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Kyrgyz Republic: Preparing the Agricultural Land Improvement Project
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Prepared by:

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United Kingdom

For Ministry of Agriculture, Water Resources and Processing Industry

Asian Development Bank

Ministry of Agriculture, Water Resources and Processing Industry

Agricultural Land Improvement Project

(ADB Project Preparatory Technical Assistance No 4924-KGZ)

Inception Report

(Final)

Bishkek, Kyrgyzstan
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ANNEXES

LIST OF ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AADP	Agriculture Area Development Project
AISP	Agricultural Investments and Services Project
ALIP	Agricultural Land Improvement Project
ARIS	Community Development and Investment Agency
ATC	Advisory Training Center
AO	Ayil Okmotu
AVEP	Agricultural Vocational Education Project
CACILM	Central Asian Countries Initiative for Land Management
CV	Curriculum Vitae
DFID	Department for International Development
DWR	Department of Water Resources
EC	European Commission
FSP	Food Security Program
GOK	Government of Kyrgyzstan
GTZ	German Technical Cooperation
I&D	Irrigation and Drainage
IFAD	International Fund for Agricultural Development
ITC	International Trade Center
JICA	Japan International Cooperation Agency
KAFC	Kyrgyz Agricultural Finance Corporation
KSAP	Kyrgyz Swiss Agricultural Program
MAWRPI	Ministry of Agriculture, Water Resources and Processing Industry
MOF	Ministry of Finance
OFIP	On-Farm Irrigation Project
PIP	Public Investment Program
PPP	Public Private Partnerships
PPTA	Project Preparatory Technical Assistance
PPP	Policy Support Project
PSC	Project Steering Committee
RAS	Rural Advisory Services
RDC-Elet	Rural Development Center “Elet”
SAADP	Southern Agriculture Area Development Project
SEA	State Environment Agency
SIDA	Swedish International Development Cooperation Agency
SVD	State Veterinary Department
TOR	Terms of Reference
UNDP	United Nations Development Program
USAID	United States Agency for International Development
VIP	Village Investment Project
WMIP	Water Management Improvement Project
WB	World Bank
WG	Working Group
WUA	Water User Association

1 INTRODUCTION

Background

Agriculture is the country's main industry contributing nearly 40% of the GDP and accounting for over 60% of employment in the country. However, since 1964, the population of Kyrgyz Republic has doubled, while land resources available for agricultural production have remained the same. Development in the agriculture sector in Kyrgyz Republic has emanated from a Russian collective/state farm system to a market-oriented, private, small farmer led system. Although land reforms have facilitated a rapid transformation away from state farms to private farming on the over one million hectares of arable land in the country, only about 30% of the irrigation infrastructure is operating, resulting in fairly low productivity on much of the arable land. The land management system that governs the nine million hectares of pastureland is not working efficiently as evidenced by overgrazing of close pastures and undergrazing of remote pastures. Consequently, there has been uneven development in the agro-ecological zones in the arable and pasture lands, resulting in, among other things, various forms of land degradation, from salinization to the loss of soil fertility, smaller herds and decreased animal breeding capacity. The uneven development within the country has also led to decreased incomes and quality of life for many agricultural communities.

Despite these setbacks, there has generally been broad-based agricultural development that has improved the average income of farmers over the past ten years. To continue the progress that has been made in reducing proverty and in addressing the constraints that prevent the country from more rapid agricultural development, a rural poverty reduction strategy in Kyrgyz Republic must be based on improved land management. Improvements in land management require a combination of physical improvements and institutional and policy framework reforms. The Central Asian Countries Initiative for Land Managament (CACILM) supports Kyrgyz Republic's land management initiatives by coordinating activities that advocate policies necessary for creating an enabling environment for sustainable land management, apply sustainable land management techniques and systems leading to increased productivity, and strengthen and build the capacity of institutions responsible for planning and implementing sustainable land management interventions. CACILM, a 10-year project, has prepared a National Programming Framework for Sustainable Land Management through 2016. The Agricultural Land Management Project that is being designed fits well within the goals and objectives of the National Programming Framework.

Purpose and Objectives of the TA

In the agriculture sector, ADB focuses on

- Poverty alleviation by improving incomes of rural people through increased farm productivity
- Development of private sector initiatives, including the input supply sector
- Promoting environmentally friendly agricultural and natural resources management practices

ADB is addressing land degradation and is supporting sustainable land management by taking a leadership role in CACILM. ADB is currently working in Chui oblast with the Agriculture Area Development Project and in Osh, Jalalabad, and Batken oblasts with the Southern Agriculture Area Development Project.

The ADB Country Support Strategy for the Kyrgyz Republic is for 2007-2010. ADB's Strategy is in line with the Joint Country Support Strategy 2007-2010 (JCSS) in cooperation with the Government of Kyrgyzstan, Swiss Agency for Development and Cooperation, United Kingdom Department for International Development, United Nations agencies and World Bank. The strategy will focus on increasing labor productivity, competitiveness and improved governance to:

- Improve economic management consistent with strong and sustained pro-poor growth
- Reduce corruption, improve governance and achieve effective public administration
- Build sustainable human and social capital through improved health and education outcomes
- Ensure environmental sustainability and natural resources management

ADB's priority sectors and themes include:

Sectors

- Agriculture and natural resources management
- Education, including early childhood development
- Roads sub-sector (transport and communication sector)

Themes

- Environmental sustainability
- Private sector development
- Regional cooperation

The total amount of funds allocated for the JCSS period (2007-2010) from the Asian Development Fund allocation is approximately 117-128 millions USD. The exact amount will depend on the Country Performance Assessment scores, availability of resources and the proportion of the grants.

The Government of the Kyrgyz Republic requested Asian Development Bank (ADB) to provide technical assistance (PPTA) to prepare the Agricultural Land Improvement Project to increase agricultural productivity and profitability in the northern regions of Issyk Kul, Naryn, Talas, and Chui oblasts.. The project is included in the Joint Country Support Strategy for Kyrgyz Republic (2007 -2010). The project fits into one of ADB's priority sectors, that is, agricultural and natural resources management.

An ADB Fact-Finding Mission visited the Kyrgyz Republic from November 20-30, 2006. The purpose of the mission was to gather information on the proposed project, assess the need of ADB assistance for the proposed project and discuss with the Government the objectives, costs, consulting services needs, implementation arrangements, and schedule for project processing. A memorandum of understanding was prepared and signed by the Government.

HTSPE Ltd (UK), in association with NIRAS AB (Scanagri, Sweden) and the Rural Development Centre "Elet" (Kyrgyzstan), has been contracted by ADB to undertake this PPTA (see Annex 1, Terms of Reference). The purpose of the technical assistance is to design an investment project that addresses the constraints to increasing agricultural productivity and profitability in the four oblasts. The specific objective of the TA is to prepare a fully justified investment project with a northern Kyrgyz Republic context incorporating a range of investments to support the sustainable management of arable and pasture lands.

Rationale for the TA

The agriculture sector is very important to the country's economy. It accounts for more than 33% of gross domestic product, 50% of employment, and 11% of exports. Of the total land area of 19.6 million hectares, the largest amount (47%) is pasture land. Only about 7% of the country's land is arable of which about 80% is irrigated. Agricultural productivity has increased from a low base back in the early 1990s. Since 1996, agricultural growth has increasingly been driven by private, small farm production. In 2002, there were 881,713 farm households producing 55% of the total agricultural output. Private farms, numbering 251,526, produced about 40%. The remaining agricultural output was produced by 1326 agricultural enterprises (former state farms or collectives).

Chui Oblast accounts for about 35% of the total agricultural output in the country. The Agriculture Area Development Project, funded by ADB, has been operating in this area for the past 6 years in improving irrigation and drainage systems, supplying agricultural advisory services, facilitating access to agricultural credit, and developing agribusiness, while focusing on targeted A*yil Okmatu (village government organizations)*. Other highly productive areas of Kyrgyz Republic include the southern oblasts of Osh, Jalalabad, and Batken. The Southern Area Agricultural Development Project, funded by ADB, has begun operating in these three oblasts. Most aspects of AADP's design and implementation are replicated in SAADP. Moreover, an additional component, a land management component that addresses pasture management and orchard management constraints, has been included in SAADP.

With the ongoing agriculture area development projects, AADP and SAADP, ADB has covered a significant portion of the country. The remaining oblasts, Issyk Kul, Naryn, and Talas, along with the northern part of Chui oblast have a number of common issues and problems, including poor pastureland management practices and infrastructure, poor animal husbandry practices, declining productivity on rainfed lands, declining productivity and quality of the

irrigated land due to water logging, erosion, and compaction and declining soil fertility, low farm incomes due to high input costs, lack of access to processing, markets, and credit, and poor institutional development. These four oblasts have been targeted in the PPTA as potential project areas for the Agricultural Land Improvement Project.

Sector Policies

The "Agrarian Policy of the Kyrgyz Republic to 2010" presents the ways and methods of implementing the main provisions of the Government's "Comprehensive Development Framework" and the "National Strategy of Poverty Development". The main goals of the Agrarian Policy Concept are to (i) define the Government's role in implementing agrarian policy under market reorganization of the economy and democratization of management, (ii) prioritize the direction of agriculture development in the country, (iii) determine the necessary reforms needed and the appropriate inter-relationship of agriculture, water resources, and the agro-processing industry, and (iv) determine the appropriate roles and responsibilities of the Government and other public and private stakeholders in implementing the Agrarian Policy. The Agrarian Policy Concept is supposed to be used as a policy tool for Government decision makers, as a source of information for donor institutions and investors so that they may support priorities in the agriculture sector, as a reference for the private sector to foresee how enabling the environment will be, as a source of information for the public to understand the Government's role in implementing agriculture policies.

Sector Institutions

The agriculture sector is primarily the responsibility of the Ministry of Agriculture, Water, and Processing Industry (MAWRPI). The MAWRPI has a number of Departments, including Pastures, Plant Protection, Cooperatives, Agrarian Investment and Land Reform, Agro-processing, and Irrigation, that are relevant to the design and implementation of the Agricultural Land Improvement Project. The operational capacity of these Departments is limited as a result of a low government budget. Donor projects, however, are well coordinated and supervised administratively by the Head of the Agrarian Investment and Land Reform Department.

At the oblast level, the MAWRPI has a Head of Agriculture and various departments that are also hampered by a low operational budget. In the oblast administration, there is also an Administrative Deputy Director of Agriculture who is not part of the MAWRPI. There is a clear emphasis in each oblast government body in promoting agriculture.

At the Rayon Government level, the Head of the Rayon has Departments including Agriculture to assist in developing appropriate policies and activities in the rayon.

There are 475 A*yil Okmotu* in Kyrgyz Republic. These organizations have a Director and a nominal number of staff that look after all sectors of the small number of villages covered by each A*yil Okmotu*.

Besides the MAWRPI, the Ministry of Environment plays a role in maintaining some regulatory control on Government projects (including donor funded). The Ministry has established procedures for donor projects to follow in designing projects.

Activities Completed to Date

The Team Leader, Dr. Kenneth Neils, arrived into Bishkek on October 1, 2007 and, along with the Deputy Team Leader, Mr. Kuvat Bapaev, had meetings over a three-week period with many Government officials, including Minister Jeenbekov of the MAWRPI, Institute leaders, donors, donor project directors and technical staff, and NGOs in Bishkek. An office in the MAWRPI was provided to the Project and renovation started.

Existing project and donor reports on agriculture development in Kyrgyzstan were reviewed. Added attention was given to the level of collaboration with the World Bank's Agricultural Investments and Services Project (AISP) and On-farm Irrigation Rehabilitation (OFIP) projects that will be required during the project design and implementation in, especially, the areas of pasture land improvement, selection of WUAs, and animal health and veterinary services.

