# Document of The World Bank

**Report No. 44831:** 

#### PROJECT PERFORMANCE ASSESSMENT REPORT

#### REPUBLIC OF AZERBAIJAN

FARM PRIVATIZATION PROJECT (CREDIT NO. 2933)

AGRICULTURAL DEVELOPMENT AND CREDIT PROJECT (CREDIT NO. 3236)

**July 28, 2008** 

Sector Evaluation Division Independent Evaluation Group

### **Currency Unit = Manat**

### Currency Equivalents (annual averages)

1996	US\$1.00	Manat (	).82
1997	US\$1.00	" (	).78
1998	US\$1.00	" (	).78
1999	US\$1.00	" (	88.0
2000	US\$1.00	" (	).91
2001	US\$1.00	" (	).96
2002	US\$1.00	" (	0.98
2003	US\$1.00	" (	).98
2004	US\$1.00	" (	).98
2005	US\$ 1.00	" (	0.92
2006	US\$ 1.00	" (	0.87
2007	US\$ 1.00	" (	0.85

## **Abbreviations and Acronyms**

ADCP Agricultural Development and Credit Project

APL Adjustable Program Loan

BG Borrower Group

CGS Competitive Grants Scheme

CIS Commonwealth of Independent States

CU Credit Union

FPP Farm Privatization Project

ICR Implementation Completion Report

IEG Independent Evaluation Group

PAD Project Appraisal Document

PMU Project Management Unit

PPAR Project Performance Assessment Report

RAC Regional Advisory Center

WUA Water Users Association

#### Fiscal Year

Government January 1-December 31

Director-General, Independent Evaluation : Mr. Vinod Thomas
Director, Independent Evaluation Group (World Bank) : Ms. Cheryl W. Gray
Manager, Sector Evaluation Division : Ms. Monika Huppi
Task Manager : Mr. John Heath

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.

#### About the IEGWB Rating System

IEGWB's use of multiple evaluation methods offers both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. IEGWB evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (additional information is available on the IEGWB website: <a href="http://worldbank.org/ieg">http://worldbank.org/ieg</a>).

**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, 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.

**Bank Performance:** The extent to which services provided by the Bank ensured quality at entry of the operation and supported effective implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of supported activities after loan/credit closing, toward the achievement of development outcomes. The rating has two dimensions: quality at entry and quality of supervision. Possible ratings for Bank Performance: Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

**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.

## **Contents**

PRINC	CIPAL RATINGS	<b>V</b>
KEY S	STAFF RESPONSIBLE	. VI
PREF	ACE	VII
SUMN	MARY	.IX
1.	BACKGROUND AND CONTEXT	1
	Overview	1
	Development Context	1
	Land Reform in Regional Perspective	2
2.	PROJECT OBJECTIVES AND DESIGN	4
	The Farm Privatization Project	4
	The Agricultural Development and Credit Project	5
	Institutional Arrangements	5
	Monitoring and Evaluation	6
3.	MAIN PROJECT RESULTS	8
	Land Reform	8
	Agricultural Services	9
	Rural Finance	12
	Irrigation Rehabilitation	14
	Agricultural Productivity	15
	Equity versus Efficiency	20
4.	RATINGS	21
	Relevance	21
	Efficacy	23

This report was prepared by Keith Oblitas, who visited Azerbaijan in November 2007. Rose Gachina provided administrative support.

	Efficiency	24
	Risk to Development Outcome	25
	Bank Performance	25
	Borrower Performance	
	Safeguard Issues	
	Saleguaru issues	21
5.	LESSONS	27
ANNE	X A. BASIC DATA SHEET	29
ANNE	X B. ECONOMIC ANALYSIS	35
ANNE	X C. IMPLEMENTATION PROCESSES THAT FACILITATE LAND REFORMS	39
ANNE	X D. BORROWER COMMENTS	41
TABI	_ES	
Table 1	. Land Policy Scores in CIS Countries	4
	Project Objectives, Components and Costs	
Table 3	. Indicators of Usage of Extension Services for FPP Farmers (2003)	. 10
	. Responses of FPP and non-FPP Villagers to Productivity–Related Questions	
	. Annual Percentage Growth in Agricultural Value Added for Azerbaijan and for CIS Country Average 1990 to	
	997 to 2000, and 2001 to 2006	
	Ratings of Development Objectives and Outcome	
FIGU	RES	
Figure 1	1. Land Privatized to Individual Farmers, Crop Production and GDP in Azerbaijan, 1985–2002	9
	2. Wheat and Vegetable Yields for ADCP Project and non-Project Farmers – Beylagan Region 2002-2006	
Figure 3	B. Azerbaijan Cereal Yields, 1992 to 2005	. 18

## **Principal Ratings**

#### **FARM PRIVATIZATION PROJECT**

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

#### AGRICULTURAL DEVELOPMENT AND CREDIT PROJECT

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

<sup>\*</sup> 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.

