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Report No.: 55258

AGRICULTURAL SECTOR REFORM IN EUROPE AND CENTRAL ASIA

AN IEG REVIEW OF THE PERFORMANCE OF SEVEN PROJECTS

including

ARMENIA - AGRICULTURAL REFORM SUPPORT PROJECT (CR. 3035)

GEORGIA - AGRICULTURAL DEVELOPMENT PROJECT (CR. 2941)

and

additional projects in AZERBAIJAN, ROMANIA and TAJIKISTAN

June 25, 2010

Sector Evaluations (IEGSE)
Independent Evaluation Group (World Bank)

Abbreviations and Acronyms

AAA	Armenian Agricultural Academy
ACBA	Agricultural Cooperative Bank of Armenia
ADC	Agribusiness Development Center
ADCP	Agricultural Development & Credit Project (Azerbaijan)
ADP	Agricultural Development Project (Georgia)
AI	Artificial Insemination
AKIS	Agricultural Knowledge and Information System
ANCA	National Agency for Agricultural Consulting
APL	Adaptable Program Lending
AR	Nakhichivan Autonomous Republic
ARET	Agriculture, Research Extension and Training Project
ARSP	Agricultural Reform Support Project (Armenia)
ASB	Agricultural Services Board
ASSP	Agricultural Support Services Project (Romania)
AZM	Azerbaijan Manat
BG	Borrowing Group
BTI	Bureau of Technical Information
CAS	Country Assistance Strategy
CBA	Central Bank of Armenia
CESW	Country Economic and Sector Work
CEE	Central and Eastern Europe
CEU	Credit to Enterprises Unit
CGS	Competitive Grant Scheme
CIS	Commonwealth of Independent States
CMEA	Council for Mutual Economic Assistance (aka COMECON)
CU	Credit Union
CUDC	Credit Union Development Center
DCA	Development Credit Agreement
DO	Development Objective
EBRD	European Bank for Reconstruction and Development
ECA	Europe and Central Asia Regional Office
ERR	Economic Rate of Return
ESC	Extension Support Center
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FPP	Farm Privatization Project (Azerbaijan)
FPSP	Farm Privatization Support Project (Tajikistan)
FRR	Financial Rate of Return
FSU	Former Soviet Union
GC-LR	General Cadastre & Land Registration Project (Romania)
GOA	Government of Armenia
GNI	Gross National Income
IA	Implementing Agency for Rural Finance Component
IAC	Information and Advisory Center
ICR	Implementation Completion Report
IDA	International Development Association
IDCDP	Irrigation and Drainage Community Development Project
IEG	Independent Evaluation Group
IEGWB	Independent Evaluation Group (World Bank)
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IMF	International Monetary Fund

IPM	Integrated Pest Management
IRP	Irrigation Rehabilitation Project
ISNAR	International Service for National Agriculture Research
LFI	Local Financial Institutions
ISR	Implementation Status Report
LIBOR	London Interbank Offered Rate
MAFRD	Ministry of Agriculture, Forests and Rural Development
MAKIS	Modernizing Agricultural Knowledge and Information Systems
MAP	Marketing Assistance Program (USDA)
MASC	Marz Agricultural Support Center
Marz	Administrative area (province)
MEBO	Management-Employee Buy Out
M&E	Monitoring and Evaluation
MFI	Micro-Finance Institution
MOA	Ministry of Agriculture
MOJ	Ministry of Justice
MOF	Ministry of Finance
MSE	Ministry of Science and Education
MT	Master Trainers
MTR	Mid-Term Review
NAPR	National Agency for Public Registry
NBA	National Bank of Azerbaijan
NBFI	Non-Bank Financial Intermediary
NBG	National Bank of Georgia
NGO	Non Governmental Organization
NPV	Net Present Value
OJCA	County Centers for Agricultural Consulting
PA	Private Advisors
PAD	Project Appraisal Document
PCC	Project Coordination Center
PCU	Project Coordination Unit
PFI	Participating Financial Institution
PIU	Project Implementation Unit
PMU	Project Management Unit
PPF	Project Pre-financing Facility
PPU	Project Preparation Unit
PPAR	Project Performance Assessment Report
PRGF	Poverty Reduction and Growth Facility
PRSC	Poverty Reduction Support Program
PRSP	Poverty Reduction Strategy Paper
PSR	Project Status Report
QAG	Quality Assurance Group
QER	Quality Enhancement Review
RAC	Regional Advisory Center
RASC	Republican Agricultural Support Center
RCC	Regional Cadastral Centers
RDP	Rural Development Project
RESCAD	Rural Enterprise and Small-Scale Commercial Agriculture Development Project
RFF	Rural Finance Facility
RS	Risk Assessment Study
SA	Social Assessment
SAR	Staff Appraisal Report
SCF	Standard Conversion Factor
SDI	Subsidy Dependence Index
SDLM	State Department for Land Management

SDR	Special Drawing Rights
SLA	Subsidiary Loan Agreement
SLCC	State Land and Cartography Committee
SME	Small and Medium-Scale Enterprise
SVS	State Veterinary Service
TA	Technical Assistance
TACIS	Technical Assistance for Commonwealth of Independent States
TAPs	Technology Assessment Projects
USAID	United States Department of Agriculture
USDA	United States Department of Agriculture
VAT	Value Added Tax
VCA	Village Credit Association
VFU	Veterinary Field Units
WFP	World Food Program
WUA	Water Users Association
YSP	Young Scientists Program

Fiscal Year

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IEGWB Mission: Enhancing development effectiveness through excellence and independence in evaluation.

About this Report

The Independent Evaluation Group assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank's self-evaluation process and to verify that the Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, IEGWB annually assesses about 25 percent of the Bank's lending operations through field work. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons.

To prepare a Project Performance Assessment Report (PPAR), IEGWB staff examine project files and other documents, interview operational staff, visit the borrowing country to discuss the operation with the government, and other in-country stakeholders, and interview Bank staff and other donor agency staff both at headquarters and in local offices as appropriate.

Each PPAR is subject to internal IEGWB peer review, Panel review, and management approval. Once cleared internally, the PPAR is commented on by the responsible Bank department. IEGWB incorporates the comments as relevant. The completed PPAR is then sent to the borrower for review; the borrowers' comments are attached to the document that is sent to the Bank's Board of Executive Directors. After an assessment report has been sent to the Board, it is disclosed to the public.

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Outcome: The extent to which the operation's major relevant objectives were achieved, or are expected to be achieved, efficiently. The rating has three dimensions: relevance, efficacy, and efficiency. *Relevance* includes relevance of objectives and relevance of design. Relevance of objectives is the extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). Relevance of design is the extent to which the project's design is consistent with the stated objectives. *Efficacy* is the extent to which the project's objectives were achieved, or are expected to be achieved, taking into account their relative importance. *Efficiency* is the extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. The efficiency dimension generally is not applied to adjustment operations. *Possible ratings for Outcome:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Risk to Development Outcome: The risk, at the time of evaluation, that development outcomes (or expected outcomes) will not be maintained (or realized). *Possible ratings for Risk to Development Outcome:* High Significant, Moderate, Negligible to Low, Not Evaluable.

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Borrower Performance: The extent to which the borrower (including the government and implementing agency or agencies) ensured quality of preparation and implementation, and complied with covenants and agreements, toward the achievement of development outcomes. The rating has two dimensions: government performance and implementing agency(ies) performance. *Possible ratings for Borrower Performance:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

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This report was prepared by John Heath (Task Team Leader), with assistance from Richard Burcroff (Consultant), who conducted an assessment mission to Armenia and Georgia in August, 2008.
Marie Charles provided administrative support.

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Preface

This report provides lessons of experience and reflects the findings from a thematic cluster of project performance assessment reports (PPARs) on farm restructuring in transition economies in Europe and Central Asia. Bank-supported projects in five countries form the basis of this review. In all the five countries – Armenia, Azerbaijan, Georgia, Romania and Tajikistan – there was an extreme urgency when the projects were being designed to resuscitate primary agricultural production and the agribusiness following the end of Soviet era.

The report also contributes to IEG's FY2010 evaluation of the World Bank Group's support to Agriculture and Agribusiness, which focuses on contributions to agricultural growth and productivity in the last decade.

The thematic overview pulls together evidence from FY2008 and FY2010 PPARs. The FY2010 PPARs cover the Armenia Agricultural Reform Support Project (approved FY1998, Credits 30350 and 30351) and the Georgia Agricultural Development Project (approved FY1997, Credit 29410). These PPARs have not previously been published and form Annexes A and B of this report.

The FY2008 PPARs—which have already been separately published—are: the Tajikistan Farm Privatization Support Project (approved FY1999, Credits 32400 & 32401); a cluster assessment of the Azerbaijan Agricultural Development and Credit Project (approved FY1999, Credit 32360) and the Farm Privatization Project (approved FY1997, Credit 29330); and a cluster assessment of the Romania General Cadastre and Land Registration Project (approved FY1998, Loan 4258) and the Agricultural Support Services Project (approved FY2000, Loan 4533). These assessments are available on IEG's website.

Each PPAR was prepared by IEG based on the Implementation Completion Reports, Staff Appraisal Reports, Loan Agreements and a review of Bank files. An IEG mission visited Armenia and Georgia in November 2008, and held interviews with a number of stakeholders including representatives of Government and the implementing agencies, plus local staff, direct beneficiaries and other donors in Armenia. The cooperation and assistance of all the stakeholders is gratefully acknowledged.

Following standard IEG procedures, the draft reports for the Armenia Agricultural Reform Support Project and the Georgia Agricultural Development Project were sent separately to the concerned government officials and agencies for their review and comment. No comments were received from the Borrowers.

Summary

IEG assessed the performance of 7 projects in 5 transition economies in the Europe and Central Asia (ECA) Region. Four of the countries (Armenia, Azerbaijan, Tajikistan and Georgia) were former republics in the USSR. The fifth country, Romania, is now a member of the European Union. The projects were prepared following the generalized collapse of these economies in the early 1990s, which forced the pace of efforts to privatize and restructure the socialist agro-industrial complex and industrial farming systems.

This review addresses the following questions:

- Was the Bank's support for the agricultural sector relevant?
- What progress did the countries make with agricultural sector reform?
- What were the project outcomes and the associated risks?
- How satisfactorily did the Bank perform?

With respect to **relevance**, the Bank's overall strategy was informed by the solid and comprehensive body of analytic work it conducted on the ECA agricultural transition. The objectives and the design of individual projects were for the most part consistent with the overall strategy and benefited from this solid analytic underpinning.

The Bank kept a detailed scorecard of **sector reform progress**. The biggest strides were taken by Romania (spurred by the EU accession). Armenia and Azerbaijan also did fairly well; but Georgia regressed (owing to the disruption caused by civil strife) and Tajikistan languished, remaining to a large extent a planned economy. With respect to specific areas of reform, price and market liberalization advanced most. There was less progress with solving the financing problems of agriculture, the liberalization of agro-processing and input supply, and with institutional reform.

In terms of **outcomes and risks**, six of the seven projects fell on the satisfactory side of the ratings divide, performance generally benefiting from strong government commitment. The risks to development outcome derive mainly from concerns about the sustainability of rural financial services and the capacity of the small farmers to compete in the more open trading environment. The most robust performance and prospects for sustainability was shown by the projects that sought to strengthen land administration.

Bank performance was, in most aspects, satisfactory, although supervision was somewhat stronger than quality at entry. Particular sources of strength were the Bank's well-focused analysis, its eventual de-emphasis of policy-based operations relative to investment projects (a previous IEG evaluation found that investment operations, partly because they are implemented over a longer period than adjustment operations, lent themselves better to the nurturing of institutions and the development of capacity), its emphasis on learning by doing and its hands-on supervision. By comparison, performance on monitoring and evaluation was weak and quality at entry was sometimes hampered by an over optimistic assessment of local capacity.

IEG draws the following lessons:

- Given the large attitudinal shift involved in the agricultural transition, government officials and project staff need substantial technical assistance and training before operations can be expected to succeed.

- In the complex and rapidly changing ECA environment, sound donor coordination was critical.

- With respect to *agriculture and agribusiness services*, project experience demonstrated that farmers and rural business owners will respond enthusiastically to innovative technologies corresponding to their needs.

- On *land administration*, the Bank's international experience strengthened the design of projects in ECA, and these projects showed the importance of avoiding a "one-size-fits- all" approach and the sound payoff to adopting a unified approach to develop property registry and cadastre.

- The *rural finance* operations showed that with appropriate regulation, technical advice and staff training banks that lend to rural areas can operate sustainably. Also, non-bank financial intermediaries have an important role to play in rural areas; but it is important to be realistic about their capabilities.

Vinod Thomas
Director-General
Evaluation

1. Introduction

1.1 This review is based on IEG assessments of 7 projects in 5 transition economies in the Europe and Central Asia (ECA) Region (Table 1 below). Four of the countries (Armenia, Azerbaijan, Tajikistan and Georgia) were former republics in the USSR. The fifth country, Romania, is now a member of the European Union. The projects were formulated during a period of hesitant recovery following the general economic collapse of the early 1990s, which was associated with and exacerbated by the rapid privatization and restructuring of the socialist agro-industrial complex and industrial farming systems.

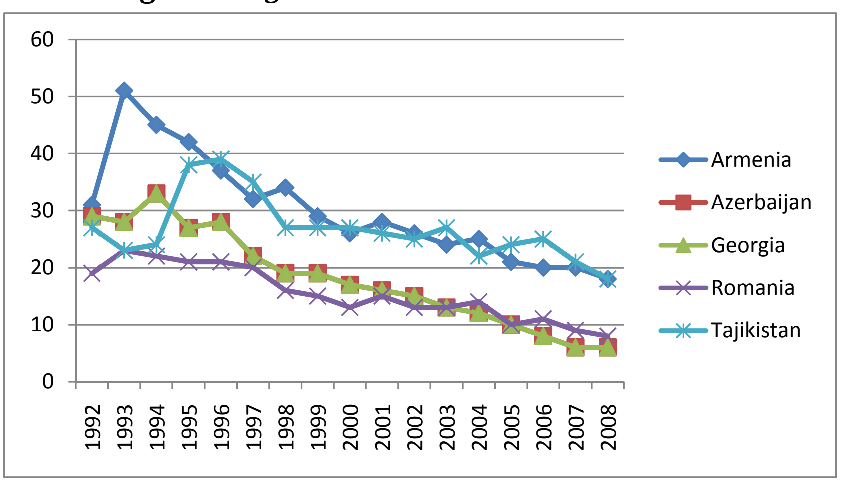
1.2 This review addresses the following questions:

- Was the Bank's support for the agricultural sector relevant?
- What progress did the countries make with agricultural sector reform?
- What were the project outcomes and the associated risks?
- How satisfactorily did the Bank perform?

The Project Setting

1.3 In the former Soviet Bloc nations the agricultural transition began around 1990.[1] Initially, in the five countries assessed in this report, agriculture's share of GDP grew because other sectors contracted faster.[2] But from 1996 onwards agriculture began a steady contraction relative to the economy as a whole (Figure 1).

Figure 1: Agricultural value added as % of GDP



Source: World Development Indicators, September 2009

1. Brooks (1991).
2. The state of agriculture at the start of the transition was reviewed at length in a multi-agency study organized by the World Bank: "Food & Agricultural Policy Reform in the Former USSR – An Agenda for the Transition" (World Bank – EC3 1992). Other contributors included the Government of the Russian Federation, EBRD, OECD, the European Commission and USDA.

Table 1: Projects by Country, Sub-sector theme and Components

	Armenia	**Azerbaijan**	**Azerbaijan**	**Georgia**	**Romania**	**Romania**	**Tajikistan**
Project ID	P035806	P040544	P035813	P008415	P043882	P034213	P049718
Project Name (Acronym, FY)	Agricultural Reform Support **(ARSP, FY98)**	Farm Privatization **(FPP, FY97)**	Agricultural Development & Credit **(ADCP, FY99)**	Agricultural Development **(ADP, FY97)**	General Cadastre & Land Registration **(GCLR, FY97)**	Agricultural Support Services **(ASSP, FY00)**	Farm Privatization Support **(FPSP, FY99)**
Total Costs (Actual, US$m) Per capita, rural*	**20.1** US$18 per head	**23.8** US$6 per head	**34.5** US$9 per head	**26.8** US$12 per head	**32.4** US$3 per head	**17.6** US$2 per head	**25.0** US$6 per head
Agricultural and Agribusiness Services **(% of total cost)**	Agricultural research, higher education, information and advisory services **(39%)** Agribusiness Development Center **(1%)**	Farm information and advisory services **(12%)** **	Information and advisory services **(32%)**	Agricultural services **(1%)**		Applied research and extension **(82%)** Institution building **(18%)**	Farm information and advisory services (Part of "Farm restructuring services" component **(18%)**
Land Administration **(% of total cost)**		Land registration services **(8%)** **	Real estate registration **(14%)**	Land registration **(21%)**	Development of General Cadastre **(65%)** Land Books & Registration **(21%)** Institutional strengthening **(14%)**		Land use rights registration services (Part of "Farm restructuring services" component) **(18%)**
Rural Finance **(% of total cost)**	Credit to farmers and agribusiness **(47%)**	Privatized credit services for farms and agribusiness **(47%)** **	Rural finance **(45%)**	Credit to farmers and agribusiness **(49%)** Credit Unions **(24%)**			Privatization grants and Rural Savings and Credit Associations **(18%)**
Main Other Themes*	Emergency Drought Relief **(6%) #**	Irrigation **(15%) ** **					Irrigation **(26%)**

*Based on rural population estimate for 1998 (World Development Indicators);
**Percent of costs estimated at appraisal (actual cost not available);
***Excluding project management costs. # Supplemental Credit.

1.4 After the initial collapse of farm output it was expected that sector growth would resume. The agriculture supply response that many within and outside the region expected to emerge early on was complicated by the removal of consumer subsidies and the contraction of export demand as the trading system collapsed. The essence of the agricultural transition was the state's withdrawal from its traditional role as claimant of rents from farming and agro-manufacturing. This role passed in stages to the beneficiaries of land reform, collective farm restructuring and privatization of the agro-industrial complex. With the removal of Soviet-era subsidies on machinery, farm chemicals, animal feeds and energy, and "credit", the terms of trade moved quickly and in most countries quite strongly against agriculture—particularly against the livestock sector which had been particularly sheltered.[3]

1.5 Throughout the Former Soviet Union and Romania there was an urgent need to increase productivity. During the socialist era, agriculture and food production were regulated by government plans, without regard to efficiencies or comparative advantage. Input provision was often dominated by a few state-owned firms and a few inefficient state buyers dominated marketing channels. The large-scale livestock and crop cooperatives from the Soviet era were unsuited to market-based private agriculture. It was a challenge to create a system of farming based on private ownership of land and responsive to market signals. The scrapping of the socialist command and control system centered on the break-up of collective farms and the privatization (or restructuring) of agricultural and agribusiness assets. This was accompanied by a collapse of the centrally planned marketing chains and foreign trade arrangements, as well as input supply systems. At the same time, the agricultural finance system stopped operating.

1.6 Each country took its own path. For example, with respect to land reform, Azerbaijan opted for comprehensive privatization, distributing plots more or less equally among rural households. Armenia followed a similar approach, while also settling displaced families from Azerbaijan on former state farm lands. Romania opted for near complete privatization, but based on restitution. Possibly this was the only socially acceptable approach (as was the case in other countries); but it did lead to "second generation" problems that were largely avoided in Azerbaijan and Armenia. Meanwhile, in Tajikistan, the government granted heritable use rights in the non-cotton growing zones to the north but maintained control over cotton production and marketing decisions in the mono-cropped areas of the South. Similarly, diverse techniques for privatizing the agro-industrial state-owned enterprises (SOEs) were employed, ranging from management-employee buyouts, to voucher privatizations, to outright sale of the more attractive assets. Attempts were also made to restructure rather than privatize "strategic" SOEs, especially the large-scale grain stores and mills.

1.7 These early reforms fragmented farm holdings in all five countries, creating a large cohort of semi-subsistence private farmers, and disrupted input supply and marketing arrangements.[4] Research and extension systems were poorly adapted to serve small farmers, the available crop and livestock technologies being more suited to the industrial crop and livestock operations characteristic of the socialist period. Agribusiness plant was obsolete, risks were high and inefficiencies were pervasive.

3. Rozelle and Swinnen (2004).
4. World Bank (2007).

1.8 With demise of the material balance planning systems and the curtailing of quasi-fiscal transfers via the state banking structure, financial “markets” stopped working. There was a pressing need to develop commercial banking, with its associated regulatory structure and supporting services (clearings, credit bureaus, savings accounts, etc.) as well as a broader array of financial services not previously available to commercial enterprises and households. Lacking access to organized credit lines in the immediate aftermath of decollectivization, the new class of smallholders retreated into semi-subsistence production while rural entrepreneurs were forced to rely on savings and informal borrowing.

1.9 Large pockets of rural poverty persisted. Following the break-up and privatization of Soviet-era collective farms, a large pool of elderly farmers was left operating tiny farms on a semi-subsistence basis throughout the FSU and in Romania. These small-holders have neither the incentive nor the skill needed to adapt to commercial farming. They have shown little inclination to join marketing cooperatives and other associative institutions, or to engage in contract farming with processors and marketing agents. But the area operated by individual farms is growing in size through leasing and (to a lesser extent) sale of land, a process that is now permitted by laws governing real property and contract. The effect was an inevitable shedding of farm labor as productivity-increasing investments were introduced and farm operations were modernized.[5]

2. Was the Bank’s support for the agricultural sector relevant?

Relevance of Overall Strategy

2.1 The Bank’s decision to assign priority to farm and agro-industrial restructuring was entirely appropriate. In all five countries there was an urgent need to revive agriculture and agribusiness. The overriding aim of the projects assessed here was to increase rural productivity and incomes, with support for smallholder farming and private enterprises being central. Operations were designed to promote private and financial sector development, public-private partnerships in farm technology transfer and business development services, infrastructure development and modernization programs and reform of government supporting services.

2.2 *Country Assistance Strategies* in all five countries gave an appropriate priority to agricultural sector development, through sector work and policy notes, via thematic components of adjustment lending and later Poverty Reduction Strategy Credits, and by targeting critical technical assistance and investment needs.

2.3 The *analytic work* carried out by the Bank’s agriculture unit in ECA was highly relevant, helping to underpin country assistance strategies and development policy operations throughout the Region. *ECA-wide*, sector work progressed through four phases. First, in the

5. Kharatyan (2007); Burcroff & Ahmadov (2008); and World Bank (2007).

early 1990s comprehensive reviews provided a benchmark assessment for various ECA economies, setting out an agenda for policy reform. (One of the largest of these was a food sector study, begun before the collapse of the Soviet Union.) Second, in the mid-1990s, the focus shifted to specific themes. A substantial body of work on land reform and farm restructuring led to the Bank becoming the leading source of knowledge about these issues in Central and Eastern Europe.[6] Other studies were devoted to rural finance, trade and research and extension. During a third phase (the latter part of the 1990s), a series of sub-regional reports were produced, focused mainly on accession to the European Union. Regional seminars based on this work involved close dialogue with the European Commission. Another multi-country initiative tackled the question of farm debt in the CIS countries, influencing debt settlement legislation in Moldova and Ukraine. After 2000, a fourth phase involved the next cycle of comprehensive sector reviews, including Moldova, Macedonia and Serbia. In short, within the space of a few years the Bank became a major repository of knowledge on ECA. A 1997 report noted that donors, firms and academics were major users of the Bank's ECA studies—to a greater extent than in other regions.[7]

2.4 With respect to the *five countries* covered by this review, the analysis and policy dialogue were highly relevant. In Armenia, Georgia and Romania dialogue was based on the findings and recommendations from comprehensive agricultural sector reviews. In Azerbaijan the Bank carried out an informal agricultural sector review in 1995, because the government was not yet ready for a formal review and supporting Country Economic Memorandum (CEM). But the government did agree to the first of two poverty assessments and to a public expenditure review, and later to an agricultural marketing study in 2005-06 and a CEM in 2008-09. A less focused approach also had to be initiated with Tajikistan, owing to the chaos that followed the civil war. Here, a "Country Study" was carried out in 1994 under the Bank's CESW program, which also included a section on agriculture, followed by a Rural Social Assessment Note in1998. A policy letter was submitted in May 1999 that placed on record the Tajikistan Government's commitments to agricultural sector reforms that would be supported by Bank lending.

2.5 In the wake of decollectivization, steps to rationalize the macro-policy framework were supported by a large portfolio of *adjustment lending* to the five countries, all designed and coordinated with the IMF's stabilization programs. For example, sequences of policy-based lending operations were implemented during the 1990s—17 in the 5 countries under review here. These sought to simplify and liberalize trade regimes, free up the pricing of previously controlled commodities, lay the foundations for fiscal reform, rationalize public spending and (later and to a lesser extent) improve and extend social safety nets. Operations included a financial structural adjustment loan and two Private/Public Institution Building Loans to Romania. Tajikistan rebuilding efforts were supported by a Post-Conflict Rehabilitation Credit (1997). Also, an agricultural structural adjustment loan was implemented in Romania soon after its Revolution.