Field trips to Talas, Issyk Kul, Naryn, and Chui oblasts were taken by the PPTA team from October 22-25. The Team visited with the Governors/Deputy Governors and agriculture leaders of the oblasts, numerous Rayon

Government Heads and agricultural staff, Aiyl Akmotu leaders and staff, WUA Support Unit staff, WUA Directors, farmers, agro-processors, Rural Advisory Services staff, NGOs implementing agriculture projects, financial institutions, etc. (see Annex 4). The purpose of the trip was to introduce the aforementioned stakeholders to the Agricultural Land Improvement Project that the Team is designing, to ascertain the interest of the various stakeholders in the various oblasts and rayons in participating in the ALIP design, to collect information on the projects being implemented in the various oblasts, lessons learned, and feedback from beneficiaries of the projects, and to make preliminary observations on the project scope and coverage.

On October 31, 2007, the Draft Inception Report (in English and Russian) was distributed to participants, including Deputy Minister Duisheev, at the Tripartite Meeting.

2 MAIN FINDINGS OF THE INCEPTION REPORT

Review of Meetings Held, Donor Programs/Projects, and Documents

Many meetings were held with the Heads of Government Ministries and Institutes, the donors, the directors and technical staff of NGOs implementing donor programs/projects, farmers, agro-processors, and other stakeholders (see Annex 4). These meetings provided many important insights into, for example, the current capacity within the relevant Government ministries, the agricultural policies and strategies already established or being developed, the role of the public and the private sectors in agriculture development in Kyrgyz Republic, the coordination mechanisms in place among development programs and projects, the state of land degradation in the various oblasts that this PPTA is targeting, etc.

Recent past, current, and planned donor programs and projects, with principal activities similar to at least one of the potential components (pastureland improvement, cropland improvement, irrigation infrastructure development, agribusiness and marketing, and institutional development) of this PPTA proposal were reviewed. Relevant donor programs/projects to the agricultural land improvement project include the following:

Donor	**Project**	**Location**	**Principal Activity**
Asian Development Bank	Agriculture Area Development Project	Chui	Agriculture Development
	Southern Agriculture Area Development Project	Osh, Jalalabad, Batken	Agriculture and Irrigation Infrastructure Development
	CACILM	Regional CIS	Coordination of Project Activities on Land Degradation & its improvement
	Irrigation Pricing Project	National	Pricing Policy Implementation
	Livelihood Development Project	National	Agricultural Development Training, Micro-financing
World Bank	Land Reform	National	Land Reform Policy
	Water Management Improvement Project	National (Initially, Pilot Projects in Talas)	Off-Farm and On-Farm Water Management Improvement and Irrigation Rehabilitation
	Agriculture Investment Support Project	National	Pasture Improvement (Management, Use, & Institutional Development), Agricultural Support Services (Soil Management and Veterinary Services)
	Agribusiness Center	National	Agribusiness & Marketing Services Institutional Development, and Microfinance
	Sheep Breeding Project	National	Improved Sheep Breeding Project
World Bank/DFID	Village Investment Project	National	Village-level Public Investment, Capacity Building in Villages

DFID	Rural Water Supply Program	Talas, Naryn, Issyk Kul	Rural Water Supply Systems
USAID	Water User Assn Support Project	Southern Oblasts	Technical Assistance and Infrastructure Development
	SME Project	National	SME Development
	AgLinks	Regional CIS	Agribusiness Advisory Services
	Land Reform	National	Land Reform (Zoning, Appraisal, and Municipal Land Sales)
	Land Reform & Market Development Program	National	Land Reform and Land Market Policy Development (focused on LRF Strategic Planning and Lease Auctions)
	Legal Assistance to Rural Kyrgyzstan	National	Legal Reforms for Pasture Leasing
European Community	Budget Support	National	Budget Support to Kyrgyz Government
	Food Security Project	National	Public Finance for Agriculture, Social Protection, Veterinary Services Strategy
GTZ	Cooperative Development	National	Cooperative Development
JIICA	Regional Development Plan (2005)	Issyk Kul	Provincial Agriculture Development Plan
	Community Development Program	Issyk Kul	Formation of Self-reliant Communities
Switzerland	Kyrgyz Swiss Agricultural Development Program	National	Rural Extension Services, Advisory Training Center Programs, Vocational Agricultural Training
	Policy Sector Project	National	Agricultural Policy Coordination among Donors
UNDP	Pastureland Improvement	National	Pastureland Improvement
UNCTAD/Swiss Development	Trade Promotion Program	National	Agricultural Trade Promotion, Support to SMEs, Export Strategy for Food Processing,
UN – FAO	Agribusiness Project	National	Agribusiness Development
SIDA - Sweden	Seed Sector Development	National	Support to Seed Sector Development
Norway	Kyrgyz Norwegian Project	Fergama Valley (Osh, Jalalbad)	Agriculture Production
New Zealand	Krygyz Agricultural Development	Naryn	Crop and Livestock Development

An exhaustive set of project documents of past, current, and planned programs/projects were collected and reviewed. Many ADB reports, including the Study of Pricing Systems and Cost Recovery Mechanisms for Irrigation, the Study of the Impact of Land Reform on Agriculture, Poverty Reduction, and Environment, the Agricultural Strategy Formulation, the CACILM, the AADP, and the SAADP, and World Bank reports, including the On-Farm Irrigation Project report, the Water Management Improvement Project report, the Agricultural Investment Support Project report, were reviewed. Other reports, such as, the Kyrgyz Livestock Study – Pasture Use and Management by Asyl Undeland, the Veterinary Strategy Paper by the TACIS Food Security Project, the Policy Note on Competitive Input Marketing in the Crop Sector by E. Polyakov, the Impact of Land Reform on Agriculture, Poerty, and the Environment in Kyrgyzstan (ADB), the Kyrgyz Livestock Study – Supply and Value Chain Analysis by Bekzod Shamsiev, were also reviewed.

From the many discussions and meetings with the Government officials of the MAWRPI, Ministry of Finance, and the Ministry of Environment, Land Management and Water Management Institute staff, the donors, the donor

project staff, WUA Association leaders, credit sources, farmers, agroprocessors, traders, et.al., and from project documents, it is clear that over the last 15 years much headway has been made in

- training and/or providing advisory services in modern agricultural technologies to nearly 50% of the private farmers in Kyrgyz Republic
- assisting farmers in diversifying their crop mix into more sustainable and market driven agricultural alternatives, such as, edible beans, potatoes, fruits, and vegetables
- applying sound crop rotation, soil fertility, anti soil erosion, and improved and more efficient irrigation and drainage techniques to arable and pasture lands
- assisting farmers in improving and expanding their herds through enhanced access to artificial insemination, breeding services, and veterinary services, quality veterinary medicines, more nutritional fodder crops, more transparent access to pasture lands, etc.
- increasing the volume of processed agricultural products that are locally-produced
- assisting agribusinesses and traders in accessing more significant markets abroad
- rehabilitating more than 15% of the total irrigation infrastructure in the country
- developing over 300 water user associations that have contributed their own capital and labor in improving their irrigation infrastructure
- instituting many legal and regulatory reforms (land reforms, pasture leasing, seed certification, WTO accession, input supply, commercial laws, etc.) that have led to more efficient allocation, use, and management of agricultural and natural resources and have created a more enabling environment for agricultural business development
- building the capacity of the MAWRPI to understand the essential agricultural policy reforms needed and the appropriate approach to formulating, analyzing, and advocating the policies

The progress that has been made also comes with many lessons learned, including:

On management and use of pastures

- Although the delegation of sole authority and governance over the different types of pastures (close, semi-remote, and remote) has been made (to aiyl matos, raion, and oblast governments, respectively), the management of these pastures remains relatively inefficient and ineffective; evidence the low level of leasing, only about 15% of available pasture land
- More effort is needed to speed the process for institutionaling better management systems for pasturelands
- Leases on pastureland of 7 years are too short for expecting private investment in infrastructure, etc. on pastureland

On access to credit

- Very little credit has been made accessible to farmers and agribusinesses; in the AADp project in Chui Oblast, only 18% of the Project's credit line was provided to Project stakeholders; a more felxible financial assistance program may need to be introduced, for example, leasing equipment needs to be integrated into the financial system; another example, the Japanese and Chinese have provided farm machinery free to the Government who in turn has sold the machinery to farmers without recovering the loans; cost recovery systems through Government financing normally don't work; leasing equipment through private, (bank or non-bank) financial institutions may be a viable option

On access to markets

- Though a large percentage of private farmers have over 10 years experience since the privatization of the cooperative/state farm system in Kyrgyzstan, and, despite the concentrated effort of many donor projects in improving land productivity, the volume of necessary agricultural products to satisfy the demand by regional and international buyers remains too low
- Although regional and international buyers were identified and, in some instances, linked to Kyrgyz agricultural product suppliers, the transport issues from Kyrgystan to these destinations have not been addressed

On integrating the value chain approach into infrastructure development

- Though many development projects have been and are continuing to expand the irrigated, arable farmland area, the follow-up integration of the value chain approach to the use of the land for those agricultural products that provide farmers the best opportunities for increasing their farm incomes has not been emphasized in many projects

On development of institutions

- Though over 400 water user associations have been established, the cost recovery on the rehabilitatetd, irrigation infrastructure has been low due to poor collection of membership fees

On veterninary services

- The Government's free vaccine program for livstock owners needs to be phased out and a private veterinary system provided significant support, including the integration of the Association for Private Veterinarians. Since there are 40 private, artificial insemination (for livestock) providers, could the private veterinary services link with these AI service providers?

On agricultural poilcy reforms

- Though the "Agrarian Policy Concept of the Kyrgyz Republic to 2010" was approved by the Kyfgyz Government, the strategy for achieving the Policy Concept goals have not been followed

On agricultural extension

- There are significant sustainability issues outstanding for the present Rural Advisory (extension) Services. Six agricultural input suppliers (assisted by AADP) could serve as models for expanding a private extension program through ag input suppliers, vet/AI service providers, animal breeders, and other private input suppliers (such as, drip irrigation suppliers, greenhouse suppliers)

On market information systems

- Though market information system using the internet is planned and will be implemented, additional emphasis must be given on the sustainability issues of the system

On agroprocessed products

- Although Kyrgyz stakeholders (owners and technicians of food processing companies) were trained abroad in food quality control and food safety procedures, laboratory facilities (public or private) are not adequate to properly test for contaminants and threshold levels of undesireable foreign matter; quality of Kyrgyz processed agricultural products remains low and not up to par with international demanded products

On access to quality agricultural inputs and testing laboratories

- Although there have been a number of donor projects in land improvement, soil testing is not commonly done by farmers and other agricultural stakeholders; only one private soil testing laboratory is operating
- Although there are a small number of agricultural input suppliers that have been assisted in accessing quality agricultural inputs and providing accurate and helpful technical information to farmers, the input supply system is nascent with a long way to go before becoming a dependable and well equipped industry

The Project team will ensure that there is no duplication of assistance and that potential synergies and complementarities are designed.

Preliminary Observations from the Field Trip

The preliminary observations of the reconnaissance field trip to the proposed oblasts for the ALIP indicate strong interest in participating in the project design by the Governors and/or Heads of Departments of the Oblast Government, Rayon Government leaders, *Ayil Akmotu* leaders, Water Users Associations, farmers, and other stakeholders in the oblasts. There is also an urgent need to collaborate with other donors (especially the World Bank and the CACILM funded projects) on pastureland and cropland management and with the World Bank and other donors on harmonizing on-the-ground rehabilitation efforts, policy dialogue, institutional development, and capacity building. Emphasis in the project design needs to address land management and improvement across both the arable irrigated and pasture land. Other preliminary observations and findings are as follows:

- It will be important to assess the relative problems and constraints as regards land management at the oblast and rayon administrative levels to obtain a better focus on the requirements for the projects in relation to geographical coverage and to identify site-specific potential interventions.
- The four oblasts differ in their relative characteristics as regards the need for support in addressing the problems in pasture and arable land management. Chui oblast is predominantly important as regards the need for improved management of irrigated-cropped land, and similarly but to a lesser extent so is Issyk Kul oblast. Both Talas and Naryn oblasts have large areas of pasture lands with the latter in particular concentrating on livestock production.
- It is recommended that the project design seriously considers continued support to the rehabilitation of on-farm irrigation and drainage works. There is an important need in this respect to link in with the activities

of the other WB and ADB projects, more especially the WB On-Farm Irrigation Project Phase 2 and the Water Management Improvement Project. The latter is focusing its activities predominantly on off-farm irrigation. Collaborative links and synergies with the World Bank projects will be essential especially in the selection of the WUAs involved in the continued rehabilitation of on-farm irrigation systems and in adding value to those irrigation schemes which have already been rehabilitated, through better farm/crop and land management practices.