<sup>\*\*</sup>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. f5/7p

# **Key Staff Responsible**

#### **FARM PRIVATIZATION PROJECT**

	Task Manager/Leader	Division Chief/ Sector Director	Country Director
Appraisal	T. V. Sampath	Michael Gould	Yukon Huang
Completion	T. V. Sampath	Benoit Blarel	D-M Dowsett-Coirolo

#### AGRICULTURAL DEVELOPMENT AND CREDIT PROJECT

Appraisal	Van Roy Southworth	Laura Tuck	Ishrat Husain
Completion	Rufiz Chirag-zade	Juergen Voegele	D-M Dowsett-Coirolo

## **Preface**

This is the Project Performance Assessment Report (PPAR) of two projects in the Republic of Azerbaijan: the Farm Privatization Project (FPP) and the Agricultural Development and Credit Project (ADCP).

The FPP was approved on January 16, 1997 and received an IDA Credit (Credit 2933) of \$14.7 million equivalent. At project closure \$13.4 million equivalent or 90 percent of the original credit had been disbursed, and \$0.2 million was cancelled. The project was closed in December 2003, 18 months behind schedule.

The ADCP was approved on June 8, 1999 and received an IDA Credit (Credit 3236) of \$30.0 million. At project closure \$31.1million had been disbursed and \$0.06 million was cancelled. The project was closed in June 2006, 30 months behind schedule.

The report presents IEG findings based on review of the projects' implementation completion reports, appraisal reports, legal documents, sector reports, and other relevant material. An IEG mission to Azerbaijan in October/November 2007 visited project sites and held discussions with government officials and agencies, project directors and staff, beneficiaries, the private sector, key donors and NGOs. The advice and help received from all persons met is greatly appreciated.

The projects were chosen for assessment because, between them, they piloted a fundamental land reform program that equitably distributed the ex-Soviet system's state and collective lands to individual families, and developed private sector agricultural extension and other rural services. Other ex-Soviet countries also undertook land reforms, but in most cases the reforms were partial. Thus, the assessment of FPP and ADCP provides lessons both for Azerbaijan's future agricultural reform program and for the general interest of other ex-Soviet countries. This PPAR also provides case-study material for a forthcoming review by IEG of the World Bank's global experience with land reforms. The PPAR adopts a results-based approach, reviewing the projects in a broader sectoral context.

Comments on the draft from the Bank's Europe and Central Asia (ECA) Region have been taken into account. Following standard IEG procedures, copies of the draft PPAR were sent to the Government of Azerbaijan for review, and the Government's comments have been taken into account in the text and are provided in full as Annex D.

## **Summary**

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. Its 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 of 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 of 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 of 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 of 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 2001, two years before FPP closed, some 95 percent of 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 of 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 of 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 of 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 of 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 of 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 of 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 statemanaged 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 of 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:

- 1. 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 of experience across countries indicates that there is no uniquely right land reform model, Azerbaijan's approach is an option for other countries to consider.
- 2. 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 of collective lands equally and transparently. For support services, Azerbaijan offers equal access to extension, training and credit—but more effort is needed to encourage women and poor people to take advantage of the available services.
- 3. 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.
- 4. 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.

Vinod Thomas Director-General Evaluation

## 1. Background and Context

#### Overview

1.1 This assessment focuses on the first two agricultural projects that the Bank supported in Azerbaijan. The Farm Privatization Project (FPP), and the Agricultural Development and Credit Project (ADCP) were the pilot vehicles for launching a land-based agricultural reform program that has been amongst the most far-reaching of any of the countries that were formerly part of the Soviet Union. Land privatization was used to create individually-owned family farms, with land shared out equally between claimants. This reform was carried out swiftly and was accompanied by measures to provide extension and credit and to rehabilitate irrigation, where possible using private suppliers. This posed an enormous challenge: the number of production units went from about 2,000 collectives<sup>1</sup> to about one million private family farms<sup>2</sup>, each needing support services.

## **Development Context**

- 1.2 Azerbaijan is one of 12 sovereign nations that, in 1991, declared Independence following the break-up of the Soviet Union in 1989.<sup>3</sup> Like the other Commonwealth of Independent States (CIS) nations, Azerbaijan experienced an initial period of major disruptions caused by the progressive collapse of the Soviet-inherited command-economy. During this period per capita GDP declined annually reaching a post-independence low of \$470 in 1995, less than 40 percent of per capita income in the Soviet period. The economy was then transformed, mainly on the back of oil and gas discoveries. Average per capita income more than doubled, reaching \$1,240 in 2005.
- 1.3 The oil-sector has not greatly improved social welfare, partly because it employs only 2 percent of the labor force. Oil revenues have fueled inflation, resulting in higher prices for consumers and higher production costs, not least for farmers. The oil boom is expected to peak in 2010. Thereafter overall growth of the economy will increasingly depend on the performance of other sectors, not least of agriculture. The sector currently contributes 10 to 15 percent of GDP and, particularly significant, employs 45 percent of the country's workforce.
- 1.4 Under the Soviet model agriculture was dominated by large, state-managed collective farms, with prescribed production targets, minimal market incentives, government-determined and delivered inputs, limited innovation in production systems, and predetermined output markets and prices. Agricultural productivity was low to begin with

1. There were some "state" managed farms as well as "collectively" managed farms, which were also substantially state-managed. For convenience, state farms will also be referred to as collective farms.

