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The World Bank

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IMPLEMENTATION COMPLETION AND RESULTS REPORT

(IDA-H3800)

FOR A GRANT

IN THE AMOUNT OF US\$ 5.85 MILLION

TO THE

KYRGYZ REPUBLIC

FOR A

SECOND LAND AND REAL ESTATE REGISTRATION PROJECT

Sustainable Development Department  
Central Asia Country Unit  
Europe and Central Asia Region

## CURRENCY EQUIVALENTS (Exchange Rate Effective 06/10/2014)

Currency Unit = Kyrgyz Som (KGS)

1.00 = US\$ 0.019 US \$ 1.00 = 52.50

FISCAL YEAR January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

ARS	Automated Registration System
CDS	Country Development Strategy
CIS	Commonwealth of Independent States
CSC	Cadastre Service Center
CY	Calendar Year
DA	Designated Account
DCF	Discounted Cash Flow
DCR	Department of Cadastre and Registration of Rights to Immovable Property
DFID	United Kingdom Department for International Development
EA	Environmental Assessment
ECA	Europe and Central Asia Region of the World Bank
EMP	Environmental Management Plan
FDI	Foreign Direct Investment
FM	Financial Management
FMS	Financial Management System
FY	Fiscal Year
GDP	Gross Domestic Product
GIS	Geographic Information System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
ICB	International Competitive Bidding
ICR	Implementation Completion and Results Report
ICT	Information and Communication Technology
IDA	International Development Association
IRR	Internal Rate of Return
IT	Information Technology
JCSS	Joint Country Support Strategy
KGS	Kyrgyz Som
KLIS	Kyrgyz Land Information System
LAN	Local Area Network
LGAF	Land Governance Assessment Framework
LRERP	Land and Real Estate Registration Project
LRO	Land Registry Office
M&E	Monitoring and Evaluation

MOF	Ministry of Finance
MTR	Mid-term Review
NPV	Net Present Value
PAD	Project Appraisal Document
PDO	Project Development Objective
PIU	Project Implementation Unit
REU	Real Estate Unit
SE-CAD	State Entity Cadastre
SIDA	Swedish International Development Agency
SIL	Specific Investment Loan
SLRERP	Second Land and Real Estate Registration Project
SRS	State Registry Service
TA	Technical Assistance
TOR	Terms of Reference
TTL	Task Team Leader
UNECE	United National Economic Commission for Europe
UNFAO	United Nations Food and Agriculture Organization
USAID	United States Agency for International Development
WB	World Bank
WPLA	Working Party on Land Administration
XDR	Special Drawing Rights

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# KYRGYZ REPUBLIC SECOND LAND AND REAL ESTATE

## REGISTRATION PROJECT

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A. Basic Information			
Country:	Kyrgyz Republic	Project Name:	Second Land and Real Estate Registration Project
Project ID:	P108178	L/C/TF Number(s):	IDA-H3800
ICR Date:	06/13/2014	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	KYRGYZ REPUBLIC
Original Total Commitment:	XDR 3.60M	Disbursed Amount:	XDR 3.59M
Revised Amount:	XDR 3.59M		
<b>Environmental Category: B</b>			
<b>Implementing Agencies:</b> Department of Cadastre and Registration of Rights to Immovable Property State Registration Service			
<b>Cofinanciers and Other External Partners:</b>			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	07/24/2007	Effectiveness:	12/24/2008	12/24/2008
Appraisal:	02/05/2008	Restructuring(s):		05/27/2013
Approval:	07/15/2008	Mid-term Review:	02/15/2010	02/24/2010
		Closing:	05/31/2012	12/31/2013

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Satisfactory
Risk to Development Outcome:	Moderate
Bank Performance:	Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Satisfactory	Government:	Moderately Satisfactory
Quality of Supervision:	Satisfactory	Implementing Agency/Agencies:	Satisfactory
<b>Overall Bank</b>	Satisfactory	<b>Overall Borrower</b>	Moderately Satisfactory

<b>Performance:</b>		<b>Performance:</b>	
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### C.3 Quality at Entry and Implementation Performance Indicators

Implementation Performance	Indicators	QAG Assessments (if any)	Rating
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Satisfactory		

### D. Sector and Theme Codes

	Original	Actual
<b>Sector Code (as % of total Bank financing)</b>		
General public administration sector	60	60
Housing finance	40	40
<b>Theme Code (as % of total Bank financing)</b>		
Land administration and management	25	25
Other public sector governance	25	25
Other rural development	13	13
Personal and property rights	24	24
Urban planning and housing policy	13	13

### E. Bank Staff

Positions	At ICR	At Approval
Vice President:	Laura Tuck	Shigeo Katsu
Country Director:	Saroj Kumar Jha	Annette Dixon
Sector Manager:	Kulsum Ahmed	John V. Kellenberg
Project Team Leader:	Malcolm D. Childress	Jessica Mott
ICR Team Leader:	Mika-Petteri Torhonen	
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## F. Results Framework Analysis

### Project Development Objectives (from Project Appraisal Document)

To support markets for land and real estate and the more intensive and effective use of land and real estate. This will be done through the further development of a reliable and well-functioning system for registration of rights in immovable property.

### Revised Project Development Objectives (as approved by original approving authority)

#### (a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
<b>Indicator 1 :</b>	Improved functioning of, and access to, sales and long-terms lease markets			
Value quantitative or Qualitative)	48,140 registered sales and 4,666 leases during calendar 2007: average processing 3 days for individuals and 4 days for firms	At least 26% cumulative increase above 2007 levels in # of registered sales and leases, and average processing time reduced to half day for individuals and 1 day for firms	20%  4 hours for individuals and firms	55.6%  4 hours for individuals and firms
Date achieved	12/31/2007	05/31/2012	05/31/2013	12/31/2013
Comments (incl. % achievement)	Result exceeded revised and original targets by 35.6 and 29.6 percentage points respectively. Revised, more ambitious target of 4 hours achieved towards end of second extension. Processing time through streamlined procedure approx. 2 hours.			
<b>Indicator 2 :</b>	Increased access to credit			
Value quantitative or Qualitative)	43,314 mortgages registered in 2007	At least 31% increase above 2007 levels	20% increase above 2007 levels	66.2% increase above 2007 levels
Date achieved	12/31/2007	05/31/2012	05/31/2013	12/31/2013
Comments (incl. % achievement)	Result exceeded revised and original targets by 46.2 and 35.2 percentage points respectively. Outcome significantly exceeded target.			
<b>Indicator 3 :</b>	Property rights clear, secure, and reflected in accessible information base			
Value quantitative or Qualitative)	About 1.2 million registered private REUs in settlement areas, about 1.2 million in non-settlement areas.	Continued increase in total number of REUs and continued improvements in operations,	No change	Continued increase in total number: 2.92 million REUs registered.  Continued

	Information on above readily accessible.	communications and reputation.		improvements in operations, communications and reputation.
Date achieved	12/31/2007	05/31/2012	05/31/2013	12/31/2013
Comments (incl. % achievement)	Both aspects of target achieved, as demonstrated by number of REUs registered (520,000 REUs) and, as show below for intermediate outcome indicators, improvements in operations.			
<b>Indicator 4 :</b>	A financially and institutionally sustainable land administration system			
Value quantitative or Qualitative)	Only 22 of 50* offices with income to self-finance activities, and essential HQ services not financed by local office revenue.	Key central functions fully funded by registry revenue; and registration streamlined to optimize efficiency and ensure fully adequate and sustainable funding.	Key central functions funded by registry revenue; and registry operations streamlined to optimize efficiency and ensure adequate and sustainable funding.	Operation of key central functions ready to be funded by registry revenue from 1-Jan-2014.  Registry operations streamlined to optimize efficiency and ensure adequate and sustainable funding
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Both aspects of target achieved, although first not implemented until project financing ended. Second target continuous over life of project. *Note: only 49 LROs existed at time PAD drafted, with 2 LROs having been merged in 2006.			

**(b) Intermediate Outcome Indicator(s)**

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
<b>Indicator 1 :</b>	Sustainable unit monitors Gosregister performance, provides strategic analysis, and supports improved communication			
Value (quantitative or Qualitative)	Project monitoring unit measures and reports on service delivery of every office according to consistent standards. Top Gosregister management responds on strategy issues as they arise.	Permanent unit has capacity and resources to monitor all aspects of Gosregister performance, analyse key strategic issues, & support improved communication between agency	Permanent unit has capacity and functions effectively with financing from registry operations by Closing Date.	Permanent unit has capacity and functions effectively, ready to be financed from registry operations on 1-Jan-2014.

		and all stakeholders.		
Date achieved	12/31/2007	05/31/2012	12/31/2012	12/31/2013
Comments (incl. % achievement)	Target of performance, strategy and communications unit achieved, with funding from registry revenue commencing at close of project funding period.			
<b>Indicator 2 :</b>	IT system upgraded, with arrangements established for post-project operational sustainability			
Value (quantitative or Qualitative)	IT Unit within PIU has supervised IT improvements including installation of an ARS and Local Area Networks in most Land Registry Offices. Sustainable source of funding for IT Unit not yet established.	IT improvements and Web Portal fully operational, and permanent unit has resources and capacity to provide ongoing IT maintenance and development support for all Gosregister including local offices.	The integration of the central system has been developed. IT improvements function well. Operational support function well and is fully funded by registry revenue. Loading of digital data (e.g., digital archive, digital cadastral data).	Central system integration completed. IT improvements function well. IT unit ready to be financed from registry operations. All data uploaded.
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Target achieved, with funding from registry revenue commencing at close of project funding period. Digital mapping data held in local office servers, other data available from central server.			
<b>Indicator 3 :</b>	Capacity developed in agency financial management and procurement			
Value (quantitative or Qualitative)	All financial management except Project unit operate according to historic practices without exposure to international standards. No agency-wide transparency of financial management data.	Subject to prior decision to proceed with Gosregister reorganization, complete reforms in: financial reporting; financial management for corporate structures and mechanisms; external audit and associated transparency.	Further implementation of integrated accounting and reporting systems in local registration offices.	Implementation of integrated accounting and reporting systems in 3 local registration offices, with others underway. Internal audit unit established. Internal auditors selected and audit methodology

				developed.
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Target (as modified in May 2013) achieved, with financial module of registration software systems implemented in three offices on pilot basis and roll out to other offices planned during 2014.			
<b>Indicator 4 :</b>	Land and real estate registry records are more secure and accessible			
Value (quantitative or Qualitative)	Archives well organized and maintained, but at risk of fire, weather and other hazards. Few historical records digitized. Over-reliance on paper records which is inefficient.	Improved climate control and back-up arrangements for archives, digital archives completed in Bishkek and Osh, and imaging of current records fully operational for all local land offices.	Improved climate control for archives well maintained and imaging of current records fully operational for all local land offices.	Climate control for archives maintained. In all local offices, there is imaging of new documents is operational.
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Target achieved for all local offices.			
<b>Indicator 5 :</b>	Organizational structure and facilities are financially sustainable			
Value (quantitative or Qualitative)	Gosregister comprises 50 separate local self-financed registry offices plus a headquarters financed by the ongoing project and government budget.	All expenses, including those of headquarters functions covered by income from registration.	All operational expenses, including those of headquarters functions covered by income from registration.	GIS Center established. All operational expenses, including those of headquarters functions to be covered by income from registration from 1-Jan-2014.
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Funding from registry revenue commenced at close of project funding period.			
<b>Indicator 6 :</b>	Project implementation timely and well-coordinated			
Value (quantitative or Qualitative)	Implementation timeliness	Project management ensures completion of project on schedule.	Project management ensures completion of project in accordance with revised schedule.	Project management ensures completion of project in accordance with revised schedule.
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Good project management provided foundation for project's successes in accordance with schedule.			

achievement)				
<b>Indicator 7 :</b>	Novistroiki, lands registered on a systematic basis			
Value (quantitative or Qualitative)	Registration of most settlement areas and most private arable land complete. However, coverage gaps in many novistroiki, as well as most government buildings and land in urban areas, and in pasture and natural reserve lands.	120,000 cumulative private REUs (mostly novistroiki) and 70,000 cumulative public REUs in urban areas systematically registered.	Cumulative totals of 10,000 REUs in novistroiki areas registered and subject to progress with Agricultural Investment and Service Project, pasture lands of more than 300 local authorities registered.	Registration of 20,854 REUs, including 10,005 REUs systematically surveyed in novistroiki areas. Registration of pasture lands in 395 local authorities is completed.
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Revised target achieved for REUs in novistroiki areas and exceeded for pasture lands.			
<b>Indicator 8 :</b>	Cadastral maps in selected areas upgraded and accessible			
Value (quantitative or Qualitative)	Digital cadastre map coverage incomplete yet required in some areas either because of active land markets or encroachment risks	Maps being used by local authorities and rural projects. Orthophotomaps produced for 34,000 hectares in 23 towns	Cumulative digitized cadastral maps for 1.5 million land parcels, of which 680,000 geo-referenced by additional GPS survey. Integration with other data.	Digitized maps for 1.88 million land parcels including geo-referencing of 722,000 with additional field survey. Map data integrated with ARS.
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Target exceeded by 380,000 land parcels (25 per cent) for digitizing of maps, and by 42,000 (6.2 per cent) for geo-referencing parcels.			
<b>Indicator 9 :</b>	Valuation information accessible and being used			
Value (quantitative or Qualitative)	Government legislation regarding implementing regulations for property tax valuation is still pending in parliament. Price index information not created.	Improvements to price index information identified and implementation initiated.	Property sales prices index (a module of the sale database) continues to be available to public for free	Immovable property price index is published on the website of the DCR for free, with average of 200 hits per month. Paid

			on website.	service available to 87 registered users.
Date achieved	12/31/2007	12/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Target achieved. Property price index is unique in the central Asian region.			
<b>Indicator 10 :</b>	Human resource developed within Gosregister			
Value (quantitative or Qualitative)	Gosregister staff well-trained but will continue to require more human resource development to address further development of Gosregister	45 courses with 900 participants	No change	111 courses for management and DCR and LRO staff, 3,098 participants trained.
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Result achieved 247 per cent of target in terms of number of courses, and by 344 per cent in terms of number of participants. Original target achieved in early 2011 in terms of number of courses and late 2010 in terms of participants.			
<b>Indicator 11 :</b>	Training for education and professional bodies			
Value (quantitative or Qualitative)	First project, SIDA support and USAID Land Reform Project involved some training for professionals	9 courses with 900 participants	No change	32 courses, 1074 participants trained
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Result achieved 355 per cent of target in terms of number of courses, and 119 per cent in terms of number of participants. Original target achieved in early 2010 in terms of number of courses and late 2012 in terms of participants.			
<b>Indicator 12 :</b>	Land parcels with use or ownership rights recorded as a result of the project (number) (Core Indicator)			
Value (quantitative or Qualitative)	0 land parcels registered in "new construction" (novistroiki) areas	No target defined	No change	20,854
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Target achieved in accordance with indicator 7			
<b>Indicator 13 :</b>	Land parcels with use/ownership rights recorded as a result of project – female (number) (Core Indicator)			
Value (quantitative or Qualitative)	No data available	No target defined	No change	Small study shows women make up a quarter of property owners
Date achieved	12/31/2007	05/31/2012	12/31/2013	12/31/2013
Comments (incl. % achievement)	Data of this kind could be used to promoting registration services and make such services more accessible to women, as well as in developing pro-women policy and legislative initiatives.			

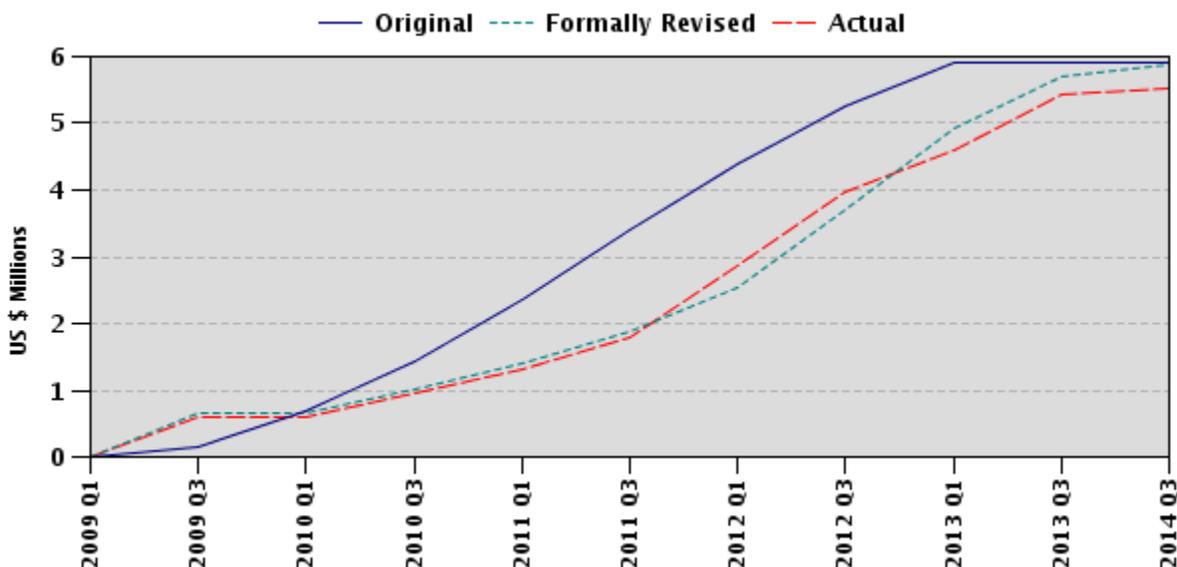
## G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	10/16/2008	Satisfactory	Satisfactory	0.00
2	03/16/2009	Satisfactory	Satisfactory	0.60
3	11/16/2009	Satisfactory	Satisfactory	0.60
4	04/07/2010	Moderately Satisfactory	Moderately Satisfactory	1.01
5	11/16/2010	Moderately Satisfactory	Moderately Satisfactory	1.32
6	04/30/2011	Satisfactory	Satisfactory	2.11
7	03/25/2012	Satisfactory	Satisfactory	3.97
8	07/04/2012	Satisfactory	Satisfactory	4.15
9	12/29/2012	Moderately Satisfactory	Moderately Satisfactory	5.44
10	05/21/2013	Moderately Satisfactory	Moderately Satisfactory	5.44
11	12/20/2013	Satisfactory	Satisfactory	5.55

## H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
05/27/2013		S	S	5.44	

## I. Disbursement Profile



# **KRYGYZ REPUBLIC SECOND LAND AND REAL ESTATE REGISTRATION PROJECT**

## **1. Project Context, Development Objectives and Design**

### **1.1 Context at Appraisal**

After a period of considerable reform in the 1990s and early 2000s, the Kyrgyz Republic entered into a phase of stagnation, increased corruption and some reversal of the reform process, which culminated in the Tulip Revolution of March 2005. Political and social turmoil followed, lasting several years. However, the economy continued to expand, with the real estate and mortgage markets developing, and important land administration policy and practical reforms continuing to be undertaken. Due to the Kyrgyz economy's relative isolation, the impact of the 2008 global economic crisis was not felt at the time of appraisal, although it was subsequently experienced in 2009-2010 and made worse by a related banking crisis.<sup>1</sup>

The project was a follow on project to the successful Land and Real Estate Registration Project (LRERP) (IDA Credit 3370 KG/P049719), which ran from 2000 to 2008 and was rated as highly satisfactory. That project supported the formation of a new registration authority (the State Agency on Registration of Rights to Immovable Property or "Gosregister"), creation of a unified system of real property and legal rights, establishment of some 50 offices across the country, and registration of 2.4 million real estate objects (REUs) such as land, houses and apartments. The land sector had developed rapidly since land, houses and apartments were privatized in the 1990s, with an active market of sales, leasing and mortgaging. In fact, between 2002 and 2007, mortgages worth US\$ 2.7 billion were issued. Essentially, the project was designed to expand and consolidate the coverage and functions of the real estate registration system created in the first project, and in so doing create a stable and sustainable institutional basis to underlie the expanding real estate sector in the country.

