external audit; (iii) Reporting both to the PSC, MOEF, ADB and the EA; (iv) Staff recruitment and performance monitoring; (iv) Procurement; (v) Monitoring and evaluation including environmental monitoring and impact of the Project on vulnerable groups; (vi) Service contract management including preparation of TOR, contract monitoring and payment.</p>
Deputy Project Managers (There will be three Deputy Managers, one in each Oblast including the First Deputy Manager based in Osh.)		936	<p>The Deputy Manager will be responsible for coordination and management of all Project activities in his/her oblast. The responsibilities of the Deputy Manager fall into four areas:</p> <ul style="list-style-type: none"> • Strategic planning; • Work planning, budgeting, supporting M&E and reporting; • Staff Management; • Coordinating Project implementation in AO • Coordination with beneficiary communities, local government and other donors.
Financial Manager		312	Responsible for establishing the financial management systems in the regional offices, training and providing technical supervision to regional office accountants. The Deputy Manager is responsible for day to day supervision of the regional office accountant.
Accountants		910	<p>Check contractors/suppliers' invoices and supporting documentation to ensure that all claims are arithmetically correct, properly authorized, approved for payment, and coded.</p> <p>Manage the petty cash and ensure that adequate funds are available for the payment of minor items.</p> <p>Ensure that advances given to Project personnel are retired on time.</p> <p>Prepare the monthly payroll and make the payments.</p> <p>Maintain and update the fixed asset register.</p> <p>Maintain and ensure the security of the paper and computerized accounting records on a daily basis.</p> <p>Prepare reconciliations for the Project's imprest bank accounts, petty cash and the ADB loan account and immediately resolve all queries.</p> <p>Assist in the preparation of Project financial reports.</p>

Procurement Specialist		299	<p>Prepare procurement documents (letters of invitation, requests for proposals, evaluation reports, notification of award of contracts) for civil works, goods and service contracts in accordance with ADB procedures and the financing agreement. Submit standard bidding documents to ADB for approval and ensure that the PMU receives ADB written approval for any deviations from these procedures. Act as Secretary to the Tender Committee. Prepare all correspondence with bidders, the Tender Committee, ADB, the MAWRPI and the MOEF;</p> <p>Prepare and submit evaluation reports to the Tender Committee and ADB and respond to queries;</p> <p>Prepare contracts and administer contract negotiations;</p> <p>Administer any disputes over adherence to contract conditions;</p> <p>Administer all contract amendments and ensure the necessary approval of any amendments;</p> <p>Administer acceptance of completed works;</p> <p>Takes all measures to ensure confidentiality, transparency of decision making, to prevent corrupt and fraudulent practices.</p>
Lawyer		299	<p>The Lawyer will ensure that the all contracts or other legal documents entered into by the PMU or the by the EA in relation to the Project are in accordance with the laws of the Kyrgyz Republic and the Financing Agreement between the ADB and the Government. Accordingly the lawyer will review and advise the Project Manager, the Procurement Specialist and other PMU technical staff on the following:</p> <p>Staff employment contracts; Contracts for purchase of goods and equipment; Civil works contracts; Other service contracts; WUA repayment and guarantee agreements under the Irrigation and Drainage Component; Agreements with beneficiaries relating to alternative financing arrangements such as equity investments in agribusinesses under the Agribusiness Development and Marketing Component; Agreements with local AO and the community relating to the ownership and rehabilitation of storage and cooling facilities under the Agribusiness Development and Marketing Component; Agreements with AO and community groups relating to grant finance under the Land Improvement Component.</p>
M & E Team M and E Manager		299	<p>Participate in the selection of national staff for the monitoring and evaluation team. Supervise and provide on the job training to National M&E staff.</p>

M&E specialist		299	<p>The M&E Specialist (Information Systems) will lead the design and maintenance of paper and computer based information systems for:</p> <ul style="list-style-type: none"> (i) Monitoring Project activities, outputs, outcomes and impact; (ii) Evaluation of the ongoing relevance, effectiveness and efficiency of the Project, (iii) Monitoring of the environmental impact of the Project with reference to the Initial Environmental Examination (IEE) and environmental assurances defined in the Financing Agreement in cooperation with the M&E Specialist with special responsibility for environmental monitoring; (iv) Monitoring of the social impact of the Project with particular reference to vulnerable groups and women in cooperation with the Senior Sociologist and the M&E Team and the International Gender and Community Development Specialist; (v) Where necessary train other M&E staff in computing and database management; (vi) Provide training and advice on information systems management to other local organisations involved in monitoring and evaluation of the Project; (vi) Provide general support in survey design, data collection, reporting, producing material for publicity and other activities as required by the M&E Manager.
