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Report No: {PAD1346}

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED IDA CREDIT
IN THE AMOUNT OF SDR 4.80 MILLION (US$6.6 MILLION EQUIVALENT)

AND ON A

PROPOSED IDA GRANT
IN THE AMOUNT OF SDR 3.90 MILLION (US$ 5.4 MILLION EQUIVALENT)

AND ON A
PROPOSED GRANT IN THE AMOUNT OF US $4.11 MILLION
FROM
GLOBAL ENVIRONMENT FACILITY

TO THE
KYRGYZ REPUBLIC

FOR AN

INTEGRATED FOREST ECOSYSTEM MANAGEMENT PROJECT

October 29, 2015

ENVIRONMENT & NATURAL RESOURCES GLOBAL PRACTICE
EUROPE AND CENTRAL ASIA REGION

CURRENCY EQUIVALENTS

(Exchange Rate Effective August 31, 2015)

Currency Unit	=	Kyrgyzstani Som
Kyrgyzstani Som 0.017	=	US$1
US$1.4	=	SDR 1

FISCAL YEAR
January 1 – December 31

ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
asl.	above sea level
CCM	Climate Change Mitigation
CPS	Country Partnership Strategy
DA	Designated Accounts
DFHIP	Department of Forest and Hunting Inventory and Planning
ECA	Europe and Central Asia
EMF	Environment Management Framework
ENPV	Expected net present value
ERR	Economic Rate of Return
FAO	Food and Agriculture Organization
FBS	Fee-based selection
FIRR	Financial Internal Rate of Return
FLERMONECA	Forest and Biodiversity Governance Including Environmental Monitoring EU Project
FM	Financial Management
FMIS	Forest Management Information System
FMM	Financial Management Manual
FMS	Financial Management Specialist
FNPV	Financial Net Present Value
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GEF	Global Environment Facility
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GNI	Gross national income
GRS	Grievance Redress Service (World Bank)
IA	Implementing Agency
IC	Individual Consultant
ICB	International Competitive Bidding
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFAC	International Federation of Accountants
IFEMP	Integrated Forest Ecosystem Management Project
IFR	Interim Financial Report

INRMP	Integrated Natural Resources Management Plans
IS	Implementation Support
ISA	International Standards on Audit
JFMC	Joint Forest Management Council
JICA	Japan International Cooperation Agency
LCS	Least-cost selection
LD	Land Degradation
Leskhoz	State Forest Enterprise *(*See SFE below)*
M&E	Monitoring and Evaluation
NCA	Natural Capital Accounting
NCB	National Competitive Bidding
NCC	National Coordination Committee
NFI	National Forest Inventory
NGO	Non-governmental organization
NTFP	Non-timber forest products
Oblast	Region
PAD	Project Appraisal Document
PIU	Project Implementation Unit
PMC	Pasture Management Committee
POM	Project Operation Manual
PPD	Public Procurement Document
PPL	Public Procurement Law
PROFOR	Program on Forests (Multi-donor partnership)
PUU	Pasture Users' Union
QBS	Quality-based selection
QCBS	Quality and cost-based selection
SAEPF	State Agency for Environmental Protection and Forests
SBD	Sample Bidding Document
SFE	State Forest Enterprise
SFF	State Forest Fund
SFM	Sustainable Forest Management
SOEs	Statement of Expenses
SORT	Systematic Operations Risk-rating Tool
SRS	State Registration Service
TA	Technical Assistance
UNDB	United Nations Development Business

Regional Vice President:	Cyril E. Muller
Country Director:	Saroj Kumar Jha
Senior Global Practice Director:	Paula Caballero
Practice Manager:	Kulsum Ahmed
Task Team Leader(s):	Nathalie Weier Johnson

KYRGYZ REPUBLIC
Integrated Forest Ecosystem Management Project

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Kyrgyz Republic

Integrated Forest Ecosystem Management (P151102)

PROJECT APPRAISAL DOCUMENT

EUROPE AND CENTRAL ASIA

GENDR

Report No.: PAD1346

Basic Information			
Project ID P151102	EA Category B - Partial Assessment		Team Leader(s) Nathalie Weier Johnson
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ] Financial Intermediaries [ ] Series of Projects [ ]		
Project Implementation Start Date 24-Nov-2015	Project Implementation End Date 30-Sep-2021		
Expected Effectiveness Date 01-Sep-2016	Expected Closing Date 30-Sep-2021		
Joint IFC No			GEF Focal Area Multi-focal area
Practice Manager/Manager Kulsum Ahmed	Senior Global Practice Director Paula Caballero	Country Director Saroj Kumar Jha	Regional Vice President Cyril E Muller

Borrower: Kyrgyz Republic			
Responsible Agency: State Agency for Environmental Protection and Forestry of the Kyrgyz Republic			
Contact:	Atajanov Sabir Sadykjanovich	Title:	Director of the SAEPF
Telephone No.:	Tel: +996 312 610-016	Email:	min-eco@elcat.kg, min-eco@elcat.kg, envforest@elca

Project Financing Data(in USD Million)					
[ ]	Loan	[X]	IDA Grant	[ ]	Guarantee

[X]	Credit	[X]	Grant	[ ]	Other

Total Project Cost:	16.11	Total Bank Financing:	12.00
Financing Gap:	0.00		

Financing Source	**Amount**
BORROWER/RECIPIENT	0.00
International Development Association (IDA)	12.00
Global Environment Facility (GEF)	4.11
Total	16.11

Expected Disbursements (in USD Million)

Fiscal Year	2015	2016	2017	2018	2019	2020	2021	2022	0000	0000
Annual	0.00	0.00	4.00	5.00	4.00	2.11	1.00	0.00	0.00	0.00
Cumulative	0.00	0.00	4.00	9.00	13.00	15.11	16.11	16.11	0.00	0.00

Institutional Data

Practice Area (Lead)

Environment & Natural Resources

Contributing Practice Areas

Cross Cutting Topics

[X] Climate Change

[ ] Fragile, Conflict & Violence

[ ] Gender

[X] Jobs

[ ] Public Private Partnership

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Public Administration, Law, and Justice	Public administration-Agriculture, fishing and forestry	30		

Agriculture, fishing, and forestry	Forestry	50	30	
Agriculture, fishing, and forestry	General agriculture, fishing and forestry sector	20	20	
Total		100		

☐ I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Environment and natural resources management	Environmental policies and institutions	30
Environment and natural resources management	Other environment and natural resources management	20
Environment and natural resources management	Biodiversity	10
Environment and natural resources management	Climate change	40
Total		100

Project Development Objective(s)

The Project Development Objective is to strengthen the capacity of government institutions and communities to improve sustainable forest ecosystem management through investments in management planning, ecosystem restoration, and infrastructure.

Global Environmental Objective(s)

The Global Environmental Objective is to strengthen the capacity of government institutions and communities to improve sustainable forest ecosystem management through investments in management planning, ecosystem restoration, and infrastructure.

Components

Component Name	**Cost (USD Millions)**
Forest Sector Institutional Reform	0.88
Strategic Investments and Piloting of Sustainable Management Approaches	11.38
Information and Monitoring and Evaluation	2.78
Project Management, Monitoring and Evaluation	1.07

Systematic Operations Risk- Rating Tool (SORT)	
Risk Category	**Rating**
1. Political and Governance	Substantial
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Substantial
4. Technical Design of Project or Program	Low
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Low
9. Other	
OVERALL	Substantial

Compliance		
Policy		
Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]
Does the project require any waivers of Bank policies?	Yes [X]	No [ ]
Have these been approved by Bank management?	Yes [X]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No [ ]

Safeguard Policies Triggered by the Project	**Yes**	**No**
Environmental Assessment OP/BP 4.01	**X**	
Natural Habitats OP/BP 4.04	**X**	
Forests OP/BP 4.36	**X**	
Pest Management OP 4.09	**X**	
Physical Cultural Resources OP/BP 4.11		**X**
Indigenous Peoples OP/BP 4.10		**X**
Involuntary Resettlement OP/BP 4.12	**X**	
Safety of Dams OP/BP 4.37		**X**
Projects on International Waterways OP/BP 7.50	**X**	

Projects in Disputed Areas OP/BP 7.60		**X**

Legal Covenants

Name	Recurrent	Due Date	Frequency
Schedule 2, Section V - Accounting System Installation		01-Oct-2016	

Description of Covenant

Within thirty (30) days from the Effective Date, the Recipient, through SAEPF, shall install an automated accounting system acceptable to the Association, with capacity to, *inter alia*, generate IFRs, statement of expenditures and annual financial statements, and in a manner acceptable to the Association

Name	Recurrent	Due Date	Frequency
Schedule 2, Section I.F.4 - Projects on International Waterways OP/BP 7.50	**X**		Yearly

Description of Covenant

The Recipient shall ensure that no activities are carried out in connection with the Project that may involve the use or potential pollution of international waterways or the tributaries of any such international waterways, as determined by the Association.

Conditions

Source Of Fund	Name	Type
IDA	Execution of GEF Grant Agreement	Effectiveness

Description of Condition

The GEF Grant Agreement has been executed and delivered and all conditions precedent to its effectiveness (other than the effectiveness of this Agreement) have been fulfilled.

Source Of Fund	Name	Type
GEF	Execution of IDA Financing Agreement	Effectiveness

Description of Condition

The Financing Agreement has been executed and delivered and all conditions precedent to its effectiveness or to the right of the Recipient to make withdrawals under it (other than the effectiveness of this Agreement) have been fulfilled.

Source Of Fund	Name	Type
IDA and GEF	Adoption of Project Operations Manual	Effectiveness

Description of Condition

The Recipient, through SAEPF, has adopted the Project Operations Manual in a manner satisfactory to the Association.

Source Of Fund	Name	Type
IDA and GEF	Establishment of PIU and Recruitment of key PIU	Effectiveness

	staff	

Description of Condition

The Recipient, through SAEPF, has established the Project Implementation Unit and recruited the Project coordinator, and the specialists referred to in Section I.A.1 (b) of Schedule 2 to this Agreement, all in a manner satisfactory to the Association.

Team Composition

Bank Staff

Name	Role	Title	Specialization	Unit
Nathalie Weier Johnson	Team Leader (ADM Responsible)	Senior Environmental Specialist	Team Leader	GENDR
Irina Goncharova	Procurement Specialist	Procurement Specialist	Procurement	GGODR
Nodar Mosashvili	Financial Management Specialist	Consultant	Financial Management	GGODR
Alisher Khamidov	Safeguards Specialist	Consultant	Social	GSU03
Andrew Michael Mitchell	Team Member	Sr Forestry Spec.	Forestry	GENDR
Asli Gurkan	Safeguards Specialist	Social Development Specialist	Social	GSURR
Drite Dade	Team Member	Sr Natural Resources Mgmt. Spec.	Natural Resource Management	GENDR
Gillian Ann Cerbu	Team Member	Natural Resources Management Specialist	Forestry	GENDR
Jasna Mestnik	Team Member	Finance Officer	Disbursement	WFALA
Linh Van Nguyen	Team Member	Program Assistant	Processing	GENDR
Nightingale Rukuba-Ngaiza	Counsel	Senior Counsel	Legal	LEGLE
Nina Rinnerberger	Team Member	Natural Resources Mgmt. Spec.	Environment	GENDR
Rustam Arstanov	Safeguards Specialist	Environmental Specialist	Safeguards	GENDR

Tolkun Jukusheva	Team Member	E T Consultant	Environment	GSURR
Vivian Campbell	Team Member	Contractor: SAVVIS	Environment	ITSCD

Extended Team

Name	Title	Office Phone	Location
Kairat Nazhmidenov	Economist		Bishkek

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Kyrgyz Republic		Various locations			

Consultants (Will be disclosed in the Monthly Operational Summary)

Consultants Required ? No consultants are required

I. STRATEGIC CONTEXT

A. Country Context

1. The Kyrgyz Republic is one of the countries in the Europe and Central Asia (ECA) region with a very high incidence of poverty. In 2013, per capita Gross National Income (GNI) was US$1200, 2.8 percent of households lived in extreme poverty, and 37 percent of the population lived below the poverty line. The country is now recovering from a period of economic shocks, conflict and political instability, as evidenced by a 10.5 percent rise in Gross Domestic Product (GDP) during 2013. However, this recovery remains vulnerable. The Kyrgyz Republic is partially dependent on wheat imports from Kazakhstan and global food price shocks are quickly transmitted to the country. Many households are dependent on remittances from energy-based economies (Russia and Kazakhstan) as well as social payments. The narrow export base is dominated by gold. Kyrgyz Republic's mountainous terrain is prone to landslides and avalanches.

2. Rural households, which make up 65 percent of the population, have been most affected by recent crises. Poverty incidence in rural and mountainous areas is extremely high (51 percent), and communities who inhabit these regions are at greatest risk from climate change, due to both extended periods of drought and increased intensity of rainfall resulting in increased soil erosion and land degradation.

3. The Kyrgyz Republic ranks as the third country most vulnerable to climate change in the Europe and Central Asia region using the simplified index of vulnerability.[1] The trend in temperature increase is expected to continue and further accelerate in the near future, with similar temperature increases foreseen under different climate scenarios. The overall warming trend suggests an increase of 2°C in average mean temperature by 2060 and of 4-5°C by 2100. The projected temperature increase is expected to be higher during summer months, while a minimal increase is forecasted for winter. An increase in winter precipitation and a decrease in summer are projected. A significant reduction in the country's glaciers and snowfields is likely, with severe implications for the country's water resources. As glaciers shrink, floods will occur with greater intensity in some areas, while water scarcity will become more acute in others. An increase in surface water flow between 2020 and 2025 is expected (at the expense of glacier melting), followed by the significant reduction in surface flow that is likely to have severe impacts on the country's ecosystems, and the economy in general.

B. Sectoral and Institutional Context

4. Although forests cover less than 6 percent of the area of the Kyrgyz Republic they play a vital economic, social and environmental role and are especially important for the livelihoods of rural communities. Approximately 2.4 million people (or 41 percent of the total population) live in or near forests and rely on the forests not only for timber and fuel wood but also for pasture and fodder, as well as non-timber forest products such as nuts, fruit, mushrooms, and medicinal plants. As a result of over harvesting, by 1966 the forest cover (619,800 ha) of the Kyrgyz

[1] World Bank. 2014. *Turn Down the Heat: Confronting the New Climate Normal.* Washington, DC

Republic was reduced to roughly half the area it covered in the 1930s (1,194,000 ha).[2] As a result, the State's policy and the underpinning legislation of the Soviet Union shifted from intensive harvesting towards forest protection. This policy has resulted in the forest area rebounding to its 1930s levels and it now extends to an area of just over 1.1 million hectares. The challenge has now shifted to managing these forests productively in a sustainable fashion in order for the population of the Kyrgyz Republic to benefit from this resource. The proposed Project focuses on forest sector reform to allow for the devolution of management authority to the leskhoz (State Forest Enterprises - SFE) level to encourage more efficient management of the natural resource base including public-private joint forest management arrangements. This has been hindered by the prevailing top-down centralized management structure for forestry.