The project was consistent with the four pillars of the government's Country Development Strategy (CDS) for 2007-2010: growth-oriented economic development and improving the business environment; governance and transparency in public administration; human development; and environmental sustainability. The government had identified a reliable, well-functioning real property registration system as a key priority. The project was also consistent

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<sup>1</sup> The Kyrgyz banking system, which is dominated by foreign-owned banks, was affected by the global financial crisis. Kyrgyzstan's largest private bank, Asia Universal Bank (AUB), which accounted for about 50 per cent of all deposits, faced involuntary bankruptcy charges as it allegedly froze US\$ 11 million in client assets for its own liquidity needs. The AUB (along with six other banks) was placed under temporary administration and subsequently nationalized. AUB went through bankruptcy procedures and its assets were restructured and privatized. While the banking sector was reprivatized, it led to a sharp fall in demand, lack of credit and liquidity in the market, and a fall in deposits and loss of confidence in the banking sector. This, in turn, has negative consequences for the deepening of the financial sector and the development of the mortgage market.

with three of the objectives of the Joint Country Support Strategy (JCSS) for 2007-2010, which built on the CDS, of economic management consistent with strong and sustained pro-poor growth; reduction of corruption, improvement of governance and effective public administration; and building sustainable human and social capital through education.

## **1.2 Original Project Development Objectives and Key Indicators (as approved)**

The Project Development Objective (PDO) was to “support markets for land and real estate and the more intensive and effective use of land and real estate. This will be done through the further development of a reliable and well-functioning system for registration of rights in immovable property.”<sup>2</sup> The outcomes and outcome indicators linked to the PDO were:

- *improved functioning of, and access to, sales and long-term lease market* - It was envisaged that there would be a 26 per cent cumulative increase above 2007 levels in the number of sales and leases, and that registration processing times would be reduced to half a day for individuals and one day for firms;
- *increased access to credit* - An indicator of at least 31 per cent increase above 2007 levels in the number of registered mortgages was adopted;
- *property rights clear, secure and reflected in an accessible information base* - This was to be demonstrated through a continued increase in the total number of REUs in the registry system, and continued improvements in the quality of registry operations, communications and reputation;
- *a financially and institutionally sustainable land administration system* - This was to be shown by key central functions of the registry being fully funded by registry revenue, and by the registration process itself being streamlined to optimize efficiency and ensure fully adequate and sustainable funding.

The outcome indicators were complemented by 11 intermediate results indicators (one for each subcomponent), plus core sector indicators for land administration projects.

## **1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification**

While the PDO was not revised, key outcome and performance indicators were revised on two occasions. The first revision took place in January 2011 and involved changes of the PDO level indicators and six of the 11 intermediate indicators. The PDO level indicators were modified, primarily in terms of their targets and target dates, as follows:

- regarding growth in the number of registered sale and lease transactions, the targets were postponed and the final target reduced from 26 to 20 per cent cumulative increase to take into account the 2009-2010 recession, banking crisis and 2010 ethnic-based conflicts,<sup>3</sup> all

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<sup>2</sup> The PDO was expressed slightly differently in the Financing Agreement of 2008 as: to support markets for, and the more intensive and effective use of, land and real estate through further development of a reliable and well-functioning system for registration of rights in immovable property

<sup>3</sup> In 2010, a series of violent attacks on ethnic groups, particularly in the South, resulted in the deaths of many hundreds of people and, according to the United Nations, displacement of some 400,000 people.

- of which affected the real property market and provision of credit;
- the reference to long-term leases in the first outcome indicator was dropped to simplify it and because policy reform on community pastures had reduced the number of leases being registered;
- a common target for reduced registration processing times to both individuals and firms was adopted to simplify matters, there was a one year postponement of the final target for individuals, and a more ambitious final target of half a day for firms was adopted;
- targets for increased numbers of mortgages were postponed and reduced from 31 to 20 per cent cumulative increase to take in to account the 2009-2010 recession, banking crisis and ethnic conflict;
- targets for a financially and institutionally sustainable land administration system were postponed to take into account implementation problems due to disruptions in agency leadership and structural re-organization (see 2.2 below).<sup>4</sup>

A one year extension was also granted, and as a consequence of the additional time, a further target was added for the final year of the last outcome indicator so that the financially sustainable system would be operating for at least one year, fully funded by registry revenue. Similar references to “at least one year” were added to several of the subcomponent targets, together with some additional target items.

The second set of revisions occurred in the restructuring of May 2013. The changes were based around a modification of the last PDO level indicator on the establishment of self-funding support for key central functions of the registry (related to the project outcome of a financially and institutionally sustainable land administration system). Based on an extension of six months, the target of “for at least one year” was removed so that the indicator reflected the fact that achievement of this objective would not occur before the penultimate year of the project (but rather only in the last six months). Also, the word “fully” was removed to reflect the decision that not all local registration offices (LROs) would be under one financial management structure, as originally foreseen.<sup>5</sup>

#### **1.4 Main Beneficiaries**

The target population was those who held rights in real property or who were acquiring such rights, plus government authorities (at national, regional and local level) that manage public land

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<sup>4</sup> As part of the restructuring, and consequential on the PDO level indicator changes, the intermediate indicators were also changed as to their targets and target dates. A new target date was set for subcomponent 1.b to take into account the additional project year. The targets for subcomponents 1.c and 1.e were postponed to take into account disruptions in the agency leadership and delays by the government in considering the proposal to form a single enterprise. The target in subcomponent 2.a was reduced to correct an error in the original estimate of the number of REUs that need to be registered, and the indicator was altered to delete the reference to “non-private” because most public lands had already been registered. In subcomponent 2.b, the targets were revised in light of a revised methodology. The target in subcomponent 2.c was revised to focus on an index of price information rather than valuation software, because mass valuation was unlikely to be implemented during the project period for lack of political consensus.

<sup>5</sup> Consequently, the indicators for subcomponents 1.a, 1.b, 1.c and 1.d were modified to remove the words “for at least one year”, and the indicator for subcomponent 1.c was amended to reflect a more limited model of financial management integration of the LROs and also a delayed roll out for the financial accounting system.

and thus directly or indirectly implies coverage of almost the entire population of Kyrgyzstan. Other beneficiaries were those wanting to use the information base that was developed under the LRERP, particularly real estate professionals (including banks, surveyors, notaries, and realtors). Although it was not expressly stated in the Project Appraisal Document (PAD), the project's expected achievements would also have spill over benefits for the country's entire economy through future investment and real estate market effects, financial deepening and social stability.

## **1.5 Original Components**

Three components were designed to support progress to reaching the PDO:

### *1. Organizational Development and Improved Services*, with six subcomponents:

- performance, strategy and communications: resulting in a permanent unit with the capacity and resources to monitor all aspects of Gosregister's performance, recommend strategic and other improvements, and communicate effectively with all stakeholders;
- information technology (IT) support: resulting in improved and expanded IT facilities, integration of registration and cadastre data, creation of a website portal, and establishment of a permanent unit to maintain and develop Gosregister's IT systems;
- agency financial management and procurement: providing an automated accounting and reporting system, internal audit function, and subject to a government decision re-organization and consolidation of Gosregister;
- records management improvement: providing improved climate control and back-up arrangements for archives in all offices, digital archives completed in Bishkek and Osh, and imaging of current records operational in all offices;
- organizational structure and facilities: resulting in all operational and capital maintenance expenses, including those of headquarters functions, covered by income from registration; and
- project management: to ensure completion of the project on schedule.

### *2. Expanding Spatial and Legal Land and Real Estate Data*, with three subcomponents:

- systematic registration of REUs: to register at least 120,000 REUs, mostly in novostroiki areas and 70,000 public REUs in urban areas, as well as registration of some community pasture lands;
- upgrading cadastral mapping: to improve the maps created under the LRERP, using satellite images or orthophotomaps, covering 7 million hectares, and production of orthophotomaps covering 34,000 hectares in 23 towns; and
- valuation support: to develop and operate valuation software for government use, and improve access to land and real estate market information.

*3. Professional Development and Standards*, with two subcomponents: human resource development of Gosregister staff, through 45 technical, professional and management courses over three years; and support for educational institutions and professional bodies (and their members) involved in real property, supporting upgraded curricula, delivery of nine courses on land and real property related subjects, and improved licensing arrangements and standards for land market professional bodies.

## 1.6 Revised Components

The second component, entitled Expanding Spatial and Legal Land and Real Estate Data, was revised in the first restructuring of January 2011 to alter the target numbers for systematic registration and upgrading of cadastral mapping, and also to revise the basis of producing cadastral maps from satellite images (orthophotomaps) to digitizing of existing cadastre maps supported by geo-referencing in the field using global positioning satellite (GPS) equipment. This change was necessary because the figures on which the initial estimates for systematic registration of REUs were based proved to be incorrect. Also, government funds had become available to cover the costs of satellite images, so the grant funds could be put to other uses. Finally, the technical advice was that digitizing existing maps and refining them with geo-referencing would be a more useful and economic approach to producing maps.

## 1.7 Other significant changes

The other significant changes during the course of the project were:

- *Mid-term review of February 2010.* This mission identified and addressed the various problems facing the project, leading to the remedial actions of the first restructuring.
- *Restructuring of January 2011.* As discussed, key outcome and performance indicators were revised for several reasons.
- *Extension of the project closing date from May 31, 2012 to May 31, 2013* (as part of the January 2011 restructuring). The primary reason for this extension was to compensate for the time lost due to the uncertainties and frequent changes in leadership of Gosregister following its re-organization into the Department of Cadastre and Registration (DCR) in late 2009 (see below). The Bank's acting Country Director approved this extension.
- *Restructuring of May 2013.* As discussed, the last PDO indicator was revised in light of delays in achieving self-financing status.
- *Extension of the project closing date from May 31, 2013 to December 31, 2013* (as part of the May 2013 restructuring). The reason for this extension was to provide sufficient time for the government's decision on the structure and organization of the land registry to be made and then implemented. The Bank's Country Director approved this extension.

## 2. Key Factors Affecting Implementation and Outcomes

### 2.1 Project Preparation, Design and Quality at Entry

*Soundness of the background analysis:* The background analysis was thorough, with preparation taking place over the final year of the LRERP (simultaneously with supervision of the LRERP). The Bank team had long and extensive experience with land administration, including in the Kyrgyz Republic. As a follow on project, the issues within Gosregister, Kyrgyz land administration and the wider context were well understood. In addition to the studies undertaken for the PAD (environmental, economic), the team took into account both positive and negative aspects of the LRERP, as outlined in the LRERP ICR, plus findings of an extensive customer survey and results of interviews with a wide range of stakeholders conducted by Gosregister. The choice for another project, rather than to leave support to other donors, was based on the Bank's

capacity to provide funds for technical and infrastructure work as well as technical advice (as part of project supervision) across a range of land administration and good governance areas.

*Assessment of the project design:* Although there were 11 subcomponents, the fundamental design of the project, its objectives and organization were relatively simple. The PDO was a continuation of the objective successfully pursued under the LRERP, and it was consistent with the government's and Gosregister's objectives. A follow on project was required both to complete the work left unfinished under the LRERP (particularly registration of state land and informal settlements), to consolidate the LRERP's achievements, and to raise Gosregister's operations to a more sophisticated and sustainable level. SIDA funded technical experts were also closely involved, and other donors were engaged during supervision and preparation missions, particularly the USAID-funded Land Reform Project. Further, the preparation team worked with the Bank funded Bishkek Osh Urban Infrastructure Project and the Agriculture Investment and Services Project to ensure coordinated efforts and maximize outcomes between the projects, particularly in terms of mapping by the SLERP. Components 2 and 3 on technical works and training were of a standard type in the Bank's land registration projects across the ECA region for the last 20 years and largely unproblematic. Only certain organizational aspects of Component 1, which relied on the project funding key services during a transition period, could be described as potentially problematic because it was uncertain that Gosregister would ultimately reach self-funding status. The design was therefore couched in terms of this risk (see below). Finally, the indicators were well defined, most were easily measurable, and they clearly related to the project's PDO and activities.

*Adequacy of government's commitment, etc.:* During preparation, there was strong support from within the government, particularly from Gosregister but also from other ministries that were to benefit from accurate and accessible land records, such as the Ministry of Agriculture. As the project was consistent with the government's CDS 2007-2010 and the JCSS 2007-2010, there was acceptance at higher levels of government of the need for the project and its design. Acceptance of some controversial grant covenants, particularly the obligation to make secret coordinates public, demonstrated the government's commitment. Gosregister staff, both headquarters staff and LRO specialists, demonstrated commitment in diligently developing each of the subcomponents, its funding needs and work plan.

*Assessment of risks:* As the list of risk on page 8 of the PAD shows, risks were closely considered and a set of mitigation measures was developed. The risks reflected a range of possible problems, from the unstable political and economic environment of the Kyrgyz Republic (rated a moderate risk), through to organizational and governance risks within the government and Gosregister, to technical and legislative risks. Volatility in the banking system and property market was also identified as a risk, although a low level one. The risk that the government would not agree to Gosregister becoming a stand-alone, self-financing agency was identified, but it was noted that other arrangements to fund central level functions from registry income would be available. Others risks (and responses) were of the kind encountered in similar projects implemented elsewhere. Given government support and Gosregister's successful track record, many of the risks were rated as low, but due to the wider instability in the Kyrgyz Republic, the overall rating was determined to be moderate.

## 2.2 Implementation

A variety of factors gave rise to the successful implementation of the project. On the Borrower's side, Gosregister/DCR was a competent, successful organization with the vision and ability to implement the project activities and other reforms, even in the face of almost continual political and institutional instability and turbulence. Management, staff and a solid project implementation unit (PIU) had experience of the LRERP, and were eager to meet project targets. When institutional difficulties arose (see immediately below), Gosregister was able to draw on strong support from donors and key users to successfully protect its continued existence as a semi-autonomous property registration authority. There was also a willingness of the government to continue the reform of land administration, despite wider political instability, as evidenced by the high rating of the Kyrgyz Republic in property registration in the Bank's *Doing Business* reports over the project period (see below).

On the Bank's side, there was strong and persistent support for the project and the registration system which helped Gosregister/DCR to maintain its equilibrium in the face of political and institutional instability, and a willingness to take remedial action to overcome problems that arose during the project, particularly through well-targeted restructurings and extensions that permitted project goals to be achieved. Support was forthcoming from both headquarters and the country office, particularly when it came to addressing contentious political and organizational issues, such as the potential break up of Gosregister in late 2009. There was also a capable preparation and supervision team with technical knowledge and a network of support with other Bank land administration experts, and also significant support from the United Nations Food and Agriculture Organization (FAO) and its technical experts, who were integral members of the teams. In addition, SIDA funded technical assistance provided important support to Gosregister/DCR. SIDA supported the LRERP since 2000 and its support continued until 2009, providing a regular program of expert advisers, key equipment and local technical assistance, and training. Finally, retroactive financing from the SLRERP permitted key PIU staff to be retained between closure of the LRERP in December 2008 and project effectiveness, to maintain the momentum and begin work on new activities.

Importantly, there was a close and strong partnership between Gosregister/DCR and the Bank, both at a management and technical level. The two shared a common understanding and aims for the project, and collaborated closely throughout to achieve the objectives, sometimes in difficult circumstances. This was enhanced by the strong institutional capacity of Gosregister/DCR and the trust and mutual respect that had developed during the LRERP and SLRERP.

There were a variety of factors that gave rise to problems. At the political level, a violent revolution in early 2010 saw the resignation of the president and formation of a new government, which had a destabilizing impact on the organization of public services and their delivery. Prior to that, there had been problems at the pinnacle of government, particularly in the project's first two years, with senior politicians exercising close control over Gosregister decisions, which resulted in a marked slowdown in activities. Economically, there were restraints on registration activity due to the global financial crisis, the Kyrgyz banking crisis and ethnic violence, as discussed above, although these did not have a direct impact on project implementation activities.

At an institutional level, the re-organization of Gosregister into the Department of Cadastre and Registration of Rights to Immovable Property (DCR), subordinate to a newly formed State Registration Service (SRS), was announced in October 2009. The change was part of a re-organization of government agencies, and it saw all agencies associated with registration (vehicles, personal, property, businesses and others) amalgamated under the SRS. For some time, there was uncertainty as to the status and the continued existence of Gosregister, in late 2009 to early 2010, and two changes in DCR's management. Lobbying by the Bank helped to ensure that DCR was not dismantled and that it remained a stand-alone operation. Management of the SRS was also unsettled. Here, too, uncertainty resulted in delays in project related decision-making and consequential activities. Also, Gosregister lost its mapping staff to the Ministry of Natural Resources as part of a re-organization. Through its own efforts with project support, Gosregister regained the necessary skills, which permitted subcomponent 2.b to proceed, only through the recruitment of consultants funded by the project.

### **2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization**

*M&E design:* Monitoring and Evaluation was a strong element of the project design which contributed to its successful implementation. The Results Framework and Monitoring annex to the PAD contains an extensive set of monitoring indicators that match the elements of the PDO and activities under the three components. The indicators, which are clearly expressed in concrete terms, combine quantitative and qualitative measures, and they were consciously designed to be the primary tool for both managing and assessing project progress. Further, the results framework clearly envisages how the data was to be collected, including through reports, assessments and customer surveys.<sup>6</sup>

*M&E implementation:* Based on the PAD's indicators, data was routinely collected and reported both prior to effectiveness and throughout the project period. The M&E results were consistently of a high, reliable standard, covering the quantitative data gathered directly from LROs and qualitative data, derived through surveys that were routinely conducted by Gosregister/DCR. As required, the Bank supervision team members advised on M&E issues, but as the indicators were generally straightforward and as there was solid M&E experience in the PIU, there was little need for advice.

*M&E utilization:* The results of the M&E were closely considered and used by the Bank team, PIU and Gosregister/DCR as the primary tool to monitor project progress, identify issues and develop remedies to ensure that progress remained on track. No independent evaluation of M&E was prepared during the project. The M&E results were used as the basis for extensive reporting, and provided signals when changes in direction were necessitated. After eight years of Bank involvement and M&E reporting and use under the LRERP, reporting and analysis of results was a mainstream management tool within Gosregister/DCR during the SLRERP, and the results

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<sup>6</sup> It should be noted that the core indicator on gender was not included, as it was not mandatory at the time, although it was included by early 2013. Monitoring of gender was undertaken towards the end of the project, including through a special gender study (see below). However, the results of monitoring on gender have yet to be utilized to any great degree in improving women's access to registration services or the land market.

were used in the preparation of the Borrower's ICR (see Annex 7 for summary), which proved very useful in preparing this report.

## **2.4 Safeguard and Fiduciary Compliance**

The project triggered one safeguard policy: environmental assessment OP 4.01. The PAD noted that were any building rehabilitation works to be undertaken, the environmental management plan (EMP) that was prepared during project preparation would be used as part of tender specifications and in works contracts. Minor rehabilitation works were conducted, in accordance with the EMP, to server rooms at DCR headquarters and Bishkek, Osh and Issyk-Kata LROs. There were no negative environmental impacts from these minor rehabilitation works.