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Senior sociologist		299	<p>The Senior Sociologist will report to the Project Manager and on a day-to-day basis will report to the M&E Manager on M&E related issues. The Senior Sociologist will therefore work as part of the M&E Team.</p> <p>In cooperation with the Deputy Managers, participate in a situation assessment and preparation of a plan of Project interventions in each AO. This situation assessment will: (i) be undertaken with the participation of the community; (ii) describe the current status of farms, agricultural businesses, and other agricultural organizations in the AO; (iii) identify potential development opportunities and partner organizations; and (iv) outline a plan of Project interventions for the AO.</p> <p>Provide training to other PMU staff, MAWRPI, PSC, key service providers, WUA Support Units, Oblast Administrations, Rayon Administrations, AOs, and WUA and other community-based groups on gender and farmer/community participation issues of the Project and measures to address them.</p> <p>Identify NGOs and formal and informal community-based organizations in the Project area, such as women’s groups and farmer groups that can be utilized for community mobilization under the Project components. Similarly, liaise regularly with AO representatives over issues relevant to the Project, e.g., identification of poor and vulnerable households, community-level leaders (for which women will be encouraged to apply). Identify ‘champions’ among AO and community-level leaders on gender and community participation issues and work with them.</p> <p>Further refine and adjust the Project’s Gender and Community Participation Plan as appropriate. For example, gender targets can be revisited in line with the baseline data collected through the baseline survey.</p> <p>Monitor implementation of the Gender and Community Participation Plan in all subproject areas and provide necessary interventions so that gender and social considerations would not evaporate.</p> <p>Regularly exchange information with other development partners such as donors and NGOs in the Project areas on relevant gender and community development issues, including conflicts among the community members and ways to solve them.</p> <p>Provide general support in survey design, data collection, reporting, producing material for publicity and other activities as required by the M&E Manager.</p>
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Environmental monitoring specialist		299	<p>The M&E Specialist (Environment) will be responsible for monitoring: a) the environmental impact of the Project; b) advising on and monitoring implementation of environmental mitigation measures; c) implementation of institutional strengthening activities for environmental monitoring and mitigation; and d) ensuring environmentally responsible procurement (ERP). The specific responsibilities of the M&E Specialist (Environment) are described below.</p> <p>Establish and implement systems for monitoring the environmental impact of the Project and implementation of mitigation measures with reference to the environmental monitoring and mitigation plan (EMMP) described in the Summary Initial Environmental Examination (SIEE). This scope of potential environmental impact extends to groundwater and surface water quality and pollution, transboundary water effects, mobilisation of heavy metals, disposal of waste from civil works, forest, arable and pasture land loss and degradation, soil quality, biodiversity, damage to vegetation and wildlife habitats. The scope of monitoring and mitigation measures extends to baseline and post intervention field surveys, laboratory testing of soil and water samples, incorporation of environmental impact mitigation clauses in civil work contracts and participatory monitoring with WUA, pasture user associations and farmers.</p> <p>Monitor and support implementation of institutional strengthening activities described in the SIEE for environmental monitoring and mitigation measures. These measures extend to incorporation of environmental impact mitigation measures into training provided to farmers by the extension services, training of DWR, WUA, pasture user associations, local government, and provision of monitoring equipment to DWR and WUA for water monitoring.