2.6 Towards the end of the 1990s—the period when the seven assessed projects were developed—there was some shift of emphasis in agricultural lending from policy-based

6. Brooks (1991); Brooks and Nash (2002); Rozell and Swinnen (2004); Dudwick, Fock and Sedik (2007).
7. OED (2003), pp. 7-8.

operations to investment operations. This made strategic sense. A previous IEG evaluation of World Bank support for agriculture sector reform in Eastern Europe and Central Asia found that investment operations, partly because they are implemented over a longer period than adjustment operations, lent themselves better to the nurturing of institutions and the development of capacity. The biggest challenges for capacity building were, by and large, in the line agencies, particularly the Ministries of Agriculture, where staffs were often poorly equipped for the transition to a market economy.[8]

Project Relevance

2.7 The **objectives** of the seven projects (set out in full in Annex 3) were highly relevant. Each of the projects was closely aligned with the Bank's overall ECA reform agenda. In each of the ECA countries the agricultural sector reforms envisaged in the early 1990s (at the start of the transition) can be summarized as follows:

- Liberalization of prices and markets, creation of a market-compatible system of conditions in the macro-agrarian economy;
- Privatization of land and transformation of the inherited economic structure;
- De-monopolization and privatization of food processing and trade in agricultural products and capital goods;
- Creation of a functioning rural bank system; and
- Establishment of an institutional structure and system of state administration required by market economies.[9]

2.8 The **design** of the projects was substantially relevant. For the most part, they were well adjusted to country circumstances. Operations were adequately sequenced and there was a large measure of complementarity between sector investment lending and policy lending.

3. What progress did the countries make with agricultural sector reform?

3.1 The Bank's ECA Region rated progress on reform in five thematic areas. Between 1997 and 2005 the Bank prepared an annual progress report, rating the change in each of the five agenda items listed above and deriving a composite score (Table 2; Figure 4). Over the period, the most progress was made by Romania (spurred by the EU accession); Georgia regressed (owing to the disruption caused by civil strife), swapping places with Azerbaijan; and Tajikistan languished, remaining to a large extent a planned economy "The biggest progress has been achieved in price and market liberalization, while there is a substantial lag in solving the financing problems of agriculture, the liberalization of agro-processing and input supply, and in the areas of institutional reforms".[10]

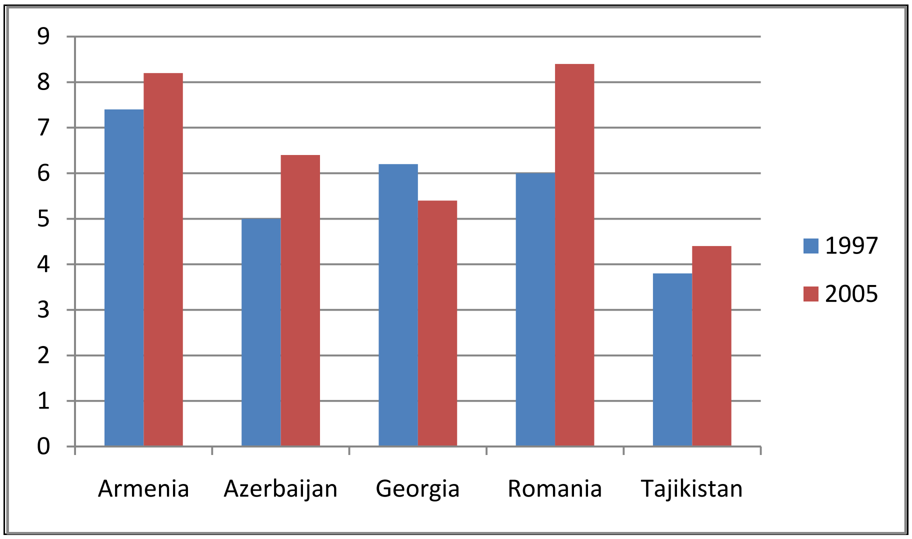
8. OED (2003), p. 14.
9. World Bank (2006), p. 14.
10. World Bank (2006), p. 18.

Table 2: Sector Reform Status, 1997 and 2005

Country	Price & Market		Land Market		Agro-processing		Rural Finance		Institutions		Total Score	
	1997	2005	1997	2005	1997	2005	1997	2005	1997	2005	1997	2005
Armenia	7	8	8	8	7	9	7	7	8	9	7.4	8.2
Azerbaijan	6	6	6	6	5	9	4	6	4	5	5.0	6.4
Georgia	7	8	7	6	5	4	6	6	6	3	6.2	5.4
Romania	7	9	7	8	6	9	6	8	4	8	6.0	8.4
Tajikistan	4	5	2	5	5	4	3	4	5	4	3.8	4.4

Source: World Bank-ECSSD (1998, 2006)
Note: 1=Centrally Planned; 10=Completed Market Reforms. "Institutions" refers in particular to research, extension and information services. **See Annex 4 for key.**

Figure 2: "Total Score", 1997 and 2005

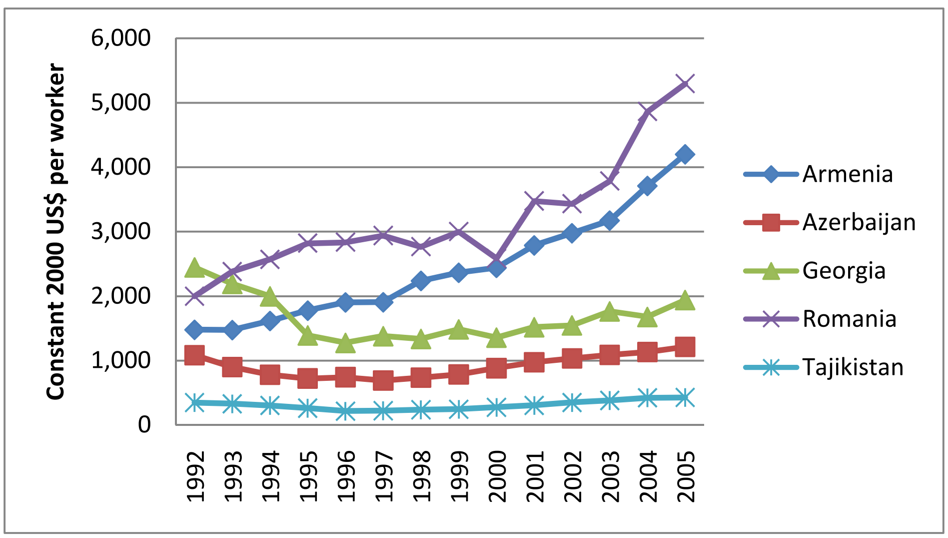


Source: Table 2.

3.2 Each of the five items on the reform agenda was linked ultimately to productivity enhancement. With respect to the seven projects assessed, only two have statements of objectives that refer explicitly to the need to boost agricultural productivity. But in each case there was a clear understanding—made explicit in the country assistance strategies—that sector productivity growth was essential. Boosting productivity entailed labor shedding, accompanied by more efficient use of farm inputs.

3.3 The level of agricultural productivity and the pace of sector productivity growth correlate roughly with the overall score of the country on the Bank's reform rankings. Thus, Romania and Armenia had the highest level of agricultural value added per worker—and also the fastest growth rate. Georgia and Azerbaijan occupy an intermediate position; with a slight *decline* in value added per worker in Georgia. Tajikistan has the lowest productivity and has made only limited progress (Figure 3). The ranking of the five countries by reform progress coincides with their ranking in terms of the share of farmland in private use. Around 2005, in descending order, privately used land accounted for the following shares of agricultural land: Romania (86 percent); Armenia (77 percent); Azerbaijan (35 percent); Georgia (26 percent); Tajikistan (9 percent).[11]

Figure 3: Agricultural Value Added Per Worker



Source: World Development Indicators, September 2009

3.4 In summary, the project objectives, implicitly or explicitly, emphasized productivity growth. Productivity growth has, indeed, taken place, particularly after 2000. The rate of productivity growth was partly driven by the adoption of the reforms that have been promoted by the Bank since the start of the transition. The factor that was most instrumental in boosting productivity was labor shedding. The countries with the highest levels of agricultural value added per worker (as shown in Figure 3) were also those that shed the most labor from the farm sector (Table 3).

11 . World Bank (2006): Country Policy Matrices.

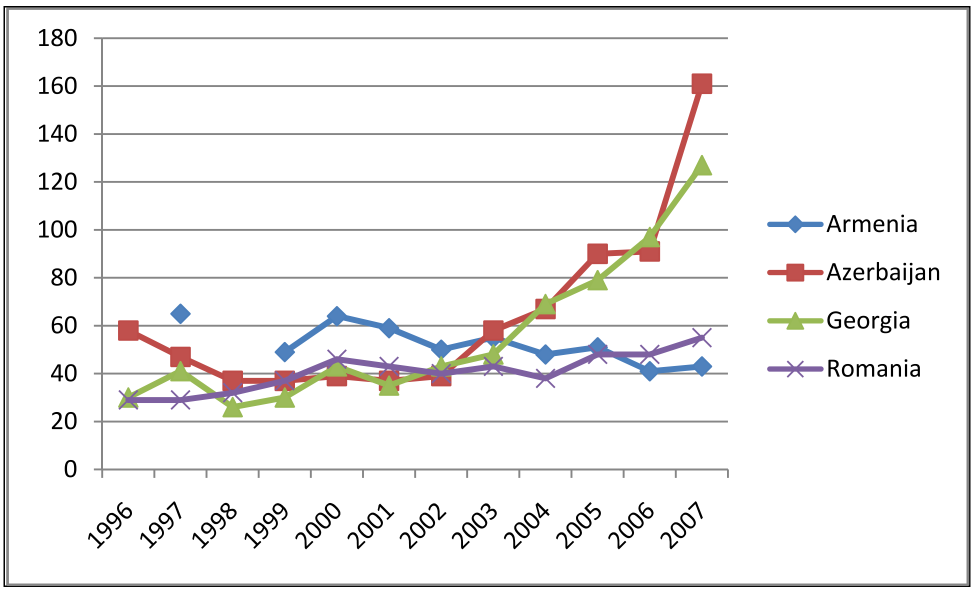
Table 3: Change in Size of Farm Labor Force

	Annual average change per period (%)	
	1992-1997	**1997-2005**
Armenia	-4.0	-2.3
Azerbaijan	0.3	0.2
Georgia	-3.2	-2.7
Romania	-3.5	-3.7
Tajikistan	0.2	0.2

Source: FAO

3.5 There has been more progress on price and market reforms than the other areas captured in the ECA reform indicators (Table 2) above). Price signals are diffused more rapidly than before and there is closer integration with world markets. But there is a sharp difference between the countries in the level of openness: trade as a proportion of sector GDP is higher in Azerbaijan and Georgia than in the other countries (Figure 4).

Figure 4: "Openness" of agriculture and food sectors



Source: World Development Indicators, September 2009.
Note: Refers to the value of agricultural and food imports plus exports expressed as a percentage of agricultural value added; all values in current US$. (The source contains no time series data for Tajikistan.)

4. What were the project outcomes and the associated risks?

(a) Overall outcomes and sustainability

4.1 Project outcomes were positive overall. Six of the seven projects fell on the satisfactory side of the ratings divide. The projects in Azerbaijan and Romania had the strongest outcomes. The assessments are less sanguine about sustainability. The rating of risk to development outcome was significant for four of the projects (Table 4).

Table 4: Outcome and Risk Ratings

	Outcome	Risk
Armenia, ARSP (FY1998)	***Moderately Satisfactory***	***Significant***
Azerbaijan, FPP (FY1997)	***Satisfactory***	***Moderate***
Azerbaijan, ADCP (FY1999)	***Satisfactory***	***Significant***
Georgia, ADP (FY1997)	***Moderately Unsatisfactory***	***Significant***
Romania, GCLR (FY1997)	***Satisfactory***	***Negligible to Low***
Romania, ASSP (FY2000)	***Satisfactory***	***Negligible to Low***
Tajikistan, FPSP (FY1999)	***Moderately Satisfactory***	***Significant***

Source: PPARs

4.2 There were four overarching factors that influenced project outcomes. First, governments were generally supportive. During the preparation phase, except in Tajikistan, government backing for the development objectives of the seven projects was generally firm. Commitment tended to wane during early implementation but then picked up again following mid-term adjustments and supporting policy reforms.

4.3 Second, at project inception, none of the implementing agencies were adequately staffed to address the challenges at hand. The members of these agencies were poorly equipped to develop new services responsive to the needs of small-scale farmers and agribusinesses. Nor were they well placed to deal with the conflicting demands of foreign donors, or able to grasp the intricacies of the Bank's procurement and disbursement procedures. Sometimes there was an outright rejection of the advice proffered by foreign agencies, including the Bank. These strains lessened over time as implementing agency staff gained experience and the projects began to bear fruit.

4.4 Third, the fallout from the Russian financial crisis of 1998-1999 placed every country, except Azerbaijan, under considerable financial stress, resulting in budgetary cutbacks and shortfalls in counterpart funding of projects. However, from about 2000 onwards, governments began to make the necessary budgetary provisions again and the pace of implementation accelerated.

4.5 Fourth, aside from the financial crisis of the late 1990s, the effect of increased exposure to the outside world had a generally positive influence on the achievement of project objectives. The prospects of joining the European Union quickened the pace of agricultural sector reforms in Romania (which acceded in 1997). The World Trade Organization has exercised a similar pull. Romania joined the WTO in 1995, Georgia in 2000, and Armenia in 2003; and Azerbaijan and Tajikistan were granted observer status.

4.6 The *risk* to development outcome was influenced by the following factors. First and foremost, there are major concerns about the sustainability of rural finance initiatives: participating banks withdrew from the follow-on project in Armenia because conditions (e.g. for administering reflows) were too restrictive; in Georgia, the credit unions foundered and there are legal impediments to their revival; in Azerbaijan, farmer access to credit remains highly constrained.[12]

4.7 Second, the small farmers that were targeted by agricultural support services may not survive in the more competitive environment. In Romania, small dairy farmers face particular challenges in meeting European Union sanitary requirements.[13] In Armenia, the services provided by the regional service centers are poorly adapted to the new realities of a commercial faming environment; small farmers do not perceive these services as helpful in terms of enhancing their ability to compete and are correspondingly disinclined to pay for them.[14]

4.8 Third, the results achieved on land administration generally appear more sustainable. Progress toward improved registration and cadastre is unlikely to be reversed in Georgia and Romania.[15] In Azerbaijan government and farmers remain firmly committed to the privatization of land ownership.[16] By contrast, in Tajikistan, there are fewer results to sustain: land reform remains incipient, proposals are donor-driven with limited local ownership and any improvement in land legislation will have limited impact on farm investment levels as long as farmers' freedom with respect to choice of crops and markets remains as tightly constrained as it is at present.[17]

(b) Results by sub-sector

Agricultural and Agribusiness Services

4.9 The services inherited from the Soviet era were geared to the large collective farms and focused on maximizing output rather than profits. Following the collapse of the communist model, agricultural services were understaffed and poorly equipped to address the

12. Armenia, PPAR; Georgia, PPAR; Azerbaijan, PPAR, p. 25.
13. Romania, ASSP, PPAR, pp. 23-27.
14. Armenia, ARSP, PPAR.
15. Romania, GCP, PPAR, pp. 23-27.
16. Azerbaijan, FPP, PPAR, p. 25.
17. Tajikistan, FPSP, PPAR, pp. 22-23.

needs of the mass of newly created smallholder farmers. Machinery and input suppliers and agribusinesses provided patchy coverage. The Bank responded to this institutional vacuum by promoting decentralized extension, competitive grant schemes and providing support to agribusiness.

4.10 *Decentralized extension services*. The two Azerbaijan projects covered by this review (FPP, ADCP) decentralized (and privatized) extension services more effectively than the Armenia project (ARSP). In **Azerbaijan**, Regional Advisory Centers (RACs) were established for each of the five regions covered by the project.[18] Each center hosted a network of extension agents and organized training, demonstrations and information campaigns. Three of the RACs were contracted out to nongovernment agencies. Extension agents contacted 91,000 farmers in 2004, well above the appraisal target of 10,000-15,000 farmers per year. Most farmers interviewed by IEG spoke highly of the program. The 25 Veterinary Field Units created under the project were successful, reaching out to 48,000 livestock owners (the appraisal target was 20,000). The Field Units were privately run and proved able to cover costs through charges on medicines and services. The veterinarians spent about two-thirds of their time in the field, and the rest at the clinic. Medicines were significantly more expensive than publicly supplied drugs, yet demand from farmers was high. Because the private veterinarians had to provide a better service in order to get paid, they had a greater range of medicines, and their professional knowledge was more up-to-date.

4.11 In **Armenia**, with somewhat less success, support centers (MASCs) were established in each of the ten provinces, building on support from the United States Department of Agriculture that dated back to 1997. The centers provided a broad range of extension services and staff spent the bulk of their time working directly with farmers. To make them more responsive to clients each center has, since 2002, hosted an advisory council with representatives from local government, farmers and private agribusiness firms helping to shape the annual work plan. Decentralization worked less well than in Azerbaijan and the support centers are unlikely to prove sustainable. First, attempts to cover the operating costs of the centers from sale of services made limited progress owing to client resistance. Second, with the winding up of project financing, the centers have ceased to assist with farmer credit applications, making them less appealing to clients. Third, the centers are not well placed to serve the emerging new class of well-educated, commercial farmers who prefer to approach private services for technical advice.[19]

4.12 *Competitive Grant Schemes*. This approach to agriculture technology transfer made big strides in Romania and Azerbaijan; it was less successful in Armenia. In **Romania**, seven calls for proposals were organized between 1999 and 2004. The 2,575 proposals received were screened by a CGS Secretariat for quality and responsiveness to established priorities. Successful applicants were invited to submit full project proposals, which were also pre-screened by the Secretariat and then forwarded to local peer reviewers for evaluation. Of the 329 proposals that were fully evaluated, 154 were funded and 149 were successfully implemented. The implementation period for each subproject averaged 3 years. About three-

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18. Azerbaijan, ADCP, PPAR, p. 10.
19. Armenia, ARSP, PPAR, pp. 18-25.

quarters of the subprojects were extension-oriented, involving the transfer of existing technologies. Implementation of the CGS was slow to begin with owing to the project staff's lack of experience with procurement and financial management; but it later picked up.

4.13 The scheme favored public-private partnerships, establishing links between 334 public agencies and 227 private organizations (including farmer associations, NGOs, and commercial firms). The private organizations absorbed 58 percent of total CGS funds. The scheme also fostered links between farmers and agribusiness firms, particularly for milk production and processing.[20] In Romania, the project management unit offered valuable technical advice and assistance to applicants during the proposal preparation process. It also repeatedly surveyed the 154 CGS grants that were approved for financing, using the findings to help streamline the approval process. There is one caveat. Farmers who attended the training and demonstration sessions organized through the CGS program, and who drew the highest benefits from the project, were more likely to be medium-scale or progressive—those best equipped to adapt to the commercial environment.[21]

4.14 In **Azerbaijan**, a CGS for financing applied research and demonstrations was established.[22] Of the 168 proposals submitted, 52 were funded, each receiving a grant averaging US$28,000. Public research institutes captured 80 of CGS funding, with private and nonprofit agencies accounting for the remaining 20 percent. The CGS supported a farmer-responsive and problem-oriented approach to agricultural technology, with demonstrations and training a major part of each subproject. About 30 percent of farmers attending demonstrations subsequently adopted the technology—moderately successful by international standards. The crop yields of adopters were 50 percent higher than those obtained under the previous technology.[23]

4.15 In **Armenia**, 45 research grants were competitively selected between 1999 and 2004. The CGS provided stopgap funding at a time when budgetary support for the research establishment was barely enough to cover salaries and facility maintenance. The scheme introduced a welcome measure of competition and accountability. However, schemes of this nature will not by themselves ensure emergence of the strategic focus needed to transform the agricultural research agenda. Moreover, the activities funded were not always of the highest relevance to farmers. Government agricultural scientists, schooled exclusively in the collectivist tradition of agriculture, were ill-equipped to devise solutions for the issues facing small-scale farmers in an evolving market economy. The CGS would have been more client-responsive if it had been open to a wider range of applicants, including nongovernment institutions, as well as researchers in universities and government institutes.[24] Also, complementary initiatives are needed to train farmers in business-oriented approaches and to reform the legal and regulatory framework for agribusiness. To the extent that farmers have business skills and the legal and regulatory framework is right, the research demands of

20. Romania, ASSP, PPAR, p. 18.
21. Romania, ASSP, PPAR, p. 27.
22. Azerbaijan, ADCP, PPAR, p. 10.
23. Azerbaijan, ADCP, PPAR p. 11.
24. Armenia, ARSP, PPAR, pp. 17-18.

farmers and agribusinesses articulated through a competitive system are more likely to encourage the development of viable research projects.

4.16 *Agribusiness support*. One of the highlights of the assessed projects was the creation, in **Armenia**, of the Agribusiness Development Center, which provided business advice and training in financial analysis, strategic planning, and marketing to agribusiness firms and large-scale farmers. Since 2003 ADC has operated as a private consulting company providing service under contracts with the Ministry of Agriculture. It stages trade fairs, provides market information and promotes exports. It also set up an association for agricultural input suppliers, which successfully improved farmer access to safe, high-quality agrochemicals.

Land Administration

4.17 This section covers the restructuring and sale of properties previously held by the state, the registering of land title and transactions, and the creation of cadastral databases specifying parcel locations, boundaries and plot sizes. The projects supported by the Bank in Azerbaijan, Georgia and Romania were more successful overall than that in Tajikistan.

4.18 In **Azerbaijan**, the two assessed projects made a major contribution to successful farm restructuring. The first project (FPP) piloted an egalitarian process of land redistribution, based on six collective farms. Land titling at the six pilot sites was completed by mid-1998, just 18 months after Board approval. Individual land titles were given to 6,645 families (the appraisal target was 4,800). The distribution of equal land areas to all persons, regardless of age, social position or gender was welcomed by farmers; and 95 percent of farmers surveyed reported that the process of allocating land by lottery was fair. The pilot was rapidly scaled-up to a nationwide operation. By 2001, two years before implementation of FPP ended, 1,980 of Azerbaijan's 2,020 state and collective farms had been privatized, accounting for 95 percent of agricultural land.[25] The follow-on project (ADCP) successfully established a system for recording land transactions. The land registration service was decentralized from Baku to 10 regional offices, speeding up procedures and improving farmer access. The time taken to register a land transaction fell from several weeks to 10-15 days. The offices became financially self-sustaining with transaction fees covering 80 percent of variable costs. The project supported computerization and the digitization of land records.[26]

4.19 In **Georgia** also, the reform of land administration procedures began as a pilot (in two regions) and was later scaled up nationwide. An independent and self-financing land registration and cadastre agency was set up.[27] Under the supporting law of fees for land registration services, base fees have been held at historic low levels but receipts have increased owing to the rapid rise in transactions registered.[28]

25. Azerbaijan, FPP, PPAR, p. 8.
26. Azerbaijan, FPP, PPAR, p. 8-9.
27. Georgia, ADP, PPAR, pp. 21-22.
28. Georgia, ADP, PPAR, p. 24.

4.20 In **Romania**, by mid-1997, almost 70 percent of those who had applied for restitution of land and property tied up in collective farms had been issued with a private title. But, as the system of national land administration was in disarray, the records of real estate ownership were disorganized and fragmented, and partly as a result, there was little land market development in either urban or rural areas.[29] One-third of the new landowners was living in towns and had little interest in farming. The project facilitated exit from agriculture of persons and the consolidation of farm holdings. A secure land book system of title registration was established throughout the country, linked to a cadastre. This provided a single window for all property transactions. Procedures were streamlined. Within the space of two years the time taken to register a sale was cut from 30-60 days to 10 days.[30] Recorded real estate transactions more than doubled between 2003 and 2006; then doubled again in 2007. The number of mortgage loans recorded by the National Bank of Romania increased from 1,948 in 2001 to 82,675 in 2005.