The financial management (FM), disbursement and procurement staff within the PIU performed capably, and all audits had a clear opinion and were conducted in a timely fashion. The FM system recorded all transactions and balances, and it permitted clear and concise reports to be promptly issued. Internal controls and audits further ensured the accuracy of records. The FM was rated as satisfactory (seven times) or moderately satisfactory (three times) throughout the project. There was one rating of moderately unsatisfactory (MU) in 2008. The issues giving rise to the MU rating (an interim financial report being several months late and two FM reports being in a form that was unacceptable to the Bank), were quickly resolved. Procurement was unproblematic throughout the project.

## **2.5 Post-completion Operation/Next Phase**

The transitional arrangements to post-completion operational sustainability were a fundamental design element of Component 1. The decision to create the GIS Center in late 2013 to fund key central level activities from LRO contributions means that registry revenue is being used to support those activities, as envisaged in the PAD and has been operating successfully in this modality for over five months. Thus, a financial structure is in place to fund the work of policy and strategy, communications, M&E and IT maintenance and development. Other project sponsored innovations, such as scanning of in-coming documents and modern financial management have been incorporated into the everyday practice of the LROs, and are thus covered by existing budgets and staff.

In terms of the achievements under Components 2 and 3, responsibility lies with DCR, the LROs and other key agencies to maintain the data, human resources and momentum for reform. As the data has been created, it now needs to be maintained, and that work can be funded from the budget and fees from users. The capacity and knowledge exists within DCR to run its own training courses, both for its staff and the private sector, as is done by land registries elsewhere.

Some performance indicators to monitor and evaluate the legacy of the project would be the reliability and adequacy of the IT system, time required to register a transaction and associated levels of customer satisfaction, and the number of training courses and participants who attend such courses. Further, to promote gender equity, an indicator monitoring the number of women who own property and engage in property transactions would be desirable.

No follow up project by the Bank is required, but as DCR has already joined the international community of land registry agencies and has taken part in (and even hosted) international events, continued engagement with Bank sponsored programs and events can be expected. Further, a Bank sponsored Land Governance Assessment Framework (LGAF) program would add momentum to the reform and good governance program. DCR is looking to other donors for assistance, and it has received a grant of US\$ 2 million from the Kingdom of Norway to support GPS/GNSS, IT and spatial data enhancement. DCR has also applied to the Republic of Korea for assistance in further mapping.

An environment of innovation and reform exists with respect to land administration within DCR, and it can be expected that the Kyrgyz Republic will continue to lead the region in this area of reform, maintaining its high place in the *Doing Business* reports through incremental improvements.

### **3. Assessment of Outcomes**

#### **3.1 Relevance of Objectives, Design and Implementation**

*Objectives:* The project's objective to support real estate markets and efficient land use remains highly relevant today. The need for such support through an efficient, well-functioning registration system has perhaps become more relevant as the Kyrgyz economy has moved further from a planned to market based system, and as demands on natural resources increase with a growing economy and population. The system is widely used by the population and almost no transactions occur outside of the registration system. As elsewhere, a well-functioning registration system is a cornerstone of economic development and social stability based on well-defined and protected property rights. The objective is also consistent with improving governance and the key areas of engagement listed in the Country Partnership Strategy 2014-2017: public administration and public service delivery, business environment and investment climate, and management of natural resources and physical infrastructure.

*Design:* The project's design, unchanged throughout the implementation period, focused on outcomes and outputs that remain highly relevant today. These were efficient public administration and good governance, creation of useful real property data, provision of access to such data, and enhancement of human capital. These elements are as necessary today as when the project was designed and will continue to be so, although DCR is moving to the data maintenance phase, rather than the data creation phase, and becoming a more mature land registry operation in the process. Thus, the design properly assessed the country's needs and formulated actions to meet those needs.

*Implementation:* The manner of implementation was slightly adjusted over time as new information arose and as circumstances evolved. Overall, implementation (by both Gosregister/DCR and the Bank) remained generally consistent with the original project design, reflecting accurate design. The timing of activities was slightly problematic, given delays due to political, social and organizational disturbances, but two extensions compensated for the adverse impact of those issues.

### 3.2 Achievement of Project Development Objectives

The PDO indicators (clear, secure property rights; accessible information; financial and institutional sustainability) illustrate the features of a reliable and well-functioning registration system, which directly supports real estate markets and more intensive and efficient land use. These indicators can therefore be used as the basis to assess whether the PDO itself was achieved. As the data sheet shows, the targets for each of these indicators was either achieved or exceeded. Similarly, the targets for the subcomponents were also achieved or exceeded, often by a significant percentage, such as the mapping and training subcomponents. The details on how each subcomponent performed regarding its outcome, indicators and targets are provided in the Data Sheet and Annex 2.

Looking beyond the indicators and targets, support for the real estate market and more intensive and efficient use of land was enhanced under the SLRERP in various ways:

*Capacity building:* DCR is a more mature, capable and robust organization, with a cadre of skilled and capable individuals. DCR demonstrated its capacity in both lobbying to maintain its separate status with the SRS while simultaneously moving forward with reforms and improvements, including those under the SLRERP. Management skills and infrastructure, including the use of quality M&E, further supports the organization.

*Skilled and capable workforce:* capacity building covers the staff of DCR and the LROs, and the land market professionals, who benefited from training courses to improve their knowledge, skills and understanding of modern land management. The public directly benefit from these improvements through better service delivery and advice to facilitate their transactions with real property.

*More complete data:* the country is better served by a more complete and accessible database of properties and their owners, which is available for a wide range of public and private sector users to exploit. The accuracy of the data (particularly mapping) has greatly improved, and will serve as a solid basis for national spatial data infrastructure, the use of which is expected to greatly expand. Reliable market data, too, is available for the first time, supported by analytical reports that are utilized by the banking sector and others for valuation purposes.

*Improved registration services:* beyond the reduced registration times, policy and legislative reforms have made it easier, quicker and simpler for people to transact with property. The reduced fees, removal of the obligation to use a notary, and introduction at LROs of one-stop-shop transaction service have dramatically reduced the burden on transactions and thus the barriers to people using the system. As the *Doing Business 2014* report shows, the Kyrgyz registration system ranks number 9 internationally.

*Better access to information:* the improvements to IT, creation of the geo-portal, digitizing of data and other reforms mean that everyone has better access to information on real estate. It can also be delivered more quickly and cheaply than previously, and on-line access removes opportunities for petty corruption.

The one area where there could be a technical dispute about the achievement of a project target was the sustainable funding of key functions. The targets (as modified) for outcome indicator 4 and subcomponent 1.e Organizational Structures and Facilities were not actually achieved until one day after the project closed as staff and functions were shifted to the newly created GIS Center upon project closure, although the funding model had been put in place in several weeks

before the close of the project. In the subsequent five months, the GIS Center has functioned in a sustainable manner, continuing to provide identical services as were offered during the project with sustainable funding by local office contributions and some fee for service arrangements. Thus, while the objective was not technically fully achieved until after the SLRERP was completed, the evidence is strong with the benefit of several months of post-project operation that the sustainable financing of the key functions is indeed in place and that the target indicator was achieved. The exact timing of the transition to self-financing on the day after project closure was based on a clear rationale of DCR for delaying the switch from project funding of the PIU to funding from registration office revenue as DCR sought to maximize the use of project funds until the very latest date possible, and thus delayed the switch to registry revenue funding until the project completion date had technically passed. Further, there could have been contracting problems had the staff of the PIU been employed by the GIS Center prior to the closure of the project.

### 3.3 Efficiency

In accordance with the PDO, the project has successfully helped increase the number of transactions and reduce the time it takes to register property. Over the project period, the total number of sales transactions increased by 74 per cent from just over 43,000 in 2007 to almost 75,000 in 2013. Similarly, the number of registered mortgages increased by 66 per cent from just over 43,300 in 2007 to almost 72,000 in 2013. Both results exceed the project targets of 26 per cent and 31 per cent respectively. These results are even more impressive in the context of the general decline in the Kyrgyz GDP especially in the years following the global financial crisis, the country's banking crisis and the 2010 Revolution. For details on these external shocks, refer to Annex 3.

Similarly, the time to register a transaction has also been reduced in accordance with the targets from 3 days to just 4 hours or just half a day,<sup>7</sup> and the number of procedures has dropped from seven visits to two visits to the LRO. There is also an option to expedite the transaction, and this requires only one visit. Clients pay KGS 300 for expedited procedure fee or KGS 150 for the regular procedure.

However, the cost of service delivery to clients in terms of the fees they pay has not been reduced. At the same time, even though per unit cost of service delivery has remained unchanged, the project has helped reduce client reliance on notaries and therefore the total cost of a real estate transaction has fallen. As noted, this brings direct savings to clients. Nevertheless, there is room to reduce the direct per unit cost of service delivery. With technological improvements and further cementing of the financially sustainable business model, DCR and the LROs will likely be able to transfer some of the reductions in cost directly to its clients.

The net present value (NPV) and internal rate of return (IRR) in the PAD and ICR are calculated by using the increase in the monetary value of sales and mortgages in the Kyrgyz economy over a ten-year period of which six years were the implementation period. Of this total increase, only

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<sup>7</sup> Note: *Doing Business Report 2014* states that the time to register a property in Kyrgyzstan is 6 days. This figure is different because DB tracks the time for the entire procedure and not only the registration time at the DCR which is shorter.

1 per cent is attributed to the project. This assumption is in line with the PAD and is important because the project should not claim credit for the overall growth of the real estate market, which can be attributed to other economic interactions which may have positively benefited the project and other reforms by the Kyrgyz Government and other donor projects. The 1 per cent assumption is conservative and helps mitigate several measurement, isolation and attribution effects that ought to be considered when measuring the impact of the project alone.

Assuming a 12 per cent discount rate (as assumed in the PAD), the NPV of benefits attributable to the project is estimated at US\$ 17.1 million and the project IRR is estimated at 39 per cent.

Note that in the model used in this ICR, some assumptions related to the PAD projections were changed. Given the project start date and the three external shocks – the global financial crisis, banking crisis and 2010 Revolution – the ICR has found the PAD baseline assumptions to be more conservative and some growth assumptions to be more aggressive. In the ICR analysis, they have been adjusted to reflect a more accurate picture of what really happened in the Kyrgyz market. For details, see Annex 3.

Due to these aforementioned changes made to the PAD projections, it is not fair to compare the NPV and IRR with the figures projected in the PAD. Keeping this in mind, a positive NPV and positive IRR should speak to the viability and success of the project.

However, purely for the sake of comparison, the analysis shows that the project’s estimated NPV of US\$ 17.1 million is 68 per cent higher than the original PAD projection of US\$ 10.2 million. This means that despite the three external shocks that affected the Kyrgyz economy, the project has generated a higher NPV done better than what was projected in the PAD. Moreover, the 2009 and 2010 external shocks occurred fairly early on in the project, meaning that they had a greater negative impact on the NPV because of the way the discounted cash flow (DCF) model is more sensitive to changes in the early years of the project.

As for the IRR, the project’s estimate of 39 per cent is 18 percentage points lower than the original PAD projection of 57 per cent. This can be explained by two developments. First, the 2009 and 2010 external shocks occurred fairly early on in the Project, meaning that they had a greater negative impact on the IRR because of the way the DCF model works. Second, the original PAD projection is calculated using a US\$ 7.0 million project investment versus the project’s final IRR estimate, which is calculated using a US\$ 7.5 million project investment. This, too, would lower the Project IRR. For the detailed model and analysis, see Annex 3.

	<b>PAD Economic Analysis</b>	<b>ICR Economic Analysis<sup>8</sup></b>
<b>Net Present Value</b>	US\$ 10.2 million	US\$ 17.1 million
<b>Internal Rate of Return</b>	57 per cent	39 per cent

<sup>8</sup> See Annex 3 for detailed assumptions on why ICR model adjusts some initial assumptions in the PAD analysis.

### **3.4 Justification of Overall Outcome Rating**

Rating: Satisfactory.

Overwhelmingly, and as demonstrated above, the project achieved its objectives. It did so efficiently, and it remained relevant throughout the project period. Minor shortcomings in implementation occurred at a number of stages, the target of funding key registration functions was not technically achieved until the project closed, and the project required two extensions (totalling 18 months) for it to reach all goals, reflecting some problems with implementation. However, these could not be considered serious enough to warrant the description of “moderate”, nor do they detract from the significant and wide ranging set of achievements of the project. Thus, an overall rating of “satisfactory” is appropriate.

### **3.5 Overarching Themes, Other Outcomes and Impacts**

#### **(a) Poverty Impacts, Gender Aspects, and Social Development**

The PAD noted that while the project would not be targeting poor people, the poor and other disadvantaged people would be likely to benefit from project outcomes, such as improved access to services and information, efficiencies that would result in lower direct and other costs, consistent standards and accountability. Further, the PAD noted, ongoing links with legal aid programs supported by other donors would also specifically benefit the poor.

For poor and disadvantaged people who own property and deal with it, or those who aspire to be property owners, the achievements of the project listed above would have benefited them in the way described in the PAD.<sup>9</sup> Specific benefits include quicker and cheaper (or free in certain instances) access to property information, reduced registration fees,<sup>10</sup> removal of the obligation to engage a notary or obtain a technical inventory certificate for every transaction, and increased ease of using property to secure loans, particularly short-term loans to buy seeds and fertilizer as well as to support animal breeding programs. Further, as the poor and disadvantaged are said to suffer disproportionately from corrupt officials’ behavior, the project’s good governance achievements would have benefited them more than others.

Women were not a specific target group of the project, but data from customer surveys were presented in gender disaggregated form and further information was gathered from LROs. A report on gender issues was produced in 2013. Thus, issues of particular concern to women could be identified. While the legal framework treats men and women equally, the situation on the ground is somewhat different, with women generally occupying a secondary position to men in terms of finances and property (only 25 per cent of property owners are estimated to be women), with the consequential reduction in their status both within and outside the family. The insights from the customer surveys would allow DCR to develop a program to deal with issues of

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<sup>9</sup> The truly poor and disadvantaged, who often do not own land and have no real hope of obtaining it, would have received no advantage from the project achievements.

<sup>10</sup> As *Doing Business 2014* notes, the cost of registering a transaction is 0.3 per cent of the value of a property. In *Doing Business 2008*, that figure was 4.1 per cent.

particular relevance to women, such as women specific information brochures, meetings or service times, although no such steps have yet been taken.

### **(b) Institutional Change/Strengthening**

As a primary focus of the project was institutional development and strengthening, and most of Components 1 and 3 were dedicated to those goals, the project's impact on the institution has been covered in numerous places above.

However, the above discussion has not addressed the issue of corruption in the land registration system, which is an important aspect of institutional change and strengthening. From both anecdotal evidence and the 2012 customer survey (see section 6 below), the picture of LROs that emerges is one of a relatively uncorrupt organization. Nevertheless, corruption is widespread in the Kyrgyz Republic, with Transparency International ranking the country 155 out of 177, and giving it a score of 24 out of 100, and the land sector (particularly land allocation) is reported highly corrupt in some accounts. However, the 2012 survey indicates that the LROs are widely regarded as honest and trustworthy. Customers are generally not required to make extra payments, receipts are given for payments, and every LRO displays the requirements and fees for registration in the public areas. Online access to property ownership information (through land market professional who use the Kyrgyz Land Information System or KLIS) further reduces opportunities for corrupt payments. One community lawyer who was interviewed for this report and who was previously highly critical of Gosregister advised that from both his personal experience and reports from clients, corruption was not a significant issue at the LROs.

### **(c) Other Unintended Outcomes and Impacts (positive or negative)**

There were a few unintended outcomes of the project that have not yet been mentioned. These were:

- the adoption of ISO standards for spatial data, which were used under the project for mapping, as the national standards for the Kyrgyz Republic, and the creation of the foundation for national spatial data infrastructure based on that mapping;
- the use of data produced by DCR by a wider range of government users, such as the statistics and taxation authority; and
- following the ethnic-based violence in 2010, in which many owners' homes and also property certificates were burnt or otherwise lost, Gosregister was able to quickly and accurately replace their certificates using information from its electronic data base. Replacing the certificates rapidly permitted owners to reconstruct their homes, which was a significant element in reducing tensions and returning the situation to a more normal one.

## **3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops**

A public opinion survey was conducted by DCR in February 2012, following a methodology developed under the LRERP. This was the third survey conducted by Gosregister/DCR, and its findings can be appropriately used in this report although they are over two years old.<sup>11</sup> Some

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<sup>11</sup> A further public opinion study was conducted in 2013, but it focused only on gender issues.

426 persons were surveyed across the country. Most were LRO private clients (70 per cent), with the remainder representing professional clients. The survey focused on 11 areas of operations, and it found that:

- *Type or service required*: clients were evenly divided between those who registered a sale, those who registered a mortgage, and those who sought information. The high proportion of clients registering a mortgage reflected a program to assist farmers with credit;
- *Gender of property owners*: female property owners represent about one-quarter of owners nationally, with the highest rates (30.8 per cent and 30 per cent) in Naryn and Chui oblasts;
- *Dissemination of information on the property registration system*: more than half (52.2 per cent) thought that there was sufficient information on the registration system, although this was down from 69.5 per cent in the 2009 survey. The main means for clients to obtain information was through the mass media and from LRO staff, with only a small percentage using the DCR web site;
- *Complexity of property registration procedures*: one-fifth of clients found the procedure to register a property difficult or very difficult, particularly in more remote areas;
- *Level of corruption*: over three-quarters of those surveyed considered that the level of corruption in LROs is low, although approximately 6 per cent considered it to be high. These figures are an improvement on the 2009 survey, in which over 20 per cent considered corruption to be high. The survey lists several categories of cases where “rewards” for staff to complete their tasks are most common,
- *Extortion by LRO staff*: payment was reportedly demanded from clients in less than 4 per cent of cases;
- *Issuance of receipts for payment for services*: almost 90 per cent of clients received receipts for the payment that they make for services;
- *Private sector services*: more than half those surveyed were positive about the transfer of cadastral services from the government to the private sector;
- *Attention to information stands*: few (28.2 per cent) private clients paid attention to public information materials posted at LROs, although almost half (45.7 per cent) of professional clients take note;
- *Quality of information*: three-quarters of clients found the quality of information to be good;
- *Kindness of staff*: around 90 per cent regarded staff as friendly or very friendly.

The survey paints a picture of DCR and the LROs operating reasonably well in many areas, particularly in terms of clients’ satisfaction with staff and low levels of corruption, but it also makes clear that there is work to be done to fully inform the public about the registration system and to streamline registration processes.

#### **4. Assessment of Risk to Development Outcome**

Rating: Moderate

In the Kyrgyz Republic, the question of assessing the risk that the project's outcomes will be maintained over time cannot be answered from only one perspective. The uncertainties faced by DCR, the registration system and its data over the coming years and decades turns on many factors.

At the macro level, the risks facing stable government in the Kyrgyz Republic must be judged as high. Since 2005, two presidents have been forced from office by public protest, several governments have come and gone, and political assassinations are not unknown. Popular uprisings are no longer unusual events, and given recent history, such uprisings could be expected again.

The project's outcomes also face potential (although not real at this stage) threats from within government. Even where there is stable government, successful land administration system elsewhere (including at least one developed with Bank assistance) have deteriorated over time due to poor management, inadequate allocation of resources, and lack of understanding of the importance of a well-functioning land registration system. There was clearly potential during the project for Gosregister to be broken up (in fact, it lost its mapping capacities) or to be subsumed within a larger body and neglected, and this risk remains into the future. However, important factors (present in the Kyrgyz Republic) that reduce the risks are integration of the real estate registration services in the wider economic, banking, planning, agricultural and other sectors of the economy, and popular support for an efficient real estate registration system. As one notary who was interviewed for this report put it, it would be unthinkable among her profession for the registration system to not exist any longer. Given the important role that the land registry plays in the Kyrgyz Republic, the likelihood of these risks is relatively small. Were threats to arise, DCR would be able to draw on support from the public and land market professionals, as well as donors who recognize the success and value of DCR's system, to deal with such threats.