- As regards the pasture lands, the initial emphasis should be on developing an inventory of livestock concentration on pasturelands and number of pastureland leases and terms of the leases. The possibility of integrating into the design of the ALIP some technical and economic analysis (given sufficient mapping and data is available) relating to the carrying capacity and optimal use of the pasturelands should be considered.
- Emphasis should also be placed on coordinating with the World Bank's Agricultural Investment Support Project in the selection of pasture lands for rehabilitation and in making improvements to the management of the various pasture eco-systems (winter, summer and spring/autumn pastures) through institutional development and strong support to existing/proposed "Pasture Management Associations". Pasture improvement practices should be implemented along side the development of sustainable local pasture management bodies, and pilot areas will need to be selected in high priority areas. It should be noted that the formation of viable and sustainable "Pasture Management Associations" is still in its infancy.
- With reference to the WUAs there is a need to upgrade the capacity of the members to better manage their irrigated arable lands, and the ALIP will need to consider the provision of technical support for better on-farm water management, erosion control and other land management aspects, especially, more sustainable crop rotations and the prudent use of farm inputs. The project will need to look at possible support to improved input supply.
- Crucial to project success and sustainability will be the importance of ensuring that production improvements are made at the same time as improvements to the agricultural input supply, post-harvest processing, packaging, and marketing are made. This applies to both crop and livestock enterprises.
- It is considered that a more holistic approach to land management and agriculture in general at the farm level is required, particularly in respect to the integration of the irrigated and rainfed areas as regards to livestock production. The objective will be to link both the WUAs and the "Pasture Management Associations" for improved management of the land resources across all agro-ecologies. Institutional development is central to this initiative.

Project Scope and Coverage

Scope - Based on meetings with the public and private stakeholders, a review of the donor programs/projects and documents/reports, and preliminary field observations, it is proposed that the scope of the project design be limited to the following components:

- project irrigation and drainage rehabilitation
- pastureland improvement/livestock development
- cropland improvements
- agribusiness and marketing

These four components could involve significant project interventions that would, when integrated, lead to significant agricultural land improvement, sustainable development, and impact on rural incomes. Within each of these components, the project design would likely include targeted institutional development, policy formulation and advocacy, and capacity building.

Coverage – The four oblasts have varying needs for interventions pertaining to irrigation and drainage rehabilitation, pastureland improvement/livestock development, cropland improvement, and agribusiness and marketing. During Phase 1, the PPTA Team will analyze the situation in each of the oblasts as it relates to each of the components. It is likely that not all components may be implemented in all oblasts.

The MAWRPI provided the following comments to the Inception Report:

- The PPTA should focus on irrigation, in Chui oblast in particular, but also in other oblasts. The main emphasis will be mainly on the on-farm irrigation area and some off-farm area if required.

- With respect to the Pasture Land Improvement/Livestock Development component ALIP during Phase I should consult with the WB and MAWRPI to identify potential areas for project interventions and results will be summarized by the end of Phase I.

3 ISSUES AND PROBLEMS

Collaboration with World Bank and Other Donors

Since the World Bank is spearheading national development projects in community-based, pasture land management and irrigation and drainage rehabilitation, it is essential that the similar components in the ALIP be designed such that there is close collaboration with these World Bank projects, namely, the On-Farm Irrigation Project, the Water Management Improvement Project, and the Agricultural Investment and Services Project. These projects are or will be operating in all or some of the four oblasts that the ALIP is being designed to be implemented within. Some of the specific project areas where collaboration would be especially important would be in the selection of Water Users Associations for irrigation rehabilitation and in the selection of pasture lands for rehabilitation. Harmonizing the approaches taken by ALIP with what is already on the ground as implemented by World Bank will be emphasized in the project design. Additionally, the designed approaches taken in policy dialogue, institutional development, and capacity building need to harmonized with the approaches already being taken by the World Bank.

It is also important, that the ALIP be designed to collaborate with other donor-funded, pastureland management projects, such as, the UNDP Susamir project (funded by CACILM), and irrigation rehabilitation projects, such as, the USAID-funded Water Users Association Support Project.

Implementation Arrangements

Project Steering Committee

The Project Steering Committee will be set up by the Ministry of Agriculture, Water Resources and Processing Industry to guide the preparation and implementation of Agricultural Land Improvement Project. The role of PSC is to provide overall guidance at policy and strategic level to the PPTA team. Proposed composition and Terms of Reference for PSC members are outlined in Annex 2. The government of Kyrgyzstan (MAWRPI) shall issue a resolution no later than 20th November 2007 to nominate relevant stakeholders to participate in the PSC meetings and provide all necessary support to the PPTA team working on the design of ALIP.

Working groups

The work on the design of ALIP will be carried out through working groups. Proposed composition and TOR for group members are outlined in Annex 3. There will be one working group established at the central (MAWRPI) level and four sub-groups for each proposed project component at the oblast level in each oblast. The sub-groups will report to the central working group which in turn will report to the PSC members. See Annex 3 for further details.

Counterpart staff

The PPTA team will closely work with the counterpart staff of the MAWRPI and other relevant stakeholders as outlined in Annexes 3 and 4 (PSC and WGs). The role and responsibilities of counterpart staff will be: (i) participate in the working group meetings; (ii) review ALIP reports and documents and provide comments; and (iii) assist the PPTA team in collecting required statistical and agricultural information and data. The government of Kyrgyzstan is responsible for nominating the counterpart staff both at the MAWRPI and oblast administration level to participate

in the design of ALIP. The GOK shall issue a resolution by no later than 20th November 2007 to assign the counterpart staff to as per TORs for PSC and Working Groups.

Consulting Team Adjustments

New Positions and Person Months

The proposed domestic Agronomist, Sydykbaev Talant, has elected to take a different job and, therefore, has to be replaced. Among four candidates to replace Mr. Sydykbaev, Ms. Anara Sartmanbetova has been selected as the best candidate. Approval is requested for her to be the National Agronomist – Land Improvement Specialist on the PPTA Team.

Change of Personnel in Existing Positions

The proposed Rural Engineer, Michael James, is scheduled for two months of consulting to assess rural infrastructure development (irrigation, rural roads, pasture roads and bridges) and to propose candidate infrastructure improvements. However, it is proposed that the rural infrastructure focus more on on-farm irrigation and drainage and supporting Water Users' Associations in close collaboration with the World Bank On-Farm Irrigation Project (Phase II) and the Water Users' Association Support Units and less on roads and bridges in cropland or pastureland. It is also recognized that Esenbeck Subanbekov, the Domestic Rural Engineer, has most of his experience in pastureland infrastructure development and not irrigation and drainage. As a consequence, it is proposed that a domestic irrigation specialist be hired immediately for up to 4 person months to carry out the more focused work on assessing on-farm irrigation and drainage infrastructure improvements and supporting Water Users' Associations. No changes will be expected in the budget. The CV for the selected, domestic irrigation and drainage engineer will be forwarded to ADB and the engineer will be hired as soon as the change and the new position are approved.

Change of Person Months of Existing Personnel.

It is proposed that the Michael James' time be reduced to one month and that a Domestic Rural Engineer specialized in irrigation and drainage be hired.

Budget Adjustments

Additional costs may be incurred for office renovation, furniture, equipment, internet/stationary, office space, translation,and transport. The estimated costs are as follows:

The Equipment line item is $10,000. However, the estimated project office renovation costs at the MAWRPI is $1,500 and the estimated cost of furniture ($3805), equipment ($9141), and internet/stationary ($1000) is $13,946. The total cost of $15,446. It is proposed that the extra cost of $5,446 be drawn from the Contingency line item (which is $13,300).

The PPTA Team will need more office space than the room that was provided to the Project by the MAWRPI. Since there has been a delay in obtaining the office from the MAWRPI, the Project has been renting space at the RDC since October 1st at $500/month plus $250 for computer and other hardware rental and these costs were not foreseen at tendering. It is proposed that the Project continue to rent the RDC office (not the hardware) for $500/month along with operating out of the office in the MAWRPI. The total cost of the office rental fees will be $750 for October and $500/month for the next 6 months, making total cost of $3,750. It is proposed that this extra cost will be drawn from the Contingency line item.

The Project will need additional translators for assisting the expatriate consultants on consultation exercises in the field. Since the Provisional Sum allocated for Workshops is already limited, It is proposed that an additional $3000 be budgeted for this purpose . The total of $3000 may be drawn from the Contingency line item.

The Project will need additional transport than the two vehicles it presently has rented. It is proposed that an additional $6,000 be added to the budget. The total budget for transport is based on 526 taxi trips in Bishkek @$4.31 per round-trip and 52,300 kilometers of travel @$0.2625 outside Bishkek.

The Project will need to pay for the mapping of pastureland. It is proposed that the $1000 be drawn from the Provisional Sum for surveys and studies.

Based on the above budget adjustments, HTSPE will be requesting a contract variation.

Request to the Government (MAWRPI)

A list of requests on logistical/counterpart staff arrangements to the Government of Kyrgyzstan

In accordance with the agreement (related to ADB PPTA No 4924-KGZ) signed between the Asian Development Bank and the Government of Kyrgyzstan, the Government of Kyrgyzstan is responsible for providing:

(i) office accommodation with furniture and telephone communication
(ii) necessary statistical and agricultural data
(iii) counterpart staff to work with the PPTA consultants (see paragraph on implementation arrangements for deadlines)

At present, the PPTA team is working out of a temporary office located outside the MAWRPI. However, in accordance with the Agreement, the MAWRPI is requested to immediately provide the PPTA team adequate office space within the Central Office of the MAWRPI. Since the PPTA team is quite large, including eight international and eight national consultants along with five support staff members, and since the PPTA team will be working closely with the MAWRPI's counterpart staff, it would be appreciated if the MAWRPI could allocate three sizable rooms in the Central Office of MAWRPI to accommodate our staff and carry out the design of the Agricultural Land Improvement Project. The ministry has so far allocated one sizable room which is not sufficient to accommodate all consultants and support staff. The PPTA team would also appreciate having at least three telephone lines available for communication and would appreciate ministry's earliest response to the listed requests.

4 REVISED WORKPLAN AND MILESTONES

It is recommended that the PPTA go forward with the revised workplan for Phases 1 and 2. The revised workplan (as detailed in Annex 6) identifies the activities already being undertaken by the PPTA's Team Leader and the Deputy Team Leader in the Inception phase, the Phase 1 activities that are involved in the situational analysis, and the Phase 2 activities that are involved in the feasibility of the Project's design. The milestones have not changed, they include the submission of the following reports:

- Inception Report by week 4
- Phase 1 Report by week 11
- Interim Phase 2 Report by week 20
- Draft Final Report by week 30
- Final Report by week 36

Phase 1 will include the establishment of the Project Steering Committee, the provision (to the Project) of counterpart staff by the MAWRPI, the oblast governments, and rayon governments, and the establishment of a Working Group and Sub-Working Groups. Phase 1 will focus on the situational analysis of the Project's proposed components, including Irrigation and Drainage Infrastructure, Cropland Improvement, Pastureland Improvement/Livestock Development, and Agribusiness and Marketing. For each component, institutional development, capacity building, and credit needs will be assessed. During this Phase, the Team's consultants (national and ex-pats) will determine the progress and lessons learned of other donor projects, and assess the current legal and institutional framework, current land use and productivity, and current land management practices though rapid rural appraisal missions and focus group discussions, mapping of land use and pastures, through meetings of the Working Group and Sub-Working Groups, etc. A social assessment and preliminary work on the environmental

assessment and economic and financial analysis will be done during this Phase. Phase 1 will include oblast-level Stakeholder Workshops, involving the key stakeholders in the design of the ALIP, where alternative design approaches are discussed and evaluated. The alternative design approaches and the scope and coverage of the proposed ALIP will then be discussed at the Project Steering Committee meeting and recommendations made for Phase 2 feasibility work. The draft Phase 1 report will be submitted by December 22nd. A Tripartite Meeting is proposed to discuss the Phase 1 report in January 2008.