4.21 **Tajikistan** took a different path. Farms were restructured but the government retained ownership of land, leasing it to farmers for cultivation. As in Azerbaijan, the Bank used a pilot approach, starting with ten collective farms, with the intention that the model would be replicated on the 600 or so state and collective farms that remained in operation nationwide.[31] The ten pilot farms were divided into 5,872 individual and family farms. Holdings were allocated by lottery and, similar to the Azerbaijan project, farmers found this to be a fair and equitable way to allocate land rights. Land maps were updated, parcels were demarcated and numbered, leasehold land use certificates were issued and records were computerized. The land use certificates were at first expensive; but under the follow-on project the cost per certificate was reduced from US$120 to US$7. Start-up grants tied to the purchase of agricultural inputs helped farmers to begin operating. From this technical perspective the project succeeded and the approach taken lends itself to adoption throughout the country (although the Bank could have a done a better job in publicizing the results—IEG found that other donors were not familiar with the model).[32] The Tajikistan project was less successful overall than its Azerbaijan counterpart. The Bank had to work within the prevailing limitations on tenure security. According to the 1996 Land Code, farmers were entitled to lease the land for 99 years; the lease right could be transferred through sale or inheritance and sub-leasing was permitted. This arrangement is intrinsically no more or less conducive to economic efficiency than private ownership; but it will not be efficient if the lease right is not properly enforced. Leasehold tenure was far from secure in Tajikistan and when IEG assessed the project in 2008, government was still able to revoke leases when land use was deemed “inappropriate”.[33]

4.22 Around 80 percent of the land covered by the project was located in cotton areas; and it is in these areas that farming operations were most tightly constrained. Following the 2002 decree bearing on restructured family farms operators were, in principle, free to grow what they want; in practice, farmers in cotton-growing areas still needed to meet cotton quotas—they had little freedom to diversify—and they needed to follow a central plan, which

29. Romania, GCP, PPAR, p. 10.
30. Romania, GCP, PPAR, p. 14.
31. Tajikistan, FPSP, PPAR, p. 5.
32. Tajikistan, FPSP, PPAR, p. 12.
33. Tajikistan, FPSP, PPAR, p. 6.

determined when cotton was sown, watered and harvested.[34] It was not uncommon for local governments to seize the land of farmers who failed to meet their cotton quotas. Farmers in non-cotton growing areas close to markets in Dushanbe and in the hills were able to make their own cropping decisions and buy seeds and fertilizer on the market. Farmers in cotton-growing areas were obliged to rely on approved brokers to provide them with overpriced, low-quality inputs at high rates of interest; and the price paid to them at the gin was below the market rate. Also, the one-time startup grant provided by the project was not enough to offset the longer-term constraints posed by the limited access to, and high cost of, credit and farm inputs. The project did not finance farm machinery; the machines inherited from the collective farms were too bulky and too dilapidated to be of much use on the new, small-scale holdings. These factors reduced the project's contribution to raising farming efficiency.[35]

4.23 IEG concluded that in preparing the Tajikistan project the Bank was too willing to use the Azerbaijan model as a blueprint, paying insufficient attention to the differences in the incentive regime of the two countries. However successful the project was in confronting the technical challenges of restructuring, titling and registration, the constraints on tenure security, crop diversification and investment in farming were not much alleviated.

Rural Finance

4.24 Following the collapse of the centralized system for financing agriculture in the early 1990s, institutional credit and other financial services to farmers and rural enterprises (e.g. savings accounts) were virtually nonexistent. The new cohort of commercial banks provided only short-term loans at very high interest rates, mainly for trade. Prudential regulation and competent supervision to govern banking services was still being refined, and commercial bank outlets in rural areas were few. The operations of non-bank financial intermediaries (including microfinance institutions and leasing companies) were scattered, small-scale and unregulated. Access to financial services by prospective rural clientele thus remained severely limited as the projects were being prepared.

4.25 The five projects under consideration in this report covered the spectrum of transition-era financial interventions. All five offered a farm credit line, two through commercial banks (Armenia ARSP, Georgia ADP), two through state-owned banks (Azerbaijan FPP, Tajikistan FPSP), and one through an agency not yet identified when the project was approved (Azerbaijan, ADCP). Three projects were designed to support lending to agribusiness and rural non-farm enterprise (Azerbaijan ADCP, Georgia ADP and Armenia ARSP). In each case an effort was made to scale up the volume of funds for on-lending during the life of the Bank credit, with provision made for relending the proceeds of loan repayments. Institutional development was a feature of all projects (except Tajikistan FPSP), involving the expansion of branches and mobile banking units into rural areas. Two of the projects (Armenia ARSP and Georgia ADP) offered savings facilities to sub-borrowers.

34. Tajikistan, FPSP, PPAR, pp. 7-8.
35. Tajikistan, FPSP, PPAR, p. 13 & p. 16.

4.26 There were significant successes. Apart from the Georgia ADP and the Azerbaijan FPP, repayment rates exceeded 95 percent, largely in response to improved regulation and supervision. To varying degrees, all five projects contributed to the development of a credit culture, something that had not existed during the Soviet era. The following paragraphs examine specific features of the projects covered in this review.

4.27 In the **Armenia** project the eligibility criteria for financial intermediaries to participate in the project were kept fairly loose, a pragmatic adjustment to the shortage of suitable candidates. The vetting process failed to exclude weak contenders. Five of the 8 participating institutions were wound up or restructured during the commercial bank consolidation of 2001-2002. IEG concluded that the Bank should have taken more steps to ensure that participating intermediaries had a clear plan in place to meet the Basel capitalization requirements within a reasonable period—or be excluded from the project later on. Moreover, intermediaries should have been expected to make adequate provisions for liquidity; and to adopt international accounting standards. Also, before implementation began the laws bearing on moveable and immoveable collateral needed tightening.[36]

4.28 In **Azerbaijan**, the first of the two project's assessed (FPP) launched a credit pilot that worked through the state-owned Agroprombank. Given that this was the only bank with rural outreach it was an obvious choice. But although Agroprombank had experience in lending to individual farmers its performance under the auspices of FPP was mixed. Complicated loan application procedures undermined farmers' trust. Nevertheless, the credit component of the project was fully disbursed and over 90 percent of loans were repaid. The follow-on project (ADCP) promoted the creation of credit unions (formal, legal entities) and (small, informal) borrower groups, with a view to increasing the depth of intermediation in rural areas. The project created an agency specifically to administer this credit initiative, with limited success. First, the agency was so risk averse that the scope for experimentation was limited. Second, the high fee for licensing credit unions (US$5,600) deterred applicants. Third, not enough attention was given to designing an exit strategy—it was unclear what would take the place of this project-specific entity once implementation ended. The ADCP credit component got off to a slow start but eventually the output targets—numbers of credit unions and borrowers groups created, volume of lending, loan recovery—were all amply exceeded. The ADCP follow-on operation took the process a step further, and more credit unions and borrower groups were created.

4.29 While FPP and ADCP both substantially achieved their rural finance objectives, some problems remained. Farmers interviewed by IEG drew attention to the following shortcomings:

- Periods for seasonal credit were too short;
- Seasonal credit often arrived too late for purchasing inputs;
- There was a lack of medium-term and long-term credit, hampering crop diversification and on-farm investment;
- Individual credit limits were too small;
- Credit unions did not take deposits;

36. Armenia, ARSP, PPAR, p. 10.

- The credit ceiling for credit unions and borrower groups was too low.[37]

4.30 In **Georgia**, an attempt was made to increase farmer access to credit by promoting credit unions; and to increase commercial bank lending to agribusiness. Both efforts fell short. Ten credit unions were set up at the outset. At first, they performed well. Encouraged by this success, the central government made pre-election promises that there would be 'a credit union in every village'. In 1998-1999, 164 credit unions were created, with 12,231 members. The network expanded so rapidly that sustainability was compromised. The project design did not spell out sound criteria for credit union startup, and not enough was invested in training managers and ensuring adequate oversight. Following the mid-term review a regulatory body for credit unions was established in the National Bank of Georgia but the necessary supporting legislation was not drafted. A Credit Union Law was being prepared when IEG visited the country in November 2008 but it had yet to be submitted for review by the Parliament's Banking Committee. Only 7 credit unions remained in operation; IEG was informed that just two of these were viable.[38]

4.31 The project also included a component to promote lending by commercial banks to agribusiness. Eight banks participated in the project, making loans to canneries, wineries and other agribusiness processing firms. Results were not sustainable. Two of the 8 banks were caught up in the Russian financial crisis and were subsequently liquidated. Instead of being made available for fresh lending, the proceeds of loan repayments were transferred to the state budget, contrary to the aim of encouraging reflows. Based on its review of loan approval and macroeconomic data IEG concluded that this component made only a negligible contribution to financial deepening. Problems were as follows:

- The eligibility of banks wishing to participate was not properly vetted;
- The staff of the participating banks were not properly trained;
- The appraisal of loan proposals was insufficiently rigorous: the business plans of agribusiness borrowers were often not closely inspected; and
- The Bank's Development Credit Agreement was not sufficiently specific about the provision for reflows.[39]

4.32 In **Tajikistan**, the project set up six credit institutions, each in the form of a Non-Banking Financial Organization (NFBOs) as classified within Tajikistan's legal system. The interest rate charged the farmers was high and difficult to repay from traditional agricultural activities. Interest rates varied between 30-37 percent depending on the NFBO (with an inflation rate estimated at 12 percent in 2003 and at 7.5 percent in 2006). IEG found that NFBOs were making a profit and were on schedule with the repayment of their US$200,000 line of credit. Repayment rates were 100 percent at first but dropped subsequently. Half of the credit extended went to small businesses, the rest to larger farm and non-farm enterprises. More than 15 percent of credit applicants were women (falling to 10 percent by 2007). IEG

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37. Azerbaijan, FPP & ADCP, PPAR, pp. 12-13.
38. Georgia, ADP, PPAR, pp. 20-21 and pp. 25-26.
39. Georgia, ADP, PPAR, pp. 19-20 and p. 25.

found that the constraints on farmers' freedom to determine cropping patterns (see paragraph 2.7 above) substantially undermined the enabling effect of easier access to finance.

4.33 The project included a component to allocate one-time grants to farm families of up to US$300 per hectare (with an upper limit of US$600 per family). These were intended to help farmers purchase critical farm inputs. To obtain grants farmers needed to show proof of local residency and a land certificate; also their farm land had to be irrigated and membership of a water users association was required. A beneficiary survey conducted in 2005 found that out of a randomly selected sample of 100 family farms spread across the ten FPSP pilot areas, 98 percent received a one-time grant. While 54 percent of those surveyed had utilized the grant to buy farm inputs for the next cropping season, 38 percent had used it to improve housing, and 66 percent had used some of the grant funds to meet family needs. IEG found that the one-time grants were necessary but insufficient; there needed to be a longer-term guarantee of access to finance, inputs and machinery.[40]

5. How satisfactorily did the Bank perform?

5.1 Quality at entry was sometimes hampered by an over optimistic assessment of local capacity. The design of monitoring and evaluation was often schematic. In the early phase of project implementation supervision often needed to be more intense. These important shortcomings aside, Bank performance generally stood out for the depth of analysis underpinning its interventions and the spirit of pragmatism and flexibility that it brought to bear.

5.2 The ratings of Bank performance are mainly positive, although somewhat less so for quality at entry than for supervision (Table 5).

Table 5: Bank Performance Ratings

	Overall	Quality at Entry	Supervision
Armenia, ARSP	***Moderately Satisfactory***	***Moderately Satisfactory***	***Moderately Satisfactory***
Azerbaijan, FPP	***Satisfactory***	***Satisfactory***	***Satisfactory***
Azerbaijan, ADCP	***Satisfactory***	***Satisfactory***	***Satisfactory***
Georgia, ADP	***Moderately Satisfactory***	***Moderately Satisfactory***	***Moderately Satisfactory***
Romania, GCLR	***Satisfactory***	***Moderately Satisfactory***	***Satisfactory***
Romania, ASSP	***Satisfactory***	***Satisfactory***	***Satisfactory***
Tajikistan, FPSP	***Moderately Satisfactory***	***Moderately Unsatisfactory***	***Satisfactory***

Source: PPARs

40. Tajikistan, FPSP, PPAR, pp. 17-18.

5.3 *Well-focused analysis*. Particularly relevant were the series of country-focused Agriculture and Food Sector Reviews commissioned by the Bank from the mid-1990s. These reviews recognized that a piecemeal approach to agricultural restructuring would not be successful given the broad menu of multi-dimensional and interlinked investments required to support the rural transition and the need to rapidly dismantle the collective farms and associated input supply industry. The reviews tracked the early reforms in agricultural restructuring and assessed on-going pricing and trade reforms. They allowed to Bank to clarify the broad outlines of its rural investment support in the transition economies and to use this as a guide for designing specific operations.[41]

5.4 *Justified switch from policy-based to investment lending*. The Bank initially experimented with sector adjustment lending, with a view to consolidating the reforms being supported by SALs, FSALs and private sector incubator operations. This approach was abandoned once it became evident that, for government and rural target populations alike, there were substantial needs for training, technical assistance and core infrastructure investment. Policy reform could not be tackled either before, or in isolation from, actions taken to address these needs. From the mid-1990s onwards the Bank switched emphasis from policy-based operations to investment project lending for agricultural.[42]

5.5 *Effective use of mid-term reviews*. Being designed to address the still very unfamiliar rural policy environment associated with the scrapping of state-managed industrial agriculture, the Bank's initial portfolio of investment projects were pilots in the true sense of the word, including all seven of the projects under review. While the development objectives of each project supported CAS objectives, the project designs (and loan/credit agreements) maintained sufficient flexibility to facilitate substantial modifications when needed to improve implementation performance and anticipated development impacts. This flexibility was manifest in the mid-term reviews. All of the seven projects underwent mid-course restructuring, ranging from moderate to severe. Closing dates were extended for all seven, ranging from 12 months in the case of the Romania ASSP to 38 months in the case of the Georgia ADP.

5.6 *Good use of PIUs*. Implementation of the entire portfolio under review was facilitated by the establishment of Project Implementation Units (PIUs). Though there was initial resistance to the roles assigned to the PIU's, more so in some countries (e.g., Tajikistan) than in others (Armenia), as the implementing agencies began to better understand how to service the advisory and financial needs of smallholders, the stature of PIU's increased commensurately – to an extent that they have been given semi-permanent status by the Governments of Romania, Georgia, Armenia and Azerbaijan.

5.7 *Emphasis on learning by doing*. The seven assessed projects were designed as extended pilots to demonstrate techniques for administering programs for small farms and for providing advisory and technical support in the wake of decollectivization. The designs for all seven projects aimed to consolidate gains realized thus far and to lay the foundations for a

41. World Bank (2000).
42. World Bank (2000); OED (2003).

more viable structure of private farms and agro-enterprises. There were follow-on operations for all seven projects, with a view to consolidating the positive results obtained and incorporating lessons learned (Table 6).

Table 6: Follow-On Projects

Country	Project ID	PPAR Project Name	Approval Year (FY)	Closing Date	Subsequent Bank Group Projects
Armenia	P035806	Agricultural Reform Support Project (ARSP)	FY98	6/30/2005	**FY05 Rural Enterprise & Small Scale Commercial Agric. Devt.**
Azerbaijan	P035813	Agricultural Devt & Credit Project (ADCP)	FY99	6/30/2006	**FY06 Agricultural Development and Credit Project 2**
	P040544	Farm Privatizat’n (FPP)	FY97	12/31/2003	**FY04 Rural Investment Project**
Georgia	P008415	Agricultural Devt Project (ADP)	FY97	6/30/2005	**FY02 Agric. Research, Extension and Training Project**
Romania	P043882	Agricultural Support Services (ASSP)	FY00	12/31/2005	**FY05 Modernizing Agricultural Knowledge & Info Systems**
	P034213	General Cadastre & Land Registration	FY98	6/30/2006	**FY07 Complementing EU Support For Agric. Restructuring**
Tajikistan	P049718	Farm Privatization Support Project (FPSP)	FY99	11/30/2005	**FY00 Rural Infrastructure Rehabilitation Project FY04 Community Agriculture & Watershed Mgt. Project**

5.8 *Solid follow-up*. The experience with the Romania GCLR illustrates the pay-off to strong Bank commitment. In 2004, following consistent advice from Bank portfolio review and supervision missions and a change of government, Romania finally unified responsibilities for implementing the general cadastre and land registration components of the project in a single, semi-autonomous and self-financed government agency. There was a rapid turnaround, the project exceeding most of its appraisal targets by an ample margin.[43]

5.9 *Weak monitoring and evaluation*. The Bank had a key responsibility for ensuring that M&E was adequately addressed in project design. Technical assistance for monitoring and evaluation (M&E) featured in all the assessed projects but, with some exceptions (e.g. monitoring of the competitive grant schemes in Romania ASSP) the systems established were generally weak. Monitoring of implementation progress was reasonably successful but rigorous impact evaluation either got underway too late in the project cycle for results to be available for these assessments; or was simply not attempted.

5.10 *Difficult attribution of sector outcomes*. It is not possible to determine how much the growth of agricultural outputs and productivity was the result of Bank interventions. Other

43. Romania, GCP, PPAR.

players such as the IMF, the European Union and the European Bank for Reconstruction and Development were also heavily engaged, both in terms of providing finance and in promoting policy and institutional reform. Several exogenous factors also influenced outcomes: ranging from the fallout of war (Armenia, Azerbaijan, Tajikistan) to the Russian financial crisis (1998-1999), to natural disasters (frost devastation in Armenia, prolonged drought in Georgia), and more positively, the stimulus provided by the prospect of accession to the European Union (Romania).

6. Lessons

(a) General Lessons

6.1 **Given the large attitudinal shift involved in the agricultural transition, government officials and project staff needed substantial technical assistance and training before operations could be expected to succeed**. Governments showed strong commitment to the preparation of the projects under review. Yet once the loans were approved, delays in declaring effectiveness were experienced for several of the loans, while during early implementation even staffs of the project units often did not fully understand how specific project activities linked to objectives. If this was true at the center, it was even truer in the localities where projects were implemented. Consultant services were not always used as effectively as they might have been (this was the case for credit operations in the Armenia ARSP and Georgia ADP). There was an attitudinal lag: most government officials in the agricultural ministries still exhibited a command and control mentality with respect to agricultural development.

6.2 When the leadership of project implementation units was skilled and motivated and their staffs were well trained, project implementation generally proceeded smoothly once some experience with the Bank's procedures had been acquired. This was especially the case with project units for the Romania ASSP and Georgia ADP, whose performance improved rapidly once professionally adept managers were recruited to replace earlier political appointees. Similarly, the appointment of a technically trained person to manage a purely technical agency such as the Romania's ANCPI for the GCLR Project resulted in a rapid acceleration of project implementation.

6.3 **In the complex and rapidly changing ECA environment, sound donor coordination was critical**. The two Romania projects rebounded from a very poor start once the Bank and other members of the donor community began working together to help Romania meet the European Union accession requirements. Together they helped Romanians to take advantage of the grants-in-aid made available under the Community's special accession program for agriculture and rural development (SAPARD).

6.4 Where donor coordination was less sharp, progress was slow. Management of the land registration component of the Georgia ADP was, at times, complicated by conflicting donor expectations that proved hard to resolve. In Tajikistan, it took the Bank until 2003 to realize that if donors spoke with one voice to the government on land reform, it might create conditions more favorable for the farms that the project had restructured.

(b) Lessons from the Sub-sectors

Agricultural and agribusiness services

6.5 **Farmers and rural business owners will respond enthusiastically to innovative technologies corresponding to their needs.** Experience from the assessed projects showed that agricultural research and extension works best when it is consultative and demand-driven. In Romania, the competitive grant approach proved to be an excellent vehicle both for generating applied research findings and extending these to farmers. But, as Armenia showed, the competitive grant scheme can also lack the strategic focus needed to effect a comprehensive strengthening of agriculture research. To respond to farmers' needs, competitive research grants should be open to all applicants, including non-governmental organizations, universities, and government research institutes. For pure farm extension work, the financial sustainability of advisory services in a setting with many small, semi-subsistence farmers can only be achieved if government acknowledges its responsibility to provide these citizens with appropriate and effective advice and information. This will probably entail some measure of subsidy given the low incomes of many of the clients; but that need not preclude use of private contractors to deliver the service.

Land administration

6.6 **The Bank's international experience with land policy issues has strengthened the design of projects in ECA; but there is no uniquely correct model for land administration or land reform and effectiveness depends on responsiveness to local conditions**. Whether grounded in restitution (Romania), or in the granting of more or less equal allotments to agricultural workers and other rural residents (South Caucasus), or being limited to the transfer of usufruct rights only (Tajikistan), each program was designed to accommodate socio-political necessities in the aftermath of de-collectivization. In Tajikistan however the project design was overly ambitious and not tailored enough to the local circumstances.

6.7 **It makes sense to adopt a unified approach to land administration**. Cadastral and land recording/land registration services are both technology and information intensive. These two services need to be closely linked and preferably digitalized to increase efficiency and enhance access. The unified approach worked well in each of projects reviewed here that had a land administration component (Azerbaijan FPP and ADCP; Georgia ADP, and Tajikistan FPSP).

Rural finance

6.8 **With appropriate regulation, technical advice and staff training banks that lend to rural areas can operate sustainably.** To realize the potential from scaling up commercial bank lending to rural areas, it is essential: (a) to confirm that supervision and prudential regulation has been developed and can be effectively enforced; (b) to "prequalify" the banks deemed eligible to participate in tendering for loan proceeds, based on rigorous prudential examination; (c) to ensure rigorous monitoring of the credit program, with the assistance of international expertise if necessary; (d) to ensure that the terms, maturities and grace periods of loans are proportional to the expected returns and the estimated economic life of the investment; and (e) to allow intermediaries to administer credit reflows in accordance with their own terms and conditions.

6.9 **The non-bank financial intermediaries have an important role to play in rural areas; but it is important to be realistic about their capabilities**. There is a strong demand for locally-based credit facilities (such as credit unions) in rural villages, and for rural financial institutions that take credit. These institutions must be savings-driven and encouraged to diversify their loan portfolio rather than focus only on farm lending. Sustained, strong support in the form of training and supervision is required if they are to evolve into viable financial institutions. The volume of lending needs to keep step with the growth in management skills and savings mobilization among members (overly-rapid expansion in the Georgia ADP and ambitious targets in the Azerbaijan ADCP considerably stressed implementation of farmer credit programs in these two projects). In general, these projects have shown that small village-based credit cooperatives are not an appropriate mechanism for large-scale credit delivery.

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ANNEX 1: ARMENIA - AGRICULTURAL REFORM SUPPORT PROJECT (CREDITS-C30350 & C30351)

Summary

The Armenia Agricultural Reform Support Project (ARSP) was the first Bank-assisted project to support the transition of Armenian agriculture from a centrally planned and publicly owned sector to privately owned commercial farming. The project also helped implement the Bank's revised regional strategy for agriculture and rural development. This strategy eschewed further agricultural adjustment lending, looking to multi-activity investment projects as the main vehicles for accelerating farm productivity and rural enterprise development.

In Armenia, during the two years following the break-up of the Soviet Union, lands were distributed mainly to collective farm workers or their offspring. The process was rapid and had several desirable features: (i) the state and collective farming system was broken up, with these lands converted to privately owned holdings; (ii) the new private holdings could in principle be inherited, sold or leased; and (iii) there were no longer official restrictions on what could be produced and what could be sold.

The ARSP supported a first phase of reforms to Armenia's agricultural technology system and its rural financial markets. The project introduced private contracting for both applied research programs and farmer information (extension) services, with a view to boosting farm productivity. It also offered business development services for rural enterprises. The uptake of recommendations from both the farm and enterprise advisory services was facilitated by sub-loans from private intermediaries, a new departure for rural Armenia.

Outcome is rated *moderately satisfactory*. The project's development objectives were substantially relevant. At project inception, agriculture still played an important role in the economy and support for the agricultural technology system was critical to the sector's development. The tens of thousands of rural smallholders newly endowed with land generally lacked the skills to farm it. The project made a contribution to the objective of developing private sector farming and agro-processing, mainly through establishment of an agribusiness development center (subsequently successfully privatized). Although the project exceeded its targets of expanding credit to the farming sector and a substantial amount of lending was recycled as reflows, more could have been achieved in this area, had participating banks been better screened. In the event, five of 8 participating banks were liquidated or restructured following the shake-up of Armenia's banking system after the Russia crisis. Attainment of the third objective—increasing the efficiency of agricultural services—fell short of expectations, partly because the introduction of a competitive grant scheme for agricultural research failed to have the catalytic effect that was hoped for. On the other hand the available evidence suggests that the project reaped a high rate of return, based on the performance of the frost damage and credit line components, as well as high returns on new farming technologies supported by the project.

The Risk to Development Outcome is rated *significant*. The sustainability of project-sponsored institutions is open to question. While the agribusiness development center continues to thrive, performance of the agricultural support centers under the follow-on RESCAD project has been poor. The banks that initially participated in the project withdrew, preferring to lend from their own resources rather than use project funds. There has been little institutional strengthening in the wake of credit closing.

Bank Performance is rated *moderately satisfactory*. Quality at entry had some shortcomings: the credit line for farmers was under-designed; arrangements for restructuring the agricultural research system were insufficient; and there was limited provision for monitoring. Project supervision had to contend with fall outs from external shocks to the Armenian economy and severe frost damage. Supervision was thorough and there was continuity in team composition.

Borrower Performance is also rated *moderately satisfactory* based on the credit effectiveness delay, shortfalls in counterpart funding, unsatisfactory handling of the technology component, and procurement problems.