</p> <p>Establish and implement systems for monitoring Project adherence to environmentally responsible procurement (ERP) based on ADB guidelines and guidelines described in the SIEE.</p> <p>Cooperate with the GEF National Secretariat in monitoring the impact of the Project on sustainable land management using the Sustainable Land Management Information System (SLMIS) developed by FAO.</p> <p>Provide training and advice on environmental monitoring and mitigation to other local organisations involved in monitoring and evaluation of the Project.</p> <p>Provide general support in survey design, data collection, reporting, producing material for publicity and other activities as required by the M&E Manager.</p>
Drainage and Irrigation Team			<p>The team will provide support in the construction and rehabilitation of irrigation and drainage infrastructure..</p>
Regional Engineer		208	
Drafts people		390	
Design supervisors		780	
Construction supervisors		624	
Site supervisors		1508	

Trainee engineers		624	
Senior farm development specialist		299	<p>Supervise Farm Development Component staff.</p> <p>Prepare annual and quarterly work plans and budgets for the Farm Development Component in Cooperation with the First Deputy Manager.</p> <p>Support the M&E Manager in monitoring the progress of and results of the Farm Development Component.</p> <p>Maintain an overview of the current status of and opportunities for farms in the Project area. Remain familiar with donor and private sector investments in the Project area and pursue any opportunities for cooperation and investment in the Project area.</p> <p>In cooperation with the Deputy Managers, participate in a situation assessment and preparation of a plan of Project interventions in each AO. This situation assessment will: (i) be undertaken with the participation of the community; (ii) describe the current status of farms, agricultural businesses, and other agricultural organizations in the AO; (iii) identify potential development opportunities and partner organizations; and (iv) outline a plan of Project interventions for the AO.</p> <p>Prepare TOR for the Technology Development, Field Schools and Village Advisory Services Contracts.</p> <p>Prepare the framework for cooperation with the LARC¹⁰ Association of Lawyers for provision of legal advisory services.</p> <p>Support the Procurement Manager in all technical aspects of bid evaluation and contracting for the above service contracts. This activity will be led by the Procurement Manager.</p> <p>Supervise contractors and develop systems for monitoring the performance of service contract as a basis for payment and ensure that these are clearly defined in the TOR for contractors.</p> <p>Undertake performance monitoring, and agree penalties or bonus payments with contractors.</p> <p>Maintain an overview of the strategies, methodologies and management practices of the farm advisory services contracted by the Project and make recommendations for improvements in the quality of service.</p>
Farm development specialists		598	<p>Assist in preparation of annual and quarterly work plans and budgets for the Farm Development Component.</p> <p>Provide information requested by the M&E Staff for monitoring progress and results of the Farm Development Component.</p> <p>Maintain an overview of the current status of and opportunities for farms in the Project area. Remain familiar with donor and private sector investments in the Project area and advise the Deputy Manager of any opportunities for cooperation and investment in the Project area.</p> <p>In cooperation with the Deputy Managers, participate in a situation assessment and preparation of a plan of Project interventions in each AO. This situation assessment will: (i) be undertaken with the participation of the community; (ii) describe the current status of farms, agricultural businesses, and other agricultural organizations in the AO; (iii) identify potential development opportunities and partner organizations; and (iv) outline a plan of Project interventions for the AO.</p> <p>Participate in Participatory Rural Appraisal (PRA) of small farmers conducted by the advisory services and in particular agree a plan of</p>

¹⁰ Legal Assistance to Rural Citizens.