5. Economic opportunities in remote mountainous areas are concentrated in livestock herding, and subsistence farming, but also include harvesting of non-timber forest products, fruit production and some tourism based activities. Livestock numbers are increasing resulting in higher rates of pasture land degradation, which in turn has heightened demand for additional land for grazing and fodder production. This increasing demand is putting further pressure on the already limited forest cover and is leading to subsequent degradation as a result of grazing inside forests in combination with the unregulated removal of firewood and timber. Commercial felling is prohibited under current legislation[3], with only very low volumes of wood derived from maintenance/sanitary cutting. During the Soviet era, the Kyrgyz Republic imported around twenty times the current official level of timber production. Timber continues to be imported from Russia, but at much lower levels. Estimates of the volume of legal imports and production, combined with estimates of illegally smuggled timber are four or five times less than the estimated annual minimum demand.[4]

6. More than one third of houses in the Kyrgyz Republic rely only on coal and fuelwood for heating and cooking, with many more households relying on woodfuel in combination with other sources of energy.[5] Forests are almost entirely state owned, with leskhozes, the local level state forest management entities, responsible for managing the State Forest Fund (SFF). Leskhozes were set up in the Soviet era to manage both forested land as well as land set aside for afforestation which is often used for pasture and fodder production; the SFF is the land officially designated as forest and includes land allocated for afforestation. Only 26 percent of the SFF is actually covered by forest, 34 percent is grassland, with the balance comprising hayfields, arable lands, gardens and orchards, settlements, and other type of lands. Meanwhile, forests outside of the SFF play an important role for communities, but are effectively under an open access regime. There are 277,000 ha of forests on municipal lands, mostly riparian forests and poplar

[2] Additional relevant details on the forest sector can be found in: World Bank. Kyrgyz Republic Communities Forests and Pastures. Report No: ACS13613. April 30, 2015.

[3] The Forest Code specifies that forests have "environmental, sanitary, recreation and other protective functions", meaning that commercial felling is prohibited. Sanitary felling (felling and removal of damaged or diseased trees to protect the remaining forest) is also prohibited in the walnut and juniper forests.

[4] The official reported contribution of timber production to the economy in 2013 was 265,200,000 KGS, just 0.2 percent of the total agricultural output in Kyrgyz Republic, although unofficial wood product demand is estimated as being much higher (National Statistics Committee; World Bank (2015). Kyrgyz Republic: Communities, Forests and Pastures.).

[5] Environment of the Kyrgyzstan 2008-2012. National Statistics Committee, 2013.

plantations, which play an important environmental role, but similarly are under pressure from communities sourcing timber and fuelwood.

7. The current institutional framework for forest management in the Kyrgyz Republic is a top-down approach where planning and budgeting in the leskhozes are mandated directly by the State Agency for Environmental Protection and Forests (SAEPF). Limitations of the current institutional structure, combined with a lack of resources and capacity at the SAEPF has led to inefficiencies in the management of forest resources for the maximum benefit of local communities and the nation. The Project aims to address the institutional issues as well as the capacity and financial constraints within the SAEPF and within its subordinate entities.

8. Government forest policy and management traditionally focused on preserving and increasing the amount of forest cover, rather than on the relationship between the forests and the surrounding ecosystem and community, including the pressures of the community to utilize forests as a productive asset. However, sector reforms were initiated with strong donor support in the late 1990s. Beginning in 1999, a number of policies and specific legislation were drafted to develop and regulate the forestry sector in the Kyrgyz Republic. A Presidential Decree, "Concept of Development of the Forestry Sector" was issued in May 1999 with the stated objectives of promoting the sustainable development of the forest sector through improved management of the leskhoz, engagement of the population in the forest, and partnership with the private sector. In 2005 the National Forest Program to Support the Implementation of the Concept of the Development of the Forest Sector (2005-2015) was developed, along with the National Action Plan for the Development of the Forest Sector (2006-2010), while the Forest Code was updated in 2007. Policy implementation, however, was weak due to a low level of commitment from the central government as well as a lack of incentives from all levels of the forest administration structure. More recently, additional strides have been made towards supporting alternative forest management arrangements inclusive of communities and their development priorities as through the Guidelines for Joint Forest Management approved by the SAEPF in November, 2013.

9. Conditions are now converging, with institutional buy-in and ownership, for a broader-based, more effective forest policy reform that would promote joint forest management and greater economic and more sustainable use of resources within and outside the SFF. The SAEPF has initiated the process of forestry sector reform by piloting different management approaches in a number of leskhozes. While these pilots are ongoing, the legislative framework to legitimize these efforts has not yet been established. To address the legitimacy gap, the SAEPF developed a government decree that grants organizational and financial flexibilities in leskhozes and provides a framework for co-management of forest resources with local communities. This government decree was approved on June 16, 2015. A Steering Committee comprised of government, development partners, and civil society representatives is guiding the pilot reform efforts that will: (1) increase transparency of operations (e.g. of the leasing of pasture/land for orchards, and leskhoz timber and firewood sales; (2) optimize natural resource use and biodiversity; (3) expand income opportunities of both user groups and individuals by allowing communities to participate in the management and use of the leskhoz pasture and forest area; (4) improve local social and economic wellbeing; and (5) identify legal and regulatory bottlenecks to the ongoing reform process and opportunities to overcome them. The Steering Committee aims to gradually reform the overall forest legislation, and incorporate lessons learned from the pilots. The reform agenda has been supported by a number of development partners, starting with the Kyrgyz-Swiss

Forestry Program (1995-2009), and more recently through Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the United Nations Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD), and local non-governmental organization (NGOs), among others. This project will build on these experiences continuing support to leskhozes that have begun to implement innovative management arrangements and help initiate new pilot approaches in additional leskhozes.

C. Higher Level Objectives to which the Project Contributes

10. The Kyrgyz Republic Country Partnership Strategy (CPS) 2014-2017 (Report 78500 – KG) identifies public management of scarce natural resources as a priority for improved poverty outcomes, particularly for the almost two-thirds of the population that live in isolated rural and mountainous areas of the country. These rural populations are at the bottom of the pyramid and are subsistence pastoralists largely outside the cash economy. The Project will contribute to poverty reduction by protecting and improving the natural resource base of forests and pastures on which these communities are dependent. Currently, leskhoz administration favors those with the funds and labor to protect their forests while poorer, and especially female-led, households are excluded from these arrangements and benefits they provide. The Project also supports the CPS pillar on governance through its proposed policy and institutional reform which will address issues of transparency and accountability in the forest sector at the national, local, and community level.

11. Forests are also an important priority for the region, thereby contributing to the ECA regions strategic pillars of competitiveness and shared prosperity through jobs and environmental, social and fiscal sustainability. The Project will promote reform of the national and leskhoz level governance structure to ensure inclusion of local communities in decision making about resource use and management planning, thereby also contributing to shared prosperity. Improved forest management can mitigate the effects of climate change through increased forest productivity, reduced emissions from forest fires, and afforestation or natural regeneration of formerly bare lands and/ or degraded forests contributing to rural communities' resilience.

12. This project is also in line with the World Bank's 2002 Forest Sector Strategy, as well as the forthcoming Forest Action Plan under development that aims to: harness the potential of forests to reduce poverty; integrate forests in sustainable economic development; and protect vital local and global environmental services and values.

13. The Project will contribute to shared prosperity in a sustainable manner through supporting integrated leskhoz-community co-management of forest ecosystems: both improving and protecting the existing natural resource base. As mentioned, forests furnish the Kyrgyz Republic's urban and rural populations with essential ecosystem values, goods and services, playing a crucial role in the livelihoods of these communities both for subsistence and additional income. The forest sector reform and corresponding changes to management arrangements supported by the Project aim to encourage increased connectivity between pastures and forest management lands, coupled with increasing transparency and local community input surrounding allocation and use rights of Forest Fund Land. The introduction of improved co-management arrangements between leskhozes and communities will create the conditions for more equitable and sustainable access to forest benefits, funds and labor.

II. PROJECT DEVELOPMENT OBJECTIVES

PDO

14. The Project Development Objective is to strengthen the capacity of government institutions and communities to improve sustainable forest ecosystem management through investments in management planning, ecosystem restoration, and infrastructure.

Global Environmental Objective(s)

15. The Global Environmental Objective is to strengthen the capacity of government institutions and communities to improve sustainable forest ecosystem management through investments in management planning, ecosystem restoration, and infrastructure.

Project Beneficiaries

16. The Project seeks to provide benefits to a range of beneficiaries. Direct beneficiaries are people (including women and children) living and working in and around the twelve target leskhozes (with each leskhoz having approximately 10,000 people). Indirect beneficiaries of the Project include 120 rural municipalities that are located adjacent to forests. Government institutions, namely SAEPF (with seven oblast-level branches), will be provided with capacity building support to improve management of forest resources. The reform of the forestry sector will create ripple effects for the entire population of the Kyrgyz Republic.

17. The global environmental benefits accrued by this project derive from the mitigation and adaptation actions inherent in the Project's planned activities. These contribute in a myriad of ways to sustainable forest management (SFM), reducing/reversing land degradation (LD), improved water use and management, maintenance of ecosystem protection functions on mountain slopes for ecosystems and human infrastructure, habitat conservation and restoration, building resilience to and mitigating climate change impacts (CCM). Most directly through the Project's activities, the integrated approach to forest ecosystem management will lead to improved forest and pasture management generating carbon sequestration benefits through increasing and maintaining the forest stock and managing pasture use intensity. It is estimated that the Project will improve management of forests equaling approximately 161,000ha and introduce sustainable management of forest and pasture landscapes on approximately 616,000ha. The participation of local communities in the private- partnership models of integrated forest ecosystem management being supported as part of this project also have the potential to serve as examples of innovative management approaches for the broader Central Asian Region as a whole.

PDO Level Results Indicators

18. The PDO level results indicators for the Project are: (i) government institutions provided with capacity building to improve management of forest resources (number – core indicator); (ii) land area where sustainable land management practices were adopted as a result of the Project (ha – core indicator); and (iii) forest area brought under management plans (ha- core indicator).

III. PROJECT DESCRIPTION

A. Project Components

19. The forestry sector in the Kyrgyz Republic has the potential to provide additional and sustainable benefits to the national economy and local communities to help address local and global challenges brought on by poverty, land degradation and climate change. The Government's capacity to support existing forest policies such as the National Forest Program to Support the Implementation of the Concept of the Development of the Forest Sector (2005-2015) is weak, and the current management structure of the forestry sector perpetuates a cycle of inadequate oversight and inefficiency. This is primarily due to the current centralized top-down nature of management, the lack of adequate information and investment in the sector, weak capacity, and incentive structures which may lead to rent-seeking behavior.

20. The Project aims to support an ecosystem-based approach to the improved management of the area controlled by the leskhozes including forested lands, pasture, and unproductive or marginal lands. This will be done through support for institutional reform and capacity building, the introduction of integrated natural resource management planning at the leskhoz level and support for the implementation of these plans in pilot areas.

21. The Project will build upon the work and policy reform agenda that the Government has initiated and which is currently being supported by a number of donors. The Project will complement the ongoing World Bank "Pasture and Livestock Management Improvement Project" (P145162) by strengthening the management and coordination of pasture under leskhoz jurisdiction as well as through adoption of lessons learned from the implementation of the sub-component, 'Forestry Enterprise Pasture Management and Investment,' which will support the piloting of co-management arrangements between Pasture Users' Unions (PUUs) and the leskhozes. The technical underpinnings of the Project design are informed by the Program on Forests (PROFOR) funded study entitled, "The Development Potential of Forests in Kyrgyz Republic" (2012), as well as preliminary case studies from pilot leskhozes which are testing new management models. The results of the analytical study, "Understanding Communities Roles in the Governance of Forests and Pastures in Kyrgyz Republic" (April 2015), which examined the institutional, legal and operational capacity development needs for integrated territorial governance, the opportunities for improved forest management, and the potential to limit land-based conflict, environmental degradation and improve local livelihoods, have also been used to elaborate the Project's design.

22. The Project will sponsor interventions in rural areas and support communities through improved access and management of the natural resource base they depend upon. Specifically, development of integrated natural resource management plans and support for the implementation of these plans will improve the sustainable management of natural resources to protect rural livelihoods. Through more inclusive and participatory management planning, the Project will also empower the sometimes disenfranchised rural poor to engage in decisions on the development and use of resources that they are dependent upon. The process of integrated natural resource management planning will also create opportunities and incentives for the

leskhozes to work in partnership with communities to reach the objectives of improving sustainable forest ecosystem management and rural livelihoods.

23. The Project will utilize experiences and lessons learned from the recent piloted forest sector reforms to broaden and solidify the institutional frameworks that support local level involvement in decision making and actions towards more sustainable management of forest resources in the Kyrgyz Republic. With regard to implementation, the Project will support the development of a framework approach for adaptive management during Project implementation to provide flexibility in defining training, capacity building, investment and technical assistance needs based on lessons learned.

24. The Project has four components:

COMPONENT I: Forest Sector Institutional Reform (US$ 0.88 million)

25. Institutional reform and capacity building will be required at the national, local and community level. To develop and implement the new approaches required for the different models of leskhoz and community participation, substantial support will be required to develop the framework and to build capacity within the Government structure (horizontal and vertical) as well as within all stakeholder groups. The Project will provide technical assistance, training, and capacity building at the national level to support the development of the policy, legal, regulatory and institutional framework, based on the lessons learned through the implementation of the pilot activities. This support will be undertaken in a consultative and participatory manner, to ensure that all relevant stakeholders' views and opinions are considered and to develop ownership and support for the way forward.

26. At the local level, support will be provided for the development of a framework to create the enabling environment for more decentralized management and planning of natural resources at the national, regional, local and leskhoz administration levels. The goal of this new approach is to provide more transparent and sustainable management of the country's natural resources with participation at all levels. The Project will finance a national public awareness campaign aimed at educating the public about the new decentralized and participatory natural resource management planning approach and its benefits. The Project will also finance training at the SAEPF, leskhoz and municipal level to support the planning and implementation process as well as technical skills. Capacity building will be provided at all levels for activities ranging from the development of legislation at the national level to the development of public-private partnerships at the local level. The training and capacity building will be combined with targeted community mobilization activities to ensure full participation of all citizens in this new approach to natural resource management.