This project assessment suggests three broad lessons.

Lesson 1: Projects that involve a major restructuring of financial institutions and that face limited Borrower capacity need to meet the following conditions:

- Clear and rigorous criteria for determining whether commercial banks are eligible for tendering in the project;
- “Prequalification” of financial intermediaries deemed eligible to participate in tendering for loan proceeds, on the basis of a thorough prudential examination—supervised by the Bank where necessary;
- Continuous monitoring by the Bank to ensure that eligibility and performance criteria are met;
- Hiring of banking or credit specialists to oversee the processes for determining eligibility and carrying out tendering.

Lesson 2: In order to provide the right incentives it is important to allow participating financial intermediaries to administer credit reflows in accordance with their own terms and conditions. Provided that participating banks meet the regulatory requirements approved by the Bank, and articulated through the project design, there is no case for paternalism in dictating how they should employ the returns to their lending activity.

Lesson 3: Projects that are designed to support reform of the national agricultural technology system need to be based on a clear agreement with the various concerned government agencies about the implementation strategy and arrangements for coordination; this agreement needs to be reached before the loan or credit is made effective.

Principal Ratings

	*ICR**	*ICR Review**	*PPAR*
Outcome	Satisfactory	Satisfactory	Moderately Satisfactory
Risk to Development Outcome	Not Rated	Not Rated	Significant
Sustainability	Likely	Likely	Not Rated
Monitoring and Evaluation	Not rated	Not rated	Modest
Bank Performance	Satisfactory	Satisfactory	Moderately Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Moderately Satisfactory

*The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.
**As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.
***As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.

Key Staff Responsible

Project	*Task Manager/Leader*	*Division Chief/ Sector Director*	*Country Director*
Appraisal	Mark Lundell	Kevin Cleaver	Judy O’Connor
Completion	Gotz Schreiber	Laura Tuck	Donna M. Dowsett-Coirolo

Background

Overview

1. After 1991 Armenia underwent an abrupt shift from central planning to a full market economy. It recovered relatively quickly from the initial shock of transition and, over the past half decade, the economy has grown at an average annual rate of 10 percent. After independence the loss of guaranteed input and output markets in the Former Soviet Union severely affected farmers and agro-processing industries. The agricultural sector came to serve as a safety net employing nearly three times as many people as before independence, the result of an inflow of refugees following the war with Azerbaijan[44] and the collapse of non-agricultural income sources. The subsequent growth of the sector has been driven by productivity gains, due largely to liberal market mechanisms, private ownership of land, export opportunities and (limited) investments in rundown infrastructure.

2. The share of agriculture value added in GDP rose from 17 percent in 1990 to a peak of 37 percent in 1996, and then fell to 20 percent in 2006 (Table 1). The terms of trade moved against agriculture following the 1998 Russia crisis, with the prices of industrial goods and services increasing consistently. The growth of jobs outside agriculture and the process of financial deepening proceeded more slowly in Armenia than in the new EU member countries, although prospects have recently improved. Agriculture's contribution to exports (only 1.6 percent in 2002) has remained limited, reflecting weak comparative advantage.[45]

3. Agriculture remains an important source of rural household income. Between 2002 and 2004 46 percent of the labor force was employed in full- and seasonal farm operations.

Table 1. Armenia: Agricultural Sector Performance Indicators

Agricultural GDP Growth (% p.a.)			
1991-93	**1994-96**	**1997-00**	**2001-06**
-5.7	**3**	**3**	**7.5**
Agricultural Value-Added (% of GDP)			
1990	**1996**	**2000**	**2006**
17	**37**	**26**	**20**

Source: World Development Indicators

4. Nationwide, growth and income transfers under Armenia's system of family assistance allowances resulted in a sharp decline in poverty. The share of the population that was poor fell from over half to 27 percent between 1998 and 2006, while the rate of extreme

44. It is estimated that Armenia absorbed over 300,000 refugees, about 10 % of the country's entire population. Though most originated from urban areas and had few agricultural skills, the very large bulk of refugees were resettled in rural areas and given private plots."
45. For example, fruits and vegetables—a major farm exportable—had a Revealed Comparative Advantage of only 1.1 in 2003. (An RCA > 1.0 demonstrates comparative advantage.)

poverty dropped from 21 percent to 4 percent.[46] Income inequality also lessened. In 1999, the national Gini was 0.57 but by 2006 the coefficient had fallen to 0.37.[47] According to the most recent poverty assessment, the share of the rural population living beneath the poverty line fell from 48 percent in the late 1990s to 23 percent in 2005. The share of rural residents in extreme poverty fell from 14 percent to 2 percent.[48]

5. The countryside has benefited from overall economic growth but less so than metropolitan areas. Commercialized agriculture on larger, consolidated holdings has begun to spread in Armenia, especially in the Ararat and inter-montane valleys. However, owing to the limited off-farm employment opportunities, rural small-holders depend heavily on their small farms for survival. Agriculture continues to function as a social safety net for the rural poor, retaining a strong subsistence orientation—less than half of output is marketed.

The Agriculture Sector Context

6. At the start of the 1990s, the key issues in the agricultural sector included the poor condition of the irrigation system and state ownership of agro-processing enterprises. Agricultural reform started early; the Bank's support to the reform program—comprising analytical work and six investment credits—was generally well conceived and successfully executed, but with some shortfalls. The integrity of a major portion of the irrigation system was restored, water losses were reduced, Water User Associations were established, and efforts were made to enhance the capacity of the Ministry of Agriculture to manage the system.[49] Land markets and the use of land as collateral expanded, with the number of land transactions doubling from 2000 to 2002. However, the sustainability of the irrigation system was uncertain.

7. The Bank's index of agricultural reform shows Armenia with a score of 7.4 in 2001, higher than any other CIS country; the average for all 12 former Soviet Republics was 5.2.[50] Although the sector's contribution to total exports remains small, in recent years, exports of processed foods such as tomato paste, cognac, and processed fruits have increased substantially, aided by the privatization of ago-processing enterprises.

8. Raising agricultural productivity remains central to income growth in the rural areas given the limited job alternatives. The rural labor force contains a large proportion of semi-

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46. Republic of Armenia, 2008, Table 2.5.
47. Republic of Armenia, 2008, Table 2.1.
48. It is of interest that the largest reduction in rural poverty occurred in the highland and mountain villages (i.e. above 1300 meters elevation). Residents in these villages not only benefited from Armenia's family assistance allowances and a disproportionate share of remittances from "guest workers abroad", but also witnessed an expansion of rural non-farm enterprise activities in the trade, services and light manufacturing sectors. This suggests that the general improvements in Armenia's investment climate are also beginning to penetrate Armenia's rural areas, as reflected in the near tripling (tough still limited) of rural borrowing from formal sources between 2002-2006 (recorded in RA 2008, Table 2.16 and para. 120).
49. In 2003, responsibility for irrigation and drainage development was transferred to the Water Resources Commission.
50. Bank – ECSSD; The Agrarian Economies of Central and Eastern Europe and the Commonwealth of Independent States – Situation & Perspectives, 1997 (World Bank Discussion Paper #387, June 1998).

subsistence and elderly farmers operating small, fragmented farms.[51] There is a growing commercialization of agriculture, accompanied by the consolidation of operational holdings, in the Ararat Valley and in some of the country's more fertile inter-montane zones. But improving the effectiveness of agricultural extension, credit, and input supply remains essential for the development of a viable agricultural economy; this goal continues to underpin the Bank Group's sector strategy for Armenia.

The Banking System & Rural Financial Markets

9. Drawing on the results of a recent Article 4 consultation, the Staff Appraisal Report (paragraph 1.13) reported that the monetary crisis and currency depreciation prevailing in Armenia in 1993-94 eroded the real values of nominal claims, including the bank's deposits and loan portfolios, as well as confidence in the currency and the banking system. In order to restore confidence in the banking sector several measures were introduced by the government under an IMF financial restructuring program. A key feature of the program was the establishment of the independence of the Central Bank of Armenia (CBA) to conduct and manage monetary policy. This was followed by a new Banking Law that gave the CBA's supervisors sufficient authority to enforce prudential rules, regulations, and sanctions, and the power to regulate financial markets, and to liquidate banks. These expanded powers strengthened the legal and regulatory framework for banking in general. Under the IMF program, technical assistance was provided to the CBA's banking supervision department to help strengthen its supervisory and regulatory capabilities.

10. The preparation team also demonstrated that credit resources flowing to the rural sector were well below the levels which the estimated credit worthiness of the sector would justify (SAR, paragraph 1.15). A pre-project survey (SAR, p.7) found that the constraints to expanded bank lending to agricultural sector in mid-1990s remained formidable, including:

- a lack of clear legal protections for creditors in the execution of judgments against defaulters, which limits the range of assets which borrowers can offer and banks will accept as collateral; this limits borrowers' capacity to obtain debt and is particularly evident in the case of residential real estate from which residents effectively cannot be evicted, even after due process of law;
- legal confusion caused by the issuing of rural land titles in the name of a family and not of a particular individual;[52]
- very shallow real estate markets with high price uncertainty that compel banks to require very high collateral coverage ratios (collateral worth three to four times the amount of the loan);
- high profits in trading, which tended to exclude lower yielding agricultural and industrial borrowers from the very shallow market for formal credit; and
- centralized management procedures in at least some of the former state banks which limited the ability of branch managers to mobilize deposits and make loans under their own authority.

51. World Bank (2005).
52. This constraint was removed under the Bank-supported Title Registration Project, a companion operation originally prepared as an integral part of ARSP.

11. Following independence in 1991, the number of banks climbed rapidly—reaching 80 by 1994. Many banks were poorly performing and undercapitalized. However, with assistance from the IMF and the Bank, the Government tightened up regulation, and many of the weaker banks closed. Adoption of the Basel convention's capital adequacy requirements led to recapitalization of surviving banks, while a loan provisioning program helped clean up bank portfolios. The rapid restructuring of the sector also hastened bank privatization, which was largely complete by 2000. Foreign bank ownership was permitted from 1995 onwards. By 1998 (when the project was approved), there were 38 banks; although following the IMF-Bank supported Financial Sector Action Plan this number fell to 20. The ten largest banks continue to account for considerably more than half of total assets and nearly three-quarters of loans.

12. By 2000—midway through the process of regulatory reform and the shake-out in the commercial banking sector[53] —most banks were on a sound financial footing. Recapitalization increased capital to risk–weighted assets ratios (Table 2). While Armenia's commercial banks had large numbers of non-performing loans, significant progress was made in improving the quality of loan portfolios in 1996-97. The level of nonperforming loans had fallen to around 6 percent by December 2000.[54]

Table 2. Armenia: Banking System Indicators

	1997	***1998***	***1999***	***2000***	
Variable	***March***	***March***	***March***	***March***	***December***
Total capital to risk-Weighted assets ratio	**29.4**	**33.6**	**29.6**	**29.0**	**25.0**
Total non-performing Loan to total loan ratio	**24.7**	**12.1**	**14.2**	**5.6**	**6.2**

Source: World Bank-OED 2002, p.62

13. Armenia's banking sector (and the financial sector at large) remains small. The ratio of banking sector assets to GDP was still only 19 percent in 2004, substantially below the CIS average (30 percent in 2003). Fifty-four non-bank financial intermediaries accounted for 3 percent of total financial system assets, while capitalization on the stock market was only 1 percent of GDP. The small size of the financial sector limits its ability to act as an engine of growth.

Project Objectives & Design

14. Appraised in December 1997 and approved in January 1998, the Agricultural Reform Support Project (ARSP), was the first Bank-assisted investment in Armenia aiming to enhance agricultural and agribusiness services, and to offer a credit line for small farmers.

53. Two years into the ARSP's implementation period.
54. IMF, "Republic of Armenia: Recent Economic Developments and Selected Issues," May, 2001; "Financial System Stability Assessment," March 2001.

15. According to the appraisal report the project's "overall objective" was "to increase agricultural productivity in Armenia by supporting the development of private sector farming and agro-processing". The development credit agreement identifies three specific objectives that will be used by this PPAR.[55] They are:

- Support the development of private sector farming and agro-processing,
- Improve and expand credit in the farming sector, and
- Increase the efficiency of providing agricultural services relating to research, education, information and extension.

16. The project originally had three components:

Component 1: Agribusiness Development Center (ADC): (Appraisal amount US$ 1.3 million, $0.3 million actual) – designed to assist entrepreneurs and managers in upgrading their financial management, strategic planning and marketing skills in Armenia's post-privatization restructuring. The ADC was intended to be the focal point for technical assistance and training to the agro-industrial sector, assisting especially with the preparation of feasibility studies, business plans and loan applications.

Component 2: Credit to Farmers: (US$ 7.5 million at appraisal, $9.4 million actual) – intended to increase access to working capital and investment credits for small farms and businesses, and facilitate the development of a sustainable rural finance system. Through a line of credit, it was to provide critical access to long-term financial resources for the Agricultural Cooperative Bank of Armenia (ACBA) and other Participating Financial Institutions (PFIs) which were then facing great difficulties in mobilizing medium- and long-term deposits.

Component 3: Strengthening Agricultural Institutions: (US$ 8.6 million at appraisal, $7.8 million actual) – designed to finance critical investments needed to make adjustments in key agricultural technology, knowledge and information institutions. This component focused on services directly relevant to the newly emerging private farmers and included sustained support in the areas of rural advisory and information services as well as short-term assistance for research and higher agricultural education institutions.

17. Additionally, a Project Implementation Unit was organized, staffed and equipped (US$ 1.3 million at appraisal, $1.2 million actual), charged with responsibility for coordination, procurement and monitoring and evaluation.

18. During implementation, the original project components were not formally adjusted. However, severe weather in December 2002 led to the de-facto addition of a fourth

55. The completion report notes that: "During the preparation stage the project was envisaged to include also a title registration component, and Project Preparation Facility funds were used to prepare it, but at negotiations in December 1997 it was agreed to make this a stand-alone project. The Armenia Title Registration Project (Credit 3135) was subsequently approved and successfully implemented from 1999 to 2004" (ICR, p. 3).

component, ***Frost Damage Rehabilitation*** (n/a at appraisal, US$ 1.3 million actual) for which project funds were initially reallocated in 2003, then replenished by a Supplementary Credit (CR-30351) which was approved in May 2004. Unusually harsh and prolonged frost in late December 2002 severely damaged about 10,000 ha of vineyards and more than 13,000 ha of orchards in much of the Ararat Valley. This component financed (i) the importation of nitrogen and phosphate fertilizers for distribution on a grant basis to affected smallholders to rehabilitate trees and vines not irreparably damaged[56], and (ii) the procurement of grape vine seedlings and fruit tree saplings for replanting vineyards and orchards destroyed by the frost. Around 30,000 small farms, employing roughly 10% of Armenia's farming population, were severely affected by the frost, whose income from farming would be reduced for a prolonged period in the absence of emergency measures.

Relevance

Relevance of Objectives

19. The development objective was consistent with the Government's and the Bank's strategic approaches in the sector and was based on a substantial body of analytical work and project experience. A report ("Armenia: The Challenge of Reform in the Agricultural Sector"), prepared by the Bank in 1993/94, evaluated the early years of agricultural and land reform in Armenia, and made policy recommendations for the next phase of market-oriented reforms. The ARSP was the Bank's second rural sector project in Armenia (after the Irrigation Rehabilitation Project), and it built on the experiences gained from this earlier operation.

20. The overall objective of the ARSP project was to promote private sector development in Armenia's rural areas, while reorienting the state's role to one of strengthening the general framework for market development by providing public goods (market information and research results), as well as increasing the supply of neglected services (agribusiness education and agribusiness restructuring skills). The project also addressed the CAS objective of developing financial markets in the agricultural sector.[57]

21. The specific objectives responded to constraints faced by Armenia's agriculture sector and agroindustries in the late 1990s. Rural financial markets were poorly developed. A pre-project survey showed that people in rural areas made little use of formal banking services. Lack of bankable collateral and high loan interest rates and transaction costs kept formal lending to farmers at minimal levels. According to data provided by surveyed banks and the Central Bank of Armenia, monthly loan interest rates ranged from 7 to 9 percent. The limited bank credit available was concentrated on large loans to the food industries.[58] There was substantial unmet demand for credit among farmers and enterprises; and a considerable number of potential clients were creditworthy and could afford to borrow at the prevailing market rates of interest for secured loans.

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56. ICR, p. 17.
57. ICR, pp. 3-4.
58. SAR, paragraph 1.28.

22. There was also a need for an agricultural technology system capable of supplying small-scale private farmers with science based, market-oriented research and extension advice, responsive to the changing consumption and export requirements of a rapidly developing economy. When the project was appraised, it was government policy that the functions of research, education and extension would eventually be integrated and managed by the Armenia Agricultural Academy—then under the Ministry of Agriculture.[59] The project sought to integrate these functions by 2001.

23. The ARSP project objectives were well conceived and tailored to the constraints facing Armenia agriculture in the mid- to late-1990s. The relevance of objectives is therefore rated ***high***.

Relevance of Design

24. Design relevance varied between the project components: it rates high for the first component (which supported the Agribusiness Development Center) but only modest for the other components. Initially established as a government owned non-profit corporation under the Ministry of Agriculture, the business development services provided by the ADC responded to managers' need for knowhow and was intended to provide detailed guidance in the development of business plans and the preparation of loan proposals. This was a timely and much needed intervention. It was also appropriate that the project design anticipated the eventual privatization of ADC.

25. The design of the credit to farmers component proposed a set of eligibility criteria for participating banks that were to a large degree 'lowest common denominator', intended to accommodate the weak position of most commercial banks at the time. This approach led to implementation problems. The "gold standard" was well known: banks should ideally satisfy the BASEL 1 requirement for capitalization, as well making adequate provisions for liquidity and adopting international accounting standards. Even if full compliance with these demanding standards was not feasible in the Armenia of that time, the Bank should have set the bar higher at the outset. On the other hand, the uncertainties at appraisal surrounding the legal definitions of immovable property and movable chattel were tackled through parallel Bank-supported operations, the Enterprise Development Project and the Title Registration Project.

26. The agricultural institutions component was designed to provide support for the immediate reform and restructuring of agricultural research and the further development of education, extension, and information institutions. At appraisal, all of these functions fell to the Ministry of Agriculture and the intention was to improve the coordination among them. There were few prospects for even limited privatization of these services: private providers would probably have been deterred by the difficulty of getting farmers to pay for applied research and field trials. It was reasonable for the project to focus on strengthening public sector service provision. It could be argued that what was lacking was a unified strategy for agricultural research, education, extension and information. Rather than tackling this under

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59. SAR, Annex D.

the auspices of one project (ARSP) a multifaceted approach was taken calling for careful donor coordination. This involved, first, a major push by the United States Department of Agriculture, followed up by a substantial sectoral review and strategy development effort by UNDP/FAO. Therefore, shortcomings in the performance of this component reflect more on problems with donor coordination than the intrinsic weakness of ARSP.

27. Balancing out this with the previous considerations, the relevance of design is rated ***modest***.

28. Despite the design limitations, the project concept was valid and responded well to the needs of the country. The overall rating of relevance is ***substantial***.

Efficacy

29. The overarching objective of the project was to increase agricultural productivity and there was, indeed, a trend in this direction. Coincident with the project implementation period, per capita agricultural value added grew steadily; at the second highest rate of the five countries assessed in this report (Figure 3, main text). The project probably contributed to this outcome but it is impossible to say by how much. The mixed performance on progress toward specific objectives suggests that it would unwise to attribute too much of this productivity growth to the project.

30. **Supporting the development of private sector farming and agro-processing (*Rating: Substantial*)**. The Agribusiness Development Center was privatized in 2003, as intended when the project was prepared, and now operates as a private consulting company. It also provides general services to processors, traders and farmers under contract with the Ministry of Agriculture. The assessment mission confirmed that the ADC has been effective in providing market information and facilitating exports. It performed well in staging trade fairs in Yerevan and supporting the participation of Armenian agribusinesses at international exhibitions in Russia, China, and Latvia. In general, its work has strengthened links between suppliers and with buyers. In 2000, the ADC helped establish a national agro-input dealers association (“AgriInput”), which made available an increased supply of safe and effective agro-chemicals.[60] Overall, the ADC has successfully responded to the training and consultancy needs of agro-processors and farmers, supplying the business planning, financial management, and market advisory services needed to perform well under free market conditions.

31. **Improving and expanding credit in the farming sector (*Rating: Modest*)**. The initial plan was to work exclusively with the Agricultural Cooperative Bank of Armenia but, following appraisal, other qualifying banks were allowed to participate. The performance of the eight banks that participated in the project was uneven (Table 3). Five of these institutions were liquidated or restructured in the banking shake-out of 2001-2002 following deterioration in the quality of their portfolios; the three other banks maintained strong portfolios. To put this in perspective, more than half of all banks in Armenia failed during

60. ICR, p. 18.

this period, not merely the five participants in ARSP. Also, at project close, the repayment rate by final borrowers was over 97 percent and only 1.2 percent of sub-loans at the three surviving PFIs were overdue. Over the course of the project, ARSP supported lending amounted to 16 percent of lending to the agriculture sector. Project targets were exceeded, a total of 17,500 loans were made during the life of the project, compared to an appraisal target of 11,130. 687.

Table 3. Lending Under the ARSP Credit Line (US$ - as of June 30, 2005)

	Short-term Loans		Medium-Term Loans		Total Loans		Amount Remaining in Revolving Funds	Total Loans extended, incl. from Revolving Funds
PFI	Subloans from ARSP Credit Line	Subloans from Revolving Funds	Subloans from ARSP Credit Line	Subloans from Revolving Funds	Subloans from ARSP Credit Line	Subloans from Revolving Funds		
Operating Banks	**2,250,000**	**8,713,596**	**800,000**	**550,000**	**3,050,000**	**9,263,596**	**128,133**	**12,313,596**
ACBA	1,850,000	6,247,009	0	0	1,850,000	6,247,009	62,575	8,097,009
Converse Bank	400,000	1,957,500	800,000	450,000	1,200,000	2,407,500	55,000	3,607,500
ArdshinInvest Bank /a		509,087		100,000	0	609,087	10,558	609,087
Withdrawn Bank	**200,000**	**200,000**	**200,000**	**0**	**400,000**	**200,000**	**0**	**600,000**
Arm. Devel. Bank /b	200,000	200,000	200,000	0	400,000	200,000	0	600,000
Liquidated Banks	**1,788,035**	**2,987,546**	**2,192,453**	**328,590**	**3,980,488**	**3,316,136**	**891,043**	**7,296,624**
Ardshin Bank	250,000	403,615	0	30,000	250,000	433,615	76,126	683,615
ArmAgroBank /a	338,035	1,774,681	914,707	160,000	1,252,742	1,934,681	13,177	3,187,423
Credit Service	500,000	490,170	450,000	109,423	950,000	599,593	270,417	1,549,593
Credit Yerevan	500,000	319,080	500,000	29,167	1,000,000	348,247	401,323	1,348,247
Trust Bank	200,000	0	327,746	0	527,746	0	130,000	527,746
Total	**4,238,035**	**11,901,142**	**3,192,453**	**878,590**	**7,430,488**	**12,779,732**	**1,019,176**	**20,210,220**

/a ArdshinInvest Bank purchased the assets of ArmAgroBank, including US$600,000 under the ARSP Rural Credit Line.
/b Armenian Development Bank repaid its funds to the ARSP and withdrew from the project.

Source: ICR Table 4.3, p. 8

32. Apart from the ACBA, whose prequalification was certified by the Bank's preparation team, the other participating banks appear to have been declared eligible for tendering rather hastily. Although the Bank deployed banking experts at the critical moments of appraisal and supervision eligibility criteria were not as sharply defined or rigorously enforced as they might have been. This resulted in 18 percent ($1.7 million) of project funds that had gone to the credit component remaining to be recovered by the Ministry of Finance and Economy when the project closed.

33. At appraisal the intention was to recruit an international consultant to serve as Rural Credit Advisor, responsible for assisting the implementing unit in verifying the eligibility of would-be participating banks and monitoring the credit program. For reasons not explained in the ICR nor made clear during the assessment mission, this consultant was never engaged. This made it imperative that Bank staff supervise the prequalification for tendering process; and all the more serious when this supervision failed to materialize.

34. It is important to put the project's long-term contribution in perspective. Accounting as it did for 16 percent of all lending to agriculture ARSP made a small but significant contribution to nurturing a credit culture in Armenia's rural areas. It was part of a broader effort, involving parallel government reforms of the financial sector and the support provided by the Bank to Armenia's central bank (NBA) and commercial banks. ACBA's credit clubs

proved a useful venue for funneling short-term loans to farmers and other rural beneficiaries. But now that ACBA is offering investment and working capital credits from its own resources, the usefulness of credit cooperatives has all but disappeared and ACBA's portfolio is shifting rapidly towards approvals based on normal creditworthiness investigations of the individual household or business applicants.[61] This shift is consistent with the philosophy of ARSP; but this positive development was only partly driven by ARSP.