			<p>support for each trainee group with contractors. Review and approve monthly or quarterly work plans with contractors.</p> <p>Provide Support to Farmers</p>
Senior Agribusiness Development Specialist		299	<p>Participate in staff selection under the Agribusiness Development and Marketing Component. Supervise Agribusiness Development and Marketing Component staff. Prepare annual and quarterly work plans and budgets for the Agribusiness Development and Marketing Component in Cooperation with the First Deputy Manager. Support the M&E Manager in monitoring the progress of and results of the Agribusiness Development and Marketing Component. Maintain an overview of the current status of and opportunities for farms and agribusiness in the Project area. Remain familiar with donor and private sector investments in the Project area and pursue any opportunities for cooperation and investment in the Project area. In cooperation with the Deputy Managers, participate in a situation assessment and preparation of a plan of Project interventions in each AO. This situation assessment will: (i) be undertaken with the participation of the community; (ii) describe the current status of farms, agricultural businesses, and other agricultural organizations in the AO; (iii) identify potential development opportunities and partner organizations; and (iv) outline a plan of Project interventions for the AO. Identify agribusinesses (processors, input suppliers, wholesalers and trade companies, machinery and spare parts suppliers and machinery contractor) which do or could potentially serve the Project area. These may be located within or outside the Project area. Undertake an initial rapid assessment of identified agribusiness, advise agribusinesses of the support available under the Project and advise them on procedures for application for support. Prepare TOR for the Marketing Support to Farmers Contract and Agribusiness Advisory Services contracts. Prepare the framework for cooperation with the SIDA¹¹ Seed Development Project to assist the Project in developing the seeds sector in the Project area. Support the Procurement Manager in all technical aspects of bid evaluation and contracting for the above service contracts. This activity will be led by the Procurement Manager. Supervise contractors and develop systems for monitoring the performance of service contract as a basis for payment and ensure that these are clearly defined in the TOR for contractors. Undertake performance monitoring, and agree penalties or bonus payments with contractors. Review training material used by the advisory services and where necessary make recommendations for improvement. Maintain an overview of the capabilities of the agribusiness advisory service staff and make recommendations to the advisory services on training and development of their staff. Maintain an overview of the strategies, methodologies and management practises of the agribusiness advisory services contracted by the Project and make recommendations for improvements in the quality of service.</p>

¹¹ Swedish International Development Agency

			<p>Prepare TOR for a local service provider to undertake assessment of proposals for rehabilitation of facilities.</p> <p>Provide Other Support to Agribusinesses</p> <p>While the main role of the Agribusiness Development Specialist is to support the management of service contracts, the Specialist will also on request provide direct support to agribusinesses to complement that provided under the Agribusiness Development and Marketing Component service contracts and agreements.</p>
Civil engineer		299	<p>The Civil Engineer will support the rehabilitation of storage and cooling facilities under the Agribusiness Development and Marketing Component and rehabilitation of pasture infrastructure under the Land Improvement Component.</p> <p>In the case of rehabilitation of storage and cooling facilities under the Agribusiness Development and Marketing Component, investors will prepare provisional proposals including a provisional technical design for rehabilitation which will be assessed by a local service provider¹².</p> <p>In the case of rehabilitation of pasture infrastructure under the Land Improvement Component, the AO will prepare provisional designs (or at least a basic concept) which will be assessed by the civil engineer.</p> <p>On approval of the provisional designs for storage and cooling facilities or pasture infrastructure, the civil engineer will prepare a full design and seek agreement on the design by all parties.</p> <p>In cases where design is complex the civil engineer will assist the Procurement Manager in the technical aspects of procurement of a design company and will supervise the contractor to ensure adherence to technical conditions of the contract and to ensure quality of final design and will seek agreement on the design by all parties.</p> <p>The civil engineer will assist the Procurement Manager in the technical aspects of procurement of a construction company and will supervise the contractor to ensure adherence to technical conditions of the contract and to ensure quality of final construction and will seek acceptance of construction by all parties.</p> <p>The civil engineer will also be responsible for ensuring approval of the design and construction by the relevant authorities of Kyrgyz Republic including SCEPF.</p>