COMPONENT II: Strategic Investments and Piloting of Sustainable Management Approaches (US$ 11.38 million)

27. This component will support the development of Integrated Natural Resources Management Plans (INRMPs). It will also provide funding for the implementation of these plans and the priority activities at the leskhoz level. The activities under this component will help increase community and leskhoz income and long-term financial sustainability. The management

planning will be based on integrated ecosystem approaches that manage multiple objectives of ecological services including biodiversity, forest and pasture rehabilitation, tree cover and sustainable economic use. The Project will help improve land use management practices and provide resource users with alternative livelihood opportunities identified during the management planning exercise. The INRMPs will be based on the assessment of the available natural resources and their condition, as well as the sustainable levels of production. They will be developed with the involvement of relevant stakeholders (e.g. users' groups, pasture committees, leskhoz staff, local governments, as well as the relevant technical departments within the SAEPF). The planning process will help the leskhoz administration collect all stakeholders' perspectives while assessing and developing priority strategies and measures. The plans will be based on physical, ecological and socio-economic baseline data. In addition to the INRMPs, annual operational plans will also be prepared. These plans will be reviewed and approved by the Leskhoz Steering Committee.

28. The Project will finance the implementation of the INRMPs in 12 leskhozes and several municipal forests where in some cases co-management approaches are being piloted in other partner-funded projects and programs The selection will be based on well-defined criteria which may include, *inter alia*: willingness of leskhoz director and staff to participate in the consultative planning process, previous participation in any of the joint forest management pilots funded by other donors, quantity and quality of natural resources—especially forest and pasture lands, biodiversity, tourism and other ecosystem service values of the leskhoz, importance of leskhoz generated income to SAEPF budget, etc.

29. The priority interventions will include: (i) silvicultural measures like thinning and establishment of plantation forests with short rotation for biomass; (ii) selective timber harvesting; (iii) production of high quality seedlings for afforestation and reforestation; (iv) investments in other value chains like processing of nuts/fruits, eco-tourism; (v) improvement of common or shared resources (such as construction of water points or overnight shelters to encourage the use of currently underutilized summer pastures; (vi) establishment of nurseries with improved seed stock and advanced technology; (vii) creation of silvopastoral systems (i.e. walnut forests or spruce with hayfields, pine with pasture); and (viii) provision of irrigation for fruit trees and nurseries.

30. The investments to implement the INRMPs and annual operational plans will vary in each leskhoz based on the priority measures identified in the plans, available funding envelope and the Project timeframe.

COMPONENT III: Information and Monitoring and Evaluation (US$ 2.78 million)

31. Better and more accessible information at the national and local level on baseline resources, tenure, land degradation, supply and demand, poverty, etc., will be required to inform policy makers and stakeholders on actions related to natural resource management. This information will also be critical for the development and implementation of new leskhoz management plans. Baseline information collection and processing, maps, and surveys will all be funded under this component. This component will include an update of the National Forest Inventory (NFI) which was partially completed in 2008 with the support of FAO. This partial update did not include the use of new remote sensing or interpretation but relied on old forest boundary

definitions with some new field sampling. This component will provide for the interpretation of new satellite imagery to define the extent of forest and SFE pasture resources. The exercise will employ state of the art methodologies for conducting national forest inventories, including GIS and remote-sensing technologies.

32. This component will finance the establishment, operation and maintenance of the Forest Management Information System (FMIS). Technical assistance will be provided to users of the FMIS including the Forestry Departments, leskhozes, local and regional governments, and local users and user associations. The SAEPF will be given specific support in developing a sound monitoring framework for the ongoing development of the sector.

33. The FMIS will be established to store, analyze, retrieve and report on the data that will be generated during the implementation of the National Forest Inventory, the preparation of management plans and the monitoring of the management plan implementation (and other relevant sector indicators). This system will be developed to facilitate the monitoring of management plan implementation based on various physical, ecological, economic and social indicators. The proposed system will include a web-based portal which will allow for various levels of access (with password protection for confidential information) to facilitate greater transparency and online submission of data, and reporting by users and leskhozes. The system will be modular and would include: remote sensing of land cover and land use data, and online reporting of economic activities, financial and administrative data, forest inventory data, biodiversity data, and forest law enforcement activities. The FMIS will support the generation of summary statistics and reports on critical indicators at local, national, and international levels.

34. To fully inform the development of national level policy and strategy for implementation of the reform process, it is necessary to understand the external factors that influence the forest and pasture sector, such as: the full economic and social costs associated with the current management of the resource (including erosion and degradation); the impact of climate change; the changing demographic situation including the dimensions of poverty and culture; current numbers of livestock and the trends; and above all, the linkages between all of these external factors not traditionally considered in forest management. Component 3 therefore includes socio-economic surveys, and support for natural capital accounting.

COMPONENT IV: Project Management, Monitoring and Evaluation (US$ 1.07 million)

35. This component will finance Project management activities which will be undertaken by the Project Implementation Unit (PIU) established in the SAEPF. This will include budgeting, preparing annual work plans, contract management, financial management, procurement, and monitoring and evaluation. Under this component all reporting on implementation progress will be prepared, including monitoring of the PDO and the Project Results Framework indicators.

B. Project Financing

36. The total Project cost is US$ 16.11 million. The Project cost summary by component is shown in Table 1. A credit for an amount of US$ 6.6 million and a grant for an amount of US$ 5.4 million will be made available on standard IDA terms. In addition a GEF Grant in the amount of US$ 4.11 million will also be made available. The approach for financing each

component is as follows: Activities under Component I and II will be financed by either the IDA Grant/Credit or the GEF Grant; Activities under Component III will be financed by the GEF Grant; and Component IV activities will be financed by the IDA Grant and GEF Grant.

Table 1. Project Cost and Financing

Project Components	Project cost (US$ Million)	IDA/GEF Financing(US$ Millions)	% Financing
1. Component I	$0.88	$0.88	5.5%
2. Component II	$11.38	$11.38	70.6%
3. Component III	$2.78	$2.78	17.2%
4. Component IV	$1.07	$1.07	6.7%
Total	**$16.11**	**$16.11**	100%

C. Lessons Learned and Reflected in the Project Design

37. The Project design reflects lessons learned from Bank-financed forestry and natural resource projects including from the Kyrgyz Republic, Bosnia, Albania, and Kenya. The design was also influenced by lessons learned through sector reform and piloting alternative joint forest management arrangements lead by the SAEPF and supported by the Swiss and German Federal Cooperation institutions, Japan International Cooperation Agency (JICA), and other bilateral partners.

38. The following key lessons were incorporated into Project design and implementation plans:

(i) *Using a multi-stakeholder and multi-sectoral approach* to Project implementation with partnerships between Government actors and civil society is beneficial as these improve transparency and accountability, as well as providing new learning opportunities for Project participants

(ii) *Supporting the development of a landscape-based integrated natural resource management approach to planning* leads to more sustainable and inclusive natural resource management as it recognizes trade-offs in land-use management decisions.

(iii)Development of public-private partnerships (increasing access to private sector capital to increase investment in the sector, and generating sustainable economic growth) by *outsourcing resource management functions to the community and private sector* (such as seedling production) has proven to be a strong model for better institutional and natural resource management as the outsourcing develops PPP.

(iv)*Building the capacities of local/community user groups*, such as those for pastures and water, is an effective means to improve resource management as it fosters local ownership in the process and a greater likelihood of sustained positive results for local stakeholders and the natural resources in question.

39. The Project objectives and design have also been informed by a recently concluded World Bank study entitled "Communities, Forests and Pastures in the Kyrgyz Republic". The Project has incorporated the following recommendations from the study:

(i) Ensuring the integration of sustainable resource use and ecosystem service provision, as well as climate change adaptation and mitigation in the management plan development process.
(ii) Development of Government capacity to assess forest and other natural resources in the SFF and municipal forests through support to an update on the National Forest Inventory, the establishment of a FMIS and increased understanding of the value of ecosystem services through Natural Capital Accounting.
(iii) Testing of fair and transparent forest tenure systems to reflect effective and sustainable practices.
(iv) Revising administrative and financing frameworks for SFEs to include incentive structures aligned to the natural resource management goals and new accountability, transparency and grievance redress mechanisms.
(v) Increasing community/local government participation in management planning through support to the development of public-private partnerships (increasing access to private sector capital to increase investment in the sector, and generating sustainable economic growth).
(vi) Supporting Government efforts to reform forestry legislation to allow for the sustainable use of timber resources as well as reflect the regulatory needs of present circumstances; reconsider the regulatory functions, control and monitoring functions from economic functions.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

40. The main implementing Agency of the Integrated Forest Ecosystem Management Project (IFEMP) will be the SAEPF. SAEPF will be supported by a PIU which will be established under the SAEPF. The Ministry of Economy and the State Agency on Local Self-Governance and Inter-Ethical Issues will also play a role in the Project. It was also agreed that the already formed National Coordination Committee in the SAEPF would serve as the Project Steering Committee. The National Coordination Committee (NCC) was established by the SAEPF to promote the forestry reform process through the piloting of the joint forest management models in several leskhozes. The NCC includes high officials of the SAEPF, representatives of international and bilateral organizations (GIZ and FAO) and several NGOs. The implementation structure of the ongoing piloting forest sector reform foresees Joint Forest Management Councils (JFMC) at the leskhoz level. If this approach is successful, this will form part of the implementation arrangements. Details of the roles and responsibilities of the lead implementing agency and other institutions will be provided in the Project Operations Manual (POM), to be finalized prior to Effectiveness.

B. Results Monitoring and Evaluation

41. A set of outcome indicators for measuring Project progress have been defined in agreement with Government counterparts (see Annex 1). The Project Implementing Agency, SAEPF, will have overall responsibility for Project monitoring and for collecting the appropriate data to follow the indicators. The Project Implementing Agency will be responsible for reporting on Project progress, with support from the relevant departments in the SAEPF and the selected leskhoz staff, in annual progress reports. In addition, the midterm review will provide an opportunity for the Bank and counterpart teams to closely review implementation progress, as well as to determine if any modifications to indicators and/or target values are required. Specific monitoring activities for gender disaggregated data will be included in the reporting activities. A detailed guide for program monitoring and evaluation is being developed as part of the Program's Operational Manual to be finalized prior to Effectiveness. The document will provide guidance on the roles and responsibilities of program beneficiaries and stakeholders, in collecting, analyzing, and disseminating program data and results.

C. Sustainability

42. The key risks for sustainable integrated forest landscape management in the Kyrgyz Republic are: (i) lack of clarity in use and ownership rights of pasture land in SFF and forest land under municipal jurisdiction resulting in a *de facto* open access regime; (ii) degradation of the forest ecosystem, including pastures and reduction in fodder resources furthering the viscous cycle of continuing encroachment of livestock into forested areas; (iii) environmental damage to forest habitats in and around pastures causing reduced biodiversity; (iv) potential difficulty in short- and medium-term exclusion of communities from the use of certain areas to allow forests to regenerate; and (v) fuel price fluctuations causing an increased reliance on wood-based fuels for heating and cooking. These factors also increase the vulnerability of rural households to natural and economic shocks causing them to hold higher livestock numbers as a form of insurance, further exacerbating these risks.

43. The Project will address these risks by: (i) harmonizing the regulatory framework for pasture management across the SFF; (ii) applying the same approach of enforcing pasture carrying capacity outside of SFF lands to SFF pastures accompanied by improved co-management and leasing arrangements; (iii) building the technical capacity of the SAEPF, leskhozes and PUUs in forestry techniques and in their transition to landscape management planning to ensure that biodiversity rich fragile forest ecosystems are allowed to recover and grow; and (iv) devolving not only the management responsibilities, but also the ability to raise and manage budgets to the leskhoz level to help ensure the financial sustainability of these services. Leskhozes in cooperation with PUUs will be supported in their efforts to prepare costed investment plans. All of these activities will be accompanied by broader awareness-raising in the country, especially adjacent to the Project's 12 pilot leskhozes, regarding the benefits of sustainable forest landscape planning.

V. KEY RISKS

Overall Risk Rating and Explanation of Key Risks

44. The overall risk rating is Substantial with the Political and governance, Sector strategies and policies, Institutional capacity for implementation and sustainability and Fiduciary risks rated Substantial.

45. Political and governance: With per capita GNI of US$ 1,200 in 2013, the Kyrgyz Republic remains a low income country. It remains at risk from commodity price shocks, as seen in the political unrest of April and June 2010, and food price increases in 2011 and 2012 after the global economic crisis which has reversed earlier gains in poverty reduction. The absolute poverty rate increased from 33.7 percent in 2010 to 36.8 percent in 2011. Mainly as a result of the adoption of market-based economic reforms in the 1990s, the economy has nearly recovered to its pre-independence level of output; however, infrastructure and social services have suffered from low investment. Weak economic governance and a high level of perceived corruption remain key obstacles to development in the Kyrgyz Republic, and were considered causes of the political unrest of 2010. Improving governance and fighting corruption were named as the Government's top priorities in its Medium Term Development Program (adopted in 2011). A series of reform-oriented governments since the political crises of 2010 have sought to restore economic and social stability, (through improvements in education, health care and social protection), as well as address shortcomings in public governance and the investment climate.

46. Sectoral strategies and policies: The greatest risks to achieving the Project's objectives is resistance to reform the forestry sector due to a long history of central control of pasture and forestry assets. The Project will address this risk by supporting the Government program for piloting new approaches that are more inclusive and community driven. The aim will be to show by example the benefits of modernizing the natural resource management system to become a more efficient and equitable system which incorporates better information, stakeholder participation, and transparency.

47. Institutional capacity for implementation and fiduciary: Another risk is the limited experience and capacity of SAEPF and limited and varied capacity at the leskhoz level. A new PIU will be established in the SAEPF; to-date the SAEPF has never implemented a World Bank project. Once the PIU is established and key staff are recruited, a Financial Management and Procurement Assessment will be undertaken. Through this process capacity gaps will be identified and appropriate training provided.. The capacity gap at the local and stakeholder level will be addressed through specialized training and Project interventions. However this type of fundamental change in the management regime will require time and a program of adaptive management to allow for changes in approach and scope.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analysis

48. The forest ecosystem resources included in the State Forest Fund managed by the leskhozes as well as those in the municipal forests are not currently being managed to their full sustainable and economic potential. This is for a variety of reasons including the restrictive policy and

legislative framework, inflexible institutional arrangements and also insufficient financing. World Bank involvement in forestry sector reform is seen as critical because of the unique expertise that the Bank brings from similar experiences from other countries in the region and around the world and specifically in assisting governments to reform state-owned enterprises. The World Bank also has a comparative advantage in combining its convening power with the provision of significant additional resources required to achieve the objectives of meaningful reform.