At the level of DCR itself, there are also some risks to sustainability, although these appear much smaller given that establishment and strengthening of the organization has been achieved with the assistance of both the LRERP and SLRERP. Here, the risk is that key personal could leave without adequate transfer of knowledge, budget cuts could see important functions curtailed or eliminated, and the flow of funds from the LROs to support key operations could stop. These risks must be closely monitored and DCR leadership needs to intervene at an early stage to deal with potential problems. In this regard, DCR is like any service delivery agency in modern times. As registration fees are already very low by international standards, there is room for shortcomings in budgets to be addressed by slight increases in fees. Further, from an operational perspective, many of the project's outcomes face little risk of being lost because they have been incorporated in the daily operations and are an integral part of the LROs' functions. The work of maintaining the outcomes, including the GIS Center, can be funded from existing sources of revenues (mostly fees). They are therefore sustainable, at least in bulk of LROs where revenue exceeds operating costs. For details on each subcomponent's sustainability, see Annex 2.

## **5. Assessment of Bank and Borrower Performance**

### **5.1 Bank Performance**

#### **(a) Bank Performance in Ensuring Quality at Entry: Satisfactory**

The Bank team was well experienced and knowledgeable in their fields and in the region, and they applied a fairly standard model of institutional development and land titling to meet the needs of the Kyrgyz Republic. Over an extended period, they worked closely with equally knowledgeable counterparts to design the project's activities to achieve the PDO. Although preparation set a clear course that did not require substantial (and costly) subsequent change, there were some minor shortcomings in preparation, as demonstrated by the need to revise component 2 in the first restructure and make changes to the mapping activity, and some targets may have been overly optimistic.

#### **(b) Quality of Supervision: Satisfactory**

Supervision followed a regular rhythm of six monthly visits during which the team provided technical advice, assessed project progress, developed an action plan for the coming six months, and met with key stakeholder representatives and other donors. In between missions, there was good support via email and the local Bank office provided support, as required, such as during the threat to DCR's continued existence. The Bank was also able to bring pressure to deal with difficult issues, both within DCR and the government, such as ensuring that the coordinates system was openly available. The restructures and extensions were timely and well-targeted, and the mid-term review of February 2010 recognized and responded to issues appropriately.

DCR reports that the aide memoires were very useful, that the working group approach was very good, and that the technical assistance (particularly that provided by FAO staff and consultants) was of great help. A long and close working relationship existed between DCR management and the Bank team, making frank discussions possible.

There were however, some minor shortcomings. Supervisions funds were significantly restricted at the end of 2010, reducing the number of specialists who could take part in missions and thus provide technical support. The funding problem also restricted the task team leader from visiting the country in early 2011. In retrospect, the Bank should perhaps have engaged more fully with senior officials and politicians to better publicize and promote the success of DCR and the LROs to enhance understanding and support for the system. Overall, therefore, supervision can be judged as satisfactory.

#### **(c) Justification of Rating for Overall Bank Performance: Satisfactory<sup>12</sup>**

The Bank's performance was adequate to the tasks and facilitated the success of the project. Quality at entry and supervision were generally appropriate to ensure that the project was

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<sup>12</sup> The ICR report test for this element is: The extent to which services provided by the Bank ensured quality at entry of the operation and supported effective implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of supported activities after loan/credit closing), toward the achievement of development outcomes.

successfully completed and the PDO was reached. While it could be argued that the Bank might have been somewhat more active in dealing with the institutional, political and bureaucratic hurdles facing project progress, and therefore to have acted more quickly to restructure, these are concerns of a relatively minor degree. As there were no significant or moderate failings in preparation and supervision, a rating of satisfactory can be attributed.

## **5.2 Borrower Performance**

### **(a) Government Performance: Moderately Satisfactory**

The performance of the government (including the former management of the SRS) is assessed as moderately satisfactory, in that there were some moderate shortcomings in its performance. The shortcomings fall under several headings:

- instability of government, particularly in the initial stages;
- lack of clear decisions or direction on the status of Gosregister/DCR;
- lack of capacity to make certain critical decisions and delays in settling the organizational arrangements, and a lack of timely resolution of implementation issues, which resulted in the transition arrangements for project funded operations to be delayed until the very end of the project.

However, in other regards, the performance of the government was supportive of the project and its objectives. For example, in the following areas, the government performed adequately or well:

- policy and legislative reforms to improve efficiencies in the real estate market, to remove barriers to access to land, to reduce some restrictions on the mortgaging of agricultural land, and to dispense with the requirement for a notary in all cases;
- reduction of fees and charges;
- public support for Gosregister/DCR, including through the media and visits to LROs;
- good relationships and communications with the Bank and other donors;
- compliance with grant covenants;
- contribution of government funds to the SLRERP.

Thus, overall, a rating of moderately satisfactory is warranted.

### **(b) Implementing Agency or Agencies Performance: Satisfactory**

The performance of Gosregister/DCR was generally of a high standard. There was strong commitment and engagement in preparation of the project, and the organization ultimately delivered on all its obligations during implementation. There was a very good working relationship with the Bank team, an open and transparent attitude to information, and good relationships and coordination with partners/stakeholders, including civil society. Further, the managers of some of the LROs (particularly Bishkek LRO) were very active in implementing reforms and fostering progress, particularly in the IT area. In general, Gosregister/DCR can be considered to have performed with few real problems.

However, the aides-mémoire show a series of delays in implementation but also delays in making some key decisions. The supervision missions found that work was often well behind schedule and stressed the need for Gosregister/DCR to make decisions and take action, particularly in the 2009-2010 period. However, from 2011 onwards, when momentum had returned, progress picked up. Although problematic at the time, these shortcomings were minor in the overall scheme of things, the decisions were ultimately made and all targets were achieved. They are not sufficient to downgrade an otherwise good performance by Gosregister/DCR and the LROs, and thus a rating of satisfactory is justified.

### **(c) Justification of Rating for Overall Borrower Performance: Moderately Satisfactory**

The significance of the government's shortcomings listed above, and the impact that they had on Gosregister/DCR's capacity to perform, means that the overall rating must be the lower of the two, and thus a rating of moderately unsatisfactory is justified.

## **6. Lessons Learned**

The lessons learned from the SLRERP are:

- **Robust M&E Framework:** Project implementation was greatly aided by a robust M&E framework based on objective indicators that were tracked consistently throughout the project and served as useful tools to monitor outputs and outcomes. This allowed for greater focus on what was important for PDO achievement and course correction, when necessary.
- **Institutional Capacity:** Building institutional capacity was critical to the success of this project, especially in the face of political instability. This also enabled the successful roll out of the IT system and the creation of the self-financed GIS Center, which has reduced the registration services' reliance on the state budget and will allow for future investments without straining the government budget.
- **Political Environment:** Related to the institutional capacity lesson is the broader lesson that instability is a regular feature of the Kyrgyz political system, and that future projects must recognize that time can be expected to be lost during changes of power and government priorities can quickly change. In light of this, the Bank must be receptive to providing extensions and it must remain flexible in project design and dealing with changing political circumstances.
- **Digital Archives:** Over the course of this project, separate digital archives were maintained and updated regularly. This was extremely valuable as records could easily be replaced when paper records were lost. As noted, the ability to issue certificates based on these records helped stabilize the country in the aftermath of the violence in the South. Such a practice should be followed elsewhere, especially in politically volatile countries.
- **Modular approach to IT:** A phased, step-by-step approach to the development and roll out of IT systems works well and can be easier to achieve and implement than large-scale systems. Starting from a basic registration system, the ARS was progressively expanded over the course of the project to meet the needs of Gosregister/DCR and the LROs and as capacity to utilize new modules increased. Using experienced in-house experts also helps to build IT capacity, which is then available to adapt to ongoing changes in the IT sector.

- **Bank-FAO Partnership Arrangements:** This partnership proved very effective in delivering technical advice to the Gosregister/DCR and the LROs. In fact, throughout the ECA region over the last two decades, the FAO has worked with the Bank on land projects to provide useful and well-targeted advice on a range of topics, including surveying and mapping, valuation, IT, legal and associated matters. Likewise, technical support from SIDA was highly useful in aiding Gosregister/DCR and the LROs to develop and fully exploit the Bank funds to improve technology, skills and procedures, and thus customer service.

## **7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners**

### **(a) Borrower/implementing agencies**

DCR is grateful for the active support of the Bank team in the implementation of the project. We agree on the draft ICR. The targets of all components and subcomponents were achieved and exceeded. The Government successfully implemented the project and reached its objectives. A rating of satisfactory is therefore justified.

### **(b) Cofinanciers**

N/A

### **(c) Other partners and stakeholders**

*(e.g. NGOs/private sector/civil society)*

## Annex 1. Project Costs and Financing

### (a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions) Loan Funds	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
A. Organizational Development and Improved Services	4.01	3.86	96%
B. Expanding Spatial and Legal Land and Real Estate Data	2.40	2.73	114%
C. Professional Development and Standards	0.55	0.54	98%
<b>Total Baseline Cost</b>	6.96	7.12	102%
Physical Contingencies	0.22	0.12	55%
Price Contingencies	0.33	0.18	55%
<b>Total Project Costs</b>	7.50	7.42	99%
<b>Total Financing Required</b>	7.50	7.42	99%

### (b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Borrower	Joint	1.65	1.57	95%
International Bank for Reconstruction and Development	Joint	5.85	5.85	100%

## **Annex 2. Outputs by Component**

### **Component 1           Organizational Development and Improved Services**

#### Subcomponent 1.a Performance, Strategy and Communications

##### *Design*

This subcomponent was designed to establish a permanent unit within Gosregister with the capacity and resources to:

- monitor all aspects of Gosregister’s performance;
- recommend strategic and other improvements; and
- communicate effectively with all stakeholders.

It was to be built on the PIU from the LRERP, which was staffed by a range of specialists who had long experience with project management, monitoring, communications and other relevant areas of expertise. However, many lacked the analytical and strategic skills, and Gosregister itself could only deal with strategic and communications needs by taking staff from other areas.

The outcome for this subcomponent was to be a sustainable unit that would monitor Gosregister’s performance, provide strategic support and support improved communications, as indicated by the unit’s outputs showing a gradual expansion of responsibilities, plus the establishment of a sustainable financing mechanism. The outcome and indicator were not revised during the restructurings, although the targets were adjusted in the first restructuring to state that the new system would be in place for at least one year, and in the second restructuring to remove that requirement.

##### *Results*

By the end of the project, the unit had consistently addressed and made progress in the areas of:

- monitoring and evaluating the performance of LROs, using data obtained through the automated registration system (ARS) reporting module and personal visits to every LRO, to improve service standards and ensure consistency in practice and outcomes across the country, as demonstrated by the reduced time to register a transaction;
- analysing changes and developments in the real property market, particularly as part of subcomponent 3.c on the price index (see below);
- developing and recommending policy, legislative and strategic improvements, which resulted in reduced registration times, reduced number of restrictions on the real estate market, lower costs for the public and a sustainable structure for core DCR services through the creation of the GIS Center. For example, the unit worked on eliminating the requirement for a technical inventory to be performed in all cases and for a notary to be engaged in every transaction;
- collecting and analysing data in order to prepare proposals for Gosregister/DCR’s financial independence;

- improving communications, through adoption of a communications strategy, training of LRO staff in communications skills, conducting customer surveys (2009, 2012, 2013), making over 200 public presentations and issuing numerous press releases, which ensured that DCR had a profile with both the public and within government. The unit also shared DCR's experiences with other government bodies delivering services to the public;
- developing a business plan and strategic plan for the period 2011-2016, primarily as an input to subcomponent 1.e on organizational structure, but of relevance to the wider range of DCR/LRO operations;
- collaborating with stakeholders, including representatives of civil society, to improve operations, policy, legislation, procedures and communications.

The goal of establishing a permanent unit was also achieved, albeit not until the end of the project, with the establishment of the GIS Center. As noted, the Center was established at the end of November 2013, and started funding staff on January 1, 2014. Of the 28 staff funded by the GIS Centre through registry revenue, four belong to the policy, strategy and communications unit (which is now named the "M&E Group"). These comprise one M&E specialist, one real estate market specialist, one economist and one training specialist. The plan is to expand the group to include another M&E specialist plus one M&E specialist in each of the seven oblasts, and a communications specialist. DCR also employs three M&E specialists from budget funds, and they are based in the cities of Osh, Naryn and Talas.

#### *Attribution*

The extensive and successful work of the unit and its many positive legal, policy, educative and practical reforms achieved have been central to improving the functioning of the registration system, the LROs and the real property market, and thus the more intensive and effective use of real property.

#### *Sustainability*

The sustainability of the M&E unit is dependent on continued funding to pay the salaries and associated costs of the staff. Five months after the project closed, funding for the unit's staff is continues to be provided. While an alternative model (full financial independence for DCR) remains under consideration, the current arrangement is generally accepted, and thus appears sustainable. Further, many of the positive outcomes of this subcomponent are likely to be retained no matter what happens because they have been incorporated into the law and the registration system itself.

## Subcomponent 1.b Information Technology Support

### *Design*

Subcomponent 1.b was designed to produce an integrated registration and cadastre IT system and the KLIS,<sup>13</sup> serving clients through a website portal that would benefit the private and public sectors, and the establishment of a permanent unit that would have the resources and capacity to provide ongoing IT maintenance and development support for all of Gosregister.

The outcome was an improved and sustainable IT system, as measured by the upgrading of the IT system, introducing an internet portal, and establishing a permanent unit with resources and capacity to provide ongoing IT maintenance and development support for all of Gosregister, including the LROs. In the first restructuring, the outcome and indicator were not changed, but a new target of loading various categories of digital data (archive, cadastre) was added for the final, additional year, and a target was added for the IT unit to be fully funded from revenue for at least one year. The second restructuring saw the requirement for funding for one year dropped.

### *Results*

This subcomponent had a solid basis from the LRERP and SIDA funded support, and work progressed steadily throughout the project period. As much of the work was technical in nature, it was unhindered by the political and organizational issues being experienced by Gosregister. Work initiated under the LRERP, such as the roll out of ARS to all 49 LROs and development of geographic information system (GIS) software, using open source software, continued. In 2008-2010, an IT strategy was developed (with SIDA support) and adopted, a geoportal was developed and tested, ARS was established in all LROs, the open source geographic information system (GIS) software for digital maps was tested in pilot LROs, and a centralized system for e-services to external users (KLIS) was developed and tested with key clients.<sup>14</sup> A great deal of IT equipment was acquired for this and other subcomponents, and by the end of the project, all LROs had servers, desktop computers, scanners and other IT equipment required for project related activities, as well as the necessary software.

Although the system was (and remains) decentralized, by early 2011, databases from 46 LROs were being uploaded to KLIS, thus providing access to practically the whole country's legal property data (ownership and encumbrances) through the geoportal. By the end of 2011, KLIS was fully operational, with updates from every LRO being provided over high-speed lines (through a VPN or virtual private network connection) every few minutes, thus providing close to real-time access to data. All archive scanned images and digital mapping data have been

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<sup>13</sup> The Kyrgyz Land Information System or KLIS is the central level database at DCR headquarters holding all LROs' digital information, other than graphical data (which is scheduled to be incorporated in 2014). KLIS thus provides not only a source of information to external users through the geoportal, but a back up for the entire country's real estate registration records.

<sup>14</sup> DCR has back up copies of digital maps, but as digital mapping is not operational in all offices (only Bishkek and two others is using digital mapping data at this stage) the digital maps are not yet incorporated in KLIS. This is planned for 2014-2015.

uploaded to local servers and copies are stored securely.

The pace of progress did not slow in the last two years of the project. By the project's end, an updated version of ARS was developed and installed around the country, as was the software to support the digital cadastral maps. KLIS was serving paying customers (particularly notaries and real estate agents), renovations at DCR's headquarters and Bishkek and Osh LROs had enhanced the physical security of IT equipment, and a system for backing up legal data between headquarters and the LROs (through KLIS) was fully operational. Finally, a consultancy to integrate ARS with the GIS open source system was implemented.

As of December 31, 2013, the geoportal had 87 registered users. These are split between private persons (65), primarily notaries, and legal entities (22), including real estate firms, banks and the National Bank of the Kyrgyz Republic. Public sector users of DCR's data also include the national statistics office and taxation authority. Bishkek city is considering using DCR's ownership and graphical data as the basis for the city's geographic information system. Other public sector bodies that receive digital data from DCR include Jalal-Abad city, the State Inspectorate for Environmental and Technical Safety and the State Committee for National Security.

The creation of the GIS Center allowed for the project's IT specialists to be retained. The IT group has nine members: one manager, two programmers, two database administrators, one system administrators and one regional specialist for LROs in the north and one for LROs in the south.

#### *Attribution*

In real property registration systems around the world, effective IT systems are the cornerstone of efficiency, security and accessibility. They also play a key role in reducing corruption opportunities (particularly petty corruption) by providing professionals and members of the public with direct access to information. Accurate real property data can now be obtained in the Kyrgyz Republic quickly and easily, reliable statistics are readily available, real property information is more secure, and the benefits of improved IT have been delivered to all parts of the country.

#### *Sustainability*

As noted in relation to subcomponent 1.a, after five months, the GIS Center funding model appears to be successful. As Gosregister/DCR has developed a successful IT system that improves operational efficiency, and the LROs understand the importance of IT to their operations, it is highly likely that funds will continue to be provided by LROs from their operational revenues to maintain the system as part of their core operating costs. However, for some of the smaller LROs, where revenue does not meet expenses, the IT system (particularly hardware) may not be sustainable without cross-subsidies, central level support or amalgamation with larger LROs, and thus a long-term solution is essential if all land registries are to maintain good IT infrastructure.

## Subcomponent 1.c Agency Financial Management and Procurement

### *Design*

This subcomponent was intended to result in the installation of a “robust automated accounting and reporting system”, with an internal audit function established across the entire LRO network. Further, subject to the decision to re-organize or consolidate Gosregister, this subcomponent was to lead to the establishment of corporate financial management practices, which would include improved financial reporting and an external audit.

The associated outcome and indicator were that an agency financial management and procurement capacity would be developed, as demonstrated by the results quoted above from the PAD, together with published audited financial statements. The outcome and indicator were not revised during restructurings, although the targets were adjusted in the first restructuring to state that the new system would be in place for at least one year, and in the second restructuring to delete that requirement and also to modify the target to reflect what was possible in the remaining time, that is, further implementation of the integrated accounting and reporting systems in LROs.

### *Results*

The objectives of this subcomponent regarding the installation of an accounting and reporting system, plus a somewhat limited internal audit function for the entire LRO network, were broadly met. Specifically:

- a consultancy produced a set of accounting practices and manual;
- an automated accounting module, linked to ARS, was installed and is operating in Bishkek, Osh and Issyk-Kul LROs on a pilot basis;
- a nationally consistent, revised accounting module of ARS was developed, and is to be rolled out in 2014-2015;
- accounting staff in all LROs have been equipped and trained in the use of computers, which was somewhat revolutionary when judged against the manual system (often assisted by an abacus) used in many LROs;
- accounting staff received introductory training in the accounting module of ARS;
- a corporate financial management plan, an accounting policy and charter of accounts were prepared and adopted;
- a corporate governance plan was prepared and adopted.