Phase 2 will get started in January (2008) and will involve the preparation of detailed feasibility studies for each of the Project's components and institutional development. After meetings of the Working Group and Sub-Working Groups, a Project Steering Committee meeting will be held (in February) to discuss the progress on the feasibility studies, any specific and preliminary proposed interventions for the components, the design and monitoring framework, the socio-economic survey, the environmental survey, the COSTAB economic and financial analysis, the procurement plan, etc. With approval from the Project Steering Committee on the progress made, an Interim Phase 2 Report will be prepared and submitted in February. Work will continue through April on completing the final work on each component. The results of the feasibility studies, the final analysis, and the final proposed interventions for each component will be discussed in April with the Working Group, Sub-Working Groups and the Project Steering Committee. The draft Final Report will then be prepared and submitted by the end of April 2008.
After the draft Final Report is submitted and before the Final Report is submitted, a Tripartite Meeting will be held to discuss the Final Report.

5 ACTION PLAN

The Action Plan for the PPTA presents a set of key deliverables by the Asian Development Bank, Ministry of Finance, Ministry of Agriculture, Water Resources and Processing Industry and Oblast Administrations during the PPTA Phase I and Phase II.

MAWRPI

The Ministry of Agriculture, Water Resources and Processing Industry is responsible for

- Allocating three sizable rooms with furniture and at least two telephone lines by no later than 20th November 2007
- Making available all necessary statistical and agricultural data for the PPTA team on pasture and agricultural land, rural infrastructure (including on-farm irrigation), agribusiness and marketing development, social and economic development of the country
- Nominating counterpart staff from the MAWRPI, Oblast and Raion administrations to work in working groups with the PPTA team on the design of ALIP by no later than 20th November 2007
- Appointing members of the Project Steering Committee and the Working Groups to guide the preparation and implementation of ALIP by 20 November 2007
- Reviewing PPTA reports and other documents and provide timely comments/feedback to the team of consultants

ADB

The Asian Development Bank is responsible for approving revised work plan, schedule of inputs, budget and changes in the consulting services

The Oblast administrations (Naryn, Issyk-Kul, Talas and Chui) is responsible for appointing counterpart staff to participate in the PSC and WG meetings by 20 November 2007

PPTA team

The PPTA team is responsible for

- Preparing/revising the PPTA work plan, schedule of inputs, budget and consulting services
- Preparing the Inception report and submit to the GoK by 1 November 2007
- Carrying out the situational analysis (Phase I) and preparing a report with recommendations on project components and geographical coverage. The report should be submitted to the GoK and ADB by no later than 20th December 2007
- Carrying out the design of ALIP (Phase II) and prepare a project proposal by 30 April 2008. The project proposal will be submitted to the GoK and ADB for consideration and approval
- Holding tripartite meetings at the end of the Inception, Phase I and Phase II periods.

ANNEXES

ANNEX 1. TERMS OF REFERENCE

A. Background

1. Despite continuing urbanization, the Kyrgyz Republic remains a predominantly rural society, with agriculture and animal husbandry providing most employment. What happens to these sectors will continue to determine the welfare of the rural population for many years to come, notwithstanding the importance of other attributes of welfare (access to education, health services, energy, etc) to the production dimension of rural livelihoods.

2. The agriculture sector is very important to the country's economy. It accounts for more than 33% (average for 2000–2004) of gross domestic product (GDP), 50% of employment (75% in rural areas), and 11% of exports. Of the total land area of 19.6 million hectares (ha), the largest amount, at 47%, is pasture land. Only about 7% of the country's land is arable, of which about 80% is irrigated. To date, the majority of land is used in an irrational manner, with a low return per hectare, and decreasing soil fertility.

3. Since 1996, agricultural growth has increasingly been driven by private small farm production. Average yields increased substantially between 1996 and 2004 (by 24% for grains, 61% for vegetables, 13% for cotton, and 8% for milk). During the same period, gross output increased by 8% for grains, 55% for vegetables, 95% for cotton, and 34% for milk. The share of production from state farms has declined from 22% in 1995 to 6% in 2004. With the emergence since 1999 of slightly more commercially oriented small private farms, the share of production from household plots has declined, from 65% in 1995 to 40% in 2004.

4. **Land Degradation.** Lying within the Tien Shan and Pamir Mountain ranges, the Kyrgyz Republic is largely defined by the mountain ecosystems that cover some 90% of the territory. Approximately 14% of the population lives in the high mountain regions of the country (above 1,500 meters in elevation), and mountains dominate all aspects of life: economic, social, environmental, and cultural. The country's mountain ecosystems are diverse and extremely fragile, and those who live in the high mountain regions are among the poorest and least well-served by public institutions. Approximately 90% of the country's agricultural lands can be defined as lands prone to desertification, and over 40% of farmlands are already considered degraded. Land degradation matters greatly in the Kyrgyz Republic, as agriculture is the main activity of the rural population (accounting for 75% of the poor and about 80% of the extremely poor). Land degradation has led to decreased fertility of arable and natural forage lands, and decreased animal breeding capacity, resulting in decreasing incomes, declining quality of life, and migration from villages to urban areas, both within the country and abroad.

5. The case for continued support of broad-based development of agriculture (including livestock) is based on the positive performance of the sector during the last 10 years and its impact on poverty reduction. Increased agricultural output has been the main driver of the significant poverty reduction that has taken place in recent years, and the increase has occurred in spite of the fragmentation and primitivization of the sector. Sustained (and preferably improving) agro-pastoral output makes rural communities viable, and justifies investments in other components of rural welfare (e.g. sanitation and health). A rural poverty reduction strategy must be based on improved land management, but cannot neglect the need for better transport infrastructure, more access to credit, better marketing, or creation of a dynamic agroprocessing subsector. Constraints in these areas exist in the country, but the basic constraint is poor on-farm and pasture land management. Improvements in land management require a combination of physical improvements and institutional and policy framework reforms.

6. **ADB Interventions.** To address land degradation and support sustainable land management, ADB is leading the Central Asian Countries Initiative for Land Management (CACILM), a 10-year program of country-driven action and resource mobilization (July 2006–June 2016). CACILM supports a sequenced set of high-priority activities to achieve (i) strengthened policy, legislative, and institutional frameworks, creating conditions conducive for sustainable land management; (ii) increased capacity of key institutions responsible for planning and implementing sustainable land management interventions; and (iii) improved sustainable land management and natural systems through the combined impact of appropriate enabling conditions and targeted project investments.

Under CACILM, the Kyrgyz Republic has prepared a National Programming Framework (NPF) for Sustainable Land Management. The proposed project fits well within the goals and objectives of the NPF.

7. To date, ADB has been working in Chui oblast with the Agriculture Area Development Project (AADP) and will be working in the Batken, Jalabad, and Osh oblasts through the Southern Agriculture Area Development Project (SAADP). The AADP approach addresses a range of issues (drainage and irrigation, access to credit, advisory services, marketing agribusiness development, and equitable access to land) simultaneously, focusing intensively on target *aiyl okmatu* (village government bodies representing one or more villages). AADP has had a substantial and visible impact on agriculture in target *aiyl okmatu* where drainage and irrigation rehabilitation has been completed and the combined impact of all project components is now visible. AADP has demonstrated the importance of a coordinated and integrated approach to addressing key constraints and opportunities and enhancing development effectiveness. Many aspects of AADP's design and implementation are replicated in SAADP, notably the farm development and drainage and irrigation components. Other aspects (e.g. credit, agribusiness development, and marketing components) have been adapted to achieve a greater impact more rapidly. SAADP has been proactive in including a land improvement component, which addresses pasture management and orchard management constraints in the south. The reorganization of water management has also been assisted by the World Bank On-Farm Irrigation Project, and further reform will be supported under the Water Management Improvement Project.

8. **Project Area**. The proposed project areas are Issyk Kul, Naryn, Talas, and Chui oblasts in the northern Kyrgyz Republic. These oblasts have a number of common issues and problems: (i) poor pastureland management practices and poor pasture infrastructure, with consequent overgrazing near local communities; (ii) poor animal husbandry practices including weak breeding and selection programs, and poor quality of veterinary care; (iii) declining productivity on rainfed lands in terms of yield and quality of crops, resulting from a variety of factors including lack of equipment and limited or no application of mineral fertilizers, herbicides, and pesticides; (iv) declining productivity (i.e., reduced yield and reduced areas under irrigation) and quality of the irrigated lands in many areas due to water-logging, erosion, and compaction and declining soil fertility; (v) low farm incomes due to high input costs (e.g., fuel, transport, agrichemicals) and decreases in commodity prices; (vi) absence of secure markets and processing facilities; (vii) relatively few farmers make use of available credit because of the high interest rates, relatively short repayment periods, and the need for collateral; and (viii) mixed success with new cooperatives created to take advantage of economies of scale with respect to larger land holdings and to allow for more sustainable land management practices.

9. **Project Scope.** The project concept is still under consideration, but the project may focus on improving the productivity of crop lands, pasture lands, and animal husbandry. Additional components may need to be considered to provide advisory services, access to credit, and assistance with marketing and agribusiness development. Potential interventions associated with sustainable land use and crop land improvement could include (i) introduction of progressive agricultural technologies, including crop rotation, which enrich soil fertility; (ii) scientifically-based application of mineral fertilizers; (iii) improvement of access to irrigation; and (iv) arrangements for a network of service centers in the rural areas (e.g., animal husbandry, agrochemical services, information and consulting services). With respect to pasture land improvements, the following may be considered: (i) capacity building at the local, raion, and oblast levels; (ii) rehabilitation of pasture land infrastructure (livestock droving routes, bridges, roads, sheds, and water structures); and (iii) specific capacity building of the Department of Pastures of the Ministry of Agriculture, Water Resources, and Processing Industry (MAWRPI), including creating and equipping a Pasture Inspectorate for monitoring and evaluation of the use of pastures and identification of degraded lands.

B. Objectives

10. The TA will help the Government design an investment project to address constraints to increasing agricultural productivity and profitability in the Issyk Kul, Naryn, Talas, and Chui oblasts in the northern part of the Kyrgyz Republic. The outcome of the TA will be the agreed design for the resulting project. The impact of the technical assistance is sustained improvement in the productivity of agriculture land.

C. Scope of Services

11. The TA will be implemented with a participatory approach from the national to the village level. It will involve the private sector (farmers, agribusiness enterprises, etc.), civil society, and aid-funded projects. The

participatory approach will be implemented through the TA steering committee, regional working groups, stakeholder workshops, focus group interviews, and the social survey and analysis in each region.

12. The TA will be divided into two phases. The key output in phase 1 will be a situational analysis of key aspects of agriculture sector and sustainable land management, which will lead to an initial assessment of alternative project designs. Phase 2 will produce a detailed feasibility study with supporting social, environmental, economic, financial, and procurement analyses.

13. The activities in phase 1 include (i) assessment of progress and lessons learned in previous ADB projects in the agriculture sector; (ii) assessment of the legal and institutional framework; (iii) update on the status of agricultural growth and development in each oblast; (iv) identification of the key issues, constraints, and opportunities with respect to developing the agriculture sector; (v) assessment of current land use and land productivity; (vi) an assessment of current land management practices; (vii) institutional and financial analyses of regional administration and other government levels and agencies, as necessary; (viii) stakeholder analysis; (ix) mapping of existing and planned development partner activities against constraints and opportunities; (x) initial assessment of alternative design approaches; and (xi) agreement with the Government on the geographical focus and scope of the proposed project. Phase 2 will prepare a detailed feasibility study that will include (i) key investment activities; (ii) institutional development activities; and (iii) clearly identified links to existing or planned investment activities of the Government, private sector, nongovernment organizations, and aid partners. Special efforts will be made to ensure that implementation capacity exists among the relevant agencies, and particularly local government agencies, for efficient and effective management.