35. **Increasing the efficiency of agricultural service provision (*Rating: Modest*)**. The project met with limited success in strengthening agricultural research. In 1998, before the credit became effective, the country's 14 agricultural research centers were combined into five and staff numbers were cut by 32 percent. Although spending was pruned the effectiveness of the new framework was undercut by the lack of any systematic rethinking of agricultural research strategy (despite support for this from FAO). This was partly the consequence of tensions between the Armenian Agricultural Academy (AAA), created in 1994, and the Ministry of Agriculture. Transfer of AAA to the Ministry of Education and Science in 2002 did not fundamentally strengthen the research system.

36. The introduction of a competitive grant scheme for agricultural research failed to have the catalytic effect that was hoped for. Forty-five grants were awarded between 1999 and 2004, totaling US$745,000. Although the scheme made some contribution to increasing competition and accountability it would have been more effective if the competition had been opened to include institutions and individuals outside the government agencies. Government agricultural scientists, schooled exclusively in the collectivist tradition of agriculture, were ill-placed to devise solutions for the issues facing small-scale farmers in an evolving market economy. The ICR notes[62] that the competitive scheme lacked the strategic focus needed to effect a comprehensive strengthening of agriculture research. But it was probably too much to expect that, by itself, the competitive scheme could have this systemic impact. As evaluations of similar schemes in other countries have found, competitive grants are useful complements to a wider system of agricultural research but they are no substitute for core funding of that system.[63] The limited assistance to this initiative was not sufficient to compensate for years of under-funding or for the lack of a longer-term strategy for prioritizing expenditures on agricultural research.

37. The project contributed to the decentralization of service provision by promoting the Marz Agricultural Support Centers (MASCs). The MASCs were launched in 1997 in three marzes, with support from USAID. Under the assessed project MASCs were extended to all ten marzes in the country. Initially somewhat top heavy, by project completion the MASCs had significantly more field staff than center-based specialists. Since 2002, to strengthen client responsiveness, each MASC has been supported by an advisory council in which representatives of local governments, farmers and private agri-business discuss the annual work program and set priorities; and by an advisory group of 5 to 7 farmers in each village.[64]

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61. Private communication from ACBA Deputy CEO/Loan Director.
62. ICR, p. 14.
63. This was one of the main findings of a 2009 IEG assessment of agricultural research and extension projects in Brazil, Colombia, Nicaragua and Peru.
64. ICR, p.16.

The Bank sought, in the course of implementation, to restructure the MASC system, reduce the number and cost of the MASCs, make them more client-focused and initiate fee-for-service arrangements—but the Ministry of Agriculture resisted this initiative. By the project's closing date, the MASCs had begun to cover some of their operating costs by entering into contractual relations with community councils, from the sale of publications and even from the provision of individualized services. However, this could not be sustained under the follow-on RESCAD project. Once more MASCs are now almost entirely dependent on funding from the central government budget. Since 2002, oversight of the MASCs has rested with a central agency created by the Ministry of Agriculture, the Republican Agricultural Support Center (RASC). The RASC has developed into a competent service provider for the MASCs and the Ministry, producing television and radio programs, operating a central website and helping MASCs to develop their own websites.

38. It was intended that the MASCs would also collaborate on extension methodology and content and on staff training with the agricultural extension arm of another central agency, the Armenian Agricultural Academy (AAA). This collaboration suffered from considerable institutional friction because of a persistent failure to agree on the role of the AAA extension department (AgroGitaSpure) in the evolving national rural extension system. When the AAA was removed from the Ministry of Agriculture to the Ministry of Science and Education it lost focus. (ARSP had no say in this transfer.) By project closing, the staff of the Agricultural Academy—starved of resources—was no longer contributing to project activities and project objectives.[65] This was less a reflection on the performance of the Bank-supported project and more a consequence of problems with a large parallel operation involving funding of AAA by the United States Department of Agriculture. The USDA project consultants were not keen to coordinate, had a very different outlook on how agricultural research and extension should be run and funded, and were eventually terminated by USDA.

39. **Emergency Rehabilitation of Frost Damage (*Rating: Substantial)***. The assessment concurs with the ICR that response to the 2002 emergency was tardy and procurement was poorly handled, owing to attempted interference by senior government officials. The contracts for replacement fruit trees were only signed in late November 2004, and distribution to the target beneficiaries did not take place until the spring of 2005. The opportunity to introduce new frost-resistant grape varieties was not seized as all contracts were awarded to local suppliers of traditional (non-frost resistant) varieties. Nonetheless, when it eventually materialized, the assistance was well targeted—all of the 11,700 recipients were among the poorest farmers—and made a significant contribution to replenishing capital stocks.[66]

40. Overall, efficacy is rated ***modest***. Achievement of two of the four objectives was rated modest. The components underpinning these objectives (credit and agricultural

65. This is based on a private communication from the AAA Department Head.
66. ICR, p. 19.

services) accounted for 85 percent of project costs, so it is reasonable that they drive the overall rating.[67]

Efficiency

41. Neither the appraisal documents nor the ICR attempted to calculate an economic rate of return for the entire project. However, the ICR did estimate an ERR of 38 percent for replanting of frost-damaged vineyards and 72 percent for the fertilizer distribution program—both under Frost Damage Rehabilitation component, which accounted for less than 15% of project costs Improved farming methods promoted through the technology assessment program (TAP) also demonstrated high ERRs: a number of the TAP initiatives were assessed during the recent preparation of the RESCAD project, and their ERRs ranged from 24 to 267 percent.[68]

42. Although the ICR did not make a detailed analysis of farm models there are indications that the subprojects financed under the credit line component represented an efficient use of resources. Only sub-projects with a financial rate of return exceeding 15 percent were eligible for financing, and the credit line achieved high repayment rates, suggesting that these investments were sound.[69] However, five out of eight participating banks were liquidated and at project closure $1.7 million of their agricultural credit portfolio supported by the project (9% of total project costs) remained to be recovered by the Ministry of Finance and Economy.

43. On balance, efficiency is rated ***substantial***.

Outcome

44. Based on the assessments of relevance (substantial), efficacy (modest) and efficiency (substantial), the outcome of this project is rated ***moderately satisfactory***.

Monitoring and Evaluation

M&E Design

45. The project design for monitoring and evaluation (M&E) was fairly schematic. At appraisal, responsibilities for M & E were assigned to the Project Implementation Unit (PIU), which was to base its monitoring on data furnished by the implementing agencies –both central and local – and by the participating banks. A foreign expert was to be engaged to assist the PIU in establishing the coordination and monitoring arrangements for the credit to enterprise component. Baseline surveys were to be designed and carried out to facilitate impact monitoring.

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67 The cost breakdown on p.34 of the ICR lumps together frost rehabilitation with agricultural services but p.17 indicates that US$1.3 million was spent on frost rehabilitation; thus, the cost of the agricultural services component was US$7.8 million. Added to the credit component (US9.4 million), this amounts to 85 percent of the total actual project cost of US$20.1 million.

68. Project Appraisal Document, Report No. 32351-AM, Annex 9.

69. ICR, p. 20.

M&E Implementation

46. Implementation was uneven. The Ministry of Agriculture's former Director of Extension was transferred to the PIU to coordinate the M&E. The PIU failed to engage a foreign expert to assist with credit component, with the result that some indicators needed to assess the performance of the participating banks were never fully developed. The baseline surveys were not carried out, reducing the scope for rigorous impact evaluation.

M&E Utilization

47. There was a regular exchange of monitoring data between the participating banks, ADC, the MASCs and RASC as well as involved departments within the Ministry of Agriculture and the central bank's supervision department. But the Armenian Agricultural Academy was dropped from the loop once it was transferred to the Ministry of Science & Technology.

48. Overall, M&E is rated ***modest***.

Risk to Development Outcome

49. Assessing the Risk to Development Outcome requires consideration of (i) the continued performance of the main project components, which were modified and to some extent scaled up in the RESCAD repeater operation, as well as (ii) secondary or spin-off effects that successful implementation of the main components in the project under review has had on the nexus of public and private sector institutions serving Armenian farmers and agribusiness enterprises at large.

50. **Credit**. Under RESCAD, different arrangements were introduced for managing credit. Government created an autonomous Rural Finance Facility (RFF) to coordinate the credit components of RESCAD and IFAD's concurrent Rural Areas Economic Development Program. It also administered credit reflows, a task earlier assigned to the participating banks. Monitoring of the credit component in the RESCAD was separated from the PIU and assumed by RFF.

51. The two commercial banks that had agreed to administer project funds (ACBA and Converse Bank) pursued different courses. ACBA, which now offers financial services as a joint venture with France's Credit Agricole, withdrew from the project, partly because RFF insisted that it provide sub-loans at highly concessional interest rates; and also because ABCA was reluctant to comply with the Bank norms and safeguards typically applied to line of credit operations in this region. On a positive note, ABCA resumed rural lending (outside of the project) on commercial terms, drawing on its own (substantial) resources. It could be argued that this favorable outcome was facilitated by the credit culture that ARSP helped to nurture. Converse Bank continued to participate under RESCAD and agricultural lending has become a core business for this bank.

52. **Agricultural Services**. The MASC's were the centerpiece of the project's contribution to institutional strengthening but, for the following reasons, these agencies have become less relevant:

- Rural clientele are reluctant to pay for MASC advisory services. This has caused Government to consider adjusting the self-financing ratios mandated for the MASCs—and to ponder whether extension services should be offered free-of-charge and funded from the budget;
- At present, MASC's are able to retain staff by permitting extension agents to accept personal service contracts on projects financed by other donors, or to work informally with commercial farmers and private agribusinesses—arrangements that are not sustainable;
- MASCs are failing to provide the assistance that farmers need with loan proposals;
- Armenia's new class of commercial (and better educated) farm owners and managers generally rely on private agencies for obtaining technical advice—MASCs and other public agencies are less well-placed to supply timely information about input supply contracts or market intelligence.

53. The MASC's loss of relevance reflects the development of the more market-friendly environment that the Bank had sought to promote all along. The restructuring introduced during the project (with farmer councils and fee-for-service payments) was intended to achieve, over time, this market-oriented outcome. The Bank also tried to reduce the number and cost of the MASCs, to give the remaining ones a better chance of success, but the Ministry of Agriculture resisted this.

54. Strengthening of extension services has been hampered by the transfer of oversight for the Armenian Agricultural Academy (AAA) from the Ministry of Agriculture to the Ministry of Science and Education. The responsibilities of AAA for extension—and particularly the division of labor with the MASCs and the RASC—have become blurred, despite attempts under the follow-on project to clarify AAA's role. Nevertheless, the significance of these inter-agency rivalries may dwindle over time as the take-off of commercial farming brings private extension advisors and veterinarians more to the fore.

55. **Conflicting Donor Approaches**. The assessed project attempted to promote the principle of self-financing agricultural services, an approach that does not square with the initiatives taken by other donors. Through its Rural Areas Economic Development Program, IFAD is financing new credit lines at highly concessional interest rates to sub-borrowers, and has sanctioned Rural Finance Facility (RFF) reflows on similarly concessional terms. This is one of the reasons why ACBA withdrew. The RFF Board refused to approve the non-concessional terms that ACBA sought to apply to its rural lending operations under the project. Meanwhile the Millennium Challenge Corporation is offering advisory services on a grant basis. MCC's support for irrigation rehabilitation also involves on-lending to project beneficiaries on highly concessional terms. Neither of these donors is promoting financial sustainability, which runs counter to the approach pursued under ARSP and the follow on.

56. The Risk to Development Outcome is rated ***significant***. While the decline of the project-supported MASCs is desirable as part of the transition to market-oriented agricultural services (and consistent with the spirit of ARSP), the emergence of alternative service providers is still incipient; and movement in this direction may be thwarted as long as other donors pursue policies conflicting with the goals of financial sustainability.

Bank Performance

Quality at Entry

57. Despite considerable efforts by staff during the project's 2.5 years of preparation period and careful diagnosis of the risks[70] the quality of entry was wanting on several counts.[71] On the one hand, the ADC component was well-designed; its successful privatization was the ultimate design vindication. On the other hand, the credit to farmers component had several shortcomings. The prequalification criteria for banks interested in tendering were poorly specified. It was a mistake to turn over certification responsibilities to the PIU and Government once Bank staff had prequalified ACBA (the participating bank of choice). It was unwise to delegate tendering to Government without ensuring Bank oversight of the evaluation and award process.

58. The design of the agricultural technology component was overambitious. The restructuring of research and the reorganization of the 14 research institutes into five regional centers would have benefited from a more clearly articulated long-term vision. Several of the prerequisite conditions for appraisal and negotiations were satisfied—but to the letter, not in spirit. For example, the Agricultural Research Council was duly established but never functioned as intended. The proposals for linking applied research and extension conflicted with the approach being followed by the USDA sponsored TAP program—a conflict that was not resolved during implementation, probably reducing the diffusion of findings from competitive grant subprojects and undercutting the MASCs. Finally, the design of monitoring and evaluation was too schematic.

59. Because it appears that the project was not fully ready for implementation in 1997, Quality at Entry is rated ***moderately satisfactory***.

Quality of Supervision

60. Supervision had to contend with the legacy of incomplete project design, external shocks leading to macroeconomic instability and budgetary shortfalls, and the devastating frost damage in 2002 and 2004. The Bank supervision process arguably tackled these problems as well as could be expected. However, it could have done more to remedy an important design failing: the lack of provision for adequate monitoring and evaluation.

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70. These included: (i) lack of experience in handling broad based and multidisciplinary projects in Armenia, (ii) continuation of the economic blockade, (iii) delays in functioning markets and financial institutions, and (iv) inadequate budgetary resources (ICR pp. 25-26).

71. The quality at entry for this project was not rated by QAG.

61. In two respects, Bank supervision was flexible and pragmatic. First, in response to shortfalls in counterpart funding, the Bank agreed in December 2002 to continue financing, all ARC research contracts and the operating costs of project institutions at 40 percent, rather than at 20 percent, the level envisaged at appraisal. Second, the Bank was quick to approve a new project component to address frost damage once the severity of the emergency became clear. This new project component was initially financed by a reallocation of existing project funds; these were then replenished by a supplementary credit.

62. There were some shortfalls in the Bank's supervision of the prequalification and tendering process for participating banks. The consequences were felt early on, with five of the eight participating banks declared insolvent. This set back progress toward the objective of developing a sustainable rural finance system. However, the prime responsibility for banking oversight rested with the Enterprise Development Project (EDP) rather than with ARSP.

63. In view of the severity of the challenges faced and the commitment to tackling them, Bank supervision is rated ***satisfactory***.

Overall Bank Performance

64. Consistent with the OPCS/IEG guidelines on aggregating sub-ratings for Bank Performance, the lowest sub-rating determines the overall outcome: a modestly satisfactory rating on quality at entry and a satisfactory rating on supervision Bank performance add up to an overall performance rating of ***moderately satisfactory***.

Borrower Performance

Government Performance

65. The government showed commitment to preparation but less so to implementation. Competent and experienced counterparts worked with the Bank's preparation team, making an important contribution to project design. During the preparation and piloting phase, the government made a capital contribution of US$2 million to ACBA, the main participating bank.

66. Momentum occasionally faltered during implementation. Project effectiveness was delayed by about six months because of the complex ratification requirements and procedures in Armenia. Similar delays were encountered in attaining effectiveness of the "emergency" Supplemental Credit, which caused delays of up to two years in getting seedlings and saplings to farmers after the destructive frost of December 2002. During the first years of the project, counterpart funding was provided only after long delays and fell well short of requirements for effective project implementation. It was only from late 2002 onward (four years after the project was declared effective) that sufficient counterpart contribution finally became available. Also, implementation was delayed by the attempts of senior government officials to intervene in the procurement process relating to the frost response component.

67. The government was responsible for the decision to transfer the Armenian Agricultural Academy and its research faculties and extension department from the Ministry of Agriculture (MOA) to the Ministry of Science and Education (MSE). This was highly disruptive causing problems even once the counterpart funds began to flow—because direct disbursements to MSE were not authorized under the project. There were disagreements between MOA and MSE about how research priorities[72] should be determined, and how extension might best be organized. The outcome was MOA's need to create a parallel structure in the form of the RASC, which thereafter functioned as a budgeting and coordinating agency for the agricultural technology component.

68. The government also imprudently chose not to engage an international rural credit specialist to assist the PIU and advise Government on the prequalification and tendering by commercial banks.

69. On a positive note, the government successfully privatized ADC, which continues to provide valuable business services to agribusiness processors, traders and commercial farmers.

70. Overall, the Government's performance is rated ***moderately satisfactory***.

Implementing Agency Performance

71. The PIU effectively administered most project components. It provided sound coordination between, on the one hand, the Ministry of Agriculture and cooperating agencies at the central level and, on the other hand, the local government departments. The PIU made a solid contribution to the agricultural service centers and the Agribusiness Development Center. (It remains to be seen if it will ultimately be absorbed by a government department.)

72. However, the PIU shares responsibility with government for the failure to hire an international credit consultant. It also failed to develop an appropriate agenda once research responsibilities were transferred from MOA to the Ministry of Science & Education. The PIU also shares responsibility with the Bank for the limited development of monitoring and evaluation.

73. Implementing agency performance is rated ***moderately satisfactory***.

Overall Borrower Performance

74. Because the weaknesses in government performance were substantial and played such a large part in limiting project outcome, overall Borrower performance is rated ***moderately satisfactory***.

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72. For example, with support from the project, the ARC was intended to be *the* coordinating body for consolidating research institutes into regional bodies and for setting (and vetting) research priorities. However, it only met a few times before going dormant.

Lessons Learned

75. This project assessment suggests three broad lessons.

76. **Lesson 1**: Projects that involve a major restructuring of financial institutions and that face limited Borrower capacity need to meet the following conditions:

- Clear and rigorous criteria for determining whether commercial banks are eligible for tendering in the project;
- "Prequalification" of financial intermediaries deemed eligible to participate in tendering for loan proceeds, on the basis of a thorough prudential examination — supervised by the Bank where necessary;
- Continuous monitoring by the Bank to ensure that eligibility and performance criteria are met;
- Hiring of banking or credit specialists to oversee the processes for determining eligibility and carrying out tendering.

77. **Lesson 2**: In order to provide the right incentives it is important to allow participating financial intermediaries to administer credit reflows in accordance with their own terms and conditions. Provided that participating banks meet the regulatory requirements approved by the Bank, and articulated through the project design, there is no case for paternalism in dictating how they should employ the returns to their lending activity.

78. **Lesson 3**: Projects that are designed to support reform of the national agricultural technology system need to be based on a clear agreement with the various concerned government agencies about the implementation strategy and arrangements for coordination; this agreement needs to be reached before the loan or credit is made effective.

Appendix A. Basic Data Sheet

ARMENIA: Agricultural Reform Support Project (Cr. 30350 & 30351)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Loan/Credit amount	14.50	15.88	109
Borrower	5.32	4.07	77
Cofinancing	0.00	0.40	0
Total project costs	19.82	20.13	102

Project Dates

	Original	*Actual*
Concept Review	06/20/1996	06/20/1996
Begin Appraisal	12/02/1997	12/02/1997
Board approval	01/27/1998	01/27/1998
Signing		03/12/1998
Effectiveness	04/30/1998	09/03/1998
Mid-Term Review	11/01/2000	11/04/2000
Closing date	12/31/2002	06/30/2005

Staff Inputs (staff weeks)

Stage of Project Cycle	Actual/Latest Estimate	
	No. Staff Weeks	**USD Thousands (including travel and consultant costs)**
Identification/Preparation		499.063
Appraisal/Negotiation		
Supervision		753.000
ICR		
Total		1,252.063

Mission Data

Mission

Stage of Project Cycle	No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.)		Performance Rating	
Month/Year	Count	Specialty	Implementation Progress	Development Objective
Identification/Preparation				
02/29/1996	4	TTL (1), Ag. Policy Spec. (1), Land Registration Spec. (1), Ag. Mgmt. Spec. (1)		
07/04/1996	4	TTL (1), Land Registration Spec. (1), Agribusiness Privatization Spec. (1), Ag. Institutions Spec. (1)		
09/20/1996	2	TTL (1), Ag. Specialist (1)		
03/11/1997	2	TTL (1), Ag. Research Systems Spec. (1)		
06/14/1997	4	TTL (1), Finance and Banking Spec. (1), Property Registration Spec. (1), Ag. Institutions Spec. (1)		
Appraisal/Negotiation				
10/01/1997	3	TTL (1), Property Registration Spec. (2)		
12/12/1997	2	TTL (1), Lawyer (1)		
Supervision				

Mission

10/09/1998	3	TTL (1), Ag. Spec. (1), Agro-Industry Spec. (1)	S	S
04/09/1999	2	TTL (1), Ag. Inputs/Marketing Spec. (1)	S	S
09/28/1999	4	TTL (1), Ag. Inputs/Marketing Sprc. (1), Banking Spec. (1), Oper. Officer (1)	S	S
05/07/2000	6	TTL (1), Financial Analyst (1), Ag. Spec. (1), Banking Spec. (1), Rural Fin. Spec. (1), Agronomist, FAO/CP (1)	S	S
07/25/2001	3	TTL (1), Economist (1), Fin. Analyst (1)	S	S
01/30/2002	5	TTL/PAS (1), Oper. Officer (1), Banking Spec. (1), Ag. Spec. (1), JPA (1)	S	S
07/03/2002	7	TTL/PAS (1), Operations Oficer (1), AKIS Spec. (1), Banking Spec. (1), JPA (1), Procurement Spec. (1), Fin. Mgmt. Spec. (1)	S	S
12/23/2002		TTL/PAS (1), Oper. Officer (1), Proc. Spec. (1), JPA (1)	S	S

Mission				
10/15/2003	5	TTL/PAS (1), Oper. Officer (1), Proc. Spec. (1), AKIS Spec. (1), JPA (1)	S	S
06/02/2004	3	TTL/PAS (1), Oper. Officer (1), AKIS Spec. (1)	S	S
11/19/2004	4	TTL/PAS (1), Oper. Officer (1), Proc. Spec. (1), AKIS Spec. (1)	S	S
05/12/2005	4	TTL/PAS (1), Oper. Officer (1), AKIS Spec. (1), JPA (1)	S	S
ICR 09/22/2005	4	TTL/PAS (1), Oper. Officer (1), AKIS Spec. (1), Rural Fin. Spec. (1)	S	S

Appendix B. Project Performance Indicators

AGRICULTURAL REFORM SUPPORT PROJECT (CREDITS-C30350 & C30351)

Outcome / Impact Indicators:

Indicator/Matrix	Projected in last PSR[1]	Actual/Latest Estimate
Loans to medium-sized farms and private agribusiness - cumulative	78	52
Repayment rates on loans	95%	97%
Number of rural enterprise and farmer loans made - cumulative	11,130	17,456
Coverage of visits by agricultural service providers to private farmers - no. of villages	240	915
Degree of re-orientation of agricultural research towards small private farmers - share of total research contracts	50%	89%

Output Indicators:

Indicator/Matrix	Projected in last PSR[1]	Actual/Latest Estimate
Number of Village Credit Associations established by ACBA - cumulative	450	678
Number of seminars conducted by agricultural service providers for private farmers per year	200	2848 (in 2004)
Number of special thematic magazines and textbooks supplied to AAA - cumulative	8,460	15,762
E-mail and Internet connections set up and maintained at AAA, ASCs, Ag. Research Centers	17	14
Average frequency of visits by MASC field staff to private farmers - visits/village/year	12	15

[1] End of project

Source: ICR for ARSP, Annex 1

ANNEX 2: GEORGIA - AGRICULTURAL DEVELOPMENT PROJECT (CREDIT-C2941)

Summary

This Performance Assessment Report reviews the Georgia Agricultural Development Project (ADP), which was the first Bank-assisted investment project to support the transition of Georgian agriculture following Independence and rural decollectivization. The ADP Credit was approved on February 28, 1997. It closed on June 30, 2005, 38 months after the original closing date.

The ADP's original overarching objective was to increase agricultural productivity in Georgia by supporting the development of private sector farming and agro-processing. Following a formal project restructuring in March 2002, the revised overall objective was "to remove key constraints to increasing incomes in rural areas of Georgia". Specific objectives were: (i) to increase the access of agribusiness firms to investment credit; (ii) to increase the access of farmers to rural credit; (iii) to increase liquidity in land markets; and (iv) to identify, through a series of studies and pilot operations, an agricultural development and investment program to address other major constraints to increased agricultural productivity. Project components consisted of credit to agro-enterprise, support for the development of credit unions, consolidation of land registration and studies in support of project preparation and agriculture policy reform.

Outcome is rated *moderately unsatisfactory*. Project objectives continue to be relevant to Bank and Borrower strategy and are well supported by sector analysis. The land registration objectives were substantially achieved. The project modernized two regional land offices (and partially equipped Georgia's remaining 9 offices), by upgrading facilities and providing computers, software, and a digitized information system that improved the accuracy of land mapping and facilitated quick retrieval of land records and titling. The results of these pilots were subsequently extended nationwide.