Currently, all LROs provide their accounts to DCR headquarters, and the SRS oversees DCR’s accounting. The GIS Center economist is to monitor accounts, and DCR headquarters is to provide an audit function.

The results of this subcomponent fell short of the loftier ambitions to see Gosregister/DCR running a more open and transparent financial system, with accounts externally audited and

published. As the PAD noted, this result was dependent on the decision to re-organize Gosregister/DCR, which did not occur. However, within the confines of the revised results indicator for subcomponent 1.c, the target was achieved.

### *Attribution*

Better accounting and reporting goes to both improved management and greater transparency of an organization, and to the extent that the work under subcomponent 1.c has raised the standard of accounting and reporting in LROs, particularly Bishkek, Osh and Issyk-Kul LROs, then the registration system can be said to be functioning better. Looking more broadly, the work under this subcomponent has raised the issue of improved accounting and reporting, prepared LROs and their staff for its implementation, and developed the necessary software. This is perhaps the first stage of the process, but it is an important initial step in improving the financial and reporting operations of the registration system.

### *Sustainability*

The accounting and reporting module is integrated in ARS, and it is being successfully used in the three pilot offices, so there appears little risk that its use will be discontinued in those LROs, particularly as the module provides a useful management tool. It is almost certain that the revised accounting module will be provided to other LROs because it forms part of the next iteration of ARS, which is due to be installed. However, the training provided to staff of the non-pilot LROs will probably need to be repeated as they have presumably forgotten much of what they learnt.

## Subcomponent 1.d Records Management Improvement

### *Design*

Subcomponent 1.d had the objective of making the extensive records created by Gosregister since its creation in 1999 (primarily paper legal documents and sketches) secure and accessible. It was to:

- improve climate control and back-up arrangements for archives in all LROs;
- produce complete digital archives for Bishkek and Osh LROs; and
- introduce scanning of new records in all LROs.

The outcome for this subcomponent was that LROs' records would be more secure and accessible, as indicated by the three items immediately above. The outcome and indicator were not revised during restructuring, although the targets were adjusted in the first restructuring to state that the new system would be in place for at least one year, and in the second restructuring to drop that requirement.

### *Results*

By the end of the project, LROs had made improvements to their archives, including:

- renovations of archives in 46 LROs;
- introduction of air conditioning in seven LROs;
- new shelving and furniture in all LROs;
- basic fire equipment in all LROs;
- fire alarms installed in 24 LROs; and
- training for archivists in archives management.

Back up arrangements for digital records have been addressed under subcomponent 1.b above.

Although digitizing the archives of Bishkek and Osh LROs was slow to start, by the end of 2012, the contractor had completed the work, with the results verified, for Bishkek and Osh LROs, and through savings, the archive of an additional LRO at Alamedin was digitized. A total of 3,344,709 pages were digitized and made accessible through ARS. The LRO at Issyk-Kata produced a digital archive using its own resources.

The project also supplied scanners to all LROs to digitize transactions as they were being registered. In 2010 there was an assessment of the need for scanners at each LRO and an ARS scanning module was developed. In late 2010 and early 2011, scanning of incoming documents was introduced in Bishkek and eight other LROs, and all LROs by early 2012. Scanners for all LROs were procured, and staff were trained in scanning, and the new module of ARS that was developed to link scanned images to the property record. Thus, all LROs now scan newly registered documents. Through this approach, staff can see the image of a document by clicking on a thumbnail image on the title for the property (in ARS). Back-up arrangements were also put in place, with copies of the records being stored at DCR's headquarters as part of KLIS.

As the summary of results shows, this subcomponent met each of the three main indicators, and exceeding the mass scanning indicator by covering a third LRO.

#### *Attribution*

Secure records (whether in paper or digital form) are essential to the security and reliability of a registration system and its ability to function effectively. Digitized records are also important to improve the efficiency of the registration system, by making data available quickly and easily. The project activities thus had a direct positive impact in terms of achieving the PDO, as the better functioning registration system provided more secure, reliable support for the real property market. Such records also reduced the possibility of corruption by making a permanent record that could not be removed or altered.

#### *Sustainability*

These changes appear to be sustainable as the archives have been improved, the digitized information has been created (and is backed up), and the LROs are scanning newly registered documents as part of the registration process. Most of the archive renovations were funded by the LROs, so maintaining the archives should be within their budgets. There should be no need for new equipment or software for several years (at least), but in the longer term, the scanners,

computers and software will have to be maintained and updated. As discussed under subcomponent 1.b, the value of IT is recognized by the LROs so it can be expected that they will ensure part of their budgets are available for IT maintenance, although the small offices could struggle in this regard.

## Subcomponent 1.e Organizational Structure and Facilities

### *Design*

Subcomponent 1.e included a number of elements that were to result in “all operational and capital maintenance expenses, including those of headquarters functions, covered by income from registration.” It included activities related to:

- consolidating small offices with larger offices and providing services through branch offices or mobile services;
- Gosregister considering changes to its national structure;
- assisting with the transition to a new structure, if the government decided to proceed.

The outcome of this subcomponent was to be that the organizational structure and facilities would be financially sustainable, as indicated by the implementation of arrangements so that all expenses of the headquarter’s functions were covered by income from registration. The outcome and indicator were not revised in the restructures, although the targets were adjusted in the first restructure to state that the new system would be in place for at least one year, and in the second restructure to drop that requirement. There was also clarification in the second restructure that headquarter’s functions referred to those to be provided by the CSC (now the GIS Center).

### *Results*

Initial identification work on consolidating small offices had begun under the LRERP, and progressed with the drafting of a business plan. Six offices were informally reduced to branch status in 2009, and a further 13 were identified for downgrading in a well-researched proposal produced in 2010 by the working group responsible for this subcomponent. Out of a national total of 49 LROs, these 19 were considered as uneconomic because they could not cover all their operating expenses from revenue, and they were therefore recommended for consolidation. However, DCR management decided in early 2011 to delay any consolidation until the larger issue of DCR’s status as a single enterprise was settled. As that issue was not resolved during the project period, work on the first aspect of this subcomponent – consolidating small offices – did not commence.

That larger issue of the structure of DCR and the LROs occupied a great deal of time and attention, particularly in the later phase of the project. A proposal for the creation of a self-funding, single agency was submitted to the prime minister in 2009, but a wholesale re-organization of government and registration services in particular overtook that process, with the splitting of Gosregister into DCR under the SRS and the transfer of its mapping services to the Ministry of Natural Resources by decree dated October 26, 2009.

Delays followed as the SRS consolidated its structure and its management, which took time to understand the issues and determine SRS's own future. There was also a lack of permanence in the SRS leadership. DCR continued to make proposals, including the drafting of a state enterprise charter, in 2010-2011, and a draft package was submitted for the government's consideration in April 2011, but no final decision was forthcoming. The aide memoire of April 2012 notes that a decision was expected in August 2012, but with a change of government in the third quarter of 2012, no decision was made. By the end of 2013, a further package had been submitted to the government recommending financial independence for DCR within the SRS. This package is planned to be considered by the prime minister and parliament in the first half of 2014.

An alternative approach was developed in the second half of 2013, during the second extension, to ensure that there would be a sustainable basis for the core activities that could be implemented before the project closed. This was to create the GIS Center, under the legal entity of Bishkek LRO, that could employ the PIU staff. The GIS Center approach is a simpler means of ensuring that key functions of DCR and the LROs could be funded through registration revenue. Funding for the GIS Center comes from each of the LROs, with the contribution of each office reflecting its ability to pay. For example, Bishkek LRO, which is the largest office, contributes more than one-third of the funds, with Osh, Issyk-Kul, Issyk-Kata, Alamedin and Sokuluk LROs contributing most of the rest. Remote LROs make only nominal payments. The arrangements are based on a contract with all the LROs. The GIS Center proposal was approved by the SRS and registered in the Ministry of Justice in November 2013, and it was to be fully functioning by the project's closing date of December 31, 2013.

In relation to the third aspect of i.e, the detailed description of this subcomponent in the PAD recognized that the consolidation of LROs was dependent on a government decision, and therefore consolidation of LROs was never certain. The failure to do so during the project was a missed opportunity, as resources were available to ensure a smooth amalgamation process. However, consolidation of offices could be done at any time, as this is a matter that could be implemented without significant cost. While the project planned to assist with such matters as relocation of equipment and archives, some renovations and publicity, these costs could be covered by LROs. Thus, no significant harm was done by the failure to consolidate smaller offices, and the practicalities of insufficient revenue to operate the 19 LROs will most likely force the issue in the very near future.

#### *Attribution*

Although it is early to fully judge the effectiveness of the GIS Center as a funding model, staff in key support areas have been retained (as discussed in this annex) and to that extent, the model has been effective in ensuring the skills and knowledge needed to support the registration system.

## *Sustainability*

There appears to be general agreement on the GIS Center funding model, with strong support from the primary contributor (Bishkek LRO) to using registration revenue to fund key central level functions, particularly IT support and development. It is likely, although not certain, that this model will remain in place and continue to be effective over the longer term.

### Subcomponent 1.f Project Management

#### *Design*

Subcomponent 1.f was intended to ensure that the project was well managed and completed in accordance with the schedule and budget. It followed the LRERP's approach of managing the project through a PIU, which had specialists in the areas of M&E, financial management and procurement, training, legal and IT. As the PAD noted, the main difference was to be that staff of the PIU would be transferred to Gosregister over the life of the project, progressively reducing the size of the PIU to core project management staff.

The outcome was that project implementation was to be timely and well-coordinated, and the indicator was completion of the project on schedule. These were not changed during the restructures except to take into account the extensions.

#### *Results*

The project benefited by the appointment of a very capable and experienced person as head of the PIU soon after the project commenced, and he remained in that position throughout the project period. Other capable staff, many of whom were members of the LRERP PIU, were recruited and stayed throughout the project period, ensuring continuity and retention of skills and corporate memory. As noted, retroactive financing from the SLRERP covered the costs between the closure of the LRERP in December 2008 and the effectiveness of the SLRERP in October 2009.

Project progress was, in general, slow during 2009 and into the second year of the project. The aide memoires show that work was often delayed, agreed actions were not met in time, and due to delays, some work had to be repeated. These problems arose primarily through interference in decision making at Gosregister (and perhaps other ministries and agencies) by high level leadership. With the removal of the president and his associates in April 2010, DCR and the PIU were once again able to begin making progress. Institutional changes in late 2009, which resulted in the creation of the SRS and division of Gosregister into two parts, also distracted management and the PIU from project activities, although most of these distractions were settled by the time that the current director of DCR was appointed in April 2010. The first restructuring referred to such problems in justifying the need for a one year extension.

By late 2010, the PIU had become fully focused on ensuring that project activities advanced. The aide memoires show progress in meeting most of the project schedules in 2011 to 2013, although delays in the government making a decision on the status of DCR and funding for core services

provided by the PIU meant that a further extension was required in 2013. By the end of the project, with two extensions, the activities had been completed and all major outcomes had been achieved.

The other main element of this subcomponent – the transfer of staff from the project and PIU to DCR – progressed slowly due to the lack of a decision on DCR’s status and resolution of the funding of DCR’s headquarters staff. As discussed already, the GIS Center now employs the staff.

In terms of procurement, financial management, reporting and other core PIU activities, this subcomponent functioned well. There were no problems with procurement, all audits were clean, and all FM ratings (except one at the beginning) were satisfactory or moderately satisfactory. Reporting was to a high standard and delivered in a timely manner. Government contributions were all provided without difficulty, and disbursement of funds closely followed the formally revised disbursement graph.

#### *Attribution*

The work under this subcomponent had an indirect, although crucial, role in achieving the PDO and associated indicators. Timely and effective project management support allowed work under the other subcomponents to progress smoothly.

#### *Sustainability*

With the close of the project, staff of the PIU are now employed by the GIS Center, as noted. Retention of knowledge and skills relating to project management and reporting have therefore been successfully retained through a funding model that appears at this stage to be sustainable, as discussed above.

## **Component 2            Expanding Spatial and Legal Land and Real Estate Data**

### Subcomponent 2.a Systematic Registration

#### *Design*

This subcomponent was to support registration of properties in areas not covered under the LRERP and to result in the systematic registration of at least 120,000 REUs (mostly in new settlement or *novostroiki* areas) and 70,000 public REUs, as well as some community pastureland. The outcome was that such REUs would be registered, with the indicator matching the numbers specified in the subcomponent’s description.

Soon after the project began, research and a pilot project to register REUs in four *novostroiki* areas in Bishkek were undertaken. It soon became clear that the number of unregistered REUs was much smaller than originally thought, that many were not suitable for registration by systematic means (due to ownership, occupation and building approval problems), and that most

public REUs had in fact been registered under the LRERP. Thus, by late 2010, the work under subcomponent 2.a was rationalized, with the funds allocated to other subcomponents, particularly 2.b. The restructuring of January 2011 reflected this, and although the description of the activities was not altered, the targets were reduced to a total of 10,000 REUs, most of which were to be in *novostroiki* areas. A target for registration of community pasturelands was also added. The subcomponent was not changed in the second restructuring.

### *Results*

Registration and survey work on the REUs was outsourced in late 2010 and completed in August 2011, with 10,005 REUs covered. When added to the number of REUs registered under the pilot project of 2009, plus a government directive of October 2009 that resulted in public entities registering the REUs that they occupied, a total of 20,854 REUs were registered during the project period, well exceeding the revised target. Half of the 62 *novostroiki* in which systematic registration work was conducted were in Bishkek, with the remainder spread between Osh (7), Alamedin (10), Sokuluk (4) and Issyk-Kata (10).

Separately to the project's activities, many new properties have been sporadically registered, particularly newly constructed properties (including a large number of apartments in Bishkek). On average, close to 70,000 new properties have been registered each year through applications made by their owners, making almost half a million new REUs in the system during the life of the project.

The other main aspects of this subcomponent – recording of community pasturelands – involved the project staff working closely with those of the Bank funded Agricultural Investments and Services Project to develop a methodology for demarcating, marking and registering these lands. A target of registering pasturelands in more than 300 local areas was inserted in the results framework in the first restructure. In 2010, a pilot was undertaken to test methodologies, and in 2011 tenders for the first of two phases of registration work were issued, with a tender for the second phase issued in 2012. By late 2012, the first phase had been largely completed, but it was not until September 2013 that work on the second phase came to a close. By the end of the project, the original target was well exceeded. Community pastureland in some 395 local areas had been demarcated and fully registered, with 37 additional areas incomplete due to disputes, which DCR is in the process of resolving.

### *Attribution*

The expansion of the number of REUs covered by the registration system provides support to the real property market by extending the coverage of the registration system. The newly included properties can be traded and otherwise dealt with in the same efficient, effective manner that exists for other properties. The same also applies to the newly registered pasturelands.

### *Sustainability*

As the data on the parcels and their ownership has been gathered and recorded in the registration system, the results of this subcomponent are fully sustainable. Equally important however is

updating the data, as boundaries or ownership change. This, too, would appear to be sustainable because DCR's fees cover the cost of updating the data, and as they are very low, there is potential for them to be raised slightly if costs increased. Also, the system for transacting without the need for a notary has greatly reduced the barriers for the public to use the registration system, and as the public generally accepts the need to register, there seems little risk that people will stop using the system. In the future, newly created properties will be registered on a sporadic basis through payment of registration fees by owners, and thus will not require project funds. Thus all aspects of registering properties and keeping data updated appear to be sustainable.

## Subcomponent 2.b Upgrading Cadastral Mapping

### *Design*

Subcomponent 2.b was intended to result in maps based on satellite images or orthophotomaps covering seven million hectares of arable and nearby pasturelands being produced and used by local authorities and projects, and production and use of orthophotomaps covering 34,000 hectares in 23 towns. Digital cadastral maps were to be produced for:

- urban areas with active land markets, tourism, etc. and where digital cadastral maps did not exist, areas where increased development (of construction and land sales) was expected or areas where land market activity is hindered by the lack of maps; and
- areas where the lack of mapping hindered public land management or posed an environmental risk.

The component was to facilitate the acquisition of orthophotographs and/or orthorectified satellite images of prioritized areas, training and equipment for Gosregister's in-house production of digital cadastral maps, and integration of the new maps to the ARS database.

There were two legal covenants relating to this subcomponent: the first required that the government make spatial data openly available; and the second required that permits be issued for aerial photograph flights.

The description of this subcomponent was modified in the first restructure to reflect a revised detail design, as separate government funds became available to acquire and process aerial photographs, and as the international professional advice was that digitizing of existing maps, which were of adequate quality, would be more effective and appropriate. Thus, SLRERP funds were to be allocated to digitize existing cadastre plans for 1.5 million parcels, with 680,000 land parcels in urban areas to be geo-referenced by field GPS/GNSS survey. By doing so, the second of the above legal covenants became no longer relevant.

The outcome and indicator for this subcomponent were that cadastral maps in selected areas would be upgraded and accessible, as measured by the production and use, by local authorities and rural projects, of rectified digital maps covering seven million hectares; and production of orthophotomaps covering 34,000 hectares in 23 towns being used by LROs and also accessible to other organizations. However, due to the significant changes in design in the first restructure, while the outcome remained the same, the indicator was modified to reflect production of

digitized maps for 1.5 million parcels and geo-referencing for 680,000 parcels. No changes to this subcomponent were introduced in the second restructure.

### *Results*

Work under this subcomponent started well in 2008-9, but following an assessment by an international mapping consultant, it soon emerged that the original design needed to be modified to better reflect the country's needs. There were delays while the subcomponent was redesigned in accordance with his advice, but as the redesign produced a better outcome, the delay was justified. However, there were various other delays in implementation with no positive impact, due to the re-organization of Gosregister (with the consequential loss of its mapping expertise), recruitment of consultants to provide the lost technical expertise, preparation of tender documents and the political instability of early 2010.

Work under the first set of contracts to digitize and geo-reference did not get underway until late 2011, although once work began, it progressed quickly. By the end of 2012, the original targets had been achieved, and the program was complete by mid-2013. The contracts, which covered key areas of the country, produced results that were better than anticipated: some 1.88 (against a target of 1.5) million land parcels covered by digital maps, with 722,000 (against a target of 680,000) land parcels verified by geo-referencing.

The resulting digital mapping data is kept in a separate database and open source software is used to view and modify the data. While it is therefore separate to ARS, the mapping data is integrated with ARS from a user's viewpoint. Users, who are currently restricted to DCR and LRO staff, can seamlessly access either textual (through ARS) or graphical (through the open source application) data from their workstation through a single office server. All 49 LROs have the open source software installed, with staff trained in its use. DCR plans to provide external users with access through the geoportal, with testing planned for late 2014 or early 2015.

It should be noted that the open source software is still in test phase in many offices – only Bishkek and Osh LROs are updating maps in digital form as changes to boundaries occur. Paper maps are being updated in parallel, and until DCR and the LROs gain confidence in the digital mapping system, the two approaches will continue to operate in parallel, as they did for several years before the legal registration system moved fully to a digital environment.

The subcomponent also delivered a number of outcomes that are not apparent from the indicators. In particular, this subcomponent resulted in:

- adoption of a uniform, open coordinates system, as required under the legal covenant, for survey information, by decree signed by the president in October 2010;
- with SIDA and Bank technical support, preparation of a cadastral technical manual for staff of LROs, which was adopted by DCR in March 2011;
- with SIDA support, upgrading of the cadastre reference infrastructure through the creation of 93 base stations for GPS/GNSS across the country, 13 of which are continuously operating reference system points: nine funded under the project, three funded by SIDA and one privately owned station;

- acquisition of 27 dual frequency receivers plus training for selected staff in all LROs in the use of GPS/GNSS equipment;
- positioning of DCR to apply for additional assistance from the Kingdom of Norway and Republic of Korea for support to complete digitizing of maps for the areas not covered by the project, plus geo-referencing, support the use of GPS and other activities;
- through the digitizing of maps for most of the country, creation of the foundation for national spatial data infrastructure in the Kyrgyz Republic;
- the implementation of internationally recognized principles and standards of quality control through the adoption of ISO standards for the quality control of spatial data as national standards, and by developing the capacity in the private and public sector for implementing them.