<sup>2.</sup> Nearly all of the privatized land is individually owned by farmers. About 2 percent of gross agricultural production is from agricultural enterprises rather than family farms (Statistical Committee of the CIS, 2003). The FPP and ADCP and (except where stated otherwise) this report deal only with the individualized farms.

<sup>3.</sup> The other Commonwealth of Independent States countries are: Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

2

and deteriorated further after the break-up of the Soviet Union, falling to less than half pre-Independence levels. Input and output markets collapsed; technical assistance and sources of finance dried up; and essential rural infrastructure (particularly irrigation works which support about three-quarters of agricultural production) were no longer maintained by the state and deteriorated.

- 1.5 By 1995 agricultural value-added had fallen to 55 percent of the level in 1990 (at constant prices). But the country was slow to develop a new agricultural strategy. In the early years, policy-making remained in the socialist mold and, up until 1994, the conflicts with Armenia were a continuing source of disruption.
- 1.6 Despite the formidable institutional obstacles, Azerbaijan has significant agricultural potential. Soils are generally fertile. The irrigation network (although in need of rehabilitation) is extensive (69 percent of cropped land). Agro-climatic zones range from temperate to Mediterranean, and from humid to semi-arid, enabling production of a wide diversity of vegetables, fruits, field crops and livestock. Export potential of fresh produce to neighboring countries is considerable once effective marketing chains are established, as is the potential for agro-processing. With a high literacy rate 97 percent of the adult population and little difference between men and women the rural population provides a solid foundation for agricultural growth.
- 1.7 The diversity of Azerbaijan's agricultural sector forms a good base for accelerated growth. About 57 percent of the country's land area is cultivated, half under crops and the remainder under pasture. About 42 percent of cropped land is under cereals. Wheat dominates followed by barley and maize. Major diversification is taking place, especially to vegetables and potatoes for which cropped area has tripled over the period 1992-2005. Livestock production has increased by more than 50 percent in the same period. Fodder crop areas are also increasing. Limited growth and job opportunities in the cities has resulted in an increasing percentage of the population residing in rural areas from 46 percent of the total population in 1990 to 48 percent in 2006. With small farms and relatively abundant family labor, the farming sector may be able to respond well to the improved incentives from land ownership.

## **Land Reform in Regional Perspective**

1.8 All of the CIS countries undertook land reforms. In some cases reforms began in the early 1990s (e.g. Kazakhstan), but for most countries significant actions commenced in the mid-1990s. Azerbaijan was typical in this respect, commencing land distribution in 1996. Azerbaijan stands out, however, in the extent of its reforms. Although the *results* of a land reform program are what ultimately matter (Section 3) the main features of Azerbaijan's

<sup>4.</sup> Data from World Development Indicators, 2008, World Bank and FAO statistics.

<sup>5.</sup> Wheat is Azerbaijan's dominant crop with about 600,000 hectares. Other cereals are barley (155,000 hectares) and maize (32,000 hectares). Cotton and fruit trees used to be major crops assured by the Soviet markets and production instructions to the collectives, but areas have since plummeted. Cotton area has fallen from 224,000 hectares in the 1992-94 period to 86,000 hectares in 2003-05. Fruit crop area has fallen from 238,000 hectares (1992-94) to 88,000 hectares in 2003-05.

3

program – full privatization and transferability of land – were close to the ideal model for land reform cited in the literature.<sup>6</sup>

- 1.9 Table 1 provides a comparison of the extent of reform in each of the CIS countries. Azerbaijan is one of the three top-scoring countries. About half of CIS countries allocated "shares" to land, rather than actual land, and only a few countries have transferable land rights. Also, "privatization" can be more nominal than real. Collectives might become "corporations", "cooperatives" or receive other titles, but in practice remain communally managed.
- 1.10 In contrast to most CIS countries, Azerbaijan's land reform embraced four catalytic elements: comprehensive land tenure arrangements; land tenure and agricultural support services; a big-bang approach; and transparent land allocation procedures to ensure equity. Azerbaijan's land reform involved:
  - Land to be privately owned.
  - Individual rather than collective or corporate farms.
  - Transferable ownership.
- 1.11 **A Package Approach**: Another feature of Azerbaijan's reform program was that it was seen as an integrated reform program, combining land reform with reform of agricultural support services in particular, agricultural extension and credit services and rehabilitation of irrigation. A better term for the reform program in Azerbaijan would be that it was a "Land-Based Agricultural Reform" program, rather than "Land Reform" by itself. At that time, literature on agrarian reform in the CIS countries tended to place lower emphasis on the non-land aspects of agricultural reform.<sup>9</sup>
- 1.12 **A "Leap": not a "Transition**": Privatization was executed swiftly. In 1997, while privatization was still being completed on the 6 pilot collectives covered by FPP, the Government rolled out a nationwide program of land privatization. By 2001 some 95 percent

<sup>6.</sup> Z. Lerman, From Common Heritage to Divergence: Why the Transition Countries are Drifting Apart by Measures of Agricultural Performance", American Journal of Agricultural Economics, 2000.