But these positive results were more than offset by the limited achievement of objectives relating to rural finance and policy reform. The two poorly-performing credit components accounted for 72 percent of total project costs. Although the credit to enterprises component disbursed the intended level of funds little ground was laid for scaling up: the project objective would have been better served if participating banks had been offered a longer repayment period; and if the project legal documents had specified that credit reflows be recycled. Instead, the Government transferred the recovered funds to the budget following the completion of loan recovery. Under the credit union component there was a rapid and undisciplined expansion of these institutions, a process that became politicized and proved to be unsustainable. At the peak there were around 150 credit unions; about three years after the project closed, only seven remained in operation and only two of these are considered truly viable. With respect to the fourth objective, there was a shortfall in the production of relevant studies and options for a national agricultural and food export improvement program were never developed

M&E performance is also rated *modest*, owing to the lack of progress with impact monitoring.

The Risk to Development outcome is rated *significant*. On the one hand, the project achievements in relation to land registration will be maintained. The National Agency for Public Registry (NAPR) has been established as a Legal Entity under Public Law, and is the single authority for land registration and cadastre management. It is fully operational and financially sustainable. Significant revenue has been generated from the rapid rise in registered transactions. But this positive evidence of sustainability is offset by the less promising outlook for rural financial institutions. Although participating banks have begun lending again to farms and agro-enterprises the market is very shallow (loans to agriculture from all sources account for only 1.2 percent of sector GDP).The prospects for establishing credit unions on a new and sounder footing are limited because government has failed to pass the necessary laws and regulations

Bank performance is rated *moderately satisfactory*. Quality at entry was generally sound and the quality of supervision was adequate in the final years of implementation. But earlier on the Bank should not have acquiesced in the unregulated proliferation of credit unions and could have resisted the Ministry of Finance's transfer of revolving fund balances to the state budget.

Borrower performance is rated *moderately unsatisfactory*. The government had more control than the Bank over the reckless expansion of credit unions and the use of credit reflows and this explains why the rating for the Borrower is lower than that of the Bank. The performance of the implementing agency was uneven.

Experience from this project points to the following lessons:

- ***The legal and regulatory underpinnings for successful financial sector operations need to be spelled out in the project legal documents***. In the ADP an opportunity to scale up lending to rural enterprises was missed because the Development Credit Agreement failed to provide for the recycling of reflows.

- ***The eligibility criteria for sub-borrowers need to be clearly defined and well enforced***. In this project the Bank should have taken more steps to enforce such criteria and to contain the reckless expansion of credit unions. It should have suspended disbursements until order was restored.

- ***The staffs of partner financial institutions need to be trained to rigorously appraise loan proposals***. The experience of ADP shows how important it is for staff to be able to assess market prospects for the commodities to be produced and to develop repayment schedules consistent with income streams.

- ***Start-up village-based credit cooperatives should not be expected to deliver large amounts of credit in the early stages***. It takes time to build up capacity and scale, and this should be done with appropriate safeguards, training, reporting and oversight in place.

Principal Ratings

	*ICR**	*ICR Review**	*PPAR*
Outcome	Satisfactory	Satisfactory	Moderately Unsatisfactory
Risk to Development Outcome	Not rated	Not rated	Significant
Sustainability	Likely	Likely	Not rated
Monitoring and Evaluation	Not rated	Not rated	Modest
Bank Performance	Satisfactory	Satisfactory	Moderately Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Moderately Unsatisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.
**As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.
***As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.

Key Staff Responsible

Project	Task Manager/Leader	Division Chief/ Sector Director	Country Director
Appraisal	Iain G. Shuker	Geoffrey Fox	Basil G. Kavalsky
Completion	Rapeepun Jaisaard	Juergen Voegele	Donna M. Dowsett-Coirolo

Background

1. The decollectivization that followed Georgia Independence in 1991 led to a near collapse in agricultural production, productivity, and exports. In the mid-1990s, when project preparation was initiated, agricultural GDP was less than one-half of its 1990 level, having suffered one of the largest declines in the ECA Region.

2. A recent Georgia Country Assistance Evaluation (CAE)[73] records that "Agriculture has traditionally been the mainstay of Georgia's economy. The country was a net supplier of vegetables, fruits, tea, wine, and brandy to the rest of the Soviet Union. In 1990, the sector employed nearly one-third of the labor force and accounted for 33 percent of GDP. The shocks that followed the collapse of the Soviet Union resulted in a sharp decline in output and exports, reducing them in 1993 to about one-third of 1990 levels. The state order system, which underpinned agricultural trade and production, had collapsed, and was abolished in 1995. By that time, key constraints to sector growth were unfinished privatization, lack of access to credit, weak management capacity, poor state of infrastructure (irrigation, drainage, roads), and unreliable energy supply."

Table 1. Georgia: Sector Performance Indicators

	Agricultural GDP Growth (% p.a.)		
1991-93	**1994-96**	**1997-00**	**2001-06**
NA	-19.3	-2.0	2.7
	Agricultural Value Added (% of GDP)		
1990	**1996**	**2000**	**2006**
32	34	22	13

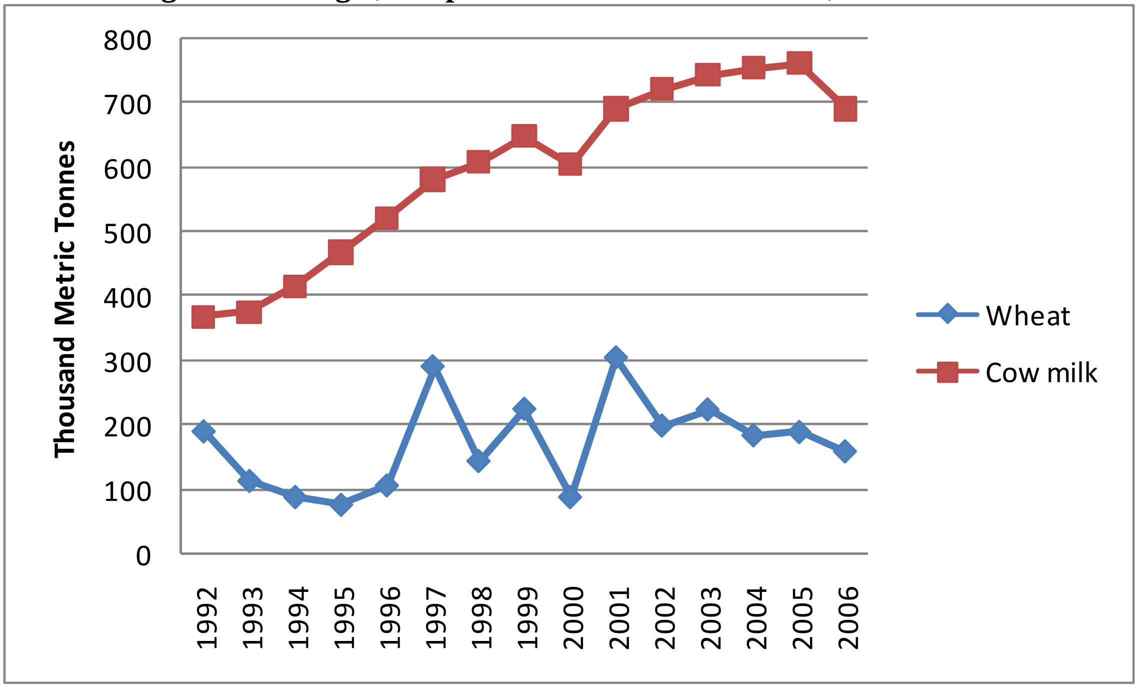
Source: World Development Indicators

3. Agricultural GDP growth fell considerably between 1994 and 2000, recovering in 2001-2006; but the sector share of overall GDP slumped (Table 1). Still, in 2002-2004 agriculture continued to provide part- and full-time employment to 54 percent of the country's labor force. The CAE[74] concurs with this assessment: "Overall, progress in increasing agricultural growth and productivity and in alleviating rural poverty (in Georgia) has been limited."

4. Output performance is mixed. The volatility of wheat production reflects weather variations (Figure 1). The overall stagnant trend is partly the result of a slump in the availability of tractor services (Table 2) and privatization of collective farm lands into small, non-contiguous plots. The expansion in milk production mainly reflects a systematic effort by Georgian authorities to improve cattle breeds and feeding regimens for smallholders; and to augment the availability of veterinary services and control the outbreak of disease, especially in the private sector.

73. IEG, 2009, paragraph 5.39.
74. IEG, 2009, paragraph 5.41.

Figure 1: Georgia, Output of Wheat and Cow Milk, 1992-2006



Source: FAOSTAT

Table 2. Georgia: Percentage Change in Indices of Factor Utilization between 1996-2001

Factors:	Land	Fertilizers	Labor	Tractors	Livestock
	0.0	31.8	-na-	-39.4	16.3

Source: Adapted from Rozell and Swinnen (2004)

5. Irrigation is vital in Eastern Georgia but less so in western regions, where the presence of convection rainfall makes drainage more of a priority. According to a recent survey, 52 percent of Georgian communities require irrigation for the whole arable land area. In two-thirds of these communities, 50 percent or less of the land requiring irrigation actually benefits from a functioning irrigation system. Where irrigation is installed it is often in disrepair.[75] This constrains growth in agricultural value added and the productivity of grains and other field crops.

6. Meanwhile, the incidence of rural poverty remains high in Georgia. According to government data, 43.5 percent of the rural population fell below the income-based poverty threshold in 2003, and 22.3 percent were in extreme poverty.[76] By 2006, the respective ratios had declined slightly to 40.5 and 20.2 percent, showing only a modest reduction in rural poverty in this period of substantial economic growth.[77]

7. It is noteworthy that the progress of Georgia's agricultural transition and reforms was consistently rated amongst the middle group of Central and East European and Former Soviet Economies being tracked by ECSSD, but that it had fallen from a middle

75. World Bank, 2006, pp. 39-40.
76. Household Income-Expenditure Survey (2003-2006).
77. IEG (2009), Table 18.

position in this group in 2000 to the bottom of the group by 2005.[78] This reflected the stalled reform of agriculture service institutions and the weak business climate for agro-processing industries.

8. The outcome of Georgia's agricultural reforms is aptly summed up by the recent Country Assistance Evaluation: "Progress in increasing growth and productivity and in alleviating rural poverty has been limited… Productivity is low and a number of institutional issues remain unresolved: small farmers do not have easy access to credit; the agricultural market is underdeveloped; and the research, extension, and education systems are not consistently able to help farmers in adopting modern technology and practices. The irrigation and drainage system is incomplete and food safety issues continue to impede export. It needs to be noted, however, that agriculture sector outcomes were affected by many external factors, including political events and natural disasters (droughts and floods)."[79]

Project Objectives & Design

9. The analytical underpinning of the Bank's strategy for Georgia agriculture was set forth in its agriculture and food sector review.[80] The strategy had three objectives: first, sustain agricultural and food production conditions; second, permit an increase in exports both to Western markets and former markets in the FSU, thus increasing hard currency earnings from food and agriculture; and third, assist the Government in the transformation of agriculture and food processing from a centrally planned economy to a market oriented environment. Its four main pillars were to:

- Complete ***land reform and collective farm restructuring***, begun under the 1992 land reform decree;
- Develop a working ***competitive domestic market*** for agricultural products and agriculture sector services;
- Create a ***financial services system*** that could meet the rural sector's credit needs; and
- Develop an ***institutional framework*** consistent with the needs of a market-based agriculture that included changing the Government's role from one of direct management of the sector's production and marketing activities, to a more hands-off role of supporting the needs of privatized agriculture through regulation, research and analysis, and the provision of public services.

10. These four elements of strategy were reflected in the design of the Agricultural Development Project (ADP), which was the Bank Group's first credit to Georgia's agricultural sector. Approved in FY97, the project's strategic aim was to help deepen and diversify the sources of growth and reduce rural poverty. Co-financed by the International Fund for Agricultural Development (IFAD), the overarching project objective was to increase agricultural productivity in Georgia by supporting the

78. World Bank/ECCSD (1998) & (2000-2006).
79. IEG (2009), p. 41.
80. World Bank, (1994).

development of private sector farming and agro-processing. The specific objectives were to:

- Develop an agricultural credit system;
- Facilitate increased liquidity in land markets;
- Identify, through training, a series of studies and pilot operations, and an agricultural development and investment program to address major constraints to increasing agricultural productivity.

11. In the interests of greater clarity, following the mid-term review in March 2002, the project's objectives were reworded to read: "to remove key constraints to increasing incomes in rural areas of Georgia by increasing the access of agribusiness firms to investment credit; increasing the access of farmers to rural credit; increasing liquidity in land markets; and identifying, through a series of studies and pilot operations, an agricultural development and investment program to address other major constraints to increased agricultural productivity".[81]

12. The project had five components.

Component 1 - Credit to Enterprises: (US$12.0 million, actual $13.0 million). This component aimed at providing private enterprises in rural areas, with loans at market prices through private commercial banks, plus technical assistance in preparing business plans and loan applications. The credit was to be disbursed through participating banks which would sign subsidiary loan agreements with the Ministry of Finance. A participating bank would be accredited by IDA to participate in the project after meeting a set of predetermined accreditation criteria, which would assess the bank's financial viability measured against international accounting standards, adequate management strengths, capability to assess credit and risks, credit absorptive capacity, and adherence to the National Bank of Georgia's prudential banking standards. The line of credit to enterprises would finance fixed investments and associated working capital.

Component 2 - Credit Unions: (US$ 7.5 million, actual $6.3 million).[82] This component aimed to develop a network of 120 rural CUs that would mobilize savings and provide loans and financial services for small farmers, micro-enterprises and the general rural population. Support for the development of the legal and regulatory framework for the establishment of Credit Unions (CUs) was intended, as well as establishment of a Credit Union Development Center (CUDC), to provide supervision, training and monitoring of CU operations. The plan was to create a maximum of 120 CUs during the five years of project implementation. However, achieving high prudential standards and sound management took precedence over this numerical target. The project would also support the regulatory body for CUs, the Credit Union Development Center

81. ICR, paragraph 3.2.
82. The ICR, Annex 2 for this project records the costs at appraisal at US$8.4 million. No explanation is given for this discrepancy.

(CUDC) which would regulate and supervise the operations of the CUs, provide training to the staff of the CUs once they become eligible to participate in the program, and assist farmers to join the CUs and to take advantage of the services being provided by the CUs. The CUDC was expected to monitor CUs compliance with interim prudential regulations developed by the appraisal team. At appraisal it was expected that a law regulating the establishment of CUs and the development of a more permanent set of prudential requirements would be prepared and submitted to Parliament for approval within the following two years. Credit unions that met eligibility criteria would be able to obtain grants from the project to cover their establishment and operating costs, and to capitalize an insurance fund until sufficient member equity could be accumulated. They would also be eligible to receive project funds on a loan basis for on-lending to members.

Component 3 - Land Registration: (US$ 6.0 million, actual $5.6 million). The project planned to support the land registration program through the establishment of an institutional framework and the development of implementation capacity to register and issue land titles to individuals and firms. Pilots implemented in Gardabani and Mtskheta rayons would concentrate on privately held rural lots and farm lands. Experience from these two rayons would inform subsequent expansion of land registration in other parts of the country. Land parcels in the project area would be regularly surveyed. Sporadic surveying of individual parcels would also be conducted on a trial basis outside these two districts at the land holder's expense. All parcels in the area would be surveyed by private survey companies that would be set up and trained under the project. Land Registration Offices would be established in each of the two project rayons and would be responsible for registering the holdings. Expenses associated with this first phase of the program would be financed in parallel by the IFAD and IDA credits. However, land owners in the area would contribute in the form of registration fees. To prepare for the next phase of the land registration program, the project also aimed to finance aerial photography over other parts of Georgia.

Component 4 - Agricultural Services: (US$ 0.5 million, actual $0.3 million). This component was designed to assist the government in formulating the next phase of its development strategy and investment program for the agriculture sector through a series of studies to identify priority agricultural services as well as to define private and public sector roles.[83] Activities to be financed under this component included: (a) the formulation of options for developing a national export improvement program; (b) a pilot program to improve the collection and publication of agricultural statistics by government agencies, (c) the design and testing of pilot research and extension modalities for small private farmers using mainly private service providers, and of farm management training programs, (d) studies to monitor the land reform and evolution of land markets, and options for

83. These were in the areas of exports, agricultural statistics, agricultural extension and research, farm management and irrigation and soil amelioration.

establishing a deposit insurance scheme for rural CUs, (e) training for government economists in agricultural policy analysis, and (f) prepare a proposal for an irrigation and soil amelioration program. It was intended that the net result of these activities would be a strategy and investment program, acceptable to IDA, for the next phase of the agricultural development program. The report outlining the program would be presented to IDA by the mid-term review.

Component 5 - Project Coordination Unit: (US$0.3 million, actual $1.6 million). The project also provided financial support for office establishment, procurement of equipment, operating costs and staff training for the Project Coordination Unit (PCU), with operating costs being funded via a Special Account for Project Administration.

Relevance

13. The relevance of project objectives is rated ***substantial***. Agriculture was identified as a primary source of expected growth during Georgia's early transition. This assessment concurs with the ICR, that the ADP's development objectives were consistent with the CAS objectives which emphasized sector reform programs and promoting private sector development and recognized that the agriculture sector would need to be one of Georgia's primary sources of economic growth. Realizing this potential, however, was contingent on the completion of farm restructuring and land reform, the existence of competitive domestic markets, the development of financial systems to meet rural credit needs and the improvement of the institutional framework to make it consistent with the needs of market-based agriculture. All were specific development objectives for the project. Also, the project supported the implementation of specific policy reforms that were incorporated in the Structural Adjustment Program.

14. The relevance of project design is also rated ***substantial***. There was a need to formulate a rural and agricultural investment program, and provide the training and investment support to achieve the project's development objectives. The several components described above were tailored to provide institutional support and development financing for rural enterprises and Georgia's new cohort of smallholders. At appraisal, ADP was probably the most feasible design possible. The design was flexible enough to facilitate adjustments at mid-term and earlier, allowing for the macroeconomic uncertainties, which had a strong impact on both sector performance and the availability of counterpart funding; and also making allowance for the political uncertainties of the time.

15. The project's overall relevance is rated ***substantial***.

Efficacy

16. The aggregate data on agricultural productivity growth show modest progress over the period coinciding with project implementation (Figure 3, main text). It is impossible to say how much the project contributed to this outcome. Owing partly to the deficiencies of the M&E framework (see Section 4 below) it was not possible to ascertain what contribution the project made to revised overall objective of increasing rural

incomes. IEG's discussions with project personnel and beneficiaries yielded a highly mixed picture on the overall trend in incomes; this evidence in considered inconclusive. The rest of this section discusses progress made toward the project's specific objectives.

17. **Objective 1: Increase the access of agribusiness firms to investment credit (*Rating: Modest*)**. The ICR reported that 48 loans were made to agribusiness enterprises, a total of US$8.6 million being channeled through 8 participating commercial banks. The loans were used for investment and working capital in six fruits and vegetable canneries, ten wineries, four wheat flour mills, five mineral water and soft drink plants, seven hazel nut production and processing factories, two tea processing factories, eight livestock production farms, two meat processing plants, one wood processing factory and three crop production farms. Of the 48 sub-projects, 73 percent were export-oriented and 27 percent were for the domestic market. Only four sub-loans were closed before maturity (either because they were used for unapproved purposes or because of managerial problems).

18. With regard to the participating banks, the ICR states that the project has contributed in significant ways to the development of the Georgia banking system, and has helped to attract commercial banks to the rural sector. The banking system is considerably stronger than it was when the project started: the total assets of the banking sector have increased from US$183 million in 1997, to US$390 million at mid-term review and to US$931 million in December 2004. The participating bank approval process benefited the whole banking system during the early stages of the project by establishing a set of prudential standards for the upper echelon of Georgian Banks. To remain eligible these banks were required to adopt international accounting standards and new operating procedures. This has helped to raise standards in the banking system as a whole.

19. Compared with the period before project start up, the enterprise loan facility led to an increase in medium-term commercial bank lending to the agro-processing sector. Demand for credit remains high. Also, bank liquidity has risen in recent years. On the other hand, the short-term nature of deposits has served to constrain long-term agricultural lending. Recently several leading banks have resumed lending to the rural sector, while micro credit organizations have established a substantial rural presence with low default on their agricultural loan portfolio. The upturn is reflected in the interest Georgian banks have shown in the follow-on RDP agricultural credit line.

20. Nonetheless, two of the eight participating commercial banks were liquidated after the Russian financial collapse, with outstanding debt to the project of US$1.7 million. On the advice of the auditor, the Project Implementing Unit asked the Ministry of Finance to write off the debt. Additional lending was made using reflows from the project's revolving fund, until the government transferred the remaining balances to the state budget. Unfortunately, this transfer was in violation of the terms of subsidiary loan agreements signed with the participating banks, undermining plans to scale-up the enterprise credit component with reflows. The ICR referred to this transfer but understated the disruption it caused. Additional safeguards were employed in the design of the follow-on Rural Development Project (RDP) to encourage the mainstreaming of credit reflows.

21. Shortcomings in the performance of the Credit to Enterprises component were as follows:

- the staff of participating banks were not well trained to deal with rural lending and, in particular, the investigation of creditworthiness was not sufficiently thorough;
- the technical and marketing aspects of sub-loan appraisals were weak;[84]
- the repayment obligations of participating banks restricted the scope for term lending to sub-borrowers; and
- the use of credit reflows was not spelled out in the Development Credit Agreement.

22. **Objective 2: Increase the access of farmers to rural credit (*Rating: Negligible*)**. A parallel effort to route credit to rural households via an untested network of credit unions (CUs) performed poorly. At the outset, ten CUs were established and performed well. But there was then a rush to create a multitude of CUs, partly encouraged by the Bank's enthusiasm for scaling-up. (On a visit to Georgia the Bank Group's President delivered a message to this effect). The expansion process was subject to political interference, with campaign promises about bringing a CU to every village. Between 1998 and 1999 164 CUs were set up, with 12,231 members. The project was not able to ensure adequate oversight; monitoring systems and capacity building programs for CU management were inadequate. In this environment, mismanagement, fraudulent activity and failure were inevitable.

23. Lacking proper legal sanction and technical supervision, and perhaps disadvantaged by increased direct lending to rural clientele by Georgia's commercial banks, the CU movement quickly deteriorated. By November 2008, a mere seven CUs remained in operation, of which only two are considered viable today by the PCU/PIU.[85] The ICR reported that a Credit Cooperatives Law had been enacted before the project closed. This was not the case. A law to govern non-bank financial intermediaries was approved by Parliament in 2005, but it did not extend to regulation of CUs. At the time of this assessment mission (November 2008), a CU Law was being drafted by the National Bank of Georgia and one of the two remaining CUs but had not yet been submitted for review by the Parliament's Banking Committee.

24. Summing up, the performance of the Credit Unions component suffered the following shortcomings:

- There was a failure at the outset to anticipate the likely consequences of rapidly introducing state supported financial services into a rural society lacking a credit culture and any real notion of personal financial responsibility beyond obligations to friends and neighbors;
- Local authorities treated the new credit institutions as a conduit for the transfer of central government largess and, partly for electoral reasons, the central

84. Private communication from the CMU.
85. This is based on private communications from the PIU Director and Bank staff.

government did little to correct this perception or to regulate the expansion of the credit unions;

- Eligibility criteria for prospective CU managers were not spelled out and training was insufficient; and
- CU legislation was weak and poorly enforced and the regulatory body established in the National Bank of Georgia following the mid-term review was ineffective.

25. **Objective 3: Increase liquidity in land markets *(Rating: Substantial).*** The land registration system was piloted and is now being used throughout Georgia. An independent and self-financing land registration and cadastre agency was successfully promoted. The 2004 Law on State Registry established the National Agency for Public Registry (NAPR), which has achieved financial self-sufficiency and shows every prospect of being sustainable. The follow-on project supported the expansion of the NAPR's communication system, and made additional investments in computerization, office infrastructure and public awareness, leading to full consolidation of the apparatus of land registration.

26. Other donors also have programs to assist Georgia with land registration. German bilateral aid (KfW) helped develop land registration, land improvement and cadastre management software and this is now being used nationwide. The Bank supported software continues to be used as a backup in the central office and the ADP's two regional offices. Although the initiatives by other donors were intended to complement the Bank program there is some indication that coordination could have been better.