49. The following are the anticipated development impacts by component: Through Component I, public finance through the Project will help address the enabling environment, and through Component III, provide the necessary information to facilitate the preparation of management plans for the sustainable development of these resources. Component II will provide the necessary funding for the implementation of the leskhoz level Integrated Natural Resource Management Plans (INRMP) which will define ecologically sustainable and economically viable investments. This will support the leskhozes to become more financially independent, and allow for greater sustainable reinvestment into the resource. These reinvestments will enhance the quality of and/or rehabilitate the resources, and increase the return to the leskhoz whilst providing improved economic opportunities for local communities, both at the individual level and for associations such as the PUUs. The Project will actively encourage the use of Public Private Partnerships (PPP), where additional investment and labor will be provided by investors. An example of the type of interventions would be: a leskhoz has land available for establishing an orchard, but this land requires the former irrigation system to be rehabilitated – through the Project, funding is provided to rehabilitate the irrigation infrastructure; the institutional enabling environment is created allowing the leskhoz to enter into a competitively tendered lease with the private sector; the area with irrigation is then competitively leased; the lessee invests in fencing, planting the orchard, maintenance and harvesting; and finally the revenue from the lease is reinvested in other resource management activities of the leskhoz.

50. Other examples of PPP opportunities would include investment in tourism facilities and fast growing fuelwood plantations. The Project will help create the enabling environment and ensure the appropriate environmental and social safeguards are met. Clearly the economic benefits are substantial, but the exact value is difficult to fully quantify at this stage as the specific activities by leskhoz will not be known until the management plans have been prepared.

51. It is possible, however, to assume some overall interventions and economic benefits at the Project level. It is expected that the Project will generate direct economic benefits from: (i) silvicultural thinning and selective regeneration felling in existing forests and plantations (this is currently prevented under the existing regulations in walnut and juniper forests and restricted in other forest types); (ii) management of municipal forests (this would include thinning, restocking and more active management); (iii) PPP investments in orchards, tourism investments, fast growing fuelwood plantations, etc.; (iv) market-based leasing of pastures and fodder production to PUUs; (v) improved pasture (i.e. water points, infrastructure to allow access to summer gazing, etc.); (vi) improved integrated forest and pasture management to facilitate access to additional pastures; (vii) direct investment in fast growing fuelwood plantations; and (viii) investments in value chains such as timber/fuelwood harvesting/processing and collection and processing of nuts/fruits and other Non-timber forest products (NTFP). Additional economic and ecological gains will be realized through improving seed collection, seedling production,

nursery management and afforestation through improved planting material to ensure better survival rates. Other economic gains at the global level would include increased carbon sequestration from the afforestation, orchard establishment and rehabilitation of degraded lands and the protection of habitats for biodiversity. Indirect economic gains would be realized through reduced erosion, prevention of landslides, and protection of watersheds. The Natural Capital Accounting to be supported by the Project will generate estimates of the value of the economic benefits and include these in the national accounting systems.

52. Financial/Economic Models. The Project will finance priority interventions in 12 leskhozes and a number of municipal forests. These interventions will be implemented through the financing of INRMPs. The analysis presented below is based on simulation of some of the likely interventions/investments to be funded within the Project. Currently six indicative financial/economic models have been prepared to illustrate the potential returns of Project interventions: (i) silvicultural thinning of existing forests, (ii) PPP investments in orchards, (iii) PPP investments in fast growing fuelwood plantations, (iv) nut and/or fruit collection, (v) nut and/or fruit processing, and (vi) establishment of silvopastoral systems.

53. At the global level an economic model estimating a benefit stream deriving from reduction of greenhouse gas (GHG) emissions from the Project areas (carbon sequestration) has been developed.

54. Silvicultural thinning: About 200,000 ha of forest area will be brought under integrated natural resource management plans by the Project. The silvicultural thinning of existing forests and plantations will be one of the results of these plans. It is assumed that selective thinning will be undertaken on a ten year cycle on about 20 percent of the forest area (the remainder being inaccessible or unsuitable for thinning). This will generate benefits of about US$ 1.4 million every year. This is a cautious estimate in that it excludes any income from selective regeneration felling, and it assumes a constant price for small sized products for all timber sizes (i.e. larger size timber for construction and sawmilling is worth more than fuelwood and poles).

55. Investments in orchards and fast growing fuelwood plantations: This model shows the financial and economic benefits of the PPP investments in orchards and fast growing fuelwood plantations. It is assumed that establishment of about 180 ha of the fruits/nuts orchards and 1820 ha of the fast growing fuelwood plantations will be supported by the Project. The model suggests that annually up to US$ 3.2 million of incremental benefits can be generated by such investments.

56. Nut/fruit collection and processing: The nut/fruit collection model presents a nut/fruit collection business from the forest of 350 ha. The total investment amount is US$ 4,700 to purchase the equipment for nut husking and for training and forest cleaning during the first five years. It is estimated that this type of investment would enable gaining an incremental net annual benefits of US$ 700 at full development. The investment would create additional casual employment. The Financial Internal Rate of Return (FIRR) is 21.9 percent over the 15-year Project period and the model records a Financial Net Present Value (FNPV) of US$ 1,116. The model is quite sensitive to increases in prices and production costs.

57. The nut/fruit processing model demonstrates the establishment of a small processing facility with capacity of about 300 tonnes of raw nuts/fruits per year. The commercial viability of the proposed model is justified by existing market demand for processed and packed nuts/fruits as well as the lack of and/or limited availability of nut/fruit processing services. It is assumed that the enterprise would invest US$ 6,200 in equipment for nut husking/fruit cleaning, curing and packing. The FIRR on the incremental net benefits is 47.2 percent, which is well above the 10 percent opportunity cost of capital. The business will also provide the rural people with market for their increased nut/fruit production. An additional employment of about six casual workers is expected at the enterprise level.

58. Silvopastoral systems: This model demonstrates the creation of a silvopastoral system that combines forest with hayfields/pasture. The model suggests that the incremental net annual income after the Project is fully mature would be US$ 648/ha. It is expected that about 1000 ha of silvopastoral systems could be established resulting in about US$ 150,000 of incremental annual income. The FIRR of silvopastoral activities of the Project is high at 45.9 percentage.

59. Economic Analysis. The analysis attempts to identify quantifiable benefits that relate directly to the activities undertaken that can be attributed to the Project's implementation. The period of analysis is 40 years to account for the long term benefit and phasing periods of the proposed interventions. The scenario presented in the economic analysis is conservative (based on conservative assumptions and estimates). The indicative analysis below demonstrates the scope of economic profitability under conditions prevailing at the time of the preparation.

60. Price estimates for tradable commodities are based on the World Bank's Global Commodity Price Forecast.[6] All local costs were converted into their approximate economic values using a Standard Conversion Factor (SCF) of 0.8, and a Shadow Wage Rate Factor of 0.7 for unskilled labor was also applied. All values are given in constant 2015 prices.

61. The incremental quantifiable benefit stream is comprised of the following four main elements: (i) increased thinning/biomass production from planted forests; (ii) production of better quality seedlings for afforestation and reforestation; (iii) increased incomes due to investments in value chains like collection and processing of nuts/fruits; (iv) increased incomes (thinning, hay) due to the creation of silvopastoral systems that combine spruce/pine forests with hayfields/pasture; and (v) carbon sequestration benefits. Economic benefits from reduced siltation of dams and reduced natural disaster losses have not been included in the overall economic analysis due to the difficulties associated with their reasonable estimation and attribution. Other direct economic benefits from interventions in areas such as tourism will be developed once the specific investment opportunities have been identified.

62. About 200,000 ha of forests will be brought under the implementation of INRMPs. One of the results of the INRMPs implementation will be a reduction of the GHG emissions. It is conservatively estimated that about an additional 0.1 tCO_2-e/ha of GHG will be sequestered annually, amounting to approximately US$ 23.2 million of additional economic benefit over a 40-year period that can be attributed to the Project.

[6] www.worldbank.org/content/dam/Worldbank/GEP/GEPcommodities/Price_Forecast_20150722.pdf.

63. The illustrative models described above have been used for the calculation of the overall benefit stream, on the basis of economic prices. In calculating the overall benefits from the models, the following were taken into account: an 80 percent success rate was applied, i.e. it was assumed that only 80 percent of the investments would achieve the estimated returns; no subsidies and taxes have been undertaken in the calculations as they represent transfer payments and have to be excluded from economic analysis. The economic Project costs have been calculated by the removal of price contingencies, exchange rate premium and taxes/duties.

64. Given the above benefit and cost streams, the base case economic internal rate of return (ERR) is estimated at 19.7 percent. The base case net present value of the Project's net benefit stream, discounted at 10 percent, is US$ 17.3 million in economic terms.

65. Sensitivity analysis. Economic returns were tested against changes in benefits and costs. In relative terms, the ERR is equally sensitive to changes in costs and in benefits. In absolute terms, these changes do not have a significant impact on the ERR, and the economic viability of the Project is not threatened by either a 20 percent decline in benefits or by a 20 percent increase in costs. A 1-year delay in project implementation would reduce the base ERR to about 17.8 percent. The base ERR would be reduced to 16.8 percent if no benefits deriving from the carbon sequestration would be taken into account, but it is still be well above the discount rate (10 percent).

Table 2. Sensitivity Analysis

Sensitivity Analysis (40-year period)	Base case	Costs Increase		Increase of Benefits		Decrease of Benefits		Delay of Benefits		No carbon seq. benefits
		+10%	+20%	+10%	+20%	-10%	-20%	1 year	2 years	
ERR	19.7%	18.6%	17.6%	20.9%	22.0%	18.5%	17.1%	17.8%	16.3%	16.8%
ENPV (US$ mln)	17.3	16.2	15.0	20.2	23.1	14.4	11.5	14.7	12.2	12.2

B. Technical

66. The Project design builds on previous experience in forestry sector and on the recommendations of a series of studies commissioned by the Bank or other partners in the Kyrgyz Republic and Central Asia. The technical interventions to be supported under the Project will be part of silvicultural measures identified in the integrated natural resource management plans. The Project will also help build technical capacities of the leskhoz staff for the development of guidelines for the preparation of integrated plans and for the establishment, operation and maintenance of the Forest Management Information System, which will feed into the National Forest Inventory and integrated management plans.

C. Financial Management

67. Responsibility for the Project financial management (FM) will rest with the PIU under the State Agency for Environmental Protection and Forestry (SAEPF) which will maintain satisfactory project accounting systems, capable of tracking all project resources and expenditures and generating regular financial statements. Financial management arrangements of SAEPF have been assessed to determine if these arrangements (budgeting, accounting, reporting,

internal control, staffing, funds flow and audit) are satisfactory to the Bank and they have been found to be inadequate (see Annex 3 for details). The SAEPF does not have experience in implementing World Bank projects. An Action Plan is agreed upon to bring the FM arrangements to satisfactory status. These actions include: (i) hiring of a Financial Management Specialist within the PIU by Effectiveness; (ii) installation of fully functional accounting software for the Project (within 30 days after effectiveness) to have the capacity to generate Interim Financial Reports (IFRs) of withdrawal applications including Statement of Expenses (SOEs) and annual financial statements; and (iii) development of a Financial Management Manual (FMM) as part of the POM and within the timeline of the POM. The annual audits of project financial statements will be provided to the Bank within six months of the end of each fiscal year, and also at project closing. The Borrower/Recipient has agreed to disclose the audit reports for the Project within one month of their receipt from the auditors, by posting the reports on the website of SAEPF. Following the Bank's formal receipt of these reports from the Recipient, the Bank will make them publicly available according to World Bank Policy on Access to Information. As part of the project implementation support and missions, quarterly IFRs will be reviewed and regular risk-based FM missions will be conducted. Details on FM arrangements are provided in Annexes 3 and 4.

D. Procurement

68. Procurement for the proposed Project would be carried out in accordance with Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014) and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014); and the provisions stipulated in the Financing Agreement. The World Bank Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006 and revised on January 2011, will also apply.

69. The State Agency for Environmental Protection and Forests (SAEPF) is responsible for overall Project implementation, including the Project's fiduciary functions. The overall procurement risk is rated as Substantial after mitigation.

70. To mitigate the procurement risks, SAEPF will implement the following agreed measures:

(i) Allocation of adequate human resources for the Project's fiduciary functions, including establishment of the PIU and hiring of an individual procurement consultant through competitive selection process using minimum qualification criteria.

(ii) The parties involved in procurement will be further trained during implementation through training seminars. The PIU's procurement specialist will have a wide range of responsibilities from preparation of bidding documents and carrying out other procurement functions to conducting on-the-job training for the Government officials in procurement.

(iii) The Bank's standard bidding documents shall be used and the appropriate Bank procedures shall be followed.

(iv) The Bank will organize a project-launching workshop to provide additional procurement knowledge about Bank procurement procedures tailored to the specific needs of the Project.

71. Detailed findings of the assessment, the proposed procurement arrangements, and measures to address the identified risks are presented in Annex 3.

72. The draft Procurement Plan covering the first 18 months of project implementation has been prepared.

E. Social (including Safeguards)

73. Overall, it is anticipated that the Project will result in positive impacts on communities. The Project activities are expected to increase the capacity and willingness of the communities to participate effectively in local development planning on the one hand, and to increase the receptivity of the local governments to community inputs on the other. Project design elements to ensure inclusion of youth and women in decision-making processes will enable these groups to perform their roles as citizens and it will contribute to their empowerment. Based on the integrity of the natural resources in some of the more impacted areas, the Project may have potential access restrictions. However, this impact is expected to be minor.

74. **Involuntary Resettlement:** The proposed Project triggers the Operational Policy on Involuntary Resettlement (OP 4.12). The project support is aimed at the improvement of public and private forest management practices as well as supporting community-based natural resource management approaches. There is a possibility that as a result of the integrated natural resource management planning exercise, some short term and maybe permanent changes to access of pastures, forests and other lands might be proposed and supported under the Project. There will however, not be any resettlement under the Project. As site-specific impacts were not known prior to appraisal, an Access Restriction Framework (ARF) has been prepared. The ARF includes relevant elements, including guidelines on the conduction of consultations, development of a Plan of Action, details on valuation procedures and livelihood restoration, and describes a grievance redress mechanism. The Project will avoid, minimize, or otherwise mitigate land acquisition and associated adverse impacts.

Social Inclusion

75. **Ensuring representation of women at various levels of Government has been an uphill struggle** in the Kyrgyz Republic. A 30 percent quota for female candidates in the parties' lists has increased the number of women in the Kyrgyz Republic parliament (by 2011, the parliament had 28 women deputies out of 120, which is 23.3 percent).[7] Nevertheless, women's representation in the central government and local governments remains at a low level. Female representation at the level of local government increased only slightly between 2008 and 2012

[7] Freedom House (2010) Freedom in the World Country Reports: Kyrgyzstan, online edition: www.freedomhouse.org/template.cfm?page=22&year=2010&country=7856.

(from 3.9 percent to 4.7 percent).[8] Although women make up a sizable proportion of forestry users, the participation of women in the governance of the forestry sector has remained at a low level mainly because the sector has been traditionally dominated by men.

76. The Project team and the PIU have recognized that Project activities will have various impacts on gender relations in participating communities in the Project areas. The Project addresses gender inclusion in its design in three ways. First, the Project requires a minimum 30 percent of Project beneficiaries to be women. Second, the Project team will include female-only focus group discussions as part of community consultations in order to capture the specific needs of women in local governance as well as social service needs. And third, the Project will capture the specific impact of the Project activities on men and women separately by collecting gender-segregated data. The Project will continue delving beyond numbers to explore pathways for participation and the potential impacts of women's participation in local-level decision-making.