<sup>7.</sup> e.g. Leaseholds rather than full ownership; retaining state rights to interfere in farmer decisions such as what crops to grow; initial issuance of share certificates specifying a land right without identification of the specific land parcel that is owned – such share "ownership" tends to persist rather than move to a next step.

<sup>8.</sup> S. Rozelle and J. Swinnen, "Success and Failure of Reform: Insights from the Transition of Agriculture", 2004.

<sup>9.</sup> The complementary links between land reform and agricultural support services, however, are well recognized in the designs of Bank land reform related projects in the Europe and Central Asia (ECA) countries since the mid-1990s. The Russia Land Reform Implementation Support Project and its twin, the Agricultural Reform Implementation Support Project (both FY94); the Tajikistan Farm Privatization Support Project (FY99); the Kazakhstan Real Estate Registration Pilot Project and Agricultural Post-Privatization Assistance Project (both FY98); and the Armenia Title Registration Project (FY99) all followed a package approach (using one or two projects). IEG's review of "Agriculture Policy Reform in the ECA Transition Economies, 1991-2002" (2003) commented that "Substantial support services are needed to make restructuring work and it is the relative absence of these in CIS countries which helps explain why the sub-region lags behind the Central and Eastern Europe countries."

of the country's agricultural land was owned by private family farmers. Each collective had been privatized in one step – from the commune straight to private family ownership. The frequently used reference to "transition" of land reform in the ex-Soviet countries was, in Azerbaijan's case, more of a "leap."

1.13 **Equitable Land Allocation**: Azerbaijan's land distribution process was egalitarian. Land from each collective was allocated to local people on the basis of equal amounts per person, irrespective of age, gender, income or social status. For each collective, there were extensive community discussions leading to a general understanding of individual rights and how the allocation process would be managed. Allocation of land parcels was then by public lottery, preempting the possibility of "rigged" outcomes.

**Table 1. Land Policy Scores in CIS Countries** 

Country	Potential private ownership	Privatization strategy	Allocation strategy	Transfer- ability	Composite land policy index <u>a/</u>
Armenia	All	Distribution	Plots	Buy/Sell/Lease	9.2
Georgia	All	Distribution	Plots	Buy/Sell/Lease	9.2
Azerbaijan	All	Distribution	Plots <u>b</u> /	Buy/Sell/Lease	9.2
Moldova	All	Distribution	Plots/Shares	Buy/Sell/Lease	8.5
Russia	All	Distribution	Shares	Lease	6.7
Ukraine	All	Distribution	Shares	Lease	6.7
Kazakhstan	House plot	None	Shares	Use rights	5.4
Kyrgyz	All	Distribution	Shares	Moratorium	5.4
Turkmenistan	All	None	Leasehold	None	4.0
Tajikistan	None	None	Shares	Use rights	2.5
Belarus	House plot	None	None	None	1.3
Uzbekistan	None	None	Leasehold	None	0.6

Source: Adapted from Z. Lerman, C. Csaki and G. Feder, "Agriculture in Transition - Land Policies and Evolving Farm Structures in Post-Soviet Countries" (2004)

NOTES: (a) Scoring is on a scale of 0 to 10, with a Composite Index of 10 representing "ideal" land policy attributes. (b) In the original table, allocation as land shares had been assumed for Azerbaijan, whereas allocation to privately owned family plots was the actual case. This is now corrected, resulting in a Composite Index of 9.2

## 2. Project Objectives and Design

## The Farm Privatization Project

2.1 FPP's Overall Development Objective was to accelerate 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 geographic replicability. The underlying intention was that the project would form the basis for subsequent development of a national program. There were six specific objectives: development of (i) land registration; (ii) farm information and advisory services; and (iii)

credit services; (iv) rehabilitation of irrigation and drainage infrastructure; (v) creation of an enabling environment to build linkages between key institutions; and (vi) development of community based services in support of land privatization and farm restructuring. There was a corresponding project component for each of these specific objectives, as shown in Table 2, along with component costs.

2.2 FPP was a pilot project covering one former collective farm in each of 6 *raions* (districts), chosen to provide broad regional coverage. Country coverage was very small relative to Azerbaijan's total number of raions (66) and former collectives (about 2000), but the impact of the pilot as an initial testing ground for Azerbaijan's agricultural reforms was potentially large. Azerbaijan needed to make a radical departure from the failed Soviet system, and a successful pilot would provide a model for reform, setting the stage for roll-out nationwide. In particular, FPP, joined by ADCP, would pioneer three main agricultural development thrusts: the land privatization program itself, and two key agricultural services - agricultural extension, and credit. Irrigation rehabilitation was also an important component of FPP.