27. **Objective 4: Ease other constraints to agricultural productivity *(Rating: Modest).*** The project financed four studies that were broadly consistent with the objective of boosting agricultural productivity. Two of these studies were designed to support project preparation, leading to the Bank-supported Irrigation and Drainage Community Development Project and the Agricultural Research, Extension and Training Project. Two other studies were intended to help strengthen the Ministry of Agriculture. A Risk Assessment Study audited Ministry accounts and reviewed outstanding legal cases. A separate study examined accounting procedures, training and software requirements. Building on this an attempt was made to train staff in International Public Sector Accounting Standards and introduce accounting software. However, restructuring of the Ministry led to the loss of many project-trained accounting staff, although the software survived. Nevertheless, a follow-up EU project reinstated many of the processes first championed by the Risk Assessment team.[86]

28. At appraisal various policy studies linked to agriculture productivity enhancement had been envisaged but none of these materialized; nor did the related training. For reasons not satisfactorily explained by Georgian authorities during the assessment mission, options for a national agricultural and food export improvement program were never developed. Also, the anticipated pilot program to improve the collection and publication of agricultural statistics was not launched. Similarly, options for establishing

86. ICR, pp. 7-8.

a deposit insurance scheme for rural CUs were not pursued, and no program was developed to train government economists in agricultural policy analysis. Project-sponsored studies to monitor the land reform and the evolution of land markets were not conducted.

29. Overall, IEG rates efficacy as ***modest***.

Efficiency

30. No economic rate of return was calculated, either at appraisal or for the ICR. The land registration component, which made up 21 percent of total project costs, produced significant results and had a positive spill-over on non-participating rayons. Also, total project costs did not exceed appraisal estimates. But, all-in-all, the ICR appears to have overstated project benefits. Although financial rates of return above 25 percent were recorded for a small sample of larger enterprises, the ICR notes that by project completion most of the enterprises that had borrowed under the credit to enterprises component had been restructured, sold or merged. Only 11 of the 47 enterprises were still in the same business for which they had obtained loans. Possibly the assessments of creditworthiness were not well done. Possibly the business environment altered dramatically and unexpectedly after the credits were given. Either way, the credit to enterprise component did not yield sound results.

31. In conclusion, the land registration component is likely to have had a high economic rate of return, based on international experience with similar initiatives. The very high demand for land registration that was experienced under the project is itself an indicator of expected high benefits. But if an ex-post economic rate of return had been calculated based on the credit to enterprises component and the Credit Unions component it would likely have been less than the opportunity cost of capital. Taking the three components together, efficiency is rated ***modest***.

Outcome

32. On the basis of the ADP's substantial relevance, modest efficacy and modest efficiency owing to the questionable performance under the two credit components (which accounted for 72 percent of total costs) the project's outcome is rated ***moderately unsatisfactory***.

Monitoring and Evaluation

M&E DESIGN

33. At appraisal, responsibilities for M&E were assigned to the project implementation unit, which would draw on data from three sources: the Credit to Enterprises Unit (CEU), the Credit Union Development Center (CUDC) and the Land Registration Units (LRUs). A specialist, hired by the PIU, would be responsible for coordinating M&E in the project. Baseline surveys were available to facilitate impact monitoring in the two rayons slated to implement the pilot land registration component. These surveys included household demographic characteristics, production and financial

information. There would also be two follow-up socioeconomic surveys that would include monitoring of gender bias in registration, dispute resolution, and the volume of land transactions.

M&E IMPLEMENTATION

34. Soon after the loan became effective the PIU engaged an M&E specialist who was responsible for making periodic progress reports to the Bank. Implementation monitoring was very uneven, in part owing to the disparate capabilities of the responsible agencies. Although the M&E indicators were hardly complex, the CUDC was unable to adequately monitor the CUs' performance, especially during and after the period when the CU system became politicized and over-extended. CUDC was slow to install an adequate loan monitoring system. Positioned within the PIU, the CEU carried out its responsibilities for monitoring implementation of the project's Credit to Enterprises component satisfactorily. The LRUs effectively monitored implementation, while the social impact study was satisfactorily updated in 2004 and is now being used in the follow-on project to help evaluate impact.

M&E UTILIZATION

35. M&E was largely limited to tracking project implementation and—save for the CU component—was carried out satisfactorily. The PIU received regular reports from the CEU and the National Agency for Public Registry (parent agency for the LRUs) as well as relevant departments in the Ministry of Finance, Ministry of Agriculture, the National Bank of Georgia, and the central bank supervision department. Except for the Land Registration and Titling component, impact evaluation was overlooked (not having been anticipated in the project design).

36. Based on these considerations the overall rating of M&E is ***modest***.

Risk to Development Outcome

37. Several achievements of the ADP are likely to be sustainable. After a hiatus caused by tight economic conditions and a lack of liquidity the participating banks (or their successors) are, with support from the RDP, again venturing into agricultural lending, principally to established agribusiness enterprises.[87] Many of the assets financed under the ADP continue to contribute to Georgian agricultural sector productivity, although ownership has altered substantially following asset sales and company mergers and/or restructuring.

38. The assessment mission confirmed that the National Agency for Public Registry is fully established and financially sustainable. Databases have been digitized. Customer assistance is now more timely and responsive. Fees for land registration services have been kept down but revenues are burgeoning owing to the sharp uptick in the number of

87. The impact of the global financial crisis on Georgia's financial markets could dilute these encouraging developments.

registered transactions. The two regional offices that were set up by the project are well equipped, perform well and are financially self-sufficient. These offices have served as the model for the nine other regional offices established under the follow-on project. Land surveys have been conducted in ten more regions and the results have been cross-checked with landowners and added to the national cadastre.

39. In other respects, prospects for sustainability are more mixed. On the one hand, the two Bank-supported projects based on preparatory studies funded by ADP are performing well. Also, thanks to the project's Risk Analysis initiative, all outstanding court cases against the Ministry of Agriculture have been resolved. In addition, the Ministry now conforms to international accounting standards and has the requisite software. On the other hand, project failings with respect to policy studies and training left government staff ill-prepared to cope with the nuances of agricultural policy making and the approach to this is unsystematic.

40. The biggest risks to development outcome center on the credit to enterprises and credit union components. In particular, there are legal impediments to a revival of credit unions. A 2002 law for Non-bank & Depository Institutions treats CUs as non-bank financial institutions, reducing their ability to organize, accept member deposits and develop a capital base. The restrictions in the law regarding the legal status of NBFI founders (physical persons only) and limitations on the kinds of financial services CUs can offer (loans and deposit taking only) have hampered the transformation of otherwise viable CUs into full-service rural financial institutions.

41. The design of ADP failed to provide for satisfactory transition arrangements to CU self-sufficiency. The follow-on project addressed the issue. It sought to consolidate and expand the CU network and to establish, by 2010, an apex structure that would be owned and managed by the member CUs. But there has been little progress on this front.

42. The project did, however, serve as a magnet for additional lending to rural enterprises by non-participating banks. The National Bank of Georgia's aggregated data on loan approvals and outstanding balances does not bear out the suggestion in the ICR that there was a retrenchment in rural lending soon after the project closed.

43. On the other hand, the monetization of the Georgian economy was still limited, even when the follow-on RDP was appraised. Banking system assets amounted to only 17 percent of GDP. Furthermore, the PAD for the follow-on project noted that in 2005, agricultural lending by commercial banks, NGOs and microfinance institutions (adding up to US$15 million) was equivalent to a mere 1.2 percent of agriculture GDP. Among the banks that were pre-qualified to participate in the RDP, Bank Republic had substantially reduced its rural portfolio once project funds had been disbursed and repaid, while agricultural lending by the Bank of Georgia was a mere 2 percent of its total portfolio. The same was true for the United Bank of Georgia: its pilot agricultural portfolio, initiated in February 2004 as the ADP was about to close, amounted to only 0.7 percent of its total lending in 2005. Only the ProCreditBank, which continued to enjoy access to medium and long term resources from partner international financial institutions, had significant outreach to rural areas: loans to agriculture had grown to 10

percent of its portfolio by 2005, lending routed mainly through processors who financed producers under contract farming arrangements.

44. IEG rates the overall risk to development outcome as ***significant***.

Bank Performance

QUALITY AT ENTRY

45. At the time it was approved the project was consistent with the borrower's agricultural development strategy and with the 1995 Country Assistance Strategy. Also, project design was closely linked to recommendations contained in the Agriculture and Food Sector Review published by the Bank in 1995. These documents emphasized the need to remove constraints to agro-enterprises and private farmers and to develop rural technical and financial infrastructure for production, processing and marketing. The project also drew on the available Bank experience with land and rural credit reform in transitional economies. The project was prepared in collaboration with IFAD, which provided sound assistance with the design and co-financed the credit union and land registry components.

46. Given the difficult economic and political environment, the Bank managed ADP preparation as well as could be expected. But, as the ICR notes, project design could have been more specific about exit strategies for the CU and land registry institutions.[88] Also, with respect to the credit to enterprises component, participating banks should have been given a longer repayment period. The Development Credit Agreement should have made more explicit provision for the recycling of credit. Failure to do so allowed the government to transfer recovered funds to the budget, reducing the scope for consolidation.

47. Overall, quality at entry is rated ***moderately satisfactory***.

QUALITY OF SUPERVISION

48. Bank supervision was relatively intense, involving 15 missions over 8 years, but there were some shortcomings. The Bank acquiesced in the rapid expansion of CUs without adequate assurance that the savings base was sufficient to allow for sustainability. There was some inattention to the refinancing of ailing, but well managed CUs, and a recommendation to increase interest rates should have been made at this juncture. The Bank could also have taken more steps to remove overlap and inconsistencies in donor support for land registration. It should have done more to address the pre-2003 inefficiencies in the project implementing unit.

49. The supervision teams failed to anticipate the eventual shake-out among beneficiaries of the Credit to Enterprises component, as well as the demise of two

88. ICR, p. 12.

participating banks. Although the provision for recycling was not made by the Development Credit Agreement, the Bank could have taken a stand on the matter once it became clear that the Treasury intended to appropriate sub-loan repayments rather than allow these to finance additional borrowing. This undercut efforts to scale-up financing for rural enterprise development.

50. On the other hand, the supervision team did ultimately build sound linkages to other donor programs and—making up for weak specifications at the design phase—did at last develop exit strategies for the CU and land registry programs, strategies that have been taken up by the follow-on project. It helped to bring about the substantial achievements under the land registration component. The supervision team helped to engineer two extensions that were essential to accommodate changes wrought by the Rose revolution and to ensure continuity with the follow-on project. Overall, supervision is rated ***moderately satisfactory***.

51. Based on sound quality at entry and mixed performance on supervision of the two credit components, the overall rating of Bank performance is ***moderately satisfactory***.

Borrower Performance

GOVERNMENT PERFORMANCE

52. The government showed commitment during project preparation and coped well despite a lack of experience. Circumstances during project implementation were more challenging. There was a lack of continuity in personnel—there were four Ministers of Agriculture and numerous changes in leadership at other ministries and agencies, partly attributable to the 2004 Rose Revolution. In three respects, government actions were not supportive of project objectives. First, it should not have absorbed credit repayments into the budget but, in line with the spirit of the project (if not the letter of the development credit agreement) it should have promoted the recycling of these funds in order to permit the scaling up of lending to enterprises. Second, with respect to the credit unions the government failed to provide the necessary regulatory oversight. Partly for reasons of political expediency (vote getting) it acquiesced in the undisciplined expansion of these institutions. Third, the government was partly responsible for the failure to implement a number of the studies envisaged at appraisal, studies that had a vital role to play in contributing to policy and institutional reform. For these reasons, government performance is rated ***moderately unsatisfactory***.

IMPLEMENTING AGENCY PERFORMANCE

53. The rapid initial progress with the credit to enterprises component, with the establishment of CUs and with land registration reflects well on the commitment and capacity of the project coordinating unit (PCU). However, by 2000, the growing scale and complexity of the CU initiative overwhelmed the unit: the staff complement envisaged at appraisal proved inadequate. Also, the unit suffered from conflicting advice received from the six donors working on land registration. The effectiveness of the PCU was undermined by internal divisions and by tensions with the Ministry of Agriculture. These issues were not resolved until late 2001 when the Project Coordination Center

(PCC) was established by Presidential Decree No. 149 as a legal public entity and a (smaller) Project Implementation Unit (PIU) substituted for the PCU. The PIU was responsible for managing day-to-day business under the auspices of the PCC.

54. The new PIU team quickly reinvigorated project implementation, but was initially constrained by weak Bank supervision. The PIU did not become fully effective until early 2003 when a new Bank supervision team urged government to refocus its vision for the project and followed up by reallocating project resources. From then on the PIU worked effectively, with one exception. The PIU strove to restructure the CU program—and to prosecute defaulting CUs—but to little avail. Adding to its problems was the failure of government to devise a supportive legal framework for the CUs and the difficulty of reversing the legacy of widespread mismanagement. Given the unevenness of the record, implementing agency performance is rated ***moderately satisfactory***.

55. In view of the moderately unsatisfactory rating of project outcome, overall, Borrower performance is also rated ***moderately unsatisfactory***. The achievement of project objectives was significantly thwarted by government actions during implementation and this negative effect outweighed the more positive performance of the implementing agency.

Lessons

56. **Lesson 1.** ***The legal and regulatory underpinnings for successful financial sector operations need to be spelled out in the project legal documents***. In the ADP an opportunity to scale up lending to rural enterprises was missed because the Development Credit Agreement failed to provide for the recycling of reflows.

57. **Lesson 2.** ***The eligibility criteria for sub-borrowers need to be clearly defined and well enforced***. In this project the Bank should have taken more steps to enforce such criteria and to contain the reckless expansion of credit unions. It should have suspended disbursements until order was restored.

58. **Lesson 3.** ***The staffs of partner financial institutions need to be trained to rigorously appraise loan proposals***. The experience of ADP shows how important it is for staff to be able to assess market prospects for the commodities to be produced and to develop repayment schedules consistent with income streams.

59. **Lesson 4.** ***Start-up village-based credit cooperatives should not be expected to deliver large amounts of credit in the early stages***. It takes time to build up capacity and scale, and this should be done with appropriate safeguards, training, reporting and oversight in place.

Appendix A. Basic Data Sheet

GEORGIA: Agricultural Development Project (Cr. 29410)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Loan/Credit amount	15,000	13,855	92
Borrower	500	457	91
IFAD*	6,500	5,945	91
Beneficiaries	4,800	6,587	137
Total project costs	26.80	26.85	100

*International Fund for Agriculture Development

Project Dates

	Original	*Actual*
Concept Review	04/13/1995	04/13/1995
Begin Appraisal	07/12/1996	07/12/1996
Board approval	03/25/1997	03/25/1997
Signing	04/14/1997	04/14/1997
Effectiveness	06/30/1997	08/21/1997
Mid-Term Review	06/01/1999	11/20/2000
Closing date	04/30/2002	06/30/2005

Staff Inputs (staff weeks)

Stage of Project Cycle	**Actual/Latest Estimate**	
	No. Staff Weeks	**USD Thousands (including travel and consultant costs)**
Supervision		775
ICR		
Total		**775**

Mission Data

Mission

Stage of Project Cycle	No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.)		Performance Rating	
Month/Year	Count	Specialty	Implementation Progress	Development Objective
Supervision				
11/08/1997	3	AGRIC. ECON. (1); LAND MGMT. SPEC. (1); AGRIC. SPEC. (1)	S	S
02/13/1998	2	AGRIC. ECON. (1); LAND MGMT. SPEC. (1)	S	S
06/26/1998	3	AGRIC. ECON. (1); LAND MGMT. SPEC. (1); CREDIT UNION SPEC. (1)	S	S
12/14/1998	4	TEAM LEADER (1); LAND ADMIN. SPEC. (1); CREDIT UNION SPEC. (1); CREDIT UNION SPEC. (1)	S	S
09/03/1999	4	MISSION LEADER/ECON (1); LAND REGISTRATION (1); FIN./ACCT (1); BANKING SECTOR (1)	S	S
06/22/2000	3	TEAM LEADER, ECON. (1); FIN. SPEC. (1); CREDIT UNION SPEC. (1)	S	S
06/13/2001	5	MISSION LEADER/ECON. (1); SR. FIN. ECON. (1); CREDIT UNION CONS. (1); MISSION LEADER (1); SR. FIN. SPEC. (1)	S	S

Mission

06/22/2002	7	MISSION LEDER (1); CREDIT UNION SPEC. (1); LAND SPEC. (1); REGISTRATION LAWYER (1); FMS (2); PROCUREMENT (1)	S	S
01/20/2003	2	FIN. SPEC. (1); TITLE REGIST. SPEC. (1)	U	U
06/21/2003	3	AGRIC. ECON. (1); FIN. SPEC. (1); PROC. SPEC. (1)	U	U
12/12/2003	4	AGRIC. ECON. (1); INST. SPEC. (1); FIN. SPEC. (1); RURAL DEV. SPEC. (1)	S	S
08/06/2004	5	MISSION LEDER (1); RURAL FIN. (1); RURAL DEV. (1); INST. SPEC. (1); IFAD STAFF (1)	S	S
ICR 08/29/2005	3	MISSION LEADER (1); INSTITUTION SPEC. (1); DEV. RURAL STAFF (1)	S	S

Appendix B. Project Performance Indicators

Outcome / Impact Indicators:

Indicator/Matrix	Projected in last PSR[1]	Actual/Latest Estimate
OUTCOME AND IMPACT: Increased productivity for agroprocessors that borrowed from the credit (measured as a rate of return >15%)	The rate of return in 2000 was 18% during the mid-term review.	The final rates of return to capital of five representative enterprises evaluated during the ICR mission ranged from 18% to 26%.
Increased number of small scale farmers with access to credit (measured as the number of CU members) Target was 2600.	Members of credit union were 5,631 in year 2004	Member of Credit union was 5,831 in September 2005.
Credit to Enterprises. subsidiary loan recovery rate and sub-loan recovery rate.	There were 48 loans to agri-businesses. The recovery rate, apart from two failed banks, was 100%.	There were 48 loans to agri-businesses. The recovery rate, apart from two failed banks, was 100%
A strategy and investment program for increasing agricultural productivity in the next phase of agricultural development in Georgia.	Two investment projects: one for irrigation and drainage rehabilitation, with participation of rural communities. Another is the agriculture research extension and training project, where institutional reforms were piloted and innovative support to research was initiated.	The new Rural Development Project would support the development of commercial agriculture. This would be done through improving competitiveness of supply chains and facilitating small and meduim farmers to access to these supply chains.

Output Indicators:

Indicator/Matrix	Projected in last PSR[1]	Actual/Latest Estimate
Total deposits held by credit unions (GEL at end of year)	The savings held by CUs was GEL 0.78 million.	The savings held by CUS was GEL 0.96 million plus GEL 0.292 of share capital.
Total funds lent by CUs (Gel end of the year)	Total funds lent by CU in 2004 was Gel 1.1 million (US$0.6 million).	Total funds lent by CUs in 2005 (6 months was Gel 1.02 million or (US$0.24 million).
Number of CUs in operation	There were 55 CUs in operation.	In September 2005, there were 58 CUs in operation.
Registry office established	11 regional offices and 37 rayons offices were established in 2004	In addition to the regional and rayons offices, civil work for the National Agency for Public Registry was completed.
Number of land transactions, including inheritance, rentals and sales.	Land registration was 53,118 by year 2004	Land registration was 88,755 by September 2005, an increase of 17%.
Land registration fee collected (secondary transaction, GEL)	Land registration fee collected in 2003 was Gel 31,000	Land registration fee collected was Gel 4.42 million

[1] End of project

Source: ICR for ADP, Annex 1 and Project Archives

ANNEX 3: BACKGROUND ON OTHER PROJECTS INCLUDED IN THIS ASSESSMENT

AZERBAIJAN, Farm Privatization Project (C29330, COFN-03910, PPFI-P9910) and Agricultural Development and Credit Project (TF-29677, C32360)

(a) Farm Privatization Project

PROJECT DATA

	Appraisal	Actual
Project Costs (US$ millions)	28.8	23.8
Credit amount (US$ millions)	14.7	13.2
Cofinancing (US$ millions)*	9.3	8.6
Board Approval Year (FY)		1997
Closing Date	June 30, 2002	December 31, 2003

*From IFAD

OBJECTIVES

The main objective of the Farm Privatization Project (FPP) is to accelerate the Government's program for land privatization and farm restructuring of representative state and collective farms in a systematic manner and to provide models which could serve as a basis for wider geographical replicability. This objective would be achieved through the provision of: (i) essential support services which are necessary to sustain privatized agriculture at the raion [district] and farm levels. These are: land registration, farm information and advisory services, credit services, and rehabilitation of critical irrigation and drainage infrastructure; (ii) an enabling environment which would help build linkages between key institutions, viz., Ministry of Agriculture, State Land Committee, State Irrigation Committee, Agrarian Reform Commissions and agricultural banking institutions; and (iii) community based social services and formation of village groups in support of land privatization and farm restructuring.

Components

(1) Farm Privatization Support Services

(Estimated cost at appraisal, US$18.6 million; Actual cost, US$11.5 million)
Services in the 6 project districts, comprising (a) land registration services, (b) farm information and advisory services, (c) water user associations and (d) privatized farm credit services.

(2) Irrigation Rehabilitation

(Estimated cost at appraisal, US$4.2 million; Actual cost, US$8.3 million).

Rehabilitation of irrigation and drainage infrastructure in the 6 pilot areas.

(3) Community Development Program

(Estimated cost at appraisal, US$4.2 million; Actual cost, US$8.3 million)
Promotion of community development activities and establishment of business centers to promote agribusinesses.

(4) Project Management

(Estimated cost at appraisal, US$1.9 million; Actual cost, US$3.5 million)
Establishment of a Project Management Unit in Baku and Project Implementation Units in each pilot area; and provision of training and technical assistance.

RATINGS

	ICR*	ICR Review*	PPAR
Outcome	Highly Satisfactory	Highly Satisfactory	Satisfactory
Institutional Development Impact**	High	Substantial	NA
Sustainability***	Highly Likely	Highly Likely	NA
Risk to Development Outcome	NA	NA	Moderate
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Highly Satisfactory	Highly Satisfactory	Highly Satisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.
** As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.
*** As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.

(b) Agricultural Development and Credit Project

PROJECT DATA

	Appraisal	Actual
Project Costs (US$ millions)	33.7	34.5
Credit amount (US$ millions)	30.0	28.7
Cofinancing (US$ millions)		
Board Approval Year (FY)		FY1999
Closing Date	March 31, 2004	June 30, 2006

OBJECTIVES

a) Program Objectives

The program will support the development nationwide of: (i) an accessible secure and unified system for registering all rights in real estate (land and buildings); (ii) a network for financial services in rural areas consisting of local financial intermediaries (LFIs), such as credit cooperatives and rural branches of commercial banks, to provide private farms and other rural enterprises with market-based financial services; (iii) mixed public and private advisory services for rural enterprises; and (iv) Government capacity to formulate appropriate policy responses to the impact of the anticipated build-up in oil revenues on the competitiveness of the rural economy. The program will be implemented in three phases over a ten year period.

b) Project Development Objective (First Phase of Program)

Private family and group farms and other private rural entrepreneurs begin to register land transactions in large numbers, use information and advisory services, and expand investment in their farms and other rural businesses.

COMPONENTS

(1) Real Estate Registration

Estimated cost at appraisal, US$5.4 million; Actual cost, US$4.7 million
Comprises: (i) regional cadastre and land registration systems; and (ii) a pilot unified cadastre and registration system for land and buildings in Nakhchivan Autonomous Republic.

(2) Information and Advisory Services

Estimated cost at appraisal, US$10.0 million; Actual cost, US$11.1 million
Comprises: (i) strengthening the existing Extension Support Center; (ii) development of public and private sector capacities to provide advisory services through establishing rural advisory centers in five pilot regions; (iii) support for Agricultural research and technology transfer through a competitive grants scheme; and (iv) introduction of private veterinary services.

(3) Rural Finance

Estimated cost at appraisal, US$15.3 million; Actual cost, US$15.6 million
Comprises: (i) the creation of a distribution network of local financial institutions (LFIs) consisting of approximately 80 credit cooperatives and 200 groups of jointly liable borrowers; and (ii) a rural credit line to the participating LFIs for allocation of sub-loans to their members.

(4) Rural Policy

Estimated cost at appraisal, US$0.8 million; Actual cost, US$0.9 million
Comprises: the establishment of a Rural Policy Unit that will help the government develop a strategy to maintain the competitiveness of agriculture in face of the potential impact on the real exchange rate of developments in the oil sector and related issues of agricultural sector management.

(5) Project Management Unit

Estimated cost at appraisal, US$2.1 million; Actual cost, US$2.3 million.

RATINGS

	ICR*	ICR Review*	PPAR
Outcome	Satisfactory	Satisfactory	Satisfactory
Institutional Development Impact**	Modest	Modest	NA
Sustainability***	Likely	Likely	NA
Risk to Development Outcome	NA	NA	Significant
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.
** As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.
*** As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.