Senior Pasture Management Specialists		299	<p>Supervise Pasture Management Specialists.</p> <p>Prepare annual and quarterly work plans and budgets for pasture management activities with the First Deputy Manager.</p> <p>Support the M&E Manager in monitoring the progress of and results of pasture management activities.</p> <p>Remain familiar with donor and private sector investments in pasture management in the Project area and pursue any opportunities for cooperation and investment in the Project area.</p> <p>In cooperation with the Deputy Managers, participate in a situation assessment and preparation of a plan of Project interventions in each AO. This situation assessment will: (i) be undertaken with the participation of the community; (ii) describe the current status of farms, agricultural businesses, and other agricultural organizations in the AO; (iii) identify potential development opportunities and partner organizations; and (iv) outline a plan of Project interventions for the AO.</p> <p>Work with relevant government agencies to formalize the</p>

¹² ABCC or other

		<p>institutional framework for pasture land management planning. Develop a methodology and approach for community based pasture land management planning. Build capacity in relevant government agencies, Project staff and/or contractors to conduct pasture land management planning. Provide guidance, oversight, and quality control and assurance for preparation of pasture land management planning activities. Assist in obtaining necessary approvals of pasture land management plans. Design and develop a pasture land monitoring system to collect data on various pasture land management indicators.</p> <p>In consultation with the CACILM, and with the support of the International GIS Specialist, design and supervise the development of a pasture land management information system for pasture land management indicators, with provision for data collection by remote sensing (satellite imagery), and establishment of a spatial (GIS) database.</p> <p>Supervise socio-economic surveys, surveys of pasture land forage condition, and the preparation of pasture boundary maps.</p> <p>Evaluate the effectiveness of pasture land management and planning activities for incorporation into a good practice manual on sustainable pasture land management. The Senior Pasture Management Specialist will take overall responsibility for establishing the system of grant management for the Land Improvement Component in their Oblast which includes investments in both pastures and orchards. The Senior Pasture Management Specialist will undertake the following.</p> <p>Prepare the Grant Administration Manual (GAM) in cooperation with the First Deputy Manager and Financial Manager.</p> <p>Assist AO and community groups in his / her oblast to prepare grant Project proposals under the Land Improvement Component in accordance with the GAM.</p> <p>Appraise proposals for grant finance and recommend approval or rejection of proposals by the Deputy Manager in his/ her oblast. Appraisal of all proposals for orchard investment will be undertaken by the Senior Orchard Management Specialist.</p> <p>Administer requests to the Financial Manager for disbursement of grant funds to AO in his/ her oblast.</p> <p>Assist AO in his/ her oblast to establish and manage the system for financial management of grant funds in the AO provided under the Land Improvement Component in accordance with the GAM with the assistance of the Financial Manager and Accountant.</p> <p>Facilitate the external audit of grant fund management in AO in his/ her oblast.</p> <p>Support the Procurement Manager in all technical aspects of bid evaluation and contracting for the above service contracts. This activity will be led by the Procurement Manager.</p> <p>In the case of services to be procured directly by the AO, support the AO in all technical aspects of bid evaluation and contracting for the above service contracts.</p> <p>Supervise contractors and develop systems for monitoring the performance of service contracts as a basis for payment and ensure that these are clearly defined in the TOR for contractors.</p>
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<p>Pasture management specialists</p>		<p>1,031</p>	<p>The Pasture Management Specialist’s responsibilities are described below.</p> <p>Assist in preparing annual and quarterly work plans and budgets for pasture management activities.</p> <p>Support the M&E Manager in monitoring the progress and results of pasture management activities.</p> <p>Remain familiar with donor and private sector investments in pasture management in the Project area and pursue any opportunities for cooperation and investment in the Project area.</p> <p>In cooperation with the Deputy Managers, participate in a situation assessment and preparation of a plan of Project interventions in each AO. This situation assessment will: (i) be undertaken with the participation of the community; (ii) describe the current status of farms, agricultural businesses, and other agricultural organizations in the AO; (iii) identify potential development opportunities and partner organizations; and (iv) outline a plan of Project interventions for the AO.</p> <p>Assist in working with relevant government agencies to formalize the institutional framework for pasture land management planning.