### The Agricultural Development and Credit Project

- 2.3 The ADCP was the first part of a three-phase Adaptable Program Loan (APL).
- 2.4 The overall development objective of the program as a whole was to: return Azerbaijan's farming areas to former levels of productivity under a new system characterized by private family and group farms operating in private markets. The objective of ADCP was that: private family and group farms and other private rural entrepreneurs begin to: (i) register land transactions in large numbers; (ii) use information and advisory services; and (iii) expand investment in their farms and other rural businesses; and (iv) that government capacity be built to formulate policy to improve the competitiveness of the rural economy.
- 2.5 ADCP was on a larger scale than FPP. Five areas for field implementation were chosen, with broad geographic coverage and representing different climatic and social conditions. ADCP's land reform program was to complete the national coverage for land titling, and introduce systems for recording land transactions, a necessary adjunct for a private land market. For agricultural extension, the aim was to strengthen field advisory and training services, promote applied research through a competitive grants scheme, and provide agricultural information services nationally, using TV and other media. For the third main activity rural finance credit services were to be decentralized through credit unions and informal borrower groups, and to be supported by a centrally managed line of credit. The private sector would be used extensively for agricultural extension, training and information services, for applied research, and for veterinary services.

## **Institutional Arrangements**

2.6 The organizational arrangements of FPP and ADCP were substantially similar at central levels and in the main line ministries involved. A Project Management Unit under the Ministry of Agriculture was established for FPP, and was charged with central coordination of the project, planning and procurement. Later, this also took on the same function for

ADCP and has now evolved (under the name "State Agency for Agricultural Credits") to a general coordination unit for all externally funded agricultural projects, but containing a specific PIU for the ADCP program. Field implementation activities for FPP and ADCP came under the line ministries and agencies concerned. The primary agencies were the Ministry of Agriculture, State Land Committee, Agrarian Reform Commission, the State Land and Cartography Committee, State Irrigation Committee, Agroprombank (for FPP), State Veterinary Service (for ADCP), and an "Implementing Agency" for ADCP's credit program. In each district covered by the projects there was also a "Project Implementation Unit" which comprised a member from each of the agencies involved with the project. The central PMU and the district PIUs were effective, and the line agencies also performed well, after hesitant starts in some cases (e.g. Agroprombank, paragraph 3.19). The only significantly poor performer was ADCP's credit Implementing Agency (paragraph 3.21).

### **Monitoring and Evaluation**

- Both projects were **Designed** to include surveys to measure project outcomes. Several surveys, such as the FPP's 2003 Beneficiary Survey and some of ADCP's impact assessments, were undoubtedly useful, especially in assessing less quantitative outcomes such as farmer views on the benefits from different project components. However, systematic M&E programs aligned to measuring the degree to which the projects' development objectives were attained were only partially developed. For FPP, the PAD designated the PMU to be responsible for M&E, but without guidance on how M&E was to be done. There were monitorable indicators including "input" type data such as number of land titles issued, and "output" indicators such as crop yields. But "outcomes" such as farm incomes were sparse. The PMU for ADCP was also to be charged with M&E, but details on M&E implementation were not provided. The PAD did, however, contain an (overly) detailed listing of monitorable indicators, but, like FPP, mostly on inputs and outputs.
- 2.8 **Implementation** of M&E continued to under-represent outcome indicators. In particular, data to measure the projects' fundamental outcomes—to increase agricultural yields, productivity and incomes—were patchy, and sources are not adequately cited. However, each project, especially ADCP, had occasional consultants' surveys, mostly on social impact and beneficiary attitudes, providing indirect indications of outcomes.
- 2.9 This has limited the **Utilization** of M&E data. For instance, for the purposes of this assessment, the projects' productivity impacts are difficult to assess. Nevertheless, Management Information System type data was collected by component and field-based managements, and was collated by the PMU. The ADCP project management commented to the mission that this MIS data, needed to inform project implementation decisions, was adequate and timely. This information, however, falls short of measuring the broader outcomes and impacts of the projects; which were only partly captured by the consultants' surveys. The overall quality of M&E is rated **Negligible** for both projects. Although some of the survey information is useful, M&E data were, overall, inadequate to estimate economic rates of return for the projects (para 4.14). This is a major gap, in particular for a pilot project where an understanding of impacts and outcomes are important for decisions on scaling up

2.10 The start made under ADCP II, with a specific M&E unit developing a more systematic approach, appears more promising. Supplementing this, an independent major survey of the FPP/ADCP outcome to date could provide a firmer base for moving the program forwards. M&E also needs to be seen as an institutionalized and continuous part of the reform program's management, rather than an activity that is disbanded at the end of each project.