14. Several participatory workshops will be held to increase participation. In each region, workshops will be held at the start of phase 1 to review the agriculture situation, assess alternative design approaches, and discuss the findings and recommendations of the consultants. The project working group at the national level will meet at the start of phase 1 to guide the consultants, and at the end to reach agreement on the findings and recommendations and proposed activities for phase 2. In phase 2, workshops at the regional level will continue while project design is ongoing. More intensive workshops and focus group meetings will be held with districts and villages in the selected focus areas and with farmers, associations, private sector, and aid-financed projects to ensure a sense of ownership of and agreement on the detailed design and implementation arrangements.

1. Phase 1: Situational Analysis

15. The situational analysis will be based largely on existing reports and project documents, supplemented by site visits. The Asian Development Bank (ADB) program performance evaluation report (2002) on the agriculture sector program will be reviewed. Other relevant ADB reports include documents relating to: (i) TA 4405-KGZ: Study on Pricing Systems and Cost Recovery Mechanisms for Irrigation - Kyrgyz Republic; (ii) TA 4408-KGZ: Study of the Impact of Land Reform on Agriculture, Poverty Reduction, and Environment-Kyrgyz Republic; (iii) TA 4409-KGZ: Agricultural Strategy Formulation; (iv) the Central Asian Countries Initiative for Land Management; (v) the Agriculture Area Development Project; and (vi) the Southern Agriculture Area Development Project (SAADP). In addition, relevant World Bank projects include the (i) On-Farm Irrigation Project, (ii) Water Management Improvement Project, and (iii) a new project expected to focus on agriculture and livestock issues at the national level.

16 **Participatory Approach.** The consultant will ensure stakeholder participation from national to community levels in project identification, design, and implementation. The degree of participation should be appropriate to ensure (i) that beneficiaries and national and local agencies reach consensus; (ii) commitment to the design and implementation arrangements; and (iii) responsibility is taken for operation and maintenance and cost recovery activities, where necessary. Participatory rural appraisal techniques will be utilized for assessment of agriculture (e.g., farmer's access to services), assessment of current land and water management practices, institutional analysis, stakeholder analysis, and identification of alternatives.

a. Agriculture Sector Growth and Development

17. The analysis of the overall growth and development of Issyk Kul, Naryn, and Talas oblasts and the northern part of Chui oblast will cover the following:

(i) oblast growth and development trends based on national- and oblast-level statistics;
(ii) progress of agricultural reforms in the oblast, identification of major constraints to effective implementation, and needed reforms to facilitate the transition to a market-based agriculture sector;
(iii) achievements of oblast development efforts undertaken by the local government, private sector, and funding agencies;
(iv) a survey of the socioeconomic and poverty situation and identification of major economic and social issues affecting the rural population, with particular attention to women and vulnerable groups, and the effects of farm restructuring, reduction of social services, and access to resources (including land) and infrastructure; and
(v) the role of agriculture and natural resources in the oblast economy, including identification of dependency by the poor on natural resources.

b. Assessment of Agriculture

18. The assessment of agriculture will address the following aspects:
(i) Ownership and structure of farms in the oblast and factors influencing the success of private farming. Constraints that inhibit the improvement of farm productivity and profitability will be identified using rapid rural appraisals to identify farm types, farm size, ownership, land, labor and capital availability, output, productivity, and net income disaggregated by farm enterprise, and where applicable, by gender.
(ii) The market potential for the oblast, the competitiveness of the current products, the potential for increased competitiveness, and constraints to achieving this competitiveness. A comparative advantage analysis of the selected project areas will be included.
(iii) Availability of and farmers' access to input supplies, technology, finance, markets and marketing facilities and channels, extension and research, veterinary services, and transport and distribution networks. Major constraints and opportunities will be identified.

c. Sustainable Land Management Assessment

19. Assessment of land and water resources will include

(i) collection of baseline information on the type of soils, land forms, topography, agro-ecological zones (specifying particularly significant or susceptible vegetation cover), land use patterns (e.g., cultivation, permanent and/or seasonal livestock grazing);
(ii) analysis of water use patterns (e.g., rain-fed crops, irrigated crops, drainage, surface and groundwater extraction);
(iii) review of existing information management and monitoring systems, including project-specific databases and information systems; and
(iv) spatial analysis and production of maps of land use patterns, (e.g., the areal extent and distribution of land degradation, and areas vulnerable to land degradation).

20. Assessment of current land and water management practices will address current practices for (i) agricultural cropland management, (ii) pasture land management, (iii) forest management, (iv) protected area management and biological diversity conservation, and (v) water resource management. The assessment will also examine animal husbandry practices, including animal health and veterinary services.

d. Physical Infrastructure

21. The assessment of infrastructure will focus on
(i) the condition of off-farm and on-farm drainage and irrigation infrastructure, and responsibilities for and financing of operation and maintenance; and
(ii) the condition of rural roads and the constraints to effective repair and maintenance.

e. Institutional Analysis

22. The institutional aspects to be addressed include

(i) overview of the current national policy, legal, and institutional environment for management of agricultural and pasture lands;
(ii) assessment of major policy, legal, and institutional barriers and constraints to sustainable land management;
(iii) description of roles, responsibilities, and capacity of relevant oblast-level institutions (i.e., capacity of agriculture administration and agencies for delivering irrigation services, including their strengths, weaknesses, and needs, and identifying strengthening opportunities;
(iv) number, strength, and effectiveness of cooperatives and other agriculture-based organizations, and arrangements for supporting their development;
(v) involvement, and constraints to involvement, by the private sector, particularly in rural finance, input supply, machine leasing, output storage, agroprocessing, and marketing, including the role of cooperatives and farmers associations;
(vi) the role, approach, and activities of nongovernment organizations in the area; and
(vii) formal and informal training of farmers, including an assessment of current support by the Government and aid-funded institutions and identification of opportunities for expanding formal and informal training in a cost-effective and sustainable manner.

f. Stakeholder Analysis

23. The stakeholder analysis will include

(i) identification of key stakeholders, including the private sector, nongovernment organizations, local communities, government agencies, and vulnerable groups;
(ii) description of direct and indirect stakeholder interests;
(iii) description of participation by stakeholders in decision making; and
(iv) preparation of a consultation and participation plan for project preparatory technical assistance phase 2, to ensure stakeholder participation from national to community levels in the finalization of the project design, and a project participation plan that determines the level and types of roles played by stakeholders during project implementation and monitoring and evaluation, including operation and maintenance and cost recovery.

g. Development Partner Agencies

24. An assessment of development partners will involve:

(i) analyzing ongoing and proposed projects, including sustainable land and water management, land distribution, farm restructuring, seed industry, livestock industry development, contract farming services, farmer advisory services, marketing, off-farm and on-farm drainage and irrigation, rural finance, and forestry;
(ii) preparing a database of relevant programs to highlight the objectives, scope, area focus, financing, special features, and possible links to the proposed project;
(iii) developing a set of lessons learned based on previous ADB and relevant funding agency projects, which can be used as a guide in the development of the proposed project. Lessons should be specifically distinguished as to those that have been applied (and therefore learned), and those that have been identified but not applied; and
(iv) analyzing current initiatives for funding agency coordination; and exploring opportunities for funding agency coordination with respect to the project.

h. Alternatives Analysis and Preliminary Design

25. On the basis of the preceding analysis, the consultant will undertake these activities:

(i) Conduct a problem analysis based on participatory approach using a proven methodology. This could use an approach with problem and objectives trees that will lead to a project design and monitoring framework (see 2.b below).
(ii) Prepare a detailed assessment of the alternative approaches to the project design.
(iii) Agree with the Government on the geographical coverage of the proposed project.

2. Phase 2: Feasibility Level Project Design

26. **Participatory Approach.** The consultant will ensure broad (national to community) stakeholder participation in project identification, design, and implementation. The degree of participation should be appropriate to ensure (i) that beneficiaries, and national and local agencies reach consensus; (ii) a commitment to the design and implementation arrangements; and (iii) responsibility for operation and maintenance and cost recovery activities, where necessary.

a. Detailed Specification of Project Components

27. Subject to confirmation in phase 1, the components to be prepared for feasibility level design in phase 2 could include: (i) pasture land improvements; (ii) crop land improvements; (iii) sustainable land management interventions, including policy, planning, budgeting, and investment activities; (iv) agribusiness services including market surveys, marketing, farm technology, input supply, machinery services and repair, and private agribusiness advisory services; (v) infrastructure, such as market infrastructure, on-farm irrigation and drainage, and farm-to-market roads; and (vi) institutional development (e.g. oblast and district administrations and departments of agriculture, oblast and district irrigation departments, villages, water users organizations, farmers associations, human resource and training needs, and related development of agricultural training institutions, such as technical and vocational schools).

b. Preparation of the Design and Monitoring Framework

28. Using the problem tree developed in phase 1 and after assessing project design alternatives, the consultant will prepare an initial design and monitoring framework (impact, outcome, outputs, activities, and inputs), including realistic performance indicators and targets, appropriate monitoring mechanisms, and key risks and assumptions. The framework will follow ADB format, and will be progressively modified through phase 2. The project framework will be used as a participatory design tool for the project.

c. Social Assessment

29. The consultant will identify the beneficiaries and groups to be affected by the project and make a social assessment. The analysis will be carried out in accordance with ADB's *Poverty Handbook* (2006) and *Social Analysis Handbook* (2007) and ADB's *Gender Checklist: Agriculture*. The consultant will prepare necessary plans/strategies (e.g., gender, participation) for implementation during the project. The consultant will conduct a socioeconomic survey to profile the beneficiaries, utilizing gender disaggregated demographic, economic, and social data, where possible, and including poverty incidence, vulnerable groups, ability and willingness to pay for cost recovery, and any adverse impacts anticipated from the project. Socioeconomic surveys will be used to identify key underlying problems relating to access to services, resources and/or assets, and participation in decision-making, and may address ways to improve the situation.

30. The consultant will include a reassessment of ADB's social safeguards with respect to indigenous peoples and resettlement. The reassessment of involuntary resettlement (IR) safeguard issues will include screening all proposed components for any IR impacts resulting from land acquisition, changes in land use, and restricted access to land, and preparation of a resettlement plan in accordance with ADB's IR policy, if required. Similarly, the reassessment will validate the Indigenous Peoples impact status of the project; any necessary documentation will be prepared in accordance with the Indigenous Peoples policy.