### *Attribution*

Elements of a well-functioning, modern real property registration system were enhanced by the results of this subcomponent, particularly in relation to:

- increasing the reliability of parcel and boundary data (particularly through geo-referencing);
- improving the accessibility of parcel and boundary data;
- equipping DCR and LROs for digital mapping; and
- establishing the foundation for NSDI.

Thus, this subcomponent had a direct positive impact on the reliability and accuracy of the registration system.

### *Sustainability*

The gathering and production of the mapping data was a one off exercise for the area covered under the project. The data now exists, staff have been trained, and the system is ready to operate around the country. As the data and skills will be in regular use, and as the updating has been, or will soon be, integrated in the daily operations of the LROs, there appears little chance that digital mapping will not be sustainable. The cost of updating of maps (which is primarily staff salaries) should be covered by the registration and other fees paid by the public.

## Subcomponent 2.c Valuation Support

### *Design*

This subcomponent was originally intended to support the development of valuation software and its implementation for both government purposes and to improve access to real estate market information. It was a relatively small subcomponent and was to build on Gosregister's initiative under the LRERP on producing key parameters for use in mass valuation assessments. The first step was to quickly and cheaply begin production of a sales price index. The index was to be based on the prices recorded in sale transactions submitted to LROs for registration. Software

development for mass valuation, which was dependent on the parliament adopting the necessary legislative basis, was to follow.

No consensus on real property taxation within government and the parliament emerged in the first two years of the project or was expected to emerge in the near future. The subcomponent was therefore restructured in January 2011 to remove references to the valuation software, and the intermediate results indicator was revised to delete reference to valuation software. The indicator was redrafted to state that the sale price index would be available free of charge on the DCR website.

### *Results*

Development of the sales price index software, with assistance of the SIDA funded technical assistance, and population of the database with recent sale prices proceeded quickly. By mid-2010, DCR was publishing, free of charge on its web site, the monthly price indices for five regions/LROs where the system was operating. At that stage, it was decided that the system would not be implemented in small settlements because there was no demand and the market in those areas was very thin. By mid-2011, nine regions/LROs were covered by the index and a more sophisticated, paid service that provided data on cross-sections of sales had been launched. The service can be found, in both Russian and Kyrgyz, at <http://www.gosreg.kg>. The service also includes some free analytical reports. While the site is in English, the sales price index and analytical reports have not been translated.

Results from DCR show that the index has become very popular. There were, on average, 200 hits per month in 2013 for the free version, and DCR has 87 individuals and bodies registered for the paid version. In 2013, 30,411 paid reports were provided, giving a monthly average of 2,534 reports. The fee for the service is approximately US\$ 3.00 per report, resulting in an average monthly income of approximately US\$ 7,600. DCR also provides a set of unique reports to the National Bank of the Kyrgyz Republic and to four private banks. There is a separate tariff for such bespoke reports.

The index continues to develop as new sales transactions are registered, and therefore become more accurate.

### *Attribution*

In providing data in this way, the functioning of the real estate market is enhanced by ensuring that the market is more informed. Achieving the revised intermediate results indicator for subcomponent 2.c, by making the index available over the web free of charge to the public, goes to greater efficiency of the market.

### *Sustainability*

As the data is drawn directly from the registration system, as long as the registration software is maintained, the sales price index will continue to be available. As noted in relation to subcomponent 1.b, it is highly likely that the LROs will provide funds for such software maintenance. Staff are also required to analyse the data and produce the reports, particularly the

specialized report, and as the reports bring in significant revenue, it is highly likely that their positions will be maintained.

### **Component 3 Professional Development and Standards**

Component 3 was a relatively small component, with a mere US\$ 0.6 million of grant funds allocated over the entire life of the project. However, the ambitions of this component were high, with plans for at least 15 courses per year for Gosregister staff (300 participants each year) and at least three courses per year for educational and professional bodies (300 participants each year). As the following summary of results will show, the project far exceeded the planned targets, and there were innovations in the manner of presentation that significantly reduced costs.

#### Subcomponent 3.a Human Resources Development for Gosregister Staff

##### *Design*

Subcomponent 3.a originally aimed to present at least 45 courses for 900 Gosregister staff over the original three years of the project. The targets were not altered as part of the restructurings. The courses were intended to upgrade technical skills in operational systems and service standards, as well as more general analytical and service delivery skills, which meant that both headquarters and LRO staff were to receive training. As Annex 4 (Detailed Project Description) to the PAD noted, this subcomponent was also intended to support Gosregister's transition towards an independent agency that could, and would, develop its human resources autonomously. Training was to include courses, seminars, workshops, study tours and participation in local and international conferences.

##### *Results*

Training commenced soon after project effectiveness, and as training had continued under the LRERP during 2008, there was little interruption in the program. Most of the training was provided by Gosregister/DCR staff, although external trainers were used where Gosregister/DCR staff lacked the necessary knowledge or experience. The PIU adopted a new approach of visiting the LROs and conducting training in the field, instead of LRO staff come to Bishkek. By reducing travel, accommodation and other costs in this way, the approach greatly increased the training budget efficiency. As a result, despite the project being extended for a total of 18 months, and many more training courses being presented, all the training was provided within the original budget.

The main topics covered in the training courses were:

- registration law and practice, at basic and advanced levels;
- office operations;
- surveying, GPS/GNSS;
- IT;
- communications and customer service;

- monitoring and evaluation;
- financial management;
- management and organizational matters; and
- office safety.

The project accomplished significantly more than the subcomponent's original goals. By December 2013, 111 courses had been presented with 3,694 participants having attended. As the entire staff of DCR and LROs is 1,668, this meant that many staff received training in more than one subject. The following table shows the numbers of courses delivered over the project's life and the number of participants.

Year	Original targets	Actual number of courses	Actual number of participants
2008		<i>15 (conducted under LRERP)</i>	<i>596 (conducted under LRERP)</i>
2009	15 courses, 300 participants	24 (cumulative 24)	527 (cumulative 527)
2010	15 courses, 300 participants	18 (cumulative 42)	272 (cumulative 799)
2011	15 courses, 300 participants	31 (cumulative 73)	1,154 (cumulative 1953)
2012		16 (cumulative 89)	486 (cumulative 2439)
2013		22 (cumulative 111)	659 (cumulative 3098)
Total	45 courses, 900 participants	111 courses (126 including 15 in LRERP final year)	3098 participants (3694 including 596 in LRERP final year)

The gender of participants at courses under subcomponent 3.a was recorded, and these show that there were 2,130 male participants and 1,564 female participants (including those in courses provided in 2008). The male/female ratio of DCR and LRO staff is 57:43, so the training can be seen to have been fairly spread between the male and female staff members, even though there is a preponderance of men in the technical areas, which were a major focus of the training.

While participants were not asked to score their training course, they were asked to provide feedback on the quality of the courses and what further training they would like. In general, their responses were reported to be positive, and their advice on what further training was required (primarily technical skills and IT) was used to develop the training plans. A consulting firm conducted a skills/training needs assessment in late 2010 and early 2011. The results of that assessment were also used to develop the training strategy and plans.

The training under subcomponent 3.a also included 19 study tours and conferences, with 59 participants, as follows:

- In 2009, a study tour to Kazakhstan to examine mass scanning and attendance at a conference in Kazakhstan on digital aerial photography.
- In 2010, a study tour to Norway to study IT matters, participation in the Third International Geo Conference in Montenegro, training in Bank procurement procedures and financial management in Italy for PIU staff, attendance at a conference on regional developments in cadastre and registration in Moscow and a study tour to Moldova.
- In 2011, a study tour to the Netherlands, further procurement training in Italy, attendance at a conference in Germany on GPS and a course on ArcGIS Server Enterprise facilities in Moscow.
- In 2012, attendance at United National Economic Commission for Europe (UNECE) Committee on Housing and Land Management, Working Party on Land Administration (WPLA) conference in London, the World Bank's annual Land Conference in Washington DC and a conference in Russia on GIS.
- In 2013, attendance at a GIS workshop in the Russian Federation, a seminar on safeguarding property rights in Sweden, a conference in Korea on information exchange and a conference in Turkey on software.

Further, in February 2009, Gosregister held its tenth anniversary conference over two days in Bishkek, with over 100 attendees from LROs and 12 regional countries, including Armenia, Azerbaijan, the Russian Federation, Tajikistan, Turkey and Uzbekistan. And in March 2013, DCR hosted the UNECE, WPLA conference in Bishkek, attended by over 100 delegates from 27 countries across the ECA region.

#### *Attribution*

The impact of training of Gosregister/DCR staff had a direct impact on improving the registration system by increasing staff member's understanding and skills in the existing system and introducing them to both improved versions of the system (particularly ARS) that made it more reliable, effective and secure, as well as new systems, such as digital mapping, the scanning and financial management modules of ARS, GIS and other features. Staff were also trained in providing new services, such as registration without a notary. The training equipped staff to employ the many legal, procedural and IT based improvements to deliver better services to the public.

#### *Sustainability*

Sustainability of training falls into two categories: retention of the knowledge already acquired and new knowledge that will need to be acquired. In terms of the results of training under the

project, it can be assumed that the knowledge and skills will be retained and employed for several years to come, as LROs have a relatively low turnover rate and the staff are using the knowledge and skills in their everyday work, that resource is unlikely to be lost through lack of use. In the longer term, however, there will be a demand for refresher courses, training in new areas and training for newly recruited staff. DCR has already identified that it will have training needs in the areas of:

- GIS;
- GPS/GNSS; and
- changes to law and practice.

Thus, funding for development of courses, deployment of trainers and associated presentation costs will be required. As long as the skilled PIU members remain employed through the GIS Center (or alternate model), there is a good prospect for the training program to continue. However, even if such staff were no longer available, existing LRO staff could provide the training, as occurs in many land registries around the world.

### Subcomponent 3.b Support for Education and Professional Bodies

#### *Design*

Subcomponent 3.b aimed to support educational institutions that taught courses associated with land administration, and to support and provide training to the associations of land market professionals. For the educational bodies, the support was to focus on developing or updating notes and materials for courses, and possibly the initial presentation of the course itself. For the professional associations, training was to be provided on topics such as the management, tasks and international experience in running such associations, as well as training for members of the associations on technical aspects of land administration and land and mortgage markets. The original targets were three courses involving 300 participants over each of the three years of the project, making a total of nine courses and 900 participants. These targets were not changed as part of the restructures or extensions.

#### *Results*

Work on this subcomponent was slow to commence, as the table below shows, as representatives of educational bodies and professional associations showed only very limited interest. Gosregister decided in 2010 therefore that it would begin making the presentations, covering technical topics on which its staff had expertise, while more actively seeking out proposals for training from academics and professional bodies. A steady program of training was sustained through the rest of the project, covering topics such as:

- KLIS and services provided by Gosregister/DCR and LROs;
- changes to the law;
- land management and basic elements of real estate;
- sales database; and
- Gosregister/DCR and law enforcement agencies and the courts.

By December 2013, a total of 32 courses with 1,074 participants had been presented, as shown in the following table.

Year	Original targets	Actual number of courses	Actual number of participants
2008		0	0
2009	3 courses, 300 participants	0	0
2010	3 courses, 300 participants	11 (cumulative 11)	246 (cumulative 246)
2011	3 courses, 300 participants	9 (cumulative 20)	229 (cumulative 475)
2012		9 (cumulative 29)	454 (cumulative 929)
2013		3 (cumulative 32)	145 (cumulative 1,074)
Total	9 courses, 900 participants	32 courses	1,074 participants

There were a variety of participants attending the courses. These included real estate agents, valuers, notaries and representatives of banks, government agencies, judges and court representatives, and educational institutions.

The gender of the 1,074 participants showed that men were highly represented (men: 698 (65 per cent); women 376 (35 per cent)), which probably reflects the dominance of men in the workforce and the areas covered by the topics, although in the banking and legal sectors there is a good gender balance in the Kyrgyz Republic.

With project support, one university course was developed. This was a cadastral engineering course through the Kyrgyz Construction and Architecture Academy. The course, which is five years in length, was first presented in 2012. Some 20 students have been enrolled in the course, which has been run only once so far. A further course was prepared for a master's degree of science in land management, but agreement with the university involved was not finalized and the course was not presented.

#### *Attribution*

The training under this subcomponent added not only to the better functioning of the registration system – by equipping the private sector to use that system more effectively and efficiently – but also provided support to the real property market by increasing the private sector's knowledge of real property matters, services provided by Gosregister/DCR and changes to the laws and practices that supported improved efficiency. The training provided new skills and knowledge

that the private sector could utilize for its clients. The cadastral engineering course provided support to the land market by equipping graduates with modern skills needed in geodesy and cadastral surveying, on which the registration system is largely based.

### *Sustainability*

Knowledge already obtained and the cadastral engineering course are assets that should not be quickly lost, particularly as the private sector in the Kyrgyz Republic continues to develop and will retain many of those professionals who took part in training. DCR has identified future training needs for land market professional, particularly real estate agents and bank representatives, in the areas of:

- changes to the law and procedures;
- changes in tariffs; and
- developments with KLIS.

Training of this kind is likely to continue because DCR and key LROs (such as Bishkek and Osh office) have adequate internal resources to conduct training for external users.

## Annex 3. Economic and Financial Analysis

### Introduction

The main goal of the project was “to *support markets* for land and real estate and the more *intensive and effective use* of land and real estate. This was to be done through the *further development* of a reliable and well-functioning system for registration of rights in immovable property.”<sup>15</sup> The project was going to achieve its PDO by (a) increasing sales and leases; (b) increasing access to credit by increasing the number of mortgages; (c) making property rights more clear, secure, and accessible; (d) reducing registration time; and (e) establishing a financially and institutionally sustainable land administration system.

As the Results Framework and other sections of this ICR demonstrate, the project achieved all of its outputs and outcomes. These results are particularly impressive given the external shocks that hit the Kyrgyz economy during the implementation period. The **Project closed with an estimated net present value of US\$ 17.1 million or 68 per cent higher than the PAD projection of US\$ 10.2 million**, and it achieved an **estimated IRR of 39 per cent or 18 percentage points lower than the PAD projection of 57 per cent**. Note the lower IRR is partly a result of the restructuring that increased the project investment from US\$ 7.0 million to US\$ 7.5 million.

This annex examines in detail the project’s economic impact in three subsections: (a) external shocks and market constraints; (b) achievement of outcomes; (c) project performance versus PAD projections.

### External Shocks and Market Constraints

The project was affected by three major external shocks over the implementation period (2007-2013). The first external shock was the Global Financial Crisis whose negative effects can be seen in the Kyrgyz economy in 2009. Associated with that crisis was the banking crisis, in which credit practically ceased to be provided. The third external shock was the 2010 Revolution, which led to the ousting of President Kurmanbek Bakiyev. However, only the risk of the third external shock was somewhat identified in the PAD – the “turmoil in [the] Kyrgyz political system” was rated as a “moderate risk.”<sup>16</sup>

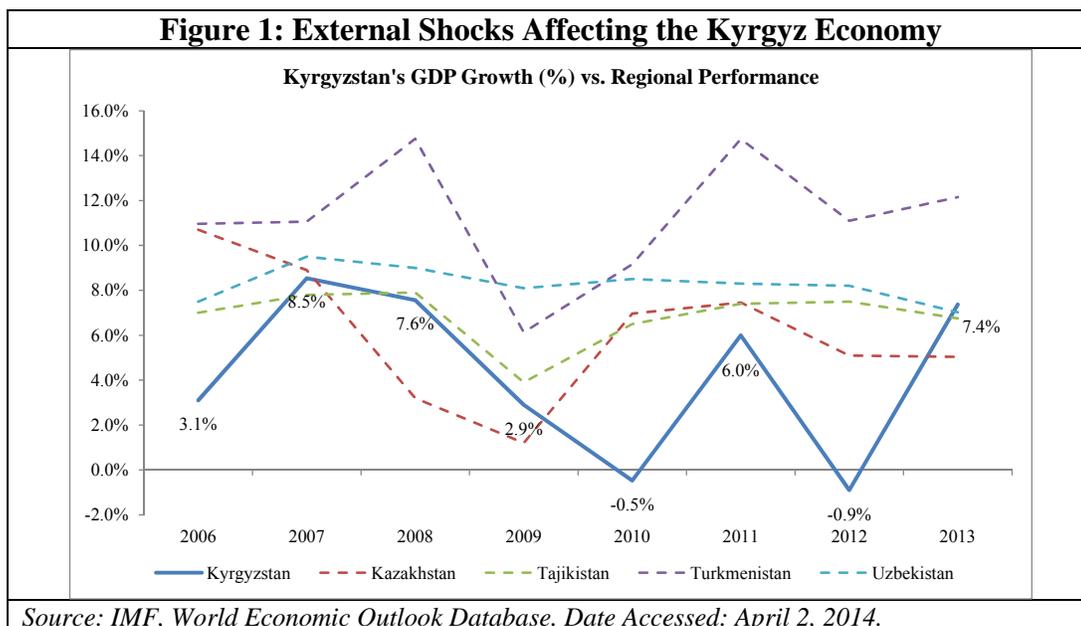
As a result of these shocks, the Kyrgyz economy contracted 4.7 percentage points in 2009 and an additional 3.4 percentage points in 2010. A comparative snapshot of GDP growth rates in the region is presented below. As the graph shows, all countries experienced moderate to severe economic contraction between 2008 and 2009. However, the 2010 Revolution meant that Kyrgyzstan was the only country in the region that was not set on a path to economic recovery between 2009 and 2010. Furthermore, the impressive economic recovery between 2010-2011 is

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<sup>15</sup> PDO. Italics added.

<sup>16</sup> PAD, Page 8.

followed by another severe contraction in the 2011-2012 period due to disruptions in the gold market.<sup>17</sup>



In addition to the external shocks, the project was implemented in an atmosphere with several market constraints. The “volatility in [the] banking system and/or property market constrains rate of growth in sales, leases, and /or mortgages” was identified as a “low risk” in the PAD.<sup>18</sup> The UNECE has identified “the lack of cheap long-term capital” as one of the biggest constraints of the Kyrgyz housing finance market.<sup>19</sup> Despite these constraints, the project has operated well and exceeded its targets to increase the number of registered sales and mortgages.

### Achievement of Outcomes

Despite the external shocks and market constraints, the project has shown impressive results with the growth in sales, leases, and mortgages; reduced time to register a transaction; and the establishment of a self-financing GIS center that supports the activities of the DCR. Additionally, there has also been a reduction in the cost to register a transaction – this development is an unintended positive benefit of the project.