</p> <p>Assist in developing a methodology and approach for community based pasture land management planning.</p> <p>Build capacity in relevant government agencies, Project staff and/or contractors to conduct pasture land management planning.</p> <p>Provide guidance, oversight, and quality control and assurance for preparation of pasture land management planning activities.</p> <p>Obtain necessary approvals of pasture land management plans.</p> <p>Assist in designing and developing a pasture land monitoring system to collect data on various pasture land management indicators.</p> <p>Assist in the development of a pasture land management information system for pasture land management indicators, with provision for data collection by remote sensing (satellite imagery), and establishment of a spatial (GIS) database. This will be undertaken in consultation with the CACILM.</p> <p>Assist in supervising socio-economic surveys, surveys of pasture land forage condition, and the preparation of pasture boundary maps.</p> <p>Assist in evaluating the effectiveness of pasture land management and planning activities for incorporation into a good practice manual on sustainable pasture land management.</p> <p>Appraise proposals for grant finance and recommend approval or rejection of proposals by the Deputy Manager. Appraisal of all proposals for orchard investment will be undertaken by the Orchard Management Specialist.</p> <p>Assist AO to establish and manage the system for financial management of grant funds in the AO provided under the Land Improvement Component in accordance with the GAM with the assistance of the Financial Manager and Accountant.</p>
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Orchard management specialists		299	<p>Prepare annual and quarterly work plans and budgets for orchard management activities with the First Deputy Manager.</p> <p>Support the M&E Manager in monitoring the progress and results of orchard management activities.</p> <p>Remain familiar with donor and private sector investments in orchard management in the Project area and pursue any opportunities for cooperation and investment in the Project area.</p> <p>In cooperation with the Deputy Managers, participate in a situation assessment and preparation of a plan of Project interventions in each AO. This situation assessment will: (i) be undertaken with the participation of the community; (ii) describe the current status of farms, agricultural businesses, and other agricultural organizations in the AO; (iii) identify potential development opportunities and partner organizations; and (iv) outline a plan of Project interventions for the AO.</p> <p>Work with the relevant government agencies to make an assessment of the condition of orchards and make recommendations for improved management and restocking of orchards.</p> <p>Build capacity in relevant government agencies, Project staff and/or contractors to conduct orchard management planning;</p> <p>Provide guidance, oversight, and quality control and assurance for preparation of orchard management planning activities;</p> <p>Assist in obtaining necessary approvals of orchard management plans;</p> <p>design and develop an orchard monitoring system to collect data on the condition of orchards;</p> <p>The Orchard Management Specialist will appraise all proposals for grant finance for orchard investments and recommend approval or rejection of proposals by the Deputy Manager.</p>
Community coordinators		5,304	<p>Community Coordinators will be nominated by the community and their appointment approved by the Project Manager.</p> <p>Community Coordinators will be paid on a part time basis and their responsibilities will be as follows (i) Represent their communities and provide a means of communicating the ideas and opinions of the community to the Project; (ii) Participate in the situation assessment and assist in preparing a plan of Project interventions in his/ her AO; (iii) Participate in quarterly and annual work planning in the field and encourage participation of the community in Project planning; (iv) Meet with the Deputy Manager in their oblast approximately monthly in the field to discuss Project progress and plans; (v) Meet with farmers and agribusinesses in their AO which are or which have expressed interest in working with the Project to understand their needs; (vi) Assist Project field staff in arranging field visits and meetings; (vii) Promote the communities awareness of the Project; ix) Participate in publicity campaigns in their AO.</p>
International			

Team Leader	5,750 average for all consultant s	117	<ul style="list-style-type: none"> (i) Provide direction to the Ministry of Agriculture, Water Resources, and Processing Industry (MAWRPI) and the Project Management Unit (PMU) in relation to project implementation and development to ensure that it achieves the intended outcome and outputs. (ii) Establish all project management systems and transfer management of these systems to local staff with appropriate training. (iii) Participate as a member of the Tender Committee and help evaluate all tenders. (iv) Agree on and implement arrangements for undertaking due diligence of financial institutions applying for participation in the project credit line. (v) Manage the consulting team and support staff.