77. Overall, it is envisioned that these measures will contribute to providing more space for female voices, provide women with the opportunity to perform their roles as citizens, and influence development priorities in ways that reflect the needs of women and girls.

Community Participation and Citizen Engagement

78. Increasing community engagement in decision-making is one of the central goals of the Project. The Project envisages the following stakeholder engagement activities: national level consultations with government agencies, donor community representatives and NGOs; local level consultations with representatives of local governments, community-based organizations, leskhozes, and community members.

79. Among the key goals of the Project are the following: a) increasing the capacity of community members to make their own decisions about community priorities and engage their local officials, b) increasing the capacity and responsiveness of local governments to respond to citizens' demands, and c) supporting channels where citizens and local governments can work together in implementation and monitoring of community-level investments to be financed by the Project. Citizen feedback also heavily shaped the Project design. As an initial step of the broader stakeholder engagement, the task team and the PIU representatives visited leskhozes in in Chui oblast (province), met with several NGOs working in the forestry sector, and attended a donor coordination meeting in Bishkek where the mission solicited donor community's opinions about the Project.

F. Environment (including Safeguards)

80. The Project support is aimed at the improvement of public and private forest management practices on the lands managed by the leskhozes, as well as supporting community-based natural resource management approaches. The environmental impact of the Project is expected to be largely positive and no major adverse environmental impacts are anticipated. The Project supports investments in sustainable forest and land management, consistent

[8] National Review of the Kyrgyz Republic in the Framework of the Beijing Declaration and Platform for Action.

with the integrated natural resource management plans. The Project is expected to increase the adoption of effective forest, land, and water management practices in the Project sites and thus contribute to soil and water conservation, and building climate resilience. The Project falls under category B – partial assessment, and an Environment Management Framework (EMF) has being prepared by the Recipient. The EMF includes provisions on mitigation of environmental impacts for the anticipated leskhoz level activities, and will include guidelines for site-specific review of each Project site. Consultations on the EMF were completed on May 27, 2015 and the document was made available to the InfoShop and released within the Kyrgyz Republic on June 3, 2015, prior to project appraisal.

81. The EMF covers primarily Component 2 activities, and takes into account lessons learned from relevant projects to help ensure that the measures included are within the country's implementation capacity. The EMF provides details on the rehabilitation modalities and sets out responsibilities for environmental monitoring by project partners that include beneficiaries, facilitating organizations, the PIUs, local authorities/specialists and relevant line ministries. The Project does not include any investment in dams, and construction of new canals or head works that will increase water extraction from main sources. The Project does not include construction of new roads. The Project area does not include parks or sanctuaries or other areas of high biodiversity significance.

82. Project impacts on natural habitats are expected to be generally positive although investments to rehabilitate vulnerable areas may pose some threat to sensitive biomes. The Operational Policy on Natural Habitats OP 4.04 is triggered to take into account risks associated with undertaking activities in these vulnerable areas. In addition, the Operational Policy on Forestry OP 4.36 is triggered to reflect the interventions being undertaken within the forest estate. As all of these activities are on state forest lands, however, procedures are already subject to management plans to promote sustainable management of such areas within a forest estate. The Operational Policy on Pest Management OP 4.09 has been triggered as the Project will finance nursery establishment and maintenance, and tree planting which will need to take into consideration pest management. Activities undertaken on forest lands could also have impacts on pests, and are also taken into consideration here.

83. The applicability of OP 7.50 was reviewed and a waiver for an exception on notifying riparian states was approved by the ECA Regional Vice President on June 11, 2015. The Project's activities involving minor rehabilitation, minor additions or alterations of existing irrigation infrastructure and all fall within the exception to the notification requirement under Paragraph 7 (a) of OP 7.50.

G. Greenhouse Gas Accounting

84. It is anticipated that the Project will have a positive net impact on greenhouse gas (GHG) emissions through the planned interventions for integrated sustainable ecosystem management

and improved land use management practices. A preliminary ex-ante assessment of the carbon balance[9] of the Project was undertaken during project preparation using the existing GHG assessment model EX-ACT, which was developed by FAO to estimate the impact of agriculture and forestry development projects, programs and policies. The GHG analysis took into account the strategic investments and piloting of sustainable management approaches supported under Component II, which will target 12 leskhozes. As the exact interventions to be supported under each INRMP are not known at this stage, the analysis conservatively assumed that an area of 2,000 ha will be restored and/or re-/afforested. Based on the EX-ACT appraisal over the full analysis duration of 20 years, the Project's net carbon balance is estimated at around 435,514 tCO2-e of avoided emissions or increased carbon sequestration. This translates into around 0.1 tCO2-e/ha annually. During implementation, when the design of the INRMPs is complete and specific project activities are known, the GHG analysis will be repeated using actual data. This analysis will provide support to the State Agency to implement the Forestry sector plan on adaptation to climate change.

85. The IFEMP interventions also target the following focal areas under the Global Environment Facility (GEF-6) Programming Directions: 'Demonstrate systemic impacts of mitigation options: Promote conservation and enhancement of carbon stocks in forest, and other land use, and support climate smart agriculture' (CCM-2, Program 4); 'Maintained Forest Resources: Reduce the pressures on high conservation value forests by addressing the drivers of deforestation' (SFM-1); and 'Reduce pressures on natural resources by managing competing land uses in broader landscapes: Scaling-up sustainable land management through the Landscape Approach' (LD-3, Program 4). The corresponding GEF Tracking Tools were submitted to the GEF-Secretariat prior to submission of the Project for Board approval.

H. World Bank Grievance Redress

86. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

[9] The carbon-balance is the estimated potential mitigation impact which could be generated by the implementation of the Project.

Annex 1: Results Framework and Monitoring

Kyrgyz Republic:

Integrated Forest Ecosystem Management (P151102)

Results Framework

Project Development Objectives

PDO Statement

The Project Development Objective is to strengthen the capacity of government institutions and communities to improve sustainable forest ecosystem management through investments in management planning, ecosystem restoration and infrastructure. The Global Environmental Objective is the same as the PDO.

These results are at | Project Level

Project Development Objective Indicators

Indicator Name	Baseline	Cumulative Target Values				
		YR1	YR2	YR3	YR4	End Target
Government institutions provided w/ capacity building to improve management of forest resources (Number) - (Core)	0	0	17	34	52	52[10]
Land area where sustainable land management practices were adopted as a result of Project interventions (Hectare(Ha)) - (Core)	0	0	to be determined in 1st year of implementation	to be determined in 1st year of implementation	to be determined in 1st year of implementation	616,000
Forest area brought under management plans (Hectare(Ha) - Sub-Type: Breakdown)	0	0	to be determined in 1st year of implementation	to be determined in 1st year of implementation	to be determined in 1st year of implementation	161,000

[10] 51 leskhozes and SAEPF.

Global Environmental Objective Indicators

No GEO Indicators have been entered.

Intermediate Results Indicators

Indicator Name	Baseline	Cumulative Target Values				
		YR1	YR2	YR3	YR4	End Target
Reforms in forest policy, legislation or other regulations supported (Yes/No) - (Core)	No	No	No	Yes	Yes	Yes
Number of participating leskhozes reinvesting self-generated income into sustainable ecosystem management (Number)	0	0	4	8	12	12
National forest inventory updated for Kyrgyz Republic (Yes/No)	No					Yes
Number of participating leskhozes collecting baseline resource data and making it available for management plans (Number)	0	0	4	8	12	12
Area restored or re/afforested (Hectare(Ha)) - (Core)	0.00	0	to be determined in 1st year of implementation	to be determined in 1st year of implementation	to be determined in 1st year of implementation	161,000
Area re/afforested (Hectare(Ha) - Sub-Type: Breakdown) - (Core)	0.00	0	to be determined in 1st year of implementation	to be determined in 1st year of implementation	to be determined in 1st year of implementation	2000
Area restored (Hectare(Ha) - Sub-Type: Breakdown) - (Core)	0.00	0	to be determined in 1st year of implementation	to be determined in 1st year of implementation	to be determined in 1st year of implementation	2000
Number of leskhozes conducting semi-annual/annual public hearings where information about leskhoz	0	0	to be determined in 1st year of	to be determined in 1st year of	to be determined in 1st year of	12

ecosystem management plans and budgets are disclosed (Number)			implementation	implementation	implementation	
Male forest resource user participation at public hearings at leskhoz level (Number)	0	0	to be determined in 1st year of implementation	to be determined in 1st year of implementation	to be determined in 1st year of implementation	2000
Female forest resource user participation at public hearings at leskhoz level (Number)	0	0	to be determined in 1st year of implementation	to be determined in 1st year of implementation	to be determined in 1st year of implementation	2000
Direct project beneficiaries (Number) - (Core)	0	0	to be determined in 1st year of implementation	to be determined in 1st year of implementation	to be determined in 1st year of implementation	1700
Female beneficiaries (Percentage - Sub-Type: Supplemental) - (Core)	0	0	to be determined in 1st year of implementation	to be determined in 1st year of implementation	to be determined in 1st year of implementation	60
Citizens and/or communities involved in planning/implementation/evaluation of integrated ecosystem management plans (Yes/No)	No	No	Yes	Yes	Yes	Yes

*****Data to set annual targets cannot be determined until the first year of implementation. The design of the project is to be a framework project that will provide a platform and resources to respond to the specific requirements of the reform when the project begins and as implementation is underway.

Indicator Description

Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Government institutions provided w/ capacity building to improve management of forest resources	This indicator measures the increase in technical and managerial capacity at the SAEPF, leskhoz level and others in integrated forest ecosystem and landscape management resulting from	Annually.	Leskhoz integrated ecosystem management plans.	Project team.

	the Bank Project's interventions.			
Land area where sustainable land mgt. practices were adopted as a result of Project interventions	This indicator measures the land area that as a result of the Bank Project incorporated and/or improved sustainable land management practices. This indicator can track progress toward sustainability at farm scale and at landscape scales within agroecological zones, watersheds, or basins. The baseline value for this indicator is expected to be zero.[11]	Annually.	SAEPF, annual leskhoz reports, FMIS.	Project team and leskhoz.
Forest area brought under management plans	This indicator measures the forest land area that as a result of the Bank Project has been brought under management plans. The baseline value for this indicator is expected to be zero.[12]	Annually.	SAEPF, annual leskhoz reports, FMIS.	Project team and leskhoz.

Global Environmental Objective Indicators

[11] In the case of the IFEMP, this indicator specifically denotes the area that will be brought under Integrated Ecosystem Management Plans (under Component II), based on the area size of 12 leskhozes which will participate. In order to arrive at this estimate, the total known area of Forest Fund Land (26,178,000 ha) was divided by the total number of leskhozes (51) to deduce the average leskhoz area, and then multiplied by the number of leskhozes which will be participating (12 or approximately 616,000ha); it was estimated that the Project will be able to bring this area under Integrated Ecosystem Management Plans. This indicator corresponds to the GEF project-level targets for Global Environmental Benefits: '2.Sustainable land management in production systems (agriculture, rangelands, and forest landscapes).'

[12] In the case of the IFEMP, this indicator specifically denotes the forest area that will be brought under Integrated Ecosystem Management Plans (under Component II), based on the area size of the forests in the 12 participating leskhozes. In order to arrive at this estimate, the total known area of Forest Fund Land (26,178,000 ha) was divided by the total number of leskhozes (51) to deduce the average leskhoz area, and then multiplied by the number of leskhozes which will be participating (12); forests make up ~6% of this area (or approximately 161,000ha spread across 12 leskhozes). It was estimated that the Project will be able to bring this forest area under Integrated Ecosystem Management Plans. This indicator corresponds to the GEF project-level targets for Global Environmental Benefits: '1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society.'

GEO Indicators are the same as PDO Indicators.

Intermediate Results Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Reforms in forest policy, legislation or other regulations supported	This indicator measures the number of forest policies, regulations or legislation supported as a result of the Project. The baseline value is expected to be zero.	Annually.	SAEPF.	Project team and SAEPF.
Number of participating leskhozes reinvesting self-generated income into sustainable ecosystem management	This indicator measures the number of participating leskhozes investing self-generated income in sustainable ecosystem management as a result of the Bank Project.	Annually.	Income finance report of the leskhoz.	Project team, leskhoz and SAEPF.
National forest inventory updated for Kyrgyz Republic	This measures whether a national forest inventory has been updated for the Kyrgyz Republic as a result of this Project.	Once.	National forest inventory	Project team/SAEPF.
Number of participating leskhozes collecting baseline resource data and making it available for management plans	This measures the number of leskhozes collecting baseline resource data and making it available for management plans as a result of the Bank Project.	Annually.	Leskhoz and Nature Park reports.	Project team and leskhoz.
Area restored or re/afforested	This indicator measures the land area targeted by the Bank intervention that has been restored or reforested/ afforested. The baseline value is expected to be zero.	Annually.	Leskhoz reports.	Project team and leskhoz.

Area re/afforested	This indicator measures the land area targeted by the Bank intervention that has been re/afforested. The baseline value is expected to be zero.	Annually.	Leskhoz reports.	Project team and leskhoz.
Area restored	This indicator measures the land area targeted by the Bank intervention that has been restored. The baseline value is expected to be zero.	Annually.	Leskhoz reports.	Project team and leskhoz.
Number of leskhozes conducting semi-annual/annual public hearings where information about leskhoz ecosystem management plans and budgets are disclosed	This measures the number of leskhozes conducting semi-annual/annual public hearings where information about leskhoz ecosystem management plans and budgets are disclosed.	Annually.	Minutes of leskhoz meetings.	Project team and leskhoz.
Male forest resource user participation at public hearings at leskhoz level	This indicator measures male forest resource user participation at public hearings at the leskhoz level.	Annually.	Minutes of leskhoz meetings.	Project team and leskhoz.
Female forest resource user participation at public hearings at leskhoz level	This indicator measures female forest resource user participation in public hearings at the leskhoz level.	Annually.	Minutes of leskhoz meetings.	Project team and leskhoz.
Direct project beneficiaries	Direct beneficiaries are people or groups who directly derive benefits from an intervention (i.e., children who benefit from an immunization program; families that have a new piped water connection). Please note that this indicator requires supplemental information. Supplemental Value: Female beneficiaries (percentage). Based on the assessment and definition of	Annually	leskhoz reports	leskhoz and project team

	direct project beneficiaries, specify what proportion of the direct project beneficiaries are female. This indicator is calculated as a percentage.			
Female beneficiaries	Based on the assessment and definition of direct project beneficiaries, specify what percentage of the beneficiaries are female.	Annually.	leskhoz reports	leskhoz and project team
Citizens and/or communities involved in planning/implementation/evaluation of integrated ecosystem management plans	This indicator will measure whether or not citizens and/or communities are involved in the planning, implementation and/or evaluation of the integrated ecosystem management plans implemented by the leskhozes.	Annually.	Minutes and attendance of planning meetings in leskhozes.	Data on number of citizens participating in planning and implementation will be collected by the project unit while the evaluation will be captured by the beneficiary assessment.