#### *Increase in Sales and Mortgages*

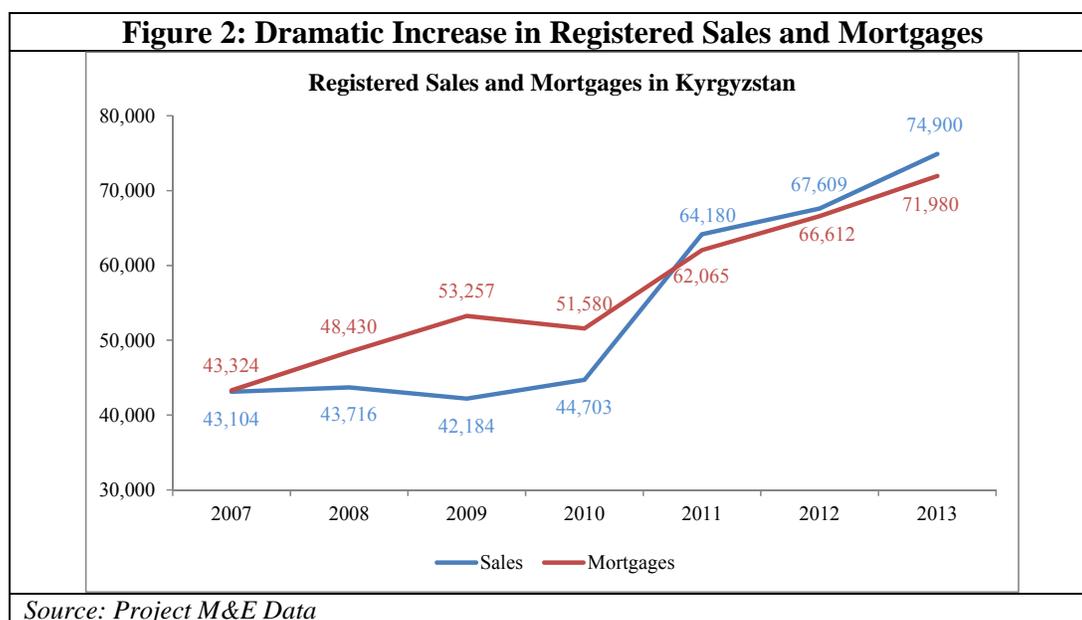
Over the course of the project, **registered sales have increased by 74 per cent** from 43,104 (2007) to 74,900 (2013) **versus the original project target of 26 per cent**. Similarly, **registered mortgages have increased by 66 per cent** from 43,314 (2007) to 71,908 (2013) **versus the original project target of 31 per cent**. These results are particularly impressive in light of the

<sup>17</sup> Kyrgyz Republic—Program Note, IMF, September 25, 2013.

<sup>18</sup> PAD, Page 8.

<sup>19</sup> “Kyrgyzstan: Country Profile on the Housing Sector,” UNECE, 2010, <http://www.unece.org/fileadmin/DAM/hlm/documents/Publications/cp.kyrgyzstan.e.pdf>

three external shocks discussed earlier. Not only has the project exceeded its targets on these two metrics and increased the market liquidity, but it may have also played a role in softening the negative impact of the three shocks on the Kyrgyz real estate market.



### *Reduction in Time and Cost to Register a Property*

The reduction in time and cost to register a property has increased the efficiency of the real estate markets in Kyrgyzstan.

Globally, the *Doing Business Report* ranks Kyrgyzstan ninth – 50 ranks ahead of the Europe and Central Asia average – for registering a property.<sup>20</sup> Over the course of this project, the number of days to register a property has dropped from 3 days to just 4 hours or just half a day,<sup>21</sup> and the number of procedures has dropped from seven visits to two visits to the Gosregister. There is also an option to expedite the transaction and this requires only one visit, although clients have to pay KGS 300 expedited procedure fee instead of KGS 150 for the regular procedure.

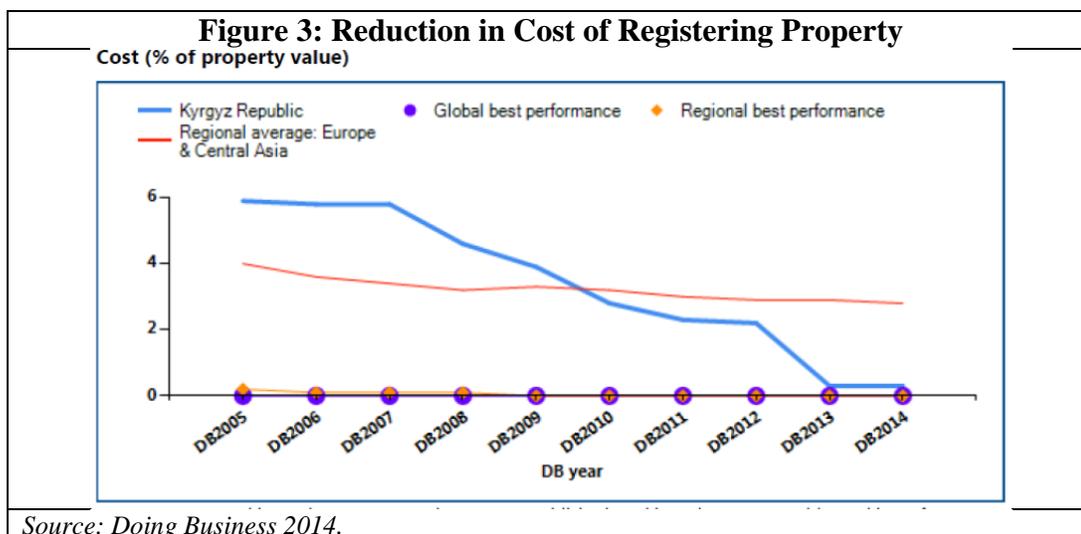
Moreover, the cost to register a property has also dropped significantly since the project began in 2007. A part of this cost reduction can be attributed to the fact that notaries are no longer required, and this helps save individuals KGS 2000 (US\$ 41.3), which is almost 40 per cent of the average monthly per capita income.<sup>22</sup> Similarly, entities are able to save KGS 5000 (US\$

<sup>20</sup> *Doing Business Report 2014*, <http://www.doingbusiness.org/data/exploreconomies/~media/giawb/doing%20business/documents/profiles/country/KGZ.pdf?ver=2>

<sup>21</sup> Note: *Doing Business Report 2014* states that the time to register a property in Kyrgyzstan is 6 days. This figure is different because DB tracks the time for the entire procedure and not only the registration time at the DCR which is shorter.

<sup>22</sup> Based on IMF estimate of Kyrgyzstan's annual per capita income in 2013 of KGS 61,672.

103.3), which is 5 per cent of the median microfinance loan in Kyrgyzstan.<sup>23</sup> DCR estimates that only 15 per cent of the individual and entity clients continue to use notary services as opposed to 100 per cent at the beginning of the project.



The GIS Center which was established during the course of the project is an important achievement of the project. The Center became self-financing as of January 1, 2014 and it has been operating well for the last five months based on contributions from local offices<sup>24</sup> and fees for services. This means that going forward, the Kyrgyz government will save approximately US\$ 39,000 annually as it will not need to finance the salaries and related costs of the PIU staff. While the savings may not seem substantial, the self-financing nature of the GIS Center would allow the Kyrgyz Government to spend the same money on other public services including health and education. Assuming the same US\$ 39,000 budget every year and a 12 per cent, opportunity cost of capital, the net present value of potential government savings over a five-year period amount to over US\$ 140,000.

### Project Performance versus PAD Projections

This section compares the project's performance against the projections made in the PAD. For this purpose, the same framework as the PAD is used so as to provide as comparable an original model as possible. However, to allow for a fair comparison, the following assumptions have been tweaked in the model presented in the PAD:

- 2007 registered mortgages increased from 43,000 to 43,324 to reflect higher actuals;

<sup>23</sup> "Research on the Level of Indebtedness and Repayment Performance of Individual Borrowers in Kyrgyzstan," *Microfinance Centre and Partner To Enterprising People*, December 2011, [http://www.mfc.org.pl/sites/mfc.org.pl/files/Indebtedness%20report%20Kyrgyzstan\\_ENG.pdf](http://www.mfc.org.pl/sites/mfc.org.pl/files/Indebtedness%20report%20Kyrgyzstan_ENG.pdf). Median loan estimated at US\$ 2,203, and average loan estimated at US\$ 3,030.

<sup>24</sup> The GIS center annual budget of USD 39,000 is financed by local registration offices with each office contributing about 5 per cent of its revenue. The main activities funded in this way include IT support, GIS/GNSS support, monitoring, training, real estate analysis etc.

- 2007 registered sales increased from 40,000 to 43,104 to reflect higher actuals; and
- 2009 and 2010 growth rates of registered mortgages, registered sales, average value of a mortgage and average value of a property are lowered to the actuals following the three external shocks faced by Kyrgyzstan.

All other assumptions in the PAD analysis remain unchanged.

The NPV and IRR are calculated by using the increase in the monetary value of sales and mortgages in the Kyrgyz economy over a ten-year period of which six years were the implementation period. Of this total increase only 1 per cent is attributed to the project. This assumption is in line with the PAD and is an important because the project should not claim credit for the overall growth of the real estate market because of other economic interactions which may have positively benefited the Project and because of other reforms by the Kyrgyz Government and other donor projects. The 1 per cent assumption is conservative and helps mitigate several measurement, isolation, and attribution effects that ought to be considered when measuring the impact of the project alone.

Assuming a 12 per cent discount rate (same assumption as the PAD), the NPV of benefits attributable to the Project is estimated at US\$ 17.1 million and the Project IRR is estimated at 39 per cent.

Due to the changes made to the original PAD assumptions, it is not fair to compare the NPV and IRR with the figures projected in the PAD since the PAD assumption baseline was more conservative and PAD growth assumptions were more aggressive. Keeping this in mind, a positive NPV and positive IRR should speak to the viability and success of the project.

Purely for the sake of comparison, the analysis shows that the Project's estimated NPV of US\$ 17.1 million is 68 per cent higher than the original PAD projection of US\$ 10.7 million. This means that despite the three external shocks that affected the Kyrgyz economy, the project has generated a higher NPV done better than what was projected in the PAD. Moreover, 2009 and 2010 external shocks occurred fairly early on in the Project meaning that they had a greater negative impact on the NPV because of the way the DCF model works.

As for the IRR, the project's estimate of 39 per cent is 18 percentage points lower than the original PAD projection of 57 per cent. This can be explained by two developments. First, the 2009 and 2010 external shocks occurred fairly early on in the project meaning that they had a greater negative impact on the IRR because of the way the DCF model works. Second, the original PAD projection is calculated using a US\$ 7.0 million project investment versus the project's final IRR estimate which is calculated using a US\$ 7.5 million project investment. This too would lower the project's IRR.

	<b>PAD Economic Analysis</b>	<b>ICR Economic Analysis</b>
<b>Net Present Value</b>	US\$ 10.2 million	US\$ 17.1 million
<b>Internal Rate of Return</b>	57 per cent	39 per cent

## Economic Model

### KYRGYZSTAN SLRERP Financial Analysis

Key to reading model:		Assumption	Calculation		PAD assumption revised with actuals							
		Implementation Period										
	Units	Baseline	1	2	3	4	5	6	7	8	9	10
<b>WITHOUT PROJECT</b>		<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Mortgages</b>												
Number of Registered Mortgages	#	43,324	46,790	51,453	49,833	53,820	58,125	62,776	67,798	73,221	79,079	85,405
Assumed Growth Rate	%		8%	10%	-3%	8%	8%	8%	8%	8%	8%	8%
Average value of a mortgage	USD	25,365	26,633	18,601	18,497	19,421	20,392	21,412	22,483	23,607	24,787	26,027
Assumed Growth Rate	%		5%	-30%	-1%	5%	5%	5%	5%	5%	5%	5%
Total Value of Mortgages - Forecast	USD million	1,099	1,246	957	922	1,045	1,185	1,344	1,524	1,729	1,960	2,223
Residential Mortgage Loans	%	43%	40%	37%	34%	31%	30%	30%	30%	30%	30%	30%
Mortgaged Property Based Equity Loans	%	57%	60%	63%	66%	69%	70%	70%	70%	70%	70%	70%
Value of Residential Mortgage Loans	USD million	473	498	354	313	324	356	403	457	519	588	667
Value of Mortgage Property Based Loans	USD million	626	748	603	608	721	830	941	1,067	1,210	1,372	1,556
<b>Sales</b>												
Number of registered sales	#	43,104	46,552	44,921	47,603	51,412	55,525	59,967	64,764	69,945	75,541	81,584
Assumed growth rates	%		8%	-4%	6%	8%	8%	8%	8%	8%	8%	8%
Average value of a property	USD	39,000	40,950	33,693	38,070	39,974	41,972	44,071	46,275	48,588	51,018	53,569
	%		5%	-18%	13%	5%	5%	5%	5%	5%	5%	5%
Total Value of Sales - Forecast	USD million	1,681	1,906	1,514	1,812	2,055	2,331	2,643	2,997	3,399	3,854	4,370

<b>WITH PROJECT</b>		<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Mortgages</b>												
Number of Registered Mortgages	#	43,324	48,430	53,257	51,580	62,065	66,612	71,980	77,781	84,049	90,822	98,141
Assumed Growth Rate	%		12%	10%	-3%	20%	7%	8%	8%	8%	8%	8%
Average value of a mortgage	USD	25,365	27,810	19,423	19,314	15,291	15,433	19,692	20,874	22,126	23,454	24,861
Assumed Growth Rate	%		10%	-30%	-1%	-21%	1%	28%	6%	6%	6%	6%
Total Value of Mortgages - Forecast	USD million	1,099	1,347	1,034	996	949	1,028	1,417	1,624	1,860	2,130	2,440
Residential Mortgage Loans	%	43%	40%	37%	34%	31%	30%	30%	30%	30%	30%	30%
Mortgaged Property Based Equity Loans	%	57%	60%	63%	66%	69%	70%	70%	70%	70%	70%	70%
Value of Residential Mortgage Loans	USD million	473	539	383	339	294	308	425	487	558	639	732
Value of Mortgage Property Based Loans	USD million	626	808	652	657	655	720	992	1,137	1,302	1,491	1,708
<b>Sales</b>												
Number of registered sales	#	43,104	43,716	42,184	44,703	64,180	67,609	74,900	80,892	87,363	94,352	101,901
Assumed growth rates	%		1%	-4%	6%	44%	5%	11%	8%	8%	8%	8%
Average value of a property	USD	39,000	35,550	29,250	33,050	37,550	40,600	46,400	48,720	51,156	53,714	56,399
	%		-9%	-18%	13%	14%	8%	14%	5%	5%	5%	5%
Total Value of Sales - Forecast	USD million	1,681	1,554	1,234	1,477	2,410	2,745	3,475	3,941	4,469	5,068	5,747
<b>PROJECT INCREMENTS</b>												
Value of Residential Mortgage Loans	USD million	0	40	29	25	-30	-47	22	30	39	51	65
Value of Mortgage Property Based Loans	USD million	0	60	49	49	-66	-110	51	70	92	119	152
Total Value of Sales	USD million	0	-352	-280	-335	355	414	833	944	1,071	1,214	1,377
<b>Total Value of Increments (Mortgages+Sales)</b>	<b>USD million</b>	<b>0</b>	<b>-252</b>	<b>-202</b>	<b>-260</b>	<b>259</b>	<b>257</b>	<b>906</b>	<b>1,043</b>	<b>1,202</b>	<b>1,384</b>	<b>1,594</b>
Net Benefits as % of Incremental	%		1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
<b>Incremental Benefits</b>	<b>USD million</b>		<b>-2.52</b>	<b>-2.02</b>	<b>-2.60</b>	<b>2.59</b>	<b>2.57</b>	<b>9.06</b>	<b>10.43</b>	<b>12.02</b>	<b>13.84</b>	<b>15.94</b>
<b>Project Investment Costs (IDA+Borrower)</b>	<b>USD million</b>		<b>0.00</b>	<b>0.81</b>	<b>0.97</b>	<b>1.07</b>	<b>2.76</b>	<b>1.89</b>				
<b>Cash Flow (Benefits+Costs)</b>	<b>USD million</b>		<b>-2.52</b>	<b>-2.83</b>	<b>-3.58</b>	<b>1.52</b>	<b>-0.19</b>	<b>7.17</b>	<b>10.43</b>	<b>12.02</b>	<b>13.84</b>	<b>15.94</b>

**Key Calculations**

Internal Rate of Return	%	IRR	39%
Opportunity Cost of Capital	%	OCC	12%
Net Present Value	USD million	NPV	17.14
Net Present Value of Benefits	USD million	NPV (B)	21.68
Net Present Value of Investment Costs	USD million	NPV (C)	2.02
Cost-Benefit Ratio	USD million	C/B	10.74

**Market Turnover**

Number of Commercial IPUs	#	1,300,000	1,326,130	1,366,313	1,421,791	1,494,316	1,586,247	1,700,672	1,841,584	2,014,113	2,224,834
Growth rate	%		2.0%	3.0%	4.1%	5.1%	6.2%	7.2%	8.3%	9.4%	10.5%
Number of Sales - With Project		43,716	42,184	44,703	64,180	67,609	74,900	80,892	87,363	94,352	101,901
Number of Sales - Without Project		46,552	44,921	47,603	51,412	55,525	59,967	64,764	69,945	75,541	81,584
Market Turnover - with Project		3.36%	3.18%	3.27%	4.51%	4.52%	4.72%	4.76%	4.74%	4.68%	4.58%
Market Turnover - without Project		3.58%	3.39%	3.48%	3.62%	3.72%	3.78%	3.81%	3.80%	3.75%	3.67%

## Annex 4. Bank Lending and Implementation Support/Supervision Processes

### (a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
<b>Lending</b>			
Jessica Mott	Senior Natural Resources Economist	ECSSD	Task team leader
Janna Ryssakova	Social Development Specialist	ECSSD	Social development
John Ogallo	Financial Management Specialist	ECSPS □	Financial management
Nurbek Kurmanaliev	Procurement Specialist	ECSPA	Procurement
Ainura Kupueva	Operations Officer	ECSSD	Operations
Wolfhart Pohl	Environmental Specialist	ECSSD	Environment
Mika Torhonen	Land Administration Specialist	FAO	Surveying
Anthony Lamb	Legal Specialist	Consultant	Legal
Andre Busuioc	Financial Management	ECSPS	Financial management
Suha Satana	Specialist Economist	FAO Consultant	Economic
Rumiana Tontchovska	IT Specialist	FAO	IT
Kenneth Mwenda	Counsel	LEGEM	Legal □
Nicholav Chistvakov	Finance Officer	LOAFC	□ Finance
B. Koshie Michel	Program Assistant	ECSSD	Operations
Hiwote Tadesse	Senior Program Assistant	ECSSD	Operations

Nurjamal Asanova	Team Assistant	ECCKG	Operations
<b>Supervision/ICR</b>			
Jessica Mott	Senior Natural Resources Economist		Task Team Leader (to Oct. 2011)
Malcolm D Childress	Senior Land Administration Specialist		Task Team Leader (from Oct. 2011)
Janna Ryssakova	Social Development Specialist	ECSSD	Social development
John Ogallo	Financial Management Specialist	ECSPS □	Financial management
Nurbek Kurmanaliev	Procurement Specialist	ECSPA	Procurement
Ainura Kupueva	Operations Officer	ECSSD	Operations
Yuling Zhou	Senior Procurement Specialist		Procurement
Galina Alagardova	Financial Management Specialist		Financial management
Irina Goncharova	Procurement Specialist		Procurement
Alexander Balakov	Procurement Specialist		Procurement
Jamilya Salieva	Team Assistant	ECCKG	Operations
Carine Ter-Akopova	Team Assistant	ECCKG	Operations
Nargiza Tynybekova	Team Assistant	ECCKG	Operations
Rahat Mederbekova	Team Assistant	ECCKG	Operations
Rumyana Tonchovska	IT Specialist	FAO	IT

Anthony Lamb	Legal Specialist	Consultant	Legal
Vladimir Evtimov	Land Administration Specialist	FAO	Surveying
Richard Baldwin	Land Administration and IT Specialist	Consultant	Surveying and IT
Tuomo Heinonen	Land Administration Specialist	FAO	Valuation
Ivan Ford	IT Specialist	Consultant	IT
Meerim Shakirova	Land Administration Specialist	Consultant	Operations
Mika Torhonen	Senior Land Administration Specialist	ECSEN	ICR Team Leader
Aanchal Anand	Junior Professional Assistant	ECSEN	Economist

### **Annex 5. Beneficiary Survey Results**

*(if any)*

No specific beneficiary survey was undertaken at the end of the project or as part of the ICR report. However, DCR undertook a beneficiary survey at the beginning of 2012, and the key findings of that survey are reproduced under paragraph 3.6 in the main body of this report.