Table 2. Project Objectives, Components and Costs

Objectives	Components —	Cost (US		illions)
<u> </u>	Components	Expected		Actual
Farm Privatization Project (FPP) Overall Objective: To accelerate the Government's program for land privatization and farm restructuring through:				
1. Land registration.	<u>Land Registration</u> : services in the 6 project districts for land surveying and mapping and registration of private land titles.	)		
2. Farm information and advisory services.	Farm Information and Advisory Services: Establishment of Farm Development Centers in each of the 6 project districts and in Baku to provide information, advisory and training services on land privatization processes, credit application, farm business plans, and crop and livestock husbandry.	} 1	8.6	11.5
3. Credit services.	<u>Credit Services</u> : Piloting provision of credit to the privatized farms through a rural bank	J		
<ul><li>4. Rehabilitation of critical irrigation and drainage infrastructure.</li><li>5. An enabling environment to build linkages</li></ul>	<u>Irrigation Rehabilitation</u> : Rehabilitation of irrigation and drainage infrastructure for the farmers on the 6 pilot areas.		4.2	8.3
between key institutions.     Community based social services in support of land privatization and farm restructuring	No specific component <u>Community Development Program</u> : Promotion of community development activities and establishment of business centers to promote agribusinesses.		1.0	0.0
restructuring	Project Management and Implementation: establishment of a Project Management Unit in Baku and Project Implementation Units in each pilot area for project management; and provision of training and consultancy technical assistance.		1.9	3.:
	Physical and price contingencies		3.1	
	Total Project Costs	2	8.8	23.8
Agricultural Development and Credit Pi	roiect (ADCP)			
Overall Objective of the ADCP Program: To return Azerbaijan's farming areas to former levels of productivity. Development Objective of the ADCP Project (APL Phase 1): Private family and group farms and other private rural entrepreneurs begin to:				
Register land transactions in large numbers.	<u>Land Registration</u> : (i) Develop a cadastre and land registration system and (ii) pilot a unified cadastre and registration system for land and buildings.	em;	5.4	4.′
2. Use information advisory services.	Information and Advisory Services: Strengthen the central Extension Support Center, establish rural advisory centers in 5 pilot regions, establish a competitive grants system for agricultural research and technology transfer, and introduce private veterinary services.	<sup>n</sup> 1	0.0	11.
3. Expand investment in their farms and other rural businesses; and	Rural Finance: Pilot market based credit through development of loc financial institutions (80 Credit Unions and 200 informal Borrower Groups) and a rural credit line.	cal 1	5.3	15.0
		ent	0.0	0.9
4. Government capacity to formulate policy is strengthened, aiming to improve the	<u>Rural Policy:</u> Establishment of a Rural Policy Unit, and developme of a strategy to maintain the competitiveness of agriculture.		0.8	0.3
			2.1	2.3

## 3. Main Project Results

#### **Land Reform**

- 3.1 **FPP**: The initial project objective was limited to land distribution and registration for FPP's six pilot collective farms (occupying an area of 4800 ha), small enough to be manageable but allowing for adequate coverage of variations in land use and scale. Land titling at the six pilot sites was completed by mid 1998, just 18 months after Board approval. Some 6645 families were provided with individual land titles (compared with a target of 4800 titles).
- 3.2 Most FPP farmers interviewed by the IEG mission had a positive view of the land privatization process. <sup>10</sup> The distribution of equal land areas to all persons, regardless of age, social position, gender or other factors, and the lottery process of allocating land, were generally considered "fair". This view is corroborated in the FPP's Beneficiary Survey (2003). The survey found that some 95 percent of FPP farmers considered that the land allocation process had provided them with "a property share of the same or better average value as others." Positive views (on the national land reform program) were also expressed by ADCP farmers, and by farmers outside the project areas.
- 3.3 Based on the early experience of the pilots, government decided in 1997 to launch a nationwide rollout of the land privatization program, using the FPP model. By 2001, two years before FPP completion, some 1980 of Azerbaijan's 2020 state and collective farms had been privatized. This represented over 95 percent of agricultural land. Government and civil society representatives interviewed by IEG stated that land reform had largely succeeded. Also, FPP was widely credited to have played a key part in the roll-out. The relationship between land reform, crop production and GDP is shown in Figure 1.
- 3.4 **ADCP**: The primary land reform objective of ADCP was to establish an efficient system for recording rural land transactions, consolidating work started under FPP. Experience elsewhere (e.g. Thailand) has demonstrated the value of a land transaction recording system: to ensure ownership/tenant security, to underpin the use of land to secure loans, and to make on-farm investments worthwhile.
- 3.5 All output targets were met. Ten Regional Cadastral Centers were created as intended, and registration of land ownership and transactions was decentralized from Baku to these centers. By 2004 the cumulative total of land transactions reached the appraisal target of 10,000. With a further 50,000 registrations under the Regional Cadastral Centers, titling was completed on virtually all of the nation's arable land. A Unified Cadastre and Registration system was successfully piloted and has provided experience for a nation-wide unified registration program under the Real Estate Registration Project (FY07).