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<p><i>Monitoring and Evaluation Specialist</i></p>		<p>43</p>	<ul style="list-style-type: none"> (i) Help the PMU recruit, supervise, and train national staff. (ii) Establish a comprehensive monitoring and evaluation system to include a baseline survey; indicators of progress toward achievement of outputs and outcome; and assessment of the Project’s environmental, social, poverty, and gender impact. (iii) Design a reporting system to meet the requirements of the Ministry of Economy and Finance, the MAWRPI, and the Asian Development Bank (ADB).
<p><i>Farm and Agribusiness Development Specialist</i></p>		<p>82</p>	<ul style="list-style-type: none"> (i) Support the PMU in implementing all activities under the farm development component and the agribusiness development and marketing component. (ii) Help the PMU recruit, supervise, and train national staff. (iii) Maintain information on policy issues, investments by development partners and the private sector, and current status of and opportunities for farms and agribusinesses in the project area. (iv) Design and supervise implementation of the rapid appraisal of the <i>aiyl okmotu</i> in cooperation with the project monitoring and evaluation team and supervise the preparation of simple strategies for each <i>aiyl okmotu</i> that will include the identification of priority products and their value chains for support under the Project. (v) Identify, inform, and assess agribusinesses (processors, input suppliers, wholesalers and trading companies, machinery and spare parts suppliers, and machinery contractors) that do or could potentially serve the project area. (vi) Prepare terms of reference for the technology development, farmer field schools, village advisory services, marketing support to farmers, and agribusiness advisory services contracts. (vii) Review training materials used by the advisory services and, where necessary, recommend improvements. (viii) Maintain an overview of the strategies, methodologies, and management practices of the farm and business advisory services contracted by the Project and recommend improvements in the quality of services. (ix) Identify storage and cooling facilities critical to the functioning of priority value chains in each <i>aiyl okmotu</i>, assess their potential for support under the Project, and prepare terms of reference for the design and construction and/or rehabilitation of the facilities. (x) Help the PMU supervise contractors and develop systems for monitoring the performance of services.

<p><i>4.Irrigation and Drainage Engineer</i></p>		<p>39</p>	<ul style="list-style-type: none"> (i) Help the PMU recruit, supervise, and train national staff. (ii) Assist the procurement specialist with all technical aspects of preparing requests for proposals, including detailed terms of reference, and in evaluating bids for services from design companies. (iii) Ensure that the design process fully involves the members of water user associations (WUAs), that WUA members are fully briefed on proposed designs, and that members' priorities are taken into full consideration during design. (iv) Ensure that designs are subject to proper technical review and approval by the technical committee chaired by the oblasts' departments of water resources and the environmental review and approval by the State Committee for Environmental Protection and Forestry. (v) Review designs prior to approval of tenders for construction and formally indicate approval or otherwise of designs for submission by the PMU to ADB. (vi) Assist the procurement specialist with all technical aspects of preparing requests for proposals, including detailed terms of reference, and in evaluating bids for services from civil works construction companies. (vii) Carry out field visits of ongoing subprojects and ensure that adequate procedures for construction supervision are in place.