Annex 2: Detailed Project Description

KYRGYZ REPUBLIC: Integrated Forest Ecosystem Management Project

1. The Project Development Objective is to strengthen the capacity of government institutions and communities to improve sustainable forest ecosystem management through investments in management planning, ecosystem restoration, and infrastructure. The Global Environmental Objective is the same as the PDO. The Project cost is US$16.11 million, (US$ 12 million IDA, and US$4.11 GEF). The Project has four components:

Component I: Forest Sector Institutional Reform
Component II: Strategic Investments and Piloting of Sustainable Management Approaches
Component III: Information and Monitoring and Evaluation
Component IV: Project Management, Monitoring and Evaluation

COMPONENT I: Forest Sector Institutional Reform (US$0.88 million)

2. This component will support the already ongoing reform in the forestry sector in the Kyrgyz Republic that is being implemented by the Government with support from a number of donors including GIZ, FAO, IFAD and others. The institutional reform elements of the Project are specifically designed to be non-prescriptive, to allow for flexibility of implementation and to cater for expected progress in the reform program that is anticipated by other development partners. The goal of the World Bank support is to fill gaps and solve problems on the challenges and opportunities that materialize when the Project resources are made available which is expected to be at least 18 months into the piloting activities initiated by other development partners.

3. Institutional reform and capacity building will be required at the national, local and community levels to implement and develop the new approaches required for the different models of leskhoz and community participation in the sustainable management of natural resources. The Project will provide technical assistance and capacity building at the national level to support the development of the policy, legal, regulatory and institutional framework, based on the lessons learned through the implementation of the ongoing pilot activities. This will be achieved through the following sub components:

Sub-component 1.1: Institutional reform:

4. This sub-component will support institutional reform at all levels. At the national level, there needs to be reform at the SAEPF to allow for the planning, budgeting and monitoring to take place at the leskhoz level. The Project will support the adoption of a new framework and the capacity building at the SAEPF and the leskhoz for the implementation of this new framework. The new planning process will include both top-down and bottom-up input for the development of leskhoz level Integrated Natural Resource Management Plans (INRMPs). Another national level reform necessary for better ecosystem management is the harmonization of regulations, specifically the adoption of unified pasture use arrangements. Currently the pastures in the SFF are regulated by forest regulations. The forestry regulations need to be modified to be consistent with the existing regulatory structure.

Sub-component 1.2: Public Awareness and Community Mobilization:

5. The Project will support a national public awareness campaign. Better information is required to improve natural resource governance and move to more sustainable management regimes. The campaign will be broad based, addressing issues of resource dependence and sustainability, the forestry reform agenda, governance, and the role of civil society. The campaign will employ more traditional methods of public awareness such as brochures and radio ads, in combination with state of the art social media. To ensure that the communities and all stakeholders in and around the pilot leskhozes are equipped to participate in both the new integrated management planning exercise and the implementation of those plans, the Project will support local NGOs with expertise in community mobilization to undertake awareness raising, training and capacity building on the new integrated planning approach. They will support the teams charged with the development of the integrated ecosystem management plans, as well as provide basic training.

***Sub-component 1.3 – Clarification of Leskhoz Boundaries**:*

6. In some instances there are issues of boundary uncertainties in the leskhoz. This leads to either no management of these areas or unsustainable use of their natural resources. The Project will support the public authority in the field of land use to clarify boundaries for leskhozes with land boundary uncertainties.

Sub-component 1.4 – Institutional Capacity Building:

7. Institutional reform and capacity building will be required at the national, local and community level. To develop and implement the new approaches required for the different models of leskhoz and community participation, substantial support will be required to develop the framework and to build capacity within the government structure (horizontal and vertical) as well as within all stakeholder groups. The Project will provide technical assistance, training, and capacity building at the national level to support the development of the policy, legal, regulatory and institutional framework, based on the lessons learned through the implementation of the pilot activities. This support will be undertaken in a consultative and participatory manner, to ensure that all relevant stakeholders' views and opinions are considered and to develop ownership and support for the way forward. At the local level, support will be provided for the development of a framework to create the enabling environment for more decentralized management and planning of natural resources at the national, regional, local and leskhoz administration levels.

COMPONENT II: Strategic Investments and Piloting of Sustainable Management Approaches (US$11.38 million)

8. This component aims to improve land use management through integrated planning and provision of priority investments to implement integrated plans and increase leskhoz income and long-term sustainability. The management planning will be based on integrated ecosystem approaches that manage multiple objectives of ecological services including biodiversity, maintaining tree cover and sustainable economic use. The Project will finance the implementation of the integrated plans, improvement of land use management practices and provide resource users with alternative livelihood opportunities.

9. The component will be implemented in twelve leskhozes. The participating leskhozes might include leskhozes (Achi, Kyzyl, Nookat, Jety Oguz, Balykshi and Frunze) where co-management approaches are being piloted in other partner funded projects and six additional leskhozes to be

identified in the first 6 months of Project implementation. The latter six will be selected based on a set of criteria defined in close cooperation with SAEPF, which may include, *inter alia*: willingness of leskhozes' director and staff to participate in the consultative planning process, previous participation in any of the joint forest management pilots funded by other donors, availability of natural resources—especially forest and pasture lands, biodiversity and tourism values of the leskhoz, importance of leskhoz-generated income to SAEPF budget, etc.

10. The approach to planning at the leskhoz level will be bottom-up and will be supported by a team of consultants financed under the Project. The general protocol for the integrated planning exercise has already been developed and has been executed in some pilot leskhozes. The Integrated Natural Resources Management Plans (INRMPs) will be based on the assessment of the available natural resources and sustainable levels of production and will be developed with the involvement of relevant stakeholders (e.g. users' groups, pasture committees, leskhoz staff, local governments, private sector, as well as the relevant technical departments within the SAEPF). The investments to implement the INRMPs will vary in each leskhoz and will be based on the priority measures identified in the INRMPs, funding envelope and Project time frame. The funding mechanism for the investments will be direct financing of leskhozes based on a partnership agreement between the SAEPF and each participating leskhoz.

11. The component will finance the following subcomponents:

Sub-component 2.1 Preparation of the Integrated Natural Resource Management Plans (INRMPs):

12. INRMPs will cover all natural resources (i.e. forest timber and non-timber products, pasture, provision of water, tourism opportunities, carbon sequestration, etc.) and will identify the needs and inputs required to implement these plans. The Project will support (i) *drafting of guidelines for the preparation of INRMPs* that provide for integrated and sustainable management and use of all natural resources (forest, pastures, water, agriculture land, etc.) within the leskhoz boundaries; (ii) *preparation of INRMPs* for 12 leskhozes; and (iii) *preparation of annual operational plans.*

13. The INRMPs will be based on the assessment of the available natural resources and sustainable levels of production and will be developed with the involvement of relevant stakeholders (e.g. users' groups, pasture committees, leskhoz staff, local governments, as well as the relevant technical departments within the SAEPF). The INRMPs will be developed in accordance with the new guidelines and through an increased consultation of all relevant stakeholders and involvement of women and other vulnerable constituents. The plans will be valid for a 5 year period. The preparation process will be monitored by the Joint Forest Management Council (JFMC) that will be established to monitor and coordinate the implementation of various management approaches. The JFMCs will serve as platforms for dialogue and conflict resolution. It is envisaged that the INRMPs will also identify opportunities for public-private partnerships, and where possible and appropriate the outsourcing of some of the current leskhoz responsibilities (such as seedling production) to the private sector through transparent procedures will be supported.

Sub-component 2.2 - Strategic investments to implement INRMPs:

14. This sub-component will finance the implementation of the INRMPs and priority measures that improve land use management practices, increase leskhoz income and offer alternative

livelihood opportunities to different users of the resources within leskhozes and in the municipal degraded forests. The menu of interventions will include: (i) silvicultural measures like thinning and plantation forests with short rotation for biomass; (ii) selective timber harvesting; (iii) production of high quality seedlings for afforestation and reforestation; (iv) investments in other value chains like processing of nut/fruit, ecotourism; (vi) establishment of nurseries with improved seed stock and advanced technology; (vii) creation of silvopastoral systems (e.g. walnut forests or spruce with hayfields, pine with pasture); and (viii) provision of irrigation for fruit trees and nurseries, etc. The funding mechanism for the strategic investments will be direct financing to leskhoz administration based on individual partnership agreements between SAEPF and each participating leskhoz.

Sub-component 2.3 - Assessment and restoration of municipal degraded resources:

15. This sub-component will help address the issue of the restoration of municipal degraded forests or so-called "orphan forests" in the areas that overlap with the leskhoz boundaries. The management of these forest lands was transferred to the municipalities twenty years ago and they are part of the National Forest Fund. These forests are heavily degraded because communities close to these forests have used them to meet their fuelwood needs. However, the municipalities do not have the necessary technical capacities to manage or funding to invest in the restoration of this valuable resource. The Project will support: (i) mapping of the municipal degraded forests; (ii) preparation of operational plans to identify key necessary investments; and (iii) provision of investments such as for afforestation with short rotation tree species, thinning (to encourage natural regeneration), etc.

COMPONENT III: Information and Monitoring and Evaluation (US$ 2.78 million)

16. Better and more accessible information is required both at the national level for strategic planning and monitoring (taking into account external factors such as climatic and demographic change), and locally for integrated forest ecosystem management planning. This component will finance the collection, storage, analysis and reporting on this data. A centralized Forest Management Information System (FMIS) will be established, which will include a web-based portal to allow the sharing of data and information with relevant government institutions, leskhozes, municipalities, the private sector, local community organizations and any other interested stakeholders. Other government institutions will be able to share and access key datasets available in the system. This component has three interconnected sub-components:

- National Forest Inventory (NFI) and Monitoring;
- Establishing of the Forest Management Information System (FMIS); and
- Research on key topics including natural capital accounting (NCA) and climate change.

Sub-component 3.1 - National Forest Inventory (NFI) and Monitoring

17. The National Forest Inventory (NFI) which was partially completed in 2008 by FAO will be updated. The FAO inventory did not include the use of new remote sensing or interpretation but relied on old forest boundary definitions with some new field sampling. The NFI exercise will

employ state of the art methodologies for conducting national forest inventories, including geospatial data.

18. The NFI will establish key parameters such as the total areas of forest by forest type and ownership (i.e. municipal in comparison to leskhoz forest in the SFF), total standing volumes by species and size class, regeneration, incidence of forest pests and disease, and the distribution of key indicator species for biodiversity conservation. Other relevant data will also be collected (e.g. evidence of illegal removals, erosion, forest fires, species/condition of pasture, etc.) as required.

19. This sub-component will also interpret new aerial imagery to define the different land use types beyond forests (i.e. pasture, orchards, recreation areas etc.) within the State Forest Fund (SFF). At the same time, data available from other sources such as the state registry will overlaid on the forest maps to delineate the boundaries of the leskhozes, protected areas, municipalities and private property. All private property in Kyrgyz Republic has been defined and registered in the State Registry. However the boundaries between other land ownership categories (such as the boundary between the SFF and municipally owned land) is not always accurately defined or known. Where these instances of boundary problems are identified, the project will support the boundary definition and registration of these areas.

Sub-component 3.2 - The Forest Management Information System (FMIS):

20. The goal is to create a permanent geospatial information system for collecting, recording and reporting on forest and pasture information, which is available to all relevant users and avoids duplication of effort. The FMIS will integrate hardware, software and relevant data acquired and managed by the forestry, and other relevant sectors. The system will allow for the viewing, querying, interpreting and visualizing the data in many ways. It will be a support tool in the business processes of integrated forest ecosystem management. The system will also provide for continuous monitoring of forestry and SFF pasture land activities. Training is an integral part of the system, including hands on training during the planning, design, installation and operation.

21. While there is an existing FMIS, it has deficiencies and needs to be modernized. The system will be established in a three-stage process: (i) planning and design, (ii) programming and installation, and (iii) implementation. It will have a modular structure so that modules can be added later and it will support multiple functionalities. Key modules would include: forestry and pasture data (geospatial and quantitative data) required for the NFI, and integrated resource management planning purposes; protected areas and critical biodiversity data; areas of erosion and flood risk; monitoring and evaluation modules where annual work plans and actual records of interventions are recorded; and a data exchange module (data exchange with external databases, e.g. State Registry, Ministry of Agriculture).

22. The FMIS will have a web-based portal to allow for different levels of access to the information. For example, approved plans and maps would be available with open public access. Sharing of spatial data would be freely available to relevant government institutions. Confidential information (i.e. contractual information) will only be available to relevant parties with encrypted/password access. Inventory crews will be able to upload the data they collect via the internet. The leskhozes will be able to download the available relevant resource data and maps, and upload the more detailed data they collect during the management planning process, the finalized plans as well as the contractual and implementation data. Data stored and contributed will allow for consolidation and reporting at all levels.

23. An FMIS management team will be established within the SAEPF to manage and coordinate the process. The management team will consist of forestry, GIS and database management professionals and Information Communications Technology (ICT) professionals. The implementation of the FMIS will allow for systematizing of contracts and leases (through whichever method is preferred), better recording of official removals and significantly improved transparency, as well as the reporting of suspicious activities through the planned web interface.

24. The Project will commission consultants to plan and design the system with the FMIS management team. The system planning and design will be based on current and future needs for data and its reporting. The project will build on the infrastructure already established and will procure the necessary hardware and software system upgrades and provide support for the software programming and installation. The option of using an external outsourcing server will be analyzed during the planning phase, taking in consideration the current infrastructure and capacities. The consultants will provide the necessary training and supervision to ensure that the SAEPF can operate and maintain the system. Wherever possible the project will utilize open source software to avoid costly software licenses which could make the sustainability of the system difficult post project. The SAEPF, with project support, will develop a common data platform with other relevant government institutions to ensure that the data it collects, stores and processes will be compatible (i.e. in the same format and file types) and freely exchangeable.