<sup>10.</sup> The mission visited Lankaran and Barda regions (FPP) and Beylagan and Masalli regions (ADCP).

<sup>11. &</sup>quot;FPP Beneficiary Survey, 2003", Elat, 2003. Farmers' response to question as worded in the survey.

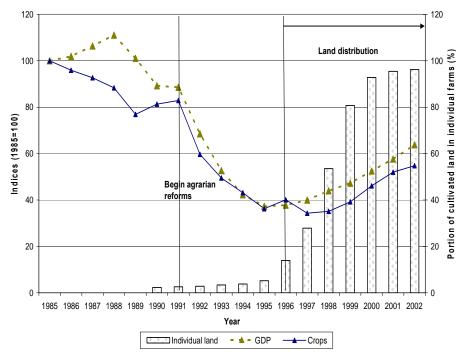


Figure 1. Land Privatized, Crop Production and GDP in Azerbaijan, 1985–2002

Source: N. Dudwick, K. Fock and D. Sedik, "Land Reform and Farm Restructuring in Transition Countries". World Bank Working Paper No. 104; 2007

("Crop production" is gross agricultural output of crops in value terms, with data from CISSTAT and Azerbaijan statistical yearbooks.)

An IEG mission visit to a Regional Cadastre Center and a Registration office in Beylagan region confirmed that land services were functioning well. Decentralization has made the service quicker and more accessible to farmers. Processing time for registering a land transaction is now 10 to 15 days compared to several weeks before the project. Land transactions were accounting for over 80 percent of the work compared with less than 20 percent for land registrations. Business was rapidly expanding—the new land registration office recorded 5,000 transactions in the first quarter of 2006, and in the same quarter of 2007, transactions were over 32,000. Financially, the field offices were becoming more self-sustaining: the fees charged for a transaction were about 80 percent of variable costs. Both the cadastral and registration offices were introducing computerized services, including digitization of land records.

## **Agricultural Services**

3.7 Before FPP, agricultural services were in poor shape. The technical staff of the collectives had departed but there were now one million new family farms, each requiring at least a minimum of technical understanding. Having previously been used to follow orders from above, farmers were for the first time expected to make their own decisions.

- 3.8 **FPP**: A Farm Information and Advisory Services unit was set up in the Ministry of Agriculture. This was complemented by provision of extension agents in each of the six pilot raions, preparation and dissemination of technical booklets, extension field visits, and farmer training. While the services primarily covered crop and animal husbandry, they also included how to apply for credit and farm business management.
- 3.9 Farm survey data and the IEG mission's field discussions indicate that the information and advisory ("agricultural extension") services are highly appreciated. Data from FPP's end-of-project Beneficiary Survey (Table 3) show that pilot farmers gained almost universal access to advisory services, and had substantially greater use of farm inputs, new cropping patterns and market information than non-pilot farmers. During a visit to FPP's Lankaran pilot area, the mission found that the extension agent's training courses were particularly popular—"we come because we get value", said one farmer. Increases in productivity were mainly attributed to the technical advice provided by the agents. At the end-of-project stakeholder workshop participants cited agricultural extension more often than any other FPP component as having been the key to their success.

**Proportion of Farmers Responding** 

Table 3. Indicators of Usage of Extension Services for FPP Farmers (2003)

	From Pilot Villages	From Non-Pilot Villages		
Accessing brochures, advice, and/or mass media	97%	5%		
Using fertilizer and/or pesticides	79%	38%		
Using a new cropping pattern	79%	48%		
Collecting market price information	65%	25%		

Source: FPP Beneficiary Survey, Elat, 2003

Indicator

- 3.10 **ADCP**: ADCP had a wider range of extension activities than FPP. Regional Advisory Centers (RACs) were established for each of ADCP's five regions, as field bases to provide training, demonstrations and a network of extension agents. Technical pamphlets on horticulture, diversification crops and farm management were prepared and distributed to farmers. Mass media information campaigns were conducted, using television and newspapers. A Competitive Grants Scheme for financing applied research and demonstrations was established. Veterinary Field Units were piloted. And, to support these initiatives, the Information and Advisory Center in the Ministry of Agriculture was strengthened.
- 3.11 **Extensive Private Sector Participation**: Three of the five RACs were contracted out to non-government agencies. The veterinarians were private, and the CGS was open to both government and non-government bidders. The non-government sector was also involved in the preparation of training and media modules. These experiences were generally positive and private sector participation is being expanded under ADCP II.
- 3.12 **Privatizing Veterinary Services**: The ADCP's 25 private Veterinary Field Units serviced some 48,000 livestock owners compared with an appraisal target of 20,000. More

11

important than such physical targets, the Field Units successfully piloted private veterinary services, and Government now intends to scale-up under ADCP II. The IEG mission visited one Veterinary Field Unit in Beylagan. Premises were spotless and well-frequented. The practice was operating independently, able to cover costs through charges on medicines and services. The veterinarians estimated they 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.