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Pasture Management Specialist		60	<ul style="list-style-type: none"> (i) Prepare a detailed project plan, schedule, and annual budgets for implementation and monitoring of sustainable pasture land management. (ii) Help the PMU (a) recruit national staff for the sustainable pasture land management activities; (b) prepare terms of reference and contract service providers to carry out social and environmental surveys and plan and supervise the pasture improvement plans; and (c) allocate funds to the <i>aiyl okmotu</i> for pasture land improvements. (iii) Supervise and provide on-the-job training for national staff. (iv) Work with relevant government agencies to formalize the institutional framework for pasture land management planning. (v) Develop a methodology and approach for community-based pasture land management planning. (vi) Provide guidance, capacity development, oversight, and quality control and assurance for the preparation of pasture land management planning activities. (vii) Provide advice and oversight in relation to the allocation of funds for implementing <i>aiyl okmotu</i> pasture land improvement plans. (viii) Design and develop a pasture land monitoring system to collect data on various pasture land management indicators. (ix) Design and supervise the development of a pasture land management information system for pasture land management indicators in consultation with the Central Asian Countries Initiatives for Land Management (CACILM) with provision for data collection by remote sensing (satellite imagery) and the establishment of a spatial geographic information system (GIS) database. (x) Supervise socioeconomic surveys, surveys of the condition of pasture land forage, and preparation of pasture boundary maps. (xi) Evaluate the effectiveness of pasture land management and planning activities for incorporation into a good practice manual on sustainable pasture land management.
GIS Specialist		13	<ul style="list-style-type: none"> (i) Design, develop, test, and deploy the pasture land management information system. (ii) Supervise and provide on-the-job training for national staff. (iii) Design and develop a pasture land management information system for pasture land management indicators in consultation with CACILM. (iv) Assist with the acquisition of remote sensing imagery and develop a database to support pasture land planning and management activities for selected geographic areas. (v) Develop capacity for creating remote sensing images, GIS layers, and other types of data and for data entry, data analysis, and reporting in relation to pasture land management information. (vi) Prepare annual monitoring reports on pasture land management indicators.

<p><i>Orchard Management Specialist</i></p>		<p>21</p>	<ul style="list-style-type: none"> (i) Prepare a detailed project plan, schedule, and annual budgets in relation to the implementation and monitoring of sustainable orchard management. (ii) Help the PMU (a) recruit national staff for the sustainable orchard management activities; (b) prepare terms of reference and contract service providers to carry out surveys and plan and supervise orchard improvement plans; and (c) allocate funds to the <i>aiyl okmotu</i> for orchard improvements. (iii) Supervise and provide on-the-job training for national staff. (iv) Work with the relevant government agencies to assess the condition of orchards and make recommendations for improved management and restocking of orchards. (v) Develop capacity in relevant government agencies and among project staff and/or contractors to conduct orchard management planning. (vi) Provide advice and oversight in relation to the allocation of funds for implementing <i>aiyl okmotu</i> orchard improvement plans. (vii) Design and develop an orchard monitoring system to collect data on the condition of orchards
<p><i>Gender and Community Development Specialist</i></p>		<p>17</p>	<ul style="list-style-type: none"> (i) Help the PMU recruit national staff and supervise and provide on-the-job training to ensure effective implementation of the gender action and community participation plans. (ii) Provide training to staff of the PMU; the MAWRPI; the Project Steering Committee; key service providers; WUA support units, oblasts, raions, <i>aiyl okmotu</i>, and WUAs and other community-based groups on the Project's gender and farmer and community participation issues and on measures to address them. (iii) Identify nongovernment organizations and formal and informal community-based organizations in the Project area, such as women's groups and farmer groups, that can be used for community mobilization under the project components. (iv) Monitor implementation of the community participation and gender action plans in all subproject areas and provide necessary interventions so that gender and social considerations are not neglected. (v) Exchange information on a regular basis with other development partners in the project areas, such as funding agencies and nongovernment organizations, on relevant gender and community development issues, including conflicts among community members and ways to resolve them. (vi) Ensure that all terms of reference and service contracts reflect provisions of the gender action and community participation plans. (vii) Review reports from service providers to monitor the gender and social impacts of project components and regularly provide assessments to the PMU for necessary action. (viii) Work closely with the monitoring and evaluation specialist to ensure the inclusion of gender- and poverty-related indicators; monitor the level of participation by poor farmers; and collect data disaggregated by gender, ethnicity, household income level, and other social parameters. (ix) Ensure that the baseline survey, farm surveys, project reporting system, and capacity building include data and technical areas related to gender and social development issues.