31. The consultant will review relevant ADB reports including: RETA 6176 Participatory Workshop Report on the SAADP (2006); Gender Evaluation of the Agriculture Area Development Project (2005); and reports of the Rural Sociologist for the Agriculture Area Development Project and the SAADP, prepared during the project preparatory assistance studies.

d. Environmental Assessment

32. The consultant will prepare an initial environmental examination (IEE) and summary IEE in accordance with ADB's *Environment Policy* (2002) and *Environmental Assessment Guidelines* (2003), and Government environment requirements. The IEE and summary IEE will identify all potential environmental impacts and describe mitigating measures, monitoring requirements, budgetary requirements, and institutional arrangements. If an environmental impact assessment (EIA) is required, the consultant will prepare necessary terms of reference, and the EIA and summary EIA in accordance with ADB and Government requirements. The consultant will pay particular attention to sustainable land management activities under the project.

e. Cost Estimate and Financing

33. The consultant will prepare detailed cost estimates using the COSTAB software, including appropriate categories of investment, operational costs, and interest during construction. Costs will be separated into foreign exchange (including direct and indirect costs) and local cost components, and physical and price contingencies. The local cost will include duties and taxes, which will be identified separately. A financing plan will be prepared with contributions from the Government, ADB, private sector, beneficiaries, and any cofinanciers.

f. Financial and Economic Analyses

34. The consultant will assess the financial accounting and management systems of the implementing agencies, and make recommendations regarding accounting and management of project expenditures, contract management, and flow of funds from the Government and ADB. They will undertake financial and economic analyses; assess the relevance and usefulness of estimating rates of return at the activity or agency, component, and project levels; calculate rates of return at those levels where the estimates are most useful for making investment decisions; and assess recurrent costs and implications for participating entities in accordance with ADB's *Guidelines for the Economic Analysis of Projects*. The consultant will include sensitivity analysis, distribution of benefits, and a poverty impact assessment. The document *Key Areas of Economic Analysis of Projects (June 2004)*[1] of EREA, ERD should be consulted with respect to the scope of the project economic analysis and the areas of analysis relevant to project economics.

g. Procurement Analysis and Plan

35. The consultant will conduct a procurement analysis and prepare a procurement plan.

h. Project Management and Implementation Arrangements

36. The consultant, in consultation with ADB, will develop a framework or criteria to examine the executing and/or implementing agency's implementation capacity. The consultant will examine their implementation capacity and describe the organizational arrangements for project management and implementation, and prepare project implementation schedules and procurement packages for civil works, equipment, and services in accordance with ADB guidelines. They will also prepare terms of reference for international and national consultants to support implementation.

i. Project Performance Monitoring System

37. The consultant will design a project performance monitoring system that facilitates monitoring and evaluation, and which can be implemented by relevant agencies.

E. Schedule and Reporting

38. It is proposed that the TA be undertaken over 9 months; it is expected to begin in September 2007 and be completed in June 2008. The consultants will produce the following reports:

(i) The inception report, due at the end of 4 weeks, which will present a work plan for the TA period. A tripartite review meeting will be held in week 5;

[1] ADB. 2004. *Key Areas of Economic Analysis of Projects.* Manila.

(ii) The phase 1 report, due at the end of week 11, which will present the findings of phase 1 and the recommended outline of the geographical focus, scope, and linkages with existing institutions, private sector, and aid-financed activities. It will analyze a detailed problem tree and alternative project designs. A tripartite review meeting will be held in week 13;

(iii) The interim report, due at the end of week 20, which will show progress in preparing the project design. The report will outline the project design, including a detailed project framework, component descriptions, and preliminary implementation arrangements, as well as identifying key issues requiring resolution. A tripartite review meeting will be held in week 22;

(iv) The draft final report, due at the end of week 30, which will present the complete design features of the project covering all aspects. A tripartite review meeting will be held in week 32; and

(v) The final report will be due by week 36, after the tripartite review and receipt of comments from stakeholders.

39. All reports are to be produced in English and Russian. Five copies (in English) of each report will be submitted to ADB, and two English and five Russian copies to the Government.

F. Consultant Requirements

40. These tasks will require consultants with substantial experience relevant to the Kyrgyz Republic or similar economies or institutional environments. The consultants will coordinate with other funding agencies and interact closely with Government officials and the private sector.

International Consultants

1. Team Leader - Economist – Institutional Specialist (6 person months)

41. Team leadership tasks will include:

(i) coordination with the Ministry of Agriculture, Water Resources, and Processing Industry (MAWRPI) and the Project Management Unit (PMU) in relation to project preparation and development to ensure that it achieves the intended outcome and outputs;
(ii) establishment of all project management systems;
(iii) management of the consulting team and support staff;
(iv) coordination and integration of all elements of design and preparation of the proposed project;
(v) preparation and editing of all reports; and
(vi) preparation of monthly progress reports.

42. The institutional tasks will include:

(i) an overview of the current national policy, legal, and institutional environment for management of agricultural and pasture lands;
(ii) an assessment of major policy, legal, and institutional barriers and constraints to sustainable land management;
(iii) a review of financial and institutional arrangements for leasing pastures in project areas;
(iv) an assessment of the potential contribution of pastures to agricultural output in the project area;
(v) a description of roles, responsibilities, and capacity of relevant oblast-level institutions (i.e., capacity of agriculture administration and agencies for delivering irrigation services, including their strengths, weaknesses, and needs, and identifying strengthening opportunities;
(vi) an analysis of number, strength, and effectiveness of cooperatives and other agriculture-based organizations, and arrangements for supporting their development;
(vii) an analysis of the involvement, and constraints to involvement, by the private sector, particularly in rural finance, input supply, machine leasing, output storage, agroprocessing, and marketing, including the role of cooperatives and farmers associations;
(viii) an analysis of the role, approach, and activities of nongovernment organizations in the area; and

(ix) an analysis formal and informal training of farmers, including an assessment of current support by the Government and aid-funded institutions and identification of opportunities for expanding formal and informal training in a cost-effective and sustainable manner.

2. Agriculture Economist (2.5 person months)

43. The Agriculture Economist tasks will include the analysis of the overall growth and development of agriculture in Issyk Kul, Naryn, and Talas oblasts and the northern part of Chui oblast will cover the following:

(i) oblast growth and development trends based on national- and oblast-level statistics;
(ii) progress of agricultural reforms in the oblast, identification of major constraints to effective implementation, and needed reforms to facilitate the transition to a market-based agriculture sector;
(iii) achievements of oblast development efforts undertaken by the local government, private sector, and funding agencies; and
(iv) the role of agriculture and natural resources in the oblast economy, including identification of dependency by the poor on natural resources.

44. The Agriculture Economist will also:

(i) analyze ownership and structure of farms in the oblast and factors influencing the success of private farming. Constraints that inhibit the improvement of farm productivity and profitability will be identified using rapid rural appraisals to identify farm types, farm size, ownership, land, labor and capital availability, output, productivity, and net income disaggregated by farm enterprise, and where applicable, by gender.
(ii) analyze the market potential for the oblast, the competitiveness of the current products, the potential for increased competitiveness, and constraints to achieving this competitiveness. A comparative advantage analysis of the selected project areas will be included;
(iii) analyze availability of and farmers' access to input supplies, technology, finance, markets and marketing facilities and channels, extension and research, veterinary services, and transport and distribution networks. Major constraints and opportunities will be identified; and
(iv) propose activities for the marketing support to farmers, and agribusiness advisory services.

3. Pasture Lands Ecologist (2 person months)

45. The pasture land ecologist will:

(i) identify and map pastures in project area;
(ii) supervise socio-economic surveys, surveys of pasture land forage condition, and the preparation of pasture maps;
(iii) evaluate the effectiveness of current pasture land management and planning activities, including financial and institutional arrangements for leasing pastures:
(iv) describe current arrangements for monitoring the condition of pastures in project area;
(v) assess condition of infrastructure (e.g. water points, access roads) in pastures.
(vi) describe any ongoing research on pasture improvement by Kyrgyz research institutes or donor funded projects;
(vii) work with relevant government agencies to formalize the institutional framework for pasture land management planning;
(viii) recommend a methodology and approach for community based pasture land management planning and monitoring;
(ix) propose pasture, livestock and land management activities and prepare the technical, ecological, policy and institutional feasibility of the design and implementation arrangements; and
(x) assist with the preparation of cost estimates of pasture land improvements.

4. Agronomist – Land Improvement Specialist (2 person months)

46. The agronomist/ land improvement specialist will:

(i) collect baseline information on the type of soils, land forms, topography, agro-ecological zones (specifying particularly significant or susceptible vegetation cover), land use patterns (e.g., cultivation, permanent and/or seasonal livestock grazing);
(ii) analyze water use patterns (e.g., rain-fed crops, irrigated crops, drainage, surface and groundwater extraction);
(iii) examine existing field-crop production and soil management practices, and recommend changes in crop production techniques;
(iv) review existing information management and monitoring systems, including project-specific databases and information systems;
(v) conduct spatial analysis and production of maps of land use patterns, (e.g., the areal extent and distribution of land degradation, and areas vulnerable to land degradation);
(vi) conduct an assessment of current land and water management practices for (i) agricultural cropland management, (ii) pasture land management, (iii) forest management, (iv) protected area management and biological diversity conservation, and (v) water resource management;
(vii) propose crop land improvements and prepare the technical, ecological, policy and institutional feasibility of the design and implementation arrangements; and
(viii) assist with the preparation of cost estimates of land improvements.

5. Animal Health and Livestock Specialist (1.5 person months)

47. Animal Health and Livestock Specialist will
(i) assess current condition of livestock;
(ii) review current livestock husbandry practices;
(iii) in conjunction with the pasture land ecologist determine the adequacy of current pasture land forage and pasture land infrastructure;
(iv) assess current training and advice on livestock husbandry provided by advisory services;
(v) assess current state of veterinary services;
(vi) propose options and activities to improve animal health and livestock husbandry practices;
(vii) propose activities to improve veterinary services and advisory services; and
(viii) prepare cost estimates for animal health and livestock husbandry improvements.

6. Rural Engineer (2 person months)

48. The Rural Engineer will:
(i) conduct an assessment of infrastructure, which will focus on the condition of off-farm and on-farm drainage and irrigation infrastructure, and responsibilities for and financing of operation and maintenance; the condition of rural roads and the constraints to effective repair and maintenance; and access roads and bridges to pasture lands;
(ii) propose candidate infrastructure improvements and wasys in which WUAs can be supported by the project;
(iii) assist in the development of criteria for selection of subprojects; and
(iv) assist with the preparation of cost estimate for infrastructure improvements.

7. Environment Specialist (2 person months)

49. The environment specialist will:
(i) prepare an initial environmental examination (IEE) and summary IEE in accordance with ADB's *Environment Policy* (2002) and *Environmental Assessment Guidelines* (2003), and Government environment requirements. The IEE and summary IEE will identify all potential environmental impacts and describe mitigating measures, monitoring requirements, budgetary requirements, and institutional arrangements. If an environmental impact assessment (EIA) is required, the consultant will prepare necessary terms of reference, and the EIA and summary EIA in accordance with ADB and Government requirements, and
(ii) propose environmentally sustainable land management activities for the project .

8. Social Development Specialist (2 person months)

50. The social development specialist will:

(i) identify the beneficiaries and groups to be affected by the project;
(ii) conduct a social assessment in accordance with ADB's *Poverty Handbook* (2006) and *Social Analysis Handbook* (2007) and ADB's *Gender Checklist: Agriculture*;
(iii) prepare necessary plans/strategies (e.g., gender, participation) for implementation during the project;
(iv) conduct a socioeconomic survey to profile the beneficiaries, utilizing gender disaggregated demographic, economic, and social data, where possible, and including poverty incidence, vulnerable groups, ability and willingness to pay for cost recovery, and any adverse impacts anticipated from the project;
(v) use the survey of the socioeconomic and poverty situation and identification of major economic and social issues affecting the rural population, with particular attention to women and vulnerable groups, and the effects of farm restructuring, reduction of social services, and access to resources (including land) and infrastructure;
(vi) use socioeconomic surveys to identify key underlying problems relating to access to services, resources and/or assets, and participation in decision-making, and may address ways to improve the situation;
(vii) conduct reassessment of ADB's social safeguards with respect to indigenous peoples and resettlement. The reassessment of involuntary resettlement (IR) safeguard issues will include screening all proposed components for any IR impacts resulting from land acquisition, changes in land use, and restricted access to land, and preparation of a resettlement plan in accordance with ADB's IR policy, if required. Similarly, the reassessment will validate the Indigenous Peoples impact status of the project; any necessary documentation will be prepared in accordance with the Indigenous Peoples policy; and
(viii) review relevant ADB reports including: RETA 6176 Participatory Workshop Report on the SAADP (2006); Gender Evaluation of the Agriculture Area Development Project (2005); and reports of the Rural Sociologist for the Agriculture Area Development Project and the SAADP, prepared during the project preparatory assistance studies.