Sub-component 3.3 – Research on Key Topics including NCA and Climate Change:

25. To fully inform the development of national level policy, and strategy for implementation of the reform process, it is necessary to understand the external factors that influence the forest and pasture sector. These key factors include amongst others: the full economic and social costs associated with the current management and status of the resource (including erosion and degradation); the impact of climate change in terms of the changing temperatures and precipitation patterns, the increased likelihood of droughts and floods, and the effect of the melting glaciers on the landscape; the changing demographic situation including the dimensions of poverty and culture; current numbers of livestock and the trends; and above all, the linkages between all of these external factors not traditionally considered in forest management. To facilitate improved understanding of these factors at the national and leskhoz level a number of different approaches will be adopted by the project:

i) ***Natural capital accounting (NCA):*** Traditionally only the direct revenue from leases, non-timber forest products and timber production have been included in national accounting systems. Forest ecosystems produce many additional services such as provision of clean water, carbon storage, habitats for wildlife and fisheries, and the prevention of floods and erosion. These goods and services tend to have a greater impact on the people living near and depending on forests who in turn tend to be poorer sectors of society. Developing a better understanding of the costs and returns from different management scenarios of the different elements within the landscape, can provide decision makers with tools to manage the trade-offs between the different resources and to maximize the sustainability and productive capacity of the resource. The project will therefore support, in cooperation with the national statistical office, piloting of an approach to account for all the costs and returns associated with the natural capital of the ecosystems, so called Natural Capital Accounting (NCA). Project support will include provision of consultants to support the design and

analysis of NCA and to help trial an approach with the SAEPF and the National Statistical Office.

ii) ***Climate Change and Adaptation Strategies:*** Climate change will have a large impact on forestry and landscape management. The Project will therefore support the monitoring of the extent and health of the forest (through the NFI). Management plans will need to take climate change adaptation needs into consideration, such as through favoring the use of more drought resistant species for example. Leskhoz management plans will need to take into consideration the availability of watering points in pastures and irrigation for other land uses, as well as changing hydrological regimes, diurnal and seasonal temperature changes. The project will therefore support the analytical study of the likely impacts of climate change on the SFF and the surrounding communities and help develop suitable adaptation strategies to help adapt to and mitigate the impacts of climate change.

COMPONENT IV: Project Management, Monitoring and Evaluation (US$ 1.07 million)

26. This component will finance Project management activities which will be undertaken by the PIU established in the SAEPF. This will include budgeting, preparing annual work plans, contract management, financial management, procurement, and monitoring and evaluation. Under this component all reporting on implementation progress will be prepared, including monitoring of the PDO and the Project Results Framework indicators.

Annex 3: Implementation Arrangements

KYRGYZ REPUBLIC: Integrated Forest Ecosystem Management Project

Project Institutional and Implementation Arrangements

1. The main Implementing Agency (IA) of the IFEMP will be the SAEPF. SAEPF will be supported by a Project Implementation Unit (PIU) established under the SAEPF and will include a coordinator, FM specialist, procurement specialist, and M&E specialist. If during implementation the capacity in the PIU for either financial management or procurement needs to be augmented, consultants will be hired to provide additional capacity. The already formed National Coordination Committee (NCC) in the SAEPF will serve as the Project Steering Committee. The NCC was established by the SAEPF to promote the forestry reform process through the piloting of the joint forest management models in several leskhozes. The NCC includes high officials of the SAEPF, representatives of international and bilateral organizations (GIZ, WB and FAO) and several NGOs. Project implementation arrangements and coordination with other agencies will be provided for in the Project Operations Manual (POM), to be adopted prior to project effectiveness.

Financial Management, Disbursements and Procurement

2. Financial management support for the Project will be provided by the PIU that will be established at SAEPF. It is expected that the staff of the PIU will handle financial management and disbursement activities of the Project, managing Project funds, maintain accounts and have the accounts audited.

3. **Financial Management:** The overall financial management arrangements for the Project, including budgeting, accounting, reporting, internal control, funds flow and audit, are not satisfactory currently. At SAEPF the staffing capacity, in terms of numbers, and skills are not adequate. The proposed IA) would require services of financial management (FM) and Disbursement/Accounting consultants, to support the PIU namely to establish and implement a financial management system for the Project implementation, including elaboration of procedures for budgeting, accounting, internal control, financial reporting, contract management and audit in a manual of financial procedures.

4. In the agency staff lacks experience with Project financial management and disbursement requirements of the World Bank. Therefore, an experienced financial management specialist will be needed and be responsible for Project financial management and disbursement functions. Accounting and financial reporting at the agency will need to be automated, with inbuilt controls to enhance reliability of financial reports produced by the accounting system as well as to have capacity to generate IFRs as well as attachments to withdrawal applications including SOEs and annual financial statements required under the Project. In addition, the manual of financial procedures, describing budgeting, accounting, reporting and internal control procedures will need to be completed to guide staff in daily Project financial management operations. This FM Manual will be part of the POM and developed within the timeline of the POM.

5. Overall, actions required to ensure satisfactory financial management requirements include: contracting a financial management specialist, installation of the automated accounting systems with inbuilt controls and capacity to generate interim financial reports.

6. The Table below lists the actions required to ensure satisfactory financial management system by effectiveness:

Table 3. Ensuring Financial Management System Effectiveness

Recommended Action	Responsibility	Deadline
POM to be developed, to include financial management chapters, including Project accounting and reporting, funds flow, audit arrangements, disbursement procedures, etc.	SAEPF	By effectiveness
Install automated accounting system with capacity to generate IFRs, attachments to withdrawal applications including SOEs and annual financial statements	SAEPF	Within 30 days after effectiveness
Recruitment of financial management specialist responsible for Project financial management and disbursement functions	SAEPF	By effectiveness
Training of financial management staff on financial management and disbursement procedures of the World Bank	World Bank	Project Launch and during implementation

7. **Budgeting and Planning:** Project budgets, prepared annually based on the procurement plan cleared by the Bank, will form the basis for allocating funds to project activities. The budgets will be prepared in enough detail, by disbursement categories, activities and account codes, and broken down by quarters. Annual budgets should be agreed with the Bank before final approval. Approved annual budgets will then be entered into the accounting system and used for periodic comparison with actual results as part of the interim financial reporting.

8. **Funds Flow:** The proceeds of the IDA/GEF Credit/Grant will be disbursed over a period of five years or for such longer period as will be agreed with the Bank. Project funds will flow from IDA/GEF either: (i) via Designated Accounts operated by the SAEPF PIU (to be replenished in accordance with guidelines in the Disbursement Letter); (ii) Reimbursement with full documentation or SOEs; (iii) Direct Payments from the Credit/Grant Account with full documentation or; (iv) Special Commitments.

9. **Accounting and Records:** The Project accounting will be maintained on cash basis, with supporting documentation maintained in files in accordance with existing government financial regulations and standards acceptable to the Bank. In the agency, automated accounting system based on suitable accounting software will be used for Project accounting reporting and other activities, including payroll. The agency will need to install suitable accounting software to support Project accounting and reporting.

10. **Project Financial Reporting:** The agency will need accounting system with capacity to generate reports required by the Bank. The Implementing Agency will be responsible for

submission of interim un-audited financial reports (IFRs) that will be generated by the accounting system based on formats agreed with the World Bank. The reports, to include Statement of Sources and Uses of Funds by disbursement categories, Uses of Funds by Project activities, project Balance Sheet, Statements of Designated Accounts13 (DA), and SOE Schedules14 will be submitted to the World Bank within 45 days of the end of each quarter, with the first report under the proposed Project being submitted after the end of the quarter of initial disbursement.

11. **Internal Control and Internal Audit:** The agency will develop the Project Operations Manual, incorporating financial procedures specific for the Project. Internal control procedures, including expenditure and payment approvals, timely and complete recording of transactions, regular reconciliation of accounts and balances, segregation of duties, safeguard of data and assets, as well as regular reporting and audits, will be described in detail in the Project Operations Manual (POM).

12. **External Audit:** Audit of the proposed Project will be conducted (i) by an independent auditor acceptable to the Bank on terms of reference acceptable to the Bank; and (ii) in accordance with International Standards on Audit (ISA) issued by the International Auditing and Assurance Standards Board of the International Federation of Accountants (IFAC). Audit of the Project will include the Project financial statements, SOEs and DA Statements. The annual audited Project financial statements will be submitted to the Bank within six months of the end of each fiscal year and at the closing of the Project. The cost of the audit will be financed from the Credit/Grant funds. The following table identifies the audit reports that will be required to be submitted:

Audit Report	Due Date
The Project financial statements (PFSs) to include Statement of Sources and Uses of Funds, Uses of Funds by Project Activity, Project Balance Sheet, SOE Withdrawal Schedules, DA Statements and Notes to the financial statements.	Within six months of the end of each fiscal year and also within six months after the closing of the Project.

Audited Project financial statements will be publicly disclosed in accordance with the Bank's Access to Information (AI) Policy.

13. **Disbursements.** The proceeds of the credit/grant will be disbursed over a period of five years or for such longer period as will be agreed with the Bank. Credit/grant funds will flow through Direct Payment and via disbursements to the Designated Accounts (DA) maintained by EAPF. The Project will follow transaction-based disbursement procedures (payments through DAs, reimbursement, direct payments, and special commitments). Withdrawals from the Credit/Grant Accounts will be requested in accordance with the guidance to be given in a Disbursement Letter. Withdrawal applications will be signed by two persons: (i) an authorized representative of the Borrower/Recipient; and (ii) another designated person as authorized by written delegated authority from the Borrower/Recipient.

[13] Separately for each source of financing;
[14] Same as above.

14. **Designated Accounts:** To facilitate timely disbursements for eligible expenditures on works, goods and services, the Borrower/Recipient will open and operate under terms and conditions acceptable to the Bank, Designated Accounts in US dollars in a commercial bank acceptable to the World Bank. The agency will be responsible for the appropriate accounting of the funds deposited into the designated accounts, for reporting on the use of these funds and for ensuring that they are included in the audits of the financial statements. Ceiling of the Designated Accounts and the Minimum Application size for Direct Payment or Special Commitment have been communicated in the Disbursement Letter.

Procurement

15. Overall, the public procurement environment in the country is improving as the Public Procurement Department (PPD) under the Ministry of Finance has revised the Public Procurement Law (PPL) and the new PPL has been recently adopted by the Parliament and signed by the President. The new PPL will create an independent complaint review commission and PPD will become a regulatory body for public procurement. The Bank is supporting the institutional development of the PPD and the complaint review commission, as well as capacity building of all stakeholders. The Government is developing e-GP with the Bank Technical Assistance (TA) and Asian Development Bank (ADB) financing.

16. **Procurement for the proposed Project be carried out in accordance with Guidelines:** Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014) and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014). The various items under different expenditure categories are described in general below.

17. The World Bank Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006 and revised on January 2011, will also apply. For each contract to be financed by the Bank, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the GoK and are in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual Project implementation needs and improvements in institutional capacity.

18. **Procurement of Works:** Works procured under this Project would include minor rehabilitation works for leskhoz under financing implementation of INRMPs.

19. **Procurement of Goods:** Goods procured under this Project would include procurement office equipment and vehicles for PIU and goods for leskhoz under financing implementation of INRMPs. Goods contracts above US$1,000,000 equivalent will be procured under International Competitive Bidding (ICB) procedures using the Bank's Sample Bidding Document (SBD) for procurement of goods. The National Competitive Bidding (NCB) method will be applicable for procurement of goods contract with the estimated budget of less than US$1,000,000. The ECA region Sample NCB bidding documents shall be used taking into account the NCB conditions set forth in the Financing Agreements. Goods contracts with an estimated budget less than US$100,000 equivalent may be procured using Shopping procedures on the basis of at least three written price quotations obtained from qualified suppliers.

20. **Selection of Consultants**: The methods for selection of consultants will include Quality and Cost Based Selections (QCBS), Quality Based Selections (QBS), Fixed Budget Selection (FBS), Least Cost Selection (LCS), Selection based on Consultants Qualifications (up to US$300,000), Single Source Selection in compliance with Paragraph 3.8 of the Bank's Consultant Guidelines, and Individual Consultants (IC). Contracts estimated to cost above US$300,000 equivalent will be advertised through United Nations Development Business (UNDB), the Bank's website and local media (one newspaper of national circulation or the official gazette, and IA's website). Short-lists of consultants for services estimated to cost less than U$100,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines. The Bank's Standard Request for Proposal Document would be used as a base for all procurement of consultancy services to be procured under the Project.

21. **Training:** Training will be covered at the national, leskhoz, and community levels. A training plan will be developed during project implementation for specific training for the SAEPF, for leskhoz staff country wide, and for communities near the 12 pilot leskhozes.

22. **Operating Costs:** The credit/grant will finance incremental operating costs. Operating costs will cover vehicle maintenance for PIU, fuel, utility and communication costs, translation costs, travel expenses, bank charges, office supplies, advertisement costs, printing, mail, as well as other reasonable expenditures directly associated with the implementation of the project. Such costs would be financed by the project as per an annual budget approved by the Bank and incurred using the implementing agency's administrative procedures. Operating costs will not include salaries of civil servants.

23. The execution of procurement under financing program below US$20,000 will be delegated to the recipients. Procurement responsibilities, procedures and sample documentation will be described in detail in the POM and in the INRMP Financing Program Procurement Handbook. A detailed INRMP Financing Program Procurement Handbook will be prepared. This financing may include the procurement of goods, minor works, consultant services and training. The recipients will manage implementation and will have a direct responsibility for procuring goods, services and minor works. Procedures will be harmonized with public procurement procedures to ensure sustainable capacity building.

24. **Assessment of the agencies' capacity to implement procurement:** State Agency for Environmental Protection and Forests (SAEPF) is responsible for overall project implementation, including the project's fiduciary functions. The overall procurement risk is rated as Substantial after mitigation. To mitigate the procurement risks, SAEPF will allocate adequate human resources for the project's fiduciary functions, including establishment of PIU and hiring an individual procurement consultant.

25. **Procurement Supervision and Ex-post Review:** Routine procurement reviews and supervision will be provided by the procurement analyst based in the country office. In addition, two supervision missions are expected to take place per year during which ex-post reviews will be conducted for the contracts that are not subject to Bank prior review on a sample basis (20 percent in terms of number of contracts). One ex-post review report will be prepared per fiscal year, including findings of physical inspections for not less than 10 percent of the contracts awarded during the review period.

26. **Procurement Thresholds and Methods of Procurement:** The following methods of procurement shall be used for procurement under the project. It has been agreed that if a particular invitation for a bid is comprised of several packages, lots or slices, and invited in the same invitation for bid, then the aggregate value of the whole package determines the applicable threshold amount for procurement and also for the review by the Bank. The national competitive bidding (NCB) conditions will be part of the Financing Agreement.

Table 4. Procurement Thresholds and Methods of Procurement

Expenditure Category	Contract Value (USD)	Procurement Method	Bank Prior Review
Civil Works	>= 5, 000 000	ICB	All ICB contracts
	< 5, 000,000	NCB	First contract
	<50 000	Shopping	First contract
	NA	DC	All
Goods	>= 1, 000 000	ICB	All ICB contracts
	<1, 000 000	NCB	First contract; All contracts >= USD 500,000
	<100 000	Shopping	First contract
	NA	DC	All DC contracts
Consultant Services	NA	QCBS, QBS, FBS, LCS and CQS*	All contracts >= USD 200,000 for firms; all contracts >= USD 100,000 for individuals; and all SSS contracts above 2 ,000.
	NA	SSS	
	NA	IC	

Notes:
ICB – International Competitive Bidding
NCB – National Competitive Bidding
DC – Direct Contracting
QCBS – Quality and Cost Based Selection
QBS – Quality Based Selection
FBS – Fixed Budget Selection
LCS – Least Cost Selection
*CQS – Selection Based on Consultants' Qualification below $300,000 depending on the nature of assignment
SSS – Single (or Sole) Source Selection
IC – Individual Consultant selection procedure
NA – Not Applicable

27. The prior review thresholds will be periodically reviewed and revised as needed during the Project implementation period based on implementation of risk mitigation measures, reports from procurement post-reviews, and improved capacity of the implementing agency.