PPAR SUMMARY

[Refers to both projects]

"This Project Performance Assessment Report reviews two projects that supported Azerbaijan's comprehensive land and agricultural reform program. Between them the projects pioneered Azerbaijan's reform program over its first ten years (1997-2006). The Farm Privatization Project (FPP, 1997-2003) was a pilot operation. I t s objective was to accelerate the Government's program for land privatization and farm restructuring of representative state and collective farms in a systematic manner to provide models which could serve as a basis for wider geographic replicability and subsequent development o f a national program. On six ex-Soviet collective farms in different regions, the land was distributed to individual families, agricultural extension and credit services were initiated, and irrigation was rehabilitated.

The Agricultural Development and Credit Project (ADCP, 1999-2006) was the first phase of a three-phase Adjustable Program Loan. ADCP sought to raise agricultural productivity by consolidating the land reform, agricultural extension and credit elements o f FPP, covering a wider geographic area. Bank support to this program is continuing under ADCP II and other related projects.

The FPP's ***Outcome*** was **Satisfactory.** The project was highly relevant because nothing short of radical reform made sense. By 1995 agricultural productivity had fallen by nearly 50 percent from the already low productivity o f Soviet era farming. Input and output markets had collapsed, technical expertise had dissipated, credit had evaporated, irrigation was in disrepair, and farming was still collective, with little incentive for improvement. All of FPP's main activities achieved their physical targets. The project's greatest contribution was the establishment o f models to guide the broader reform process. Agricultural extension, credit, and water user associations were created for the first time in Azerbaijan. The land reform achievements were remarkable. In 1997, less than two years into project implementation, Government decided to scale up land privatization nationwide. By 200 1, two years before FPP closed, some 95 percent o f Azerbaijan's agricultural land had been divided up into private family farms. Data deficiencies due to inadequate M&E preclude estimation of an economic rate o f return, although proxy indicators suggest positive economic impact.

Risk to Development Outcome is rated **Moderate.** The reform is unlikely to be reversed and the only significant risk is the sustainability o f irrigation-water user associations need to collect more funds to finance operation and maintenance. The ***Bank's performance*** *is* ***rated*** **Satisfactory.** Other than the M&E arrangements, the project was well designed, and, during preparation and supervision, the Bank provided cutting edge expertise, and motivation and advice to guide the reform program. The ***Borrower's Performance*** is rated **Highly Satisfactory.** Government was fully committed to reform, the nation's most senior political leaders were effective champions, and the implementing agencies were largely effective.

The ADCP's ***Outcome*** is rated **Satisfactory.** Its objective o f consolidating the reform program and enhancing agricultural productivity was highly relevant, and the project's physical targets were met. As with FPP, incomplete data due to weak M&E preclude estimation o f an economic rate of return, although alternative indicators suggest positive economic impact. ADCP's most significant achievements were to develop private agricultural extension services and to establish field offices for recording land transactions. The ADCP also pioneered farmer credit unions and informal borrower groups. However, the credit apex agency was ineffective, partly due to the decision at project design that it should contribute 20 percent of its own capital to investments. The agency became risk-averse and paid little attention to developing farmer institutions. Risk to Development Outcome is rated **Significant,** mainly because a problem-free model for the credit program is yet to be found. Bank performance was **Satisfactory.** Quality at entry was good except for the farmer credit management arrangements and design of M&E. During supervision, the reformist and collegiate partnership with Government established under FPP continued. The Borrower's performance is also rated **Satisfactory.** Government continued to champion the reform program, and, except for the credit agency and implementation o f M&E, the implementing agencies performed well.

The two projects are significant because-compared to the other 11 Commonwealth of Independent States countries that emerged from the 1989 break-up o f the Soviet Union-the land reform that FPP and ADCP supported was more sweeping. All 12 CIS countries declared Independence at the same time (1991), all shared the Soviet heritage of state managed collective farms, and all attempted some degree of land reform from the early to mid-1990s onwards. But there are differences between the countries in the reform paths chosen and the progress made.

Azerbaijan adopted a broad-based land privatization agenda. Land was transferred from the collectives to fully autonomous privately owned holdings-common practices elsewhere were leasing of land by the state or imposition of crop production quotas. Also, land in Azerbaijan was distributed to individual families rather than to corporate or cooperative farms-a common practice in other CIS countries. Such multi-family enterprises have tended to differ little from the collectives they were meant to replace. Additionally, land was fully transferable and could be sold, rented or leased without restrictions (not the case in some CIS countries). Land reform was also packaged with provision of agricultural extension and credit. Another feature was that land was privatized rapidly-at a single stroke rather than through intermediate steps (which might become permanent rather than temporary arrangements). Finally, land was shared out evenly via transparent lottery, all persons receiving equal areas.

Azerbaijan’s agricultural productivity has increased, although it is impossible to attribute how much this was driven by the Bank-supported projects. Data are weak and inconsistent between sources. ADCP project farmers increased yields by 30-40 percent in four years (2002-06) while the yields o f non-project farmers increased by only 10-15 percent. Nationwide data from 1994-96 (before land was privatized) to 2003-05 show a more than 50 percent increase in cereal yields, and rapid expansion of high-value horticultural crops. The productivity of the new family farms is twice that of corporate farms. The agricultural productivity increases in Azerbaijan closely follow the progress of land privatization corroborating the views of farmers on the benefits from the land reforms.

The assessment of these projects suggests the following lessons of broad application:

- Azerbaijan’s largely successful land reform program has been characterized by full and individualized (ownership by families) privatization of land, a package approach combining agricultural services with land reform, and a rapid and single-step change rather than gradual or phased implementation. While the great diversity o f experience across countries indicates that there is no uniquely right land reform model, Azerbaijan’s approach is an option for other countries to consider.
- Equitable land distribution and access to agricultural support services helps to ensure that vulnerable groups such as women and the poor share in the benefits from land reform. By far the most important action for social inclusion was the distribution o f collective lands equally and transparently. For support services, Azerbaijan offers equal access to extension, training and credit-but more effort i s needed to encourage women and poor people to take advantage o f the available services.
- The reform ***process*** is critical for determining whether land reform works. In Azerbaijan’s case, client focus, transparency and stakeholder involvement were central to reform implementation, and a learning-oriented and innovative culture was fostered.
- Privatized service delivery reduced requirements for extra government staff.
- Land reform needs powerful champions to succeed. Exceptional commitment by champions in the Government and the Bank were critical to the success under the projects evaluated here”.

ROMANIA, Agricultural Support Services Project (L-45330) and General Cadastre and Land Registration Project (L-42580)

(a) Agricultural Support Services Project

PROJECT DATA

	Appraisal	Actual
Project Costs (US$ millions)	17.8	17.6
Loan amount (US$ millions)	11.0	10.9
Cofinancing (US$ millions)*	3.0	3.1
Board Approval Year (FY)		FY2000
Closing Date	December 31, 2004	December 31, 2005

*USAID

OBJECTIVES

(a) Increase agricultural productivity, sustainability and income by providing immediately needed technology, information and training for private farmers and agro-processors; and

(b) Improve efficiency, cost effectiveness and client relevance in the management of research and extension.

COMPONENTS

(1) Applied Research and Extension

(Estimated Cost at Appraisal, US$14.9 million; Actual Cost, US$14.5 million)
Comprises: support by means of a Competitive Grant Scheme (CGS) to applied agricultural research and extension on priority problems facing private farmers and agro-processors.

(2) Institution Building

(Estimated Cost at Appraisal, US$3.0 million; Actual Cost, US$3.1 million)
Comprises: assistance to administer the CGS, support to the National Agricultural Advisory Agency (ANCA) to deliver rapid impact extension programs, develop a rural radio program, and develop and distribute farm management handbooks, and formulate an Action Plan for agricultural knowledge and information systems, technical assistance and training, and support for the Project Management Unit (PMU) to implement the project.

RATINGS

	ICR*	ICR Review*	PPAR
Outcome	Satisfactory	Satisfactory	Satisfactory
Institutional Development Impact**	Substantial	Substantial	NA
Sustainability***	Highly Likely	Likely	NA
Risk to Development Outcome	NA	NA	Negligible to Low
Bank Performance	Satisfactory	Highly Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Moderately Satisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.
** As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.
*** As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.

(b) General Cadastre and Land Registration Project

PROJECT DATA

	Appraisal	Actual
Project Costs (US$ millions)	37.3	32.4
Loan amount (US$ millions)	25.5	24.6
Cofinancing (US$ millions)		
Board Approval Year (FY)		FY1997
Closing Date	December 31, 2003	June 30, 2006

OBJECTIVES

(a) Establish an efficient system for securing land titles of real estate owners which can be expanded nationwide;
(b) Create a general cadastre system which provides clear and current definition of real estate parcels which form the basis for real estate registration; and
(c) Set up a simple, safe and cost effective procedure for land transactions.

COMPONENTS

(1) Development of Cadastre

(Estimated Cost at Appraisal, US$22.5 million; Actual Cost, US$20.9 million)
Comprises: (i) service contracts for aerial photography, control densification, mapping and orthophotography and systematic cadastre undertaken by the private sector; (ii) system design, procurement and installation of a cadastre information system to manage the general cadastre database; (iii) renovation and expansion of the local cadastre offices

(OJCGCs); (iv) vehicles, furniture and office equipment for the National Office for Cadastre, Geodesy and Cartography (ONCGC) and the local cadastre offices; and (v) training and technical assistance to strengthen ONCGC and OJCGCs.

(2) Establishment of Land Book System

(Estimated Cost at Appraisal, US$12.1 million; Actual Cost, US$6.7million)
Comprises: (i) renovation and expansion of 76 land book offices in 18 *judets* [counties] to make the new land book system fully operational; (ii) vehicles, furniture and office equipment for the land book offices; (iii) system design, procurement and installation of a computerized land book system; (iv) service contracts for data entry of real estate titles into the land book system; and (v) technical assistance and training for the land book judges, office staff, and notaries.

(3) Institutional Strengthening

(Estimated Cost at Appraisal, US$2.7 million; Actual Cost, US$4.8 million)
Comprises: (i) consultancy services to ONCGC and Ministry of Justice in the first few years of the project to strengthen their capacity to manage and implement the project; (ii) a Project Coordination Unit (PCU) to ensure coordination in the operation of the two project agencies; (iii) a national publicity campaign to create public awareness of the benefits of land registration and the procedures to make use of it; and (iv) a cost recovery study to quantify the market for land registration and cadastre and set realistic fees and charges for services and data to recover a steadily increasing proportion of the cost of operations and maintenance of the cadastre and registers from revenues received from users.

RATINGS

	ICR*	ICR Review*	PPAR
Outcome	Satisfactory	Highly Satisfactory	Satisfactory
Institutional Development Impact**	NA	NA	NA
Sustainability***	NA	NA	NA
Risk to Development Outcome	Moderate	Moderate	Negligible to Low
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Moderately Satisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.
** As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.
*** As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.

PPAR SUMMARY

[*Refers to both projects]*

"This Performance Assessment Report reviews two projects, one that supported the development of Romania's land markets, and another that supported the transition of Romanian agriculture from a centrally planned and publically owned sector to privately owned commercial farming: The General Cadastre and Land Registration Project (GC-LR) and the Agricultural Support Services Project (ASSP).

GC-LR was a large scale pilot program to introduce a general cadastre for private holdings in Romania and to systematize and create a considerably more efficient land registration and titling system. This project was approved December 9, 1997 and closed on June 30, 2006. Its main features are now being extended nationwide, with support from a semi-repeater being financed with Bank assistance.

The ASSP provided support to a first phase o f reforms to Romania's agricultural technology system. It introduced private contracting for both applied research programs and farmer information (extension) services to quickly augment farm-level productivity. It was approved January 27, 2000 and closed on December 31, 2005. Its main features also are being scaled up under a follow-on Bank-assisted loan.

The land system reform that GC-LR supported was arguably the most far-reaching amongst former Council for Mutual Economic Assistance (CMEA) countries in Central and Eastern Europe. Romania's agricultural sector plays a far more significant role in its national economy than in any other EU member state and ASSP's support for the agricultural technology system was critical to the sector's development.

In Romania, during the two years following the events of 1989, lands were restituted mainly to previous owners or their offspring, often following procedures conjured locally without much preparation or coordination among localities. The process was a rapid one and had several desirable features: (i) the state and collective farming system was completely broken up and their lands were converted to privately owned holdings, (ii) the new private holdings could in principle be inherited, sold or leased in and out, (iii) farm land could be employed for whatever purpose the new owners chose - there were no longer official dictates on what could be produced and what might be sold. The very rapid process o f restitution effectively truncated the ability of rural influentials from the *ancien régime* to retain control, as has been so evident in many parts of the Former Soviet Union. But it also introduced issues which the GC-LR Project was designed to address. Principal among these was the need to unify and harmonize the two land registration systems then being practiced in Romania, each being legate from Romania's pre-socialist era. The authorities eventually decided to create a land book system, patterned on the system adopted in Transylvania, but modified (in the project) to ease harmonization with the inscription/transcription system being applied elsewhere in Romania. Second, a systematic general cadastre was needed to provide a firm basis for creating land records and verifying titles. Lastly, the entire registration and titling process needed to be streamlined and digitalized in order to save costs and markedly reduce the unreasonably long delays infused in pre-project titling procedures.

The GC-LR's outcome is rated Satisfactory against the ICR Review rating of Highly Satisfactory. This downgrade was made taking into account the substantial lag in project implementation, essentially until end FY04 when major (and successful) adjustments in project organization and implementation arrangements were introduced. As the GC-LR project got underway it became quickly evident that placement of the cadastral function and land registration responsibilities under two separate heads was not going to work. (This was a reflection of the Austro-Hungarian approach, which foundered on the shoals of Romania's two distinct land recording systems once implementation of the operation commenced.) Nonetheless, bureaucratic inertia, in-fighting and institutional pride prevented the consolidation o f these inter-related functions within the purview o f a single, task focused agency. However, following the unification o f the project's cadastre and land registration systems under the purview of a semi-independent and self-financed agency, implementation literally took off.

Bank performance was Satisfactory. Project design fundamentals were the subject of hot debate within the Romanian government and with and within civil society during the mid-1990*s* prior to the Bank becoming directly involved. It is to the credit o f staff, that once recognition of the need for the project had gelled, staff was able to promote the views of those protagonists supporting the more needed elements of project design and project management in a sensitive and effective manner. The Borrower's performance over the life of the project was Moderately Satisfactory. Agency directors and deputy ministers assigned to the project constantly changed and this made implementation progress difficult. The Government also failed to achieve a timely resolution o f the major implementation issue, especially the need to unify responsibilities. The excellent progress made after 2003 once unification had been achieved helped counterbalance the limited initial progress and i s reflected in this rating.

The ASSP's outcome is rated Satisfactory. The project faced some implementation challenges arising from weak and politicized leadership in the project management unit which was ultimately overcome. The project's risk to development outcome is Negligible to Low. The technologies disseminated through the Competitive Grant Scheme (CGS) component are sustainable, because these are simple, low-cost technologies, which require exclusively inputs (seeds, plant nutrients and animal medications) and services (artificial insemination, quality controls) available in the country. They provide high rates of return and substantial incremental net incomes. It is therefore highly unlikely that farmers will revert to previous practices. By contributing to the building up and strengthening of NGOs and farmers' associations, the Project has also enhanced the ability of farmers to maintain and further promote the disseminated technologies, as this will enable increased exchanges of experience and accelerate spillovers. Both Bank and Borrower performance was Satisfactory. Despite initial teething problems, the Government was committed to the project, and was proactive in the preparation process.

Building on the completion report, the assessment of these projects suggests the following broad lessons:

For the GC-LR Project:

- Borrower commitment and ownership can turn even the most difficult of projects around. Sometimes this commitment can come from political events which have nothing directly to do with the project.
- A key success factor for a viable land administration system is the establishment of a workable institutional structure. The experience of Romania shows that the single agency model and the creation of a semi-autonomous self finance agency appears to work best and this could have wider applicability in the Central and East European context.
- The building of public confidence in the system and ensuring the public has access to the professional support services (notaries, real estate agents) is necessary not only for successful implementation, but for truly achieving the objective of secure property markets.
- Projects may place too high expectations on automation and underestimate the complexity o f large scale information technology system development.
- Sustainability needs to be built into project design; and this is largely about human capacity.

For the ASSP Project:

- Farmers and rural business owners will respond enthusiastically to innovative technologies corresponding to their needs. There has to be consultation and a demand driven element in any serious research and extension endeavor”.

TAJIKISTAN, Farm Privatization Support Project (C32400 & 32401)

PROJECT DATA

	Appraisal	Actual
Project Costs (US$ millions)	23.5	25.0
Credit amount (US$ millions)	20.0	23.0
Cofinancing (US$ millions)		
Board Approval Year (FY)		1999
Closing Date	June 30, 2004	November 30, 2005

OBJECTIVES

(a) Develop procedures and institutional mechanisms at the state level and in selected regions to ensure fair, secure and equitable transfer of land and other farm assets to private individuals or groups;
(b) Test and implement these procedures in ten selected former state and collective farms in order to provide representative models which could serve as a basis for wider geographical replicability; and
(c) Create sustainable private family farming units and provide them with the enabling conditions to operate independently in a market economy.

A Supplemental Credit of US$3.0 million was approved by the Board in February 2001. This supported the three objectives above and added a fourth:

(d) Mitigate the effects of the severe 2000 drought by providing emergency agricultural inputs to the families affected by the drought.

COMPONENTS

(1) Farm Restructuring Services

(Estimated Cost at Appraisal, US$5.5 million; Actual Cost, US$4.6 million)
This comprises: (i) land use registration services; and (ii) rural information and advisory services, including strengthening of the Ministry of Agriculture's staff and field level demonstrations in crop varieties and agricultural technology.

(2) Rehabilitation of Critical Main and Field Level Irrigation and Drainage Works

(Estimated Cost at Appraisal, US$6.5 million; Actual Cost, US$6.5 million)
This comprises: rehabilitation at ten sites, including the establishment of water users associations to manage the rehabilitated irrigation facilities.

(3) Provision of One-time Grant and Creation of Rural Savings and Credit Association

(Estimated Cost at Appraisal, US$5.2 million; Actual Cost, US$4.5 million)
This comprises: (i) one-time grants to farm families of up to US$300 per hectare for purchase of farm inputs; and (ii) create farmer-owned rural savings and credit associations including provision of start-up capital and a credit line.

(4) Project Management and Implementation Units

(Estimated Cost at Appraisal, US$2.8 million; Actual Cost, US$6.4 million)

(5) Supplemental Credit

(Estimated Cost at Appraisal, NA; Actual Cost, US$3.1 million)
The Supplemental Credit was to provide seed and fertilizer packages to some 56,000 farming families affected by the 2000 drought, with distribution handled by contracted NGOs.

RATINGS

	ICR*	ICR Review*	PPAR
Outcome	Satisfactory	Satisfactory	Moderately Satisfactory
Institutional Development Impact**	Modest	Modest	NA
Sustainability***	Likely	Likely	NA
Risk to Development Outcome	NA	NA	Significant
Bank Performance	Satisfactory	Satisfactory	Moderately Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.
** As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.
*** As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.

PPAR SUMMARY

"Under the Soviet Union, Tajikistan's collective and state farms received their farming inputs from Moscow and delivered cotton in return. After independence in 1991, the flow of inputs, such as seeds, fertilizers, farm machinery, and spare parts, as well as wheat and energy stopped. A five-year civil war ensued between 1992 and 1997, during which time irrigation systems became dilapidated, and many specialists knowledgeable about operating irrigation pumps left the country. By the time o f the 1997 peace agreement, the agricultural sector was in poor condition, with irrigation systems in disrepair. During the appraisal process the project evolved away from one that would finance the rehabilitation of irrigation systems, toward a focus on restructuring the large state and collective farms in which they operated. Farms would only be profitable when farmers made the key investment and farming decisions, and increasing farm profitability was expected to allow the systems' users to finance infrastructure maintenance.

The Farm Privatization Support Project (FPSP) was approved in June 1999 with the objectives to (i) develop procedures and institutional mechanisms at the state level and selected regions to ensure fair, secure and equitable transfer of land and other farm assets to private individuals or groups; (ii) test and implement these procedures in ten selected former state and collective farms in order to provide representative models which could serve as a basis for wider geographical replicability; and (iii) create sustainable private family farming units and provide them with the enabling conditions to operate independently in a market economy. In 2001, a Supplemental Credit in the amount of US$3.0 million was approved with the objective to (iv) mitigate the effects of a severe 2000 drought by providing emergency agricultural inputs to the families affected by the drought.

Overall this PPAR rates project outcome as **moderately satisfactory**. The project was relevant to what the 2005 CAS described as the Government's priorities in the agricultural sector. With respect to the drought intervention, distributing genetically improved seed for wheat, fertilizer, and other chemical inputs has led to an impressive increase in wheat production over the last seven years. The project effectively restructured ten pilot farms into 5,782 individual and family farms. The procedures used in this farm restructuring experience are being replicated in a follow-on project, which involves 300 additional farms.

However, project design was overly ambitious and not tailored enough to the circumstances o f a country that was just emerging from five years of civil war. In the cotton-growing areas of Tajikistan, quotas for cotton and wheat production are enforced. Local governments have the authority to take land away from farmers who do not achieve their cotton production quotas, even if farmers could make more money with other crops. Unfortunately, about 80 percent o f the project's efforts took place in cotton quota areas. While the project offered farmers a package o f support to serve as an incentive for restructuring, the PPAR concludes that the package provided necessary but not sufficient enabling conditions. The package included rehabilitation of irrigation infrastructure, the establishment of water users associations for their maintenance, a one-time grant for farm inputs, and access to credit, and training. While in some farms restructuring resulted in increased farm profitability, in others, restructuring met with significant local resistance. Local governments have constrained the farmers' right to choose their own crops and credit institutions have preferred other borrowers over farmers. Many farms have been unable to avail themselves o f even rental tractors and other agricultural machinery. Some associations established to maintain irrigation systems lack operating funds to keep the rehabilitated structures operating and farmers' groups have been organized in a way that creates disincentives to working together.

Risk to development outcome is rated as **substantia**l. Tajikistan is still confronting fundamental legal, cultural, and social barriers to farm restructuring. Bank performance is rated **moderately satisfactory** because of an overly ambitious project design and in spite of highly dedicated supervision. Borrower performance is rated **satisfactory** because of the strong support from the highest levels of government and a dedicated and creative Project Implementation Unit team.

Among the lessons suggested by the project experience are the following:

- Land tenure security and farmers' freedom to make their own management decisions are vital for successful farm privatization. In the case of Tajikistan, strong support from the highest levels o f government was not enough to restructure and privatize state and collective farms throughout the country. In cotton-growing areas, local governments were more interested in profiting from cotton production than sharing benefits with newly independent farmers.
- International experience may enrich project design, but only when local conditions are fully taken into account. In the case of Tajikistan, project design was overly ambitious and not tailored enough to the local circumstances, including five years of civil war and the remaining aspects of a command economy.
- Care must be taken to identify all the factors constraining the achievement o f project objectives, and then something needs to be done about each one of them. While some of the barriers to farm restructuring (such as improving access to water and credit), were dealt with at appraisal, the lack of farm machinery was not recognized as in issue, even though it was a high priority for farmers.
- Donor coordination can assist with the propagation o f major reforms. In Tajikistan, it took the Bank until 2003 to realize that if donors would speak with one voice to the government on land reform, it might create conditions more favorable for the project restructured farms".

ANNEX 4: KEY TO SECTOR REFORM STATUS RATINGS

Key to Sector Reform Status Ratings (Table 2)

Reform Area / Scores	Market Conforming Policy Environment	Land Reform	Privatization of Agroprocessing and Input Supply	Rural Financial Systems	Institutional Framework
1-2	Direct state control of prices and markets.	System dominated by large-scale farms.	Monopolistic state owned industries.	Soviet type system, with "Agrobank" as the sole financing channel.	Institutions of command economy.
3-4	Deregulation with indicative prices, and price controls; significant NTB on imports or exports.	Legal framework for land privatization and farm restructuring in place, implementation launched only recently.	Spontaneous privatization and mass privatization in design of early implementation stage.	New banking regulations are introduced; little or no commercial banking.	Modest restructuring of government and public institutions.
5-6	Mainly liberalized markets constrained by the absence of competition and some remaining controls on trade policy.	Advanced stage of land privatization, but large-scale farm restructuring is not fully complete.	Implementation of privatization programs in progress.	Restructuring of existing banking system, emergence of commercial banks.	Partly restructured governmental and local institutions.
7-8	All command economic type interventions are removed. Market and trade policies are in compliance with WTO; however, domestic markets are not fully developed.	Most land privatized, but titling is not finished and land market not fully functioning.	Majority of industries privatized with a framework conducive for foreign direct investment.	Emergence of financial institutions serving agriculture.	Government structure has been refocused while research, extensions, and education are being reorganized.
9-10	Competitive markets with market conforming trade and agricultural policies, and no more than modest protection.	Farming structure based on private ownership and active land markets.	Privatized agro-industries and input supply, with improved international competitiveness.	Efficient financial system for agriculture, agro-industries, and services.	Efficient public institutions focused on the needs of private agriculture.

Source: World Bank-ESSD (2005), Table 2

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