9. Financial and Economic Analysis Specialist (2 person months)

51. The financial and economic analysis consultant will:

(i) assess the financial accounting and management systems of the implementing agencies, and make recommendations regarding accounting and management of project expenditures, contract management, and flow of funds from the Government and ADB;
(ii) financial and economic analyses; assess the relevance and usefulness of estimating rates of return at the activity or agency, component, and project levels; calculate rates of return at those levels where the estimates are most useful for making investment decisions; and assess recurrent costs and implications for participating entities in accordance with ADB's *Guidelines for the Economic Analysis of Projects; and*
(iii) conduct sensitivity analysis, distribution of benefits, and a poverty impact assessment. The document *Key Areas of Economic Analysis of Projects (June 2004)*[2] of EREA, ERD should be consulted with respect to the scope of the project economic analysis and the areas of analysis relevant to project economics.

Domestic Consultants

10. Deputy team leader – Economist – Institutional Specialist (8 person months)

52. Deputy team leadership tasks will include:

(i) assist with relations with all Kyrgyz Republic government agencies and other stakeholders to facilitate project implementation and development to ensure that it achieves the intended outcome and outputs;

[2] ADB. 2004. *Key Areas of Economic Analysis of Projects.* Manila.

(ii) assist with operation of project management systems;
(iii) coordination of all domestic consulting inputs; and
(iv) preparation and editing the Russian version of all reports

53. The institutional tasks will include:
(i) assist with preparation of overview of the current national policy, legal, and institutional environment for management of agricultural and pasture lands;
(ii) assist with the assessment of major policy, legal, and institutional barriers and constraints to sustainable land management;
(iii) assist with the review of financial and institutional arrangements for leasing pastures in project areas;
(iv) assist with the assessment of the potential contribution of pastures to agricultural output in the project area;
(v) assist with the description of roles, responsibilities, and capacity of relevant oblast-level institutions (i.e., capacity of agriculture administration and agencies for delivering irrigation services, including their strengths, weaknesses, and needs, and identifying strengthening opportunities;
(vi) assist with the identification of the number, strength, and effectiveness of cooperatives and other agriculture-based organizations, and arrangements for supporting their development;
(vii) assist with the analysis of the involvement, and constraints to involvement, by the private sector, particularly in rural finance, input supply, machine leasing, output storage, agroprocessing, and marketing, including the role of cooperatives and farmers associations;
(viii) assist with the analysis of the role, approach, and activities of nongovernment organizations in the area; and
(ix) formal and informal training of farmers, including an assessment of current support by the Government and aid-funded institutions and identification of opportunities for expanding formal and informal training in a cost-effective and sustainable manner.

54. Agriculture economics tasks with include:
(i) assisting with the analysis of the overall growth and development of agriculture in Issyk Kul, Naryn, and Talas oblasts and the northern part of Chui oblast;
(ii) assisting with the farm level analysis (ownership, productivity improvement);
(iii) assisting with the assessment of market potential and competiveness; and
(iv) assisting with the assessment availability of and farmers' access to input supplies, technology, finance, markets and marketing facilities and channels, extension and research, veterinary services, and transport and distribution networks.

11. Agribusiness Development Specialist (4 person months)

55. The agribusiness development specialist will:
(i) collect information investments by development partners and the private sector, and current status of and opportunities for farms and agribusinesses in the project area;
(ii) identify priority products and their value chains for support under the Project;
(iii) 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; and
(iv) propose activities for the marketing support to farmers, and agribusiness advisory services.

12. Pasture Lands Specialist (4 person months)

56. The pasture lands specialist ecologist will:
(i) assist with the identification and mapping of pastures in project area;
(ii) conduct surveys of pasture land forage condition and the preparation of pasture maps;
(iii) assist with the evaluation of the effectiveness of current pasture land management and planning activities, including financial and institutional arrangements for leasing pastures;

(iv) assist with the describe current arrangements for monitoring the condition of pastures in project area;
(v) assist with the assessment of condition of infrastructure (e.g. water points, access roads) in pastures;
(vi) assist with the description of any ongoing research on pasture improvement by Kyrgyz research institutes or donor funded projects;
(vii) assist with the work with relevant government agencies to formalize the institutional framework for pasture land management planning;
(viii) assist with the development of a methodology and approach for community based pasture land management planning and monitoring; and
(ix) propose pasture, livestock and land management activities and assist with the preparation the technical and ecological feasibility of the design and implementation arrangements.

13. Agronomist - Land Improvement Specialist (4 person months)

57. The agronomist/ land improvement specialist will:
(i) collect of baseline information on the type of soils, land forms, topography, agro-ecological zones (specifying particularly significant or susceptible vegetation cover), land use patterns (e.g., cultivation, permanent and/or seasonal livestock grazing);
(ii) assist with the analysis of water use patterns (e.g., rain-fed crops, irrigated crops, drainage, surface and groundwater extraction);
(iii) assist with the examination of existing field-crop production and soil management practices, and recommend changes in crop production techniques;
(iv) assist with the review of existing information management and monitoring systems, including project-specific databases and information systems;
(v) assist with the spatial analysis and production of maps of land use patterns, (e.g., the areal extent and distribution of land degradation, and areas vulnerable to land degradation);
(vi) assist with the analysis the assessment of current land and water management practices; and
(vii) propose crop land improvements and assist with the preparation the technical, ecological, policy and institutional feasibility of the design and implementation arrangements; and
(viii) assist with the preparation of cost estimates of land improvements.

14. Animal Health – Livestock Specialist (4 person months)

58. Animal Health and Livestock Specialist will
(i) assist with the assessment of current condition of livestock;
(ii) assist with the review of current livestock husbandry practices;
(iii) in conjunction with the pasture land ecologist, assist with the determination of the adequacy of current pasture land forage and pasture land infrastructure;
(iv) assist with the assessment of current training and advice on livestock husbandry provided by advisory services;
(v) assist with the assessment of current state of veterinary services;
(vi) propose options and activities to improve animal health and livestock husbandry practices;
(vii) propose activities to improve veterinary services and advisory services; and
(viii) assist with the preparation of cost estimates for animal health and livestock husbandry improvements.

15. Rural Engineer (4 person months)

59. The Rural Engineer will
(i) assist with the assessment of infrastructure, which will focus on the condition of off-farm and on-farm drainage and irrigation infrastructure, and responsibilities for and financing of operation and maintenance; the condition of rural roads and the constraints to effective repair and maintenance; and access roads and bridges to pasture lands;
(ii) propose candidate infrastructure improvements;
(iii) assist in the development of criteria for selection of subprojects; and
(iv) assist with the preparation of cost estimate for infrastructure improvements.

16. Environmental Specialist (4 person months)

60. The environment specialist will:

(i) gather all relevant environmental baseline information is a format suitable for environmental assessment;
(ii) assist with prepare an initial environmental examination (IEE) and summary IEE; and
(iii) propose environmentally sustainable land management activities for the project .

17. Rural Sociologist (4 person months)

61. The rural sociologist will:

(i) assist with the identification of beneficiaries and groups to be affected by the project;
(ii) assist with the social assessment and prepare necessary plans/strategies (e.g., gender, participation) for implementation during the project;
(iii) assist with the socioeconomic survey and application of survey results to identify key underlying problems relating to access to services, resources and/or assets, and participation in decision-making, and may address ways to improve the situation; and
(iv) assist with the reassessment of ADB's social safeguards with respect to indigenous peoples and resettlement.

18. Financial and Economic Analysis Specialist (4 person months)

62. The financial and economic analysis consultant will:

(i) compile all relevant economic statistics (in both English and Russian);
(ii) assist with the assessment the financial accounting and management systems of the implementing agencies;
(iii) assist with the financial and economic analyses; and

assist with sensitivity analysis, distribution of benefits analysis, and a poverty impact assessment.

ANNEX 2. TERMS OF REFERENCE FOR MEMBERS OF PSC

The Project Steering Committee (PSC) will be set up to guide the preparation and implementation of Agricultural Land Improvement Project. The PSC will be comprised of representatives of:

1. Ministry of Agriculture, Water Resources and Processing Industry
2. Ministry of Finance
3. Asian Development Bank
4. Oblast Administrations
5. State Environment Agency
6. CACILM
7. Department of Water Resources
8. Department of Pastures

The PSC will hold meetings at the end of Phase I and II and will be chaired by the Minister (Deputy Minister) of Agriculture, Water Resources and Processing Industry. Travel funds for the administrators from the oblasts will be provided by the Project's "Seminars, Workshops, Training" line item.

During the design stage the PSC will be responsible for the following tasks:

1. Provide overall guidance to the team of consultants on issues concerning the design of ALIP
2. Review project reports and other documentation and provide comments on strategic directions of ALIP
3. Nominate counterpart staff to participate in the working groups which will be set up at central and oblast level to facilitate the preparation process
4. Facilitate the coordination of activities between the ALIP, government agencies and other donor projects

ANNEX 3. TERMS OF REFERENCE FOR MEMBERS OF WORKING GROUPS

The main objective of the ALIP is to increase farm productivity and ensure agriculture growth in four oblasts: Naryn, Talas, Issyk-Kul and parts of Chui. In order to achieve the objective, one working group will be set up in Bishkek and one working group will be set up at each of the oblasts to facilitate the preparation of ALIP.

Central Working Group

The central working group will be established in the MAWRPI in Bishkek and will include representatives of:

1. Republican Department of Water Resources
2. Republican Department of Pastures
3. Department of Livestock
4. Department of Agro-processing
5. Department of Crop Production
6. Department of Agricultural Policy and Investments
7. Asian Development Bank

The central working group will be chaired by the Deputy Minister/Head of Department of Agricultural Policy and Investments. Travel funds for the members from outlying areas will be provided by the Project's "Seminars, Workshops, Training" line item The group will meet at least four times during the PPTA and members will be responsible for the following:

1. Attend meetings of the central working group on a regular basis
2. Provide all necessary statistical and agricultural data if required
3. Review PPTA reports and other project related documentation and provide written comments

Oblast Working Groups

At the oblast level, one working group will be set up in each oblast. The working group will be comprised of oblast administrators and stakeholders involved in each of the project's components, that is,

- Pasture land improvement/livestock development
- Crop land improvement
- Infrastructure development
- Agribusiness and marketing.

The working group in each oblast will be chaired by the head of oblast department of agriculture and will include representatives of:

1. Oblast inspector on pastures
2. Oblast department of agriculture
3. Oblast administration
4. Raion administrations
5. Ayil Okmotus
6. Oblast WUA support unit
7. WUAs
8. Pasture farmers/leaders/farmers associations
9. Crop farmers/leaders/farmers association
10. Private agricultural input suppliers
11. Private agro-processing companies
12. Rural advisory services (RAS) and NGOs

13. PPTA international and local consultants

Each working group in the oblasts will closely work with the PPTA consultants who will be coming on missions to each oblast. It is expected that the oblast working groups will meet at least four times during the course of the PPTA, Results of the working group meetings will be reported to the central working group in the MAWRPI which in turn will report to the PSC at the end of Phase I and II. Members of working groups will:

1. Attend meetings of subgroups on a regular basis
2. Provide all necessary statistical and agricultural data if required
3. Assist ALIP consultants with arranging field visits to enterprises, pastures, crop fields and meetings with farmers, NGOs, donor projects etc
4. Review PPTA reports and other project related documentation and provide written comments

ANNEX 4. LIST OF PERSONS MET

No	Name	Position
Ministry of Agriculture, Water Resources and Processing Industry		
1	S. S. Jeenbekov	Minister
2	N.A. Duisheev	Deputy Minister
3	S.M. Tynaev	Head of Directorate for Agricultural Policy and Investments
4	A. Egemberdiev	Head of Department on Pastures
5	K. Kulov	Director, Kyrgyz Research Irrigation Institute
Asian Development Bank		
6	R. Everitt	Task Manager, Manila, Philippines
7	C. Mambetova	Project Implementation Officer, KYRM
8	R. Patterson	Head, Central Asian Countries Initiative for Land Management Project (CACILM)
9	K. Nurymgereyev	Deputy Head, CACILM
10	J. Annaklycheva	Project Implementation Specialist, CACILM
11	A. Matisakov	Manager, Southern Agriculture Area Development Project
World Bank		
12	T. Koshmatov	Operations Officer, Resident Mission
13	A. Kupueva	Operations Officer, Resident Mission
14	N. Djailobayev	Manager, On-Farm Irrigation Project
15	K. Beishekeev	Coordinator, Water Management Improvement Project
16	D. Alibaev	Manager, Water Management Improvement Project
17	T. Bekov	Director, Agribusiness and Marketing Center
Ministry of Finance		
18	M. Baigonchokov	Head, Department of Public Investment Program
19	N. Asanalieva	Head, Investment Monitoring Unit
20	J. Estebesova	Supervisor, Investment Monitoring Unit
European Commission		
21	H. Coulter	Technical Assistant, Food Security Program
International Trade Center		
22	I. Kadyrkanova	National Manager
United States Agency for International Development (USAID)		
23	I. Krapivina	Project Officer, USAID Office in Kyrgyzstan
24	C. Arapova	Country Manager, Land Reform & Market Development Project (Chemonics)
Kyrgyz Swiss Agricultural Program (KSAP)		
25	P. Suter	Manager
26	S. Messerli	Advisor, Advisory Training Center and Agricultural Vocational Education Project
27	T. Osmonov	Director, Agricultural Policy Support Unit, MAWRPI
Swedish International Development Cooperation Agency (SIDA)		
28	A. Islamov	Senior Coordinator, Support to Seed Sector Development in the Kyrgyz Republic
Department for International Development (DFID)		
29	E. Turusbekov	Program Officer
Japan International Cooperation Agency (JICA)		
30	T. Ito	Project Formulation Advisor
Community Development and Investment Agency (ARIS)		
31	E. Ibraimova	Executive Director
Agricultural Land Improvement Project (ALIP)		
32	ALIP local consultants	K. Bapaev (Deputy Team Leader), A. Jumaliev (Livestock Specialist), L.