28. **Procurement plan.** For each contract to be financed by the Bank, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior

review requirements, and time frame are agreed between the Government and the Bank Project team in the Procurement Plan. A procurement plan has been developed covering the above procurement activities and has been agreed with Government. The plan will be updated periodically, at least once per year, and each update will be subject to the Bank's prior review. The initial procurement plan plus the subsequent updates will be published on the Bank's external web site in line with the requirements of Bank Guidelines.

Table 5. Procurement Plan (October 2015)

Item №	Contract Description	Proc. Method	WB Review (Prior/ Post)	Date of Contract Signing
GOODS				
Component 1. Forest Sector Institutional Reform				
	No goods			
Component 2. Strategic Investments and Piloting of Sustainable Management Approaches				
1	Financing the implementation of INRMPs	NCB/SH	Prior/Post	
2	Investments like afforestation of short rotation tree species, natural regeneration through thinning etc.	NCB/SH	Prior/Post	
Component 3. Information and Monitoring and Evaluation				
3	National Forest Inventory (NFI) and the Management Forest Inventory (MFI) (Non-consulting services)	ICB	Prior	**9/1/2016**
4	Office equipment for FMIS	NCB	Prior	**6/1/2017**
Component 4. Project Management, Monitoring and Evaluation				
5	Computers for PIU	SH	Prior	**3/1/2016**
6	Furniture for PIU	SH	Post	**3/1/2016**
7	Car for PIU	SH	Post	**3/1/2016**
8	Accounting software for PIU	SH	Post	**3/1/2016**

CONSULTANCY LARGE

Item №	Contract Description	Select. Method	WB Review (Prior/ Post)	Date of Contract Signing
Component 1. Forest Sector Institutional Reform				
1	Support of introduction of new principles of planning, budgeting and monitoring	QCBS	Prior	**9/1/2016**
Component 2. Strategic Investments and Piloting of Sustainable Management Approaches				
2	Preparation of the Integrated Natural Resource Management Plans (INRMPs)	QCBS	Prior	**9/1/2016**
Component 3. Information and Monitoring and Evaluation				
3	The Forest Management Information System (FMIS)	QCBS	Prior	**1/1/2017**
Component 4. Project Management, Monitoring and Evaluation				
4	Project Audit	LCS	Prior	**9/1/2016**

Environmental and Social (including safeguards)

29. The environmental impact of the Project is expected to be largely positive and no major adverse environmental impacts are anticipated. The Project supports investments in sustainable forest and land management, consistent with existing management plans. It is expected to increase the adoption of effective forest, land, and water management practices in the Project sites and thus contribute to soil and water conservation, and building climate resilience. The Project falls under category B – partial assessment, and an Environmental Management Framework (EMF) is being prepared by the Recipient. The EMF will include provisions on mitigation of environmental impacts for the anticipated activities, and will include guidelines for site-specific review of each Project site, mostly in relation to the development or rehabilitation of existing small infrastructure. The EMF will also bring in considerations that are embedded in the Integrated Natural Resource Management Plans for the Project sites. Consultations on the EMF were completed on May 27, 2015 and the document was made available to the InfoShop on June 3, 2015 and released within the Kyrgyz Republic on June 3, 2015, prior to Project Appraisal.

30. The EMF covers primarily Component II activities, and takes into account lessons learned from relevant Projects to help ensure that the measures included are within the country's implementation capacity. The EMF provides details on the rehabilitation modalities and on the demonstration projects, and sets out responsibilities for environmental monitoring by project partners that include beneficiaries, facilitating organizations, the PIUs, local authorities/specialists and relevant line ministries. The Project does not include any investment in dams, and construction of new canals or head works that will increase water extraction from main sources. There is a possibility that the project will support small scale drip irrigation activities for orchard establishment and therefore the project does trigger OP 7.50 (Projects on International Waterways). The applicability of OP 7.50 was reviewed and a waiver for an exception on notifying riparian states was approved by the ECA Regional Vice President on June 11, 2015.

31. The Project does not include construction of new roads. The Project area does not include parks or sanctuaries or other areas of high biodiversity significance.

32. Project impacts on natural habitats are expected to be generally positive. Investments to rehabilitate vulnerable areas may pose some threat to sensitive biomes. The Natural Habitats OP 4.04 is triggered to take into account risks associated with undertaking activities in these vulnerable areas. In addition, the Forestry OP 4.36 is triggered to reflect the interventions being undertaken within the forest estate. As all of these activities are on state forest lands, however, procedures are already subject to management plans and certification provisions promote sustainable management of such areas within a forest estate.

33. It is anticipated that impacts on Pest Management (OP 4.09) will also be positive; however, the OP 4.09 has been triggered as the Project will finance nursery establishment and maintenance, and tree planting which will need to take into consideration pest management. Activities undertaken on forest lands could also have impacts on pests, and are also taken into consideration here.

Monitoring & Evaluation

34. By effectiveness, a detailed 'Guide for project monitoring and evaluation' will be produced as part of the Project Operational Manual. The document will provide guidance on the roles and responsibilities of Project beneficiaries and partners, plus other relevant stakeholders in collecting, analyzing and communicating Project data and results. By producing timely and pertinent information, the M&E system will be a key management instrument aimed at helping decision-making processes and support adaptive management and Project implementation. The Project is expected to contribute to the Kyrgyz Republics mandate to monitor and report on natural resource management both for national and international audiences.

Annex 4: Implementation Support Plan

KYRGYZ REPUBLIC: Integrated Forest Ecosystem Management Project

Strategy and Approach for Implementation Support

1. The strategy for implementation support (IS) was developed based on the nature of the Project and its risk profile. Its aim is to make IS to the Recipient more flexible, efficient, and focused on the risk mitigation measures defined in the Systematic Operations Risk-rating Tool (SORT) and to support the achievement of the PDO and GEO.

2. **Procurement:** IS for procurement will include: (a) reviewing procurement documents and providing timely feedback to the Procurement Specialist; (c) providing detailed guidance on the Bank's Procurement Guidelines to the Procurement Specialist who has focused on ensuring procurement readiness of first year contracts; and (d) monitoring procurement progress against the detailed Procurement Plan, which will be updated every six months (or as required) to reflect Project implementation needs and improvements in institutional capacity.

3. **Financial Management Support:** As part of its Project implementation support mission, the World Bank's FM Specialist (FMS) would conduct risk-based financial management supervision within six months of Project effectiveness and then at appropriate intervals. During Project implementation, the Bank would supervise the Project's financial management arrangements in the following ways: (i) review the Project's quarterly IFR, annual audited financial statements, and the auditor's Management Letters and remedial actions recommended; and (ii) during the Bank's on-site supervision missions, review the following key areas: (a) Project accounting and internal control systems; (b) budgeting and financial planning arrangements; (c) disbursement management and financial flows, including counterpart funds, as applicable; and (d) any incidences of corrupt practices involving Project resources. As required, a Bank-accredited FMS would assist in the implementation support process. More frequent implementation support missions may take place during the first part of the Project. The FMS would consider joint fiduciary missions with procurement colleagues.

4. **Environmental and Social Safeguards:** Compliance with environmental and social safeguards will be the primary responsibility of the PIUs with one staff specifically tasked to monitor compliance. Depending on the specific pilot activities, a site-specific Environmental Management Plan will be prepared and cleared by the World Bank environmental specialist. The PIU staff have adequate experience and capacity related to World Bank social and environmental safeguards based on implementation of previous World Bank projects. *The Bank team will provide guidance to the PIUs to address any issues as they may arise.*

5. **Audit:** External auditors are expected to identify any internal control deficiencies and accounting issues. The audit reports, audited financial statements and management letter will be delivered to the Bank within six months of the end of each fiscal year. The audited Project Financial Statements will be made publicly available in a timely fashion and in a manner acceptable to the Bank.

6. **Monitoring and Evaluation:** There will be an M&E specialist in the PIU. M&E will be based on both survey and administrative data sources. A mid-term review will be carried out to assess overall progress. Lessons learned, recommendations for any improvements, and

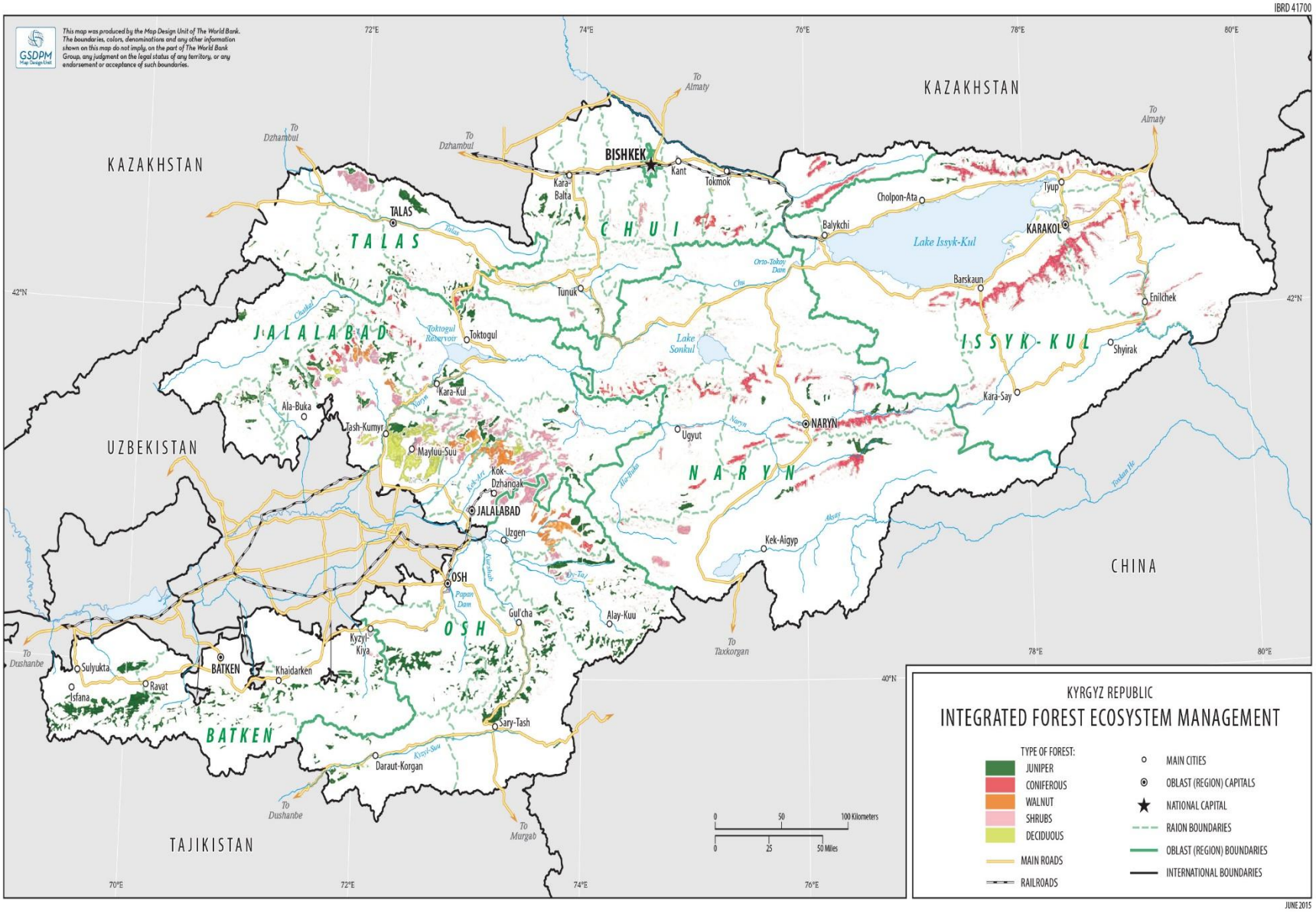
stakeholder feedback will be used in restructuring the Project if necessary. The results of the M&E activities will be fed back into the implementation process as improved practices.

Table 6. Implementation Support Plan

Time	***Focus***	***Skills Needed***	***Resource Estimate***
First twelve months	Establishment of the PIU Review Legislative and Regulatory Framework Review and selection of pilot leskhozes Development of Integrated Natural Resource Management Plans Review and Propose Solution to Tenure Disputes Effective implementation of training and capacity building efforts Community Mobilization	Task Team Leader Development Partners FM and procurement Environmental Specialist Social Specialist Forestry NRM Specialist	$130,000
12-60 months	Effective implementation of priority leskhoz management plans Evaluation of pilot activities to determine success and failure and opportunity for replication Completion and maintenance of National Forest Inventory and FMIS	Task Team Leader Development Partners FM and procurement Environmental Specialist Social Specialist Project management; strategic thinking; environmental economics;	$130,000 per year

Table 7: Implementation Support Plan Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Team Coordination Sustainable Forestry Monitoring Procurement Financial management Communication Specialist	12-18 per year total across the team	2 trips per year for core team	To be adjusted according to implementation progress and emerging issues and needs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JALALABAD
OSH
BATKEN
Lake Issyk-Kul
Lake Sonkul
Toktogul Reservoir
Orto-Tokoy Dam
Papan Dam
Kara-Balta
Kant
Tokmok
Cholpon-Ata
Tyup
Balykchi
Barskaun
Enilchek
Shyirak
Kara-Say
Tunuk
Toktogul
Kara-Kul
Ala-Buka
Tash-Kumyr
Mayluu-Suu
Ugyut
Kok-Dzhangak
Uzgen
Kek-Aigyp
Gul'cha
Alay-Kuu
Kyzyl-Kiya
Sulyukta
Khaidarken
Isfana
Ravat
Sary-Tash
Daraut-Korgan
To Almaty
To Dzhambul
To Dushanbe
To Murgab
To Taxkorgan
0 50 100 Kilometers
0 25 50 Miles
KYRGYZ REPUBLIC
INTEGRATED FOREST ECOSYSTEM MANAGEMENT
TYPE OF FOREST:
JUNIPER
CONIFEROUS
WALNUT
SHRUBS
DECIDUOUS
MAIN ROADS
RAILROADS
MAIN CITIES
OBLAST (REGION) CAPITALS
NATIONAL CAPITAL
RAION BOUNDARIES
OBLAST (REGION) BOUNDARIES
INTERNATIONAL BOUNDARIES
JUNE 2015