### **Annex 6. Stakeholder Workshop Report and Results**

*(if any)*

**N/A**

## **Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR**

### *Summary of Borrower's ICR*

The lengthy Borrower's ICR Report followed the format of the Bank's ICR Report. Following a summary of the project context, development objectives and design, including a description of the two restructures, it looked at the key factors affecting implementation and outcomes, and then moved on to the assessment of outcomes and also lessons learned. At the end, the Borrower's ICR provided a detailed list of achievements and outcomes of the SLRERP in Annex 7. The following is a shortened version of the main body of the Borrower's ICR Report.

### **KEY FACTORS AFFECTING IMPLEMENTATION AND OUTCOMES**

#### **Project Preparation, Design and Quality at Entry**

The SLRERP took into account lessons learned from land and real estate administration in other countries as well as lessons from the LRERP. These cumulative lessons are as follows:

- a) Establishment of the single organizational structure, responsible for registration of rights and maintenance of cadastre is viewed worldwide as advanced practice.
- b) Improvement of registration offices' financial management methods and analysis of this aspect due to other activity aspects – such as service standards and payment – shall help DCR to improve its activity, become more financially sustainable, and develop a strategy for practical resolution of problems.
- c) Focusing on more effective cooperation, which was one of the directions upon clients' survey requiring much attention and support.

An important factor influencing on quality of preparation and design of the project was that the SLRERP supported the established Government goals in the area of development, specified by the Country Development Strategy for 2007-2010.

The World Bank played a key role in the process of the project preparation, directing efforts for resolving fundamental issues related to improvement of the cadastre and registration system and proposing advanced developments related to the project design. Generally, the project design was correct and well developed.

#### **Implementation**

The SLRERP was implemented by the PIU operating in DCR headquarters under its supervision. To implement the project successfully, on each component and each subcomponent working groups from the PIU, DCR and LROs' staff were created. For each component supervisors from the DCR management were appointed to monitor the working group operations. To monitor the project progress, a Steering Committee headed

by the DCR director was appointed. During the Steering Committee meetings the working groups' reports, problem issues and perspective plans were considered.

Under the LRERP a monitoring system was created to ensure agreed application of single national standards of the 49 LROs and for reporting. The monitoring function included data collection and processing required for development of framework results and data on observing service standards. The performance, strategy and communication unit (PSCU) made an analysis and developed strategies and organization of communication – as on internal DCR issues so on issues related to other agencies – thereby providing to DCR an important management tool.

In the course of the project implementation in 2009 a reform for streamlining procedures and reducing registration time was implemented. Amendments in the Civic Code of the Kyrgyz Republic were implemented in part of cancellation of mandatory notary certification of transactions and in the Kyrgyz Republic law “On state registration of rights to immovable property” in part of mandatory survey of real estate units, reduction of registration and streamlining requirements for provided documents (requirement of provision of notarized copies of constituent documents cancelled). The above arrangements have significantly reduced the procedure, time and costs for transactions processing with real estate. Direct transactions in LRO's have enabled making agreements and registration of rights. A registrar checks for compliance with legislation, restrictions in the database, drafts an agreement, accepts an application and makes registration. Registration is possible within 1 hour in urgent cases. A significant support for streamlining procedures was implemented by the Kyrgyz Government, which adopted arrangement plans and monitored the implementation of the reforms. These developments enabled ranking in the ninth position in 2013 on the World Bank *Doing Business* indicator “Property registration”.

Project implementation was successfully implemented thanks to invaluable World Bank support, provided taking into account different approaches on the basis of the gained experience. Supervision missions were arranged twice a year enabling regular personal cooperation on project implementation issues. Project progress reports would be provided twice a year enabling tracking key project indicators and progress in real estate market. The following steps and additional actions would be agreed in detail with partners on project implementation reflected in aide memoires and reports for the management, and would be subsequently monitored. Consulting support from the World Bank part played a great role in taking right decisions on project implementation.

During project implementation there was an effective cooperation with Swedesurvey team (the Swedish cadaster agency implementing SIDA funded technical assistance component and conducting training for DCR staff). Thanks to that technical assistance, DCR developed effective land registration procedures and real estate objects, built fundament for creation of cadastral database and implementation of GNSS technologies.

There were no major unforeseen developments that threatened the implementation path of the project or its strategy for achieving the PDO. Issues that did come up were

identified in a timely manner and with appropriate attention related to overall development objectives.

### **Monitoring and Evaluation Design, Implementation and Utilization**

Under the SLRERP the Monitoring Unit has been revised into Performance, Strategy, and Communication Unit, continuing the project activities. The monitoring system would build on the first project experience, which was rather successful. Regional staff would be accountable to the PIU national monitoring and evaluation coordinator.

Indicators related to quality of services provided would be monitored, including number of submitted complaints and sampling check of observance of agreed registration procedures including transparency and rates for registration. Whole data on contacts with clients would be analyzed by regional monitoring staff and submitted to the PIU and the DCR management.

The simple and comprehensive project design enabled development of that clear and easily implementable monitoring system. Data quality would be reinforced by cross checks, conducted during supervision missions and would be reckoned reliable. Data on PDO indicators would be agreed with another existing information on real estate market development. Particularly, mortgage credit data would be carefully studied by the World Bank project team by cross checks, conducted under the Second Rural Financing Project.

### **Safeguard and Fiduciary Compliance**

**Safeguards:** The project did not involve any safeguard policies. There was a limited amount of office repair and small-scale reconstruction, which at the time of appraisal rated a category C for Environmental Assessment.<sup>25</sup> It did not involve involuntary resettlement, natural habitats or forest areas.

**Procurement:** The procurement under the project has been carried out in satisfactory manner. Procurement plans for project implementation were developed and revised as required. The overall project risk for procurement was rated Medium to High, considering the lack of Bank procurement experience in the PIU. Procurement staffing at the PIU was adequate and the staff became more knowledgeable and efficient as the project progressed.

**Financial management:** The financing management system, employed by the PIU, enables accounting of all operations and accounts and has a function of regular financing reporting, which would be timely submitted to the World Bank. The established internal control system within the PIU ensures authenticity of accounting documentation and safety of the project resources and assets. The PIU has upgraded the project financial management manual. The project would use the automated accounting system on the basis of “1-C” software. Accounting is done according to the World Bank’s procedures and requirements related to finances and payments management. Funds would be used in

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<sup>25</sup> ICR Author’s note: the project was rated B for Environmental Assessment.

accordance with the provisions of the Financing Agreement # H380 KG and relevant World Bank guidelines, paying attention to performance and economy and exclusively for the goals financing was designed for.

### **Post-completion Operation/Next Phase**

One of the project outcomes is the establishment of self-financing body and funding of costs for performing of the headquarters' functions from registration incomes.

On the basis of the PIU, a Centre GIS has been established that is to ensure succession of the SLRERP and to further maintain information and geo-information technologies, GPS/GNSS network, to improve registration procedures, professional development of LRO's staff, and implementation of international and national projects directed to development of the cadastre and registration system and to keep qualified staff. The main goals of the Centre shall be:

- institutional development of LRO's;
- implementation of geo-information systems;
- implementation of GPS/GNSS technologies;
- support of information –communication technologies;
- modernization of registration procedures, monitoring and evaluation;
- professional development and international cooperation;
- provision of data from KLIS;
- carryout cadastral activities on contractual basis.

### **ASSESSMENT OF OUTCOMES**

#### **Relevance of Objectives, Design and Implementation**

Real estate market support together with more intensive and effective use of land and real estate at the expense of further development of reliable and effective registration system was for the Kyrgyz Republic a high priority throughout the whole project implementation period. In 2013 a new transition Program of the Kyrgyz Republic to the sustainable system for 2013-2017, which is based on the five new components was adopted:

First, a principle for formulating sustainable policy development policy through cooperation and mutual impact of economic, social and ecological processes. Secondly, policy content on all development directions has been formulated through specific requirements for key components of the state governance system: (i) institutional capacity; (ii) legislation; (iii) staff capacity and requirements for its development to promote sustainable development principles nationwide; (iv) requirements for information authenticity to take weighed political decisions. The third program element is a human resources development policy through concrete obligations of public service improvement. The fourth program element is inter-sectoral segments in providing public service. The fifth section of the Program became a section for sustainable development

strategy, as without economic contributions of regions there is no sustainable country strategy.

The project design was in compliance with state programs for country development.

An effective real estate registration system helped generate many economic benefits, supporting (a) tenure security; (b) property taxation; (c) security for credit; (d) judicial procedures relating to land and real estate rights; (e) dispute management; (f) real property markets development and monitoring; (g) protection of State lands; and (h) land reform; (j) information sharing between state and municipal bodies; (k) participation in regions development.

The achieved outcomes in the course of the project development have become an example of advanced experience for other state bodies.

### **Achievement of Project Development Objectives**

The objective of the SLRERP is to support markets for land and real estate and the more intensive and effective use of land and real estate has been achieved. It was done through the further development of a reliable and well-functioning system for registration of rights in immovable property. Project outcomes by the end of the project were as follows:

- Improved functioning of, and access to sales and long-term lease markets in land and real estate, as evidenced by an increase of at least 26 percent above the number of transactions in 2007. By the project completion date of 31 December 2013, the number of transactions made up 74900 units, which is 73,8% from the basic indicator.
- Increased performance, expressed by reduction of average time for sale processing. The average indicator of transactions processing was 0,5 day as compared with the base 2007 year (4 days).
- Increased access to credit, as evidenced by an increase of at least 31 percent above the number of transactions in 2007. As of 31 December 2013, 71980 mortgages were registered, which is 66,1% from the basic indicator.
- Property rights clear, secure and reflected in a publicly accessible information base, as evidenced by an increase in the number of land and real estate units in the registry system, and continued improvements in the quality of registry operations, communications and reputation. A permanent increase of total number of real estate units within the registration system and permanent improvement of registration operations was noted. In the base year, 2,4mln of real estate units were registered. Upon the SLRERP, in the information base more than 2,92mln immovable property units were registered.
- A financially and institutionally sustainable land administration system, as evidenced by implementation of organizational and financing reforms. Upon the project completion, a Centre GIS was established, being responsible for maintenance of information and geo-information technologies, monitoring and evaluation, improvement of procedures, the system professional development.

## **Efficiency**

The gradual approach that DCR adopted has been, especially considering the questions of capacity and resources, a very correct policy, ensuring reliable registration operations at all times while allowing progress towards a modern and efficient registration system.

Under the project in all LROs, ARS was implemented, sporadic scanning of archive documents carried out, KLIS and sales database has been developed, implementation of automation accounting has been started, and cadastral database has been developed. The consecutive approach applied under the project, particularly taking into account issues related to capacity and resources enabled ensuring reliable operation of registration system anytime making possible progress in establishing modern and effective land registration system.

The developed monitoring and evaluation system allowed achievement of significant outcomes in streamlining registration procedures. A monitoring group watched such issues as problems in the executing activities, problem issues for clients, costs and time for processing of each application type, public opinion survey was carried out according to which recommendations for elimination of legal and administrative barriers and unneeded costs in processing transactions with land shares and registration of such transactions were given.

Procedures streamlining procedures made possible achieving significant results on reduction of registration time and funds.

In part of cadastral mapping it was also decided to start from using cheap software products. Mass geo-referencing of cadastral maps and their geo-referencing with the following establishment of graphic data allows reducing time of cadastral procedures and generally make cheaper preparation of appropriate documents. Transition to the centralized digital database created a basic for implementing ways of cadastral data provision via Internet, which is the indicator of the cadastre system performance.

Implementation of open software products for cadastral mapping allows integration of graphic data with textual data as well as efficiency for step-by-step transition to digital mapping in LRO's. In the future this will enable graphic data processing and providing real estate object's location data in digital.

## **Justification of Overall Outcome Rating**

Results of the project remained relevant throughout implementation and continue to be relevant. A reliable system for registration of immovable property rights is a key building block of a well-functioning market economy. The project demonstrated clear success in putting in place such a system, which in turn has had a direct contributing influence on the significant expansion of land and real estate market activity. In 2013 an approximate

market volume made up about 28,8% GDP, which is almost annual state budget of the country.

***Access to the registration information:*** The system is open and accessible. Under the project, KLIS data provision has been implemented enabling clients, state bodies and registers use of registration data. KLIS data has served as a basis for taxation. Needed real estate data and technical characteristics were provided to tax authorities for tax calculation. Information from the real estate register was used by the National statistic committee in recording housing resources nationwide in 2009. In implementing electronic software for local self-governments, the information from the register was used to develop municipal property register. To make an analysis of mortgage credit and real estate market data is used by the National bank of the Kyrgyz Republic.

Prior to the project inception a special record or some reliable data sources on real estate price was lacking. Currently, on the DCR website price index is published, being developed by registered transactions documents.

There are memoranda on cooperation with public and private organizations for the use of digital data in the layout of the resort and recreation area of Issyk-Kul lake, to use the data in the infrastructure cities of Osh and Jalal-Abad, and for sharing GNSS / GPS base stations.

Under the project the coordinate system's accessibility has been achieved. The approval of the open coordinate system is one of the legal conditions of the Financing Agreement, which is key for investment in the second component. Official recognition of the new geodetic reference system (approved new national coordinate system Kyrg-06 based on the international system (ITRF- 2005) Resolution of the Government of the Kyrgyz Republic dated October 7, 2010 at number 235) was a necessary factor in the viability of investments subcomponent 2b upgrading cadastral mapping (which, after the restructuring of the project got almost \$ 2.4 million of total project funds).

***Reduction in Time to Process Transactions:*** Transactions time reduced from 4 days to 1 day. Previously, to process transaction, a technical survey, receiving certificate from a LRO, to process a transaction by a notary and register again a transaction at a LRO were mandatory. During the 2009 reforms, normative legal acts were revised, cancelling mandatory technical survey and notary's certification and registration time has been reduced. As a result, a purchaser has an option in processing a transaction: in a notary office or in a LRO. Currently 85 percent of transactions are processed within LRO's as time and cost for transaction processing has been significantly reduced.

### **Overarching Themes, Other Outcomes and Impacts**

***Poverty Impacts, Gender Aspects, and Social Development:*** Analysis of the DCR database (as of September 30 2013) showed that number of registered property to women increased as compared with 2012 by 1,6 percent. Property owners are 60,3 percent are male, 39,7 percent - female.

Thanks to the good registration system and state security of registered rights, in 2013 the number of registered property achieved 2,92mln units, which is 21,7 percent higher than in base 2007 year. The market stabilization enabled the growth of property involved in mortgage operations for receiving credit. During the reporting period number of mortgages was 71980, which is 66,1 percent higher as compared with the base 2007 year. Implementation of the open national coordinate system enabled wide employment of cadastral data in public cartographic materials and reduce number of land disputes in various economy sectors. The ARS implementation and its development enabled improvement of clients servicing.

***Institutional Change/Strengthening:*** During the project implementation period, the focus was on introduction of various innovations and capacity building directed to increase effectiveness, encouraging good management, and resolving registration challenges. The project continued further development of undertaken steps towards establishing modern and open organization and mechanism ensuring institutional succession and further development upon the project completion.

***Other Unintended Outcomes and Impacts:*** To date, the creation of digital maps due to the need to solve problems that arise in solving the problems of socio-economic development of the country, in the operation and interaction of automated systems created different categories of citizens in the area of information services. Every year there is an increasing demand for relevant real estate data and digital maps and in various other areas of public administration as the development of network communications, records of citizens, accurate voter lists, measures to protect the environment and prevent emergencies, territorial development planning regions, agriculture, cartographic support infrastructure projects. To implement these tasks, it is necessary to create a National Spatial Data Infrastructure (fully functional GIS system).

## **LESSONS LEARNED**

Generally the project achieved significant outcomes in resolving established goals. The successful project implementation is confirmed by a range of obvious lessons:

- Establishing the PSCU group was effective for ensuring DCR activity improvement. The monitoring system is the cornerstone of improving operations of DCR, and includes the monitoring of local office performance, staffing and finances, maintaining quality control, analyzing the results of monitoring, formulating improvements, communicating findings to staff and management, as well as to key stakeholders. The monitoring system considers social development issues as well. It used a quantitative survey, plus focus group discussions, structured interviews and observations to measure indicators of service provision (information dissemination, levels of access, assessment of complexity, and costs), staff professional competence (accuracy and speed of services), and client relations (perceptions of friendliness, convenience). On the base of analysis and recommendations, DCR takes measures to address good land governance.

- Working groups comprising PIU and DCR staff and others became rather useful as a coordination tool, ensuring progress in project implementation of different project subcomponents. On each direction of the project, working groups together developed work plans, discussed strategic goals.
- Step-by-step implementation of IT and employment of low-cost methods allowed to ensure uninterrupted work on registration and effective transition to the automated systems. Originally, a method for step-by-step employment of IT together with use of paper based version. New or modified software products were implemented nationwide only after testing in several offices. Software was developed by local consultants and improvements were made as needed.
- A decision on restructuring of the project in maps upgrading through digitalization of paper based maps played a key role in development of digital maps for LRO's. This decision was directed for further maintenance of mapping in digital. Conditions of paper based maps annually became worse in process of work and employment of which would have worsen accuracy of cadastral works in the future. Implementation of the open source coordinate system allowed land survey with use of new methods not only for DCR but also for private, public and municipal structures.
- Successful training of the DCR and LROs' staff enabled development of human resources within cadastre and registration, playing an important role in executing effective activity of the system in all directions. Support of private real estate professionals enabled timely informing on the system operation, simplified procedures, innovations which had a positive impact on the DCR service. Development of training courses for education institutions and conducting different trainings enabled focusing training on DCR training directions, particularly on automated registration system, geo-information system, and implementation of GPS/GNSS technologies.
- The DCR has gained significant experience in project implementation. The implementation of the two projects funded by the World Bank enabled mastering of project proposals drafting skills, achievement of established goals. "Property rights security" project in cooperation with the Norwegian Mapping Authority has been started. The main project goals are expanding of GPS/GNSS network nationwide, geo-referencing of digital maps, and implementation of integrated information system on real estate. The issue on implementation of the project "Modernization of the Kyrgyz Republic cadastre system" in cooperation with the South Korea Cadastral Corporation in part of cadastral mapping and improvement of cadastral database is being discussed. Implementation of joint project implementation on state-private partnership in cooperation with the General Directorate on cadastre and registration in Turkey is being considered. These projects are directed to continuation of works started by the SLRERP.

*Summary of Comments by Borrower on Draft ICR*

DCR is grateful for the active support of the Bank team in the implementation of the project. We agree on the draft ICR. The targets of all components and subcomponents

were achieved and exceeded. The Government successfully implemented the project and reached its objectives. A rating of satisfactory is therefore justified.

**Annex 8. Comments of Co-financiers and Other Partners/Stakeholders**

N/A

**Annex 9. List of Supporting Documents**

Project Appraisal Document  
Aide Memoires, ISRs for the Project  
DCR Customer Surveys 2012, 2013  
DCR ICR Report