		Penkina (Pasture Land Specialist), D. Aitmatova (Environmental Specialist), C. Mamatova (Economist), O. Sheraliev (Agribusiness Specialist), T. Sharshembieva (Rural Sociologist), E. Subanaliev (Rural Engineer), T. Sydykbaev (Agronomist)
33	ALIP international consultants	S. Robinson (Pasture Land Specialist), E. Thompson (Livestock Specialist), I. Hancock (Agronomist), K. Neils (Team Leader)
State Environment Agency		
34	J. Bekulova	Head of Ecological and Environmental Policy Department
Agriculture Area Development Project		
35	K. Kyshtobaev	Manager
36	R. Sidorenko	Deputy Manager
37	Z. Kasymova	Agro-Processing Specialist
38	Tologonov	Machinery Services Specialist
39	Nurbek	Marketing Specialist
40	M. Orel	Head, Agribusiness and Marketing Component
Visits to Oblasts		
Talas		
41	B. Murataliev	Governor of Talas oblast
42	K. Nurtaev	Head, Talas raion
43	G. Satymkulov	Head, Bakai-Ata raion
44	U. Smanaliev	Head, WUA “Kogoi-3”
45	A. Borkeev	Coordinator, Talas Oblast WUA Support Unit
46	I. Abylgaziev	Head of Ayil Okmotu “Kalba”
47	J. Murataliev	Head of Oblast Department of Agriculture
Issyk-Kul		
48	K. Isaev	Governor of Issyk-Kul oblast
49	K. Alyshpaev	First Deputy Governor of Issyk-Kul oblast
50	K. Alybaev	Deputy Head of Oblast Department of Agriculture
51	N. Jumadylov	Deputy Head of Oblast Department of Water Resources
52	S. Egemberdiev	Head of Agrarian Unit, Issyk-Kul Oblast Administration
53	K. Ashyrov	Head of Jety-Oguz Raion Department of Agriculture
54	A. Usenbaev	Head, Fruit & Vegetable Processing Factory, Balykchi
55	T. Kyshtobaeva	Coordinator, Tup Raion WUA Support Unit
56	N. Hekolov	Specialist, Issyk-Kul Oblast WUA Support Unit
57	S. Aibashev	Coordinator, Ton Raion WUA Support Unit
Naryn		
58	A. Apsamatov	Head of Office, Naryn Oblast Administration
59	N. Karybekov	Head of Agrarian Unit, Naryn Oblast Administration
60	N. Jusupov	Specialist, Naryn Oblast WUA Support Unit
61	E. Junusalieva	Coordinator, Naryn Raion WUA Support Unit
62	A. Moldobaev	Engineer, Naryn Raion WUA Support Unit
63	B. Balbaev	Manager, Naryn RAS
64	S. Kojogulova	Specialist, Kochkor Raion WUA Support Unit
HTSPE		
65	Greg Kaser	Project Director
66	Caroline Baker	Project Coordinator
RDC-Elet		
67	B. Shamkeev	Director
FNT		
68	A. Chokoeva	Head, Tender Management Unit
Visits to Ag-Processing Enterprises in Chui oblast		
69	Shultz	Manager, Sausage Making Plant
70	G. Likhacheva	Manager, Vegetable Processing Plant

ANNEX 5. FORMAT OF PHASE 1 SITUATIONAL ANALYSIS REPORT

- Assessment of progress and lessons learned in ongoing and previous ADB and other donor projects in the agriculture sector
- Assessment of the legal and institutional framework
- Identification of the key issues, constraints, and opportunities with respect to the agriculture sector
- Assessment of crop and pasture land resources, current use and management, and productivity
- Assessment of current water resources and management practices
- Assessment of rural irrigation and farm-to-market road infrastructure
- Institutional and financial analysis of regional administration and other government levels and agencies
- Assessment of institutional strengths, weaknesses, opportunities, and threats (WUAs, Farmer Associations, Agro-processor Associations, etc.)
- Stakeholder Analysis
- Mapping of existing and planned development partner activities against constraints and opportunities
- Initial assessment of alternative design approaches
- Problem analysis based on a participatory approach and methodology
- Agreement with the Government on the geographical focus and scope of the proposed project

ANNEX 6. DETAILED WORK PLAN AND PERSONNEL SCHEDULE

DETAILED WORKPLAN

N°	Activity	Oct '07	Nov '07	Dec '07	Jan '08	Feb '08	Mar '08	Apr '08	May '08	Jun '08
1.1	Inception									
1.2	Meetings with Gov't Ministries, Institutes, donors, donor project staff, and NGOs									
1.3	Set up of Project office									
1.4	Collection of Project related documents and reports									
1.5	Field trips to oblasts to meet Oblast, Rayon, and AO Government leaders, WUAs, farmers, agro-processors, and other stakeholders									
1.6	Preparation and submission of the Draft Inception Report									
1.7	Tripartite Meeting (1)									
1.8	Submission of the Final Inception Report									
	Phase 1 – Situational Analysis									
2.1	Establishment of the Project Steering Committee									
2.2	Assessment of Progress and Lessons Learned in Previous and Current ADB and Other Donor Projects in the Agricultural Sector									
2.3	The GOK assigns the counterpart staff of the Government to the Project									
2.4	Assessment of the legal and institutional framework									
2.5	Update on the status of agricultural growth and development in each oblast									
2.6	Identification of the key issues, constraints and opportunities with respect to developing the agricultural sector									
2.7	Assessment of current land use and land productivity									
2.8	Assessment of current land management practices									
2.9	Institutional and financial analyses of regional administration and other government levels and agencies									
2.10	Meeting (1) of Working Group									
2.11	Meeting (1) of Sub-Working Groups in oblasts									
2.12	Stakeholder workshops in oblasts and analysis									
2.13	Mapping of existing and planned development partner activities against constraints and opportunities									
2.14	Mapping of oblast land use and pastures									
2.15	Initial assessment of alternative design approaches									

2.16	Meeting (1) of the Project Steering Committee to discuss Project progress										
2.17	Agreement with the Government on the project scope and geographical coverage of the proposed project										
2.18	Tentatively scheduled Tripartite Meeting (2)										
2.19	Preparation and submission of Draft Phase 1 Report										
2.2	Revision and submission of Final Phase 1 Report										
	Phase 2 – Feasibility Level Project Design										
3.1	Participatory planning and detail key investment activities										
3.1.1	Feasibility Design for Pasture land improvements										
3.1.2	Feasibility Design for Crop land improvements										
3.1.3	Feasibility Design for Sustainable Land Management interventions										
3.1.4	Feasibility Design for Agribusiness Services interventions										
3.1.5	Feasibility Design for Infrastructure investments										
3.2	Detail institutional development activities for the project										
3.3	Identify links to existing or planned investment activities by the Government, private sector, NGOs and partners										
3.4	Meeting (2) of Working Group										
3.5	Meeting (2) of Sub-Working Groups										
3.6	Meeting (2) of Project Steering Committee										
3.7	Preparation and submission of Phase 2 Interim Report										
3.10	Specification of Project Components with Problem Tree										
3.11	Preparation of Design and Monitoring Framework										
3.12	COSTAB Economic and Financial Analysis of Project										
3.13	Preparation and Implementation of Social Assessment										
3.14	Analysis and Write-up of Social Assessment										
3.15	Preparation and Implementation of Socio-Economic Survey										
3.16	Analysis and Write-up of Socio-Economic Survey										
3.17	Preparing and Conducting of Environmental Assessment										
3.18	Revision and approval of Phase 2 Interim Report										
3.19	Preparation of Preliminary Detailed Cost Estimates										
3.2	Preparation of Preliminary Procurement Plan										
3.21	Meeting (3) of Working Group										
3.22	Meeting (3) of Sub-Working Groups										
3.23	Meeting (3) of Project Steering Committee										
3.24	Stakeholder Workshop in Bishkek										
3.25	Revised Detailed Cost Estimates & Procurement Plan										
3.26	Amendment of Project design										
3.27	Preparation and submission of the Draft Final Report										

3.28	Tripartite Meeting (3)										
3.29	Revision and submission of Final Report										
	Reports										
	Inception (due end of week 4)	◆									
	Phase 1 Report (due end of week 11)			◆							
	Interim Report (due end of week 20)					◆					
	Draft Final Report (due end of week 30)							◆			
	Final Report (due end of week 36)										◆

PERSONNEL SCHEDULE

	Name of Expert /Position	Expert input									Total person-month Input		
		Oct '07	Nov '07	Dec '07	Jan '08	Feb '08	Mar '08	Apr '08	May '08	Jun '08	Home	Field[3]	Total
International													
1	Kenneth Neils/ Team Leader/ Economist/ Institutional Specialist										0	6.0	6
2	Sim Hasker/ Agriculture Economist										0.5	2.0	2.5
3	Sarah Robinson/ Pasture Lands Ecologist										0.2	1.8	2
4	Ian Hancock/ Agronomist- Land Improvement Specialist										0.2	1.8	2
5	Euan Thomson/ Animal Health & Livestock Specialist										0.2	1.3	1.5
6	Michael James/Rural Engineer											0.7	0.7
7	Lynne Barratt/ Environment Specialist											1.8	2
8	Arustan Joldasov/ Social											1.8	2

9	Vergilio Dizon/Financial & Economic Analysis Specialist												1.8	2
											Subtotal		**19**	**20.7**
Local		**Oct '07**	**Nov '07**	**Dec '07**	**Jan '08**	**Feb '08**	**Mar '08**	**Apr '08**	**May '08**	**Jun '08**				
1	Kubat Bapaev/ Deputy Team Leader/ Economist/ Institutional Specialist										8			8
2	Otkulbek Sheraliev/ Agribusiness Development Specialist										4			4
3	Ludmila Penkina/ Pasture Lands Specialist										4			4
4	Anara Sartmambetova/ Agronomist-Land Improvement Specialist										4			4
5	Akylbek Jumaliev/ Animal Health-Livestock Specialist										4			4
6	Esenbek Subanbekov/ Rural Engineer													4
7	Djamila Aitmatova/ Environmental Specialist													4
8	Taalay Shashemieva/ Rural Sociologist													4
9	Chnara Mamatova/ Financial and Economic Analysis Specialist													4
10	Irrigation & Drainage Specialist										3			3
							Subtotal							**43**
							Total				**44.7**		**19**	**63.7**

Full time input

Part time input