- 3.13 **Competitive Grants**: A Competitive Grants Scheme (CGS) was used to sponsor applied research and new technologies, and had broad geographic and crop coverage. It was also considered a first step towards rehabilitating and improving the national agricultural research capacity. Some 52 grants (average cost: \$28,000) were awarded under ADCP (from 168 competing submissions) to a mixture of public entities such as research stations (80 percent), and proposals from the NGO and private sectors (20 percent). 12
- 3.14 The competitive grants have helped instill a farmer-oriented and problem-specific approach to promoting agricultural technology. Demonstrations and training are a major part of each funded sub-project. CGS activities are clearly "owned" by the RACs. According to one RAC Director, their research was now more relevant to farmers. CGS survey data indicates that about 30 percent of farmers that had visited demonstrations took up the demonstrated technologies. The yields of farmers who had attended demonstrations are typically over 50 percent higher than yields under traditional practices. Given the enthusiasm that the grants scheme has generated amongst farmers, the extension service and researchers, it is being continued under ADCP II, with strong support from Government.
- 3.15 **Agricultural Extension, Training and Demonstrations**: Annual extension contacts reached 91,000 farmers in 2004, well above the appraisal target of 10,000 to 15,000 farmers per annum. Demonstrations are reported to have been visited by about 8,000 farmers annually, compared with the appraisal target of 3,000 visits. Most farmers interviewed by the mission said that the program was helpful, and there was a desire in most cases that the program should be intensified. Farmers said they were particularly interested in obtaining the technical knowledge needed to raise productivity, as well as advice on crop diversification and how to obtain credit.
- 3.16 The IEG mission was shown over a hundred technical brochures offering practical advice to farmers. The Information Advisory Center's national bi-monthly TV programs on agricultural subjects are aired in prime time and are popular with the general population as well as farmers.

<sup>12.</sup> The research or extension activities for competitive submissions are chosen by a committee, which also evaluates the submissions received against each pre-identified research/demonstration activity. For the future, the CGS might be further enriched by creating an additional open window option. This would allow proposals to be submitted by any party for activities that are not pre-identified by the committee, encouraging additional innovations.

#### **Rural Finance**

- 3.17 The FPP and ADCP rural finance programs made slow starts but ultimately achieved their main objectives. FPP blazed the trail and ADCP built on this experience, piloting a larger, more sophisticated program based on farmer-managed field institutions.
- 3.18 The FPP/ADCP credit program followed a series of banking sector crises. The transformation of the socialist banking system had caused major financial losses and a loss of consumer confidence in the emerging commercial banks. This was matched by commercial bank skepticism about the profitability of lending to the rural population. Government attempted to establish credit unions in the 1990s but most of them failed.
- 3.19 **FPP**: The credit pilot was built around the state-owned Agroprombank, which lent directly to individual farmers. It was chosen as it was the only bank that reached into all major agricultural regions. It made sense to opt for an existing financing agency, and Agroprombank would have been a logical choice, given the limited alternatives when FPP was being prepared. However, Agroprombank had little experience with rural finance and did not develop as an effective lending institution. Loan application procedures were initially overly-complicated and farmers distrusted the system. Nevertheless, FPP's output targets were ultimately achieved. Its credit component was fully disbursed and credit repayment was over 90 percent.
- 3.20 Government officials and Bank staff frequently told the IEG mission that FPP's significant rural finance achievement was to "change mind-sets". There was little experience of credit prior to FPP, let alone a culture of repaying loans.
- 3 21 **ADCP**: ADCP's rural finance program built on the starting initiatives of FPP, taking them much further. ADCP's notable achievement was at field levels - in piloting farmer institutions for managing credit, and setting the stage for the nationwide scale-up of the credit program under ADCP II. The ADCP established two types of local financial institutions: Credit Unions (CUs) as formal legal entities, and smaller informal Borrower Groups (BGs). ADCP also attempted to establish an "Implementing Agency" to manage the credit program. The appraisal concept for the Agency was that this activity would be managed commercially, and would be tendered with the requirement that the Agency would put 20 percent of its own money into each loan. It was considered that this would provide the incentive for good loan management and cost recovery. However, the arrangement also introduced incentives to only take easy lending opportunities rather than develop grass-roots and development oriented farmer institutions. The eventually selected entity was risk-averse, and showed little inclination to provide training and to promote the CUs. Eschewing encouragement of local ownership and self-imposed financial discipline, the Agency favored a top-down approach with excessive controls. Another problem was the high licensing fee for a CU – some \$5,600 – which deterred applications. A critical institutional issue was the lack of an exit-strategy for the Agency. It was seen as a temporary arrangement, but, especially given the long-term and national perspective of the ADCP's three stage APL, the need to think ahead should have been evident.

13

- 3.22 The program got off to a slow start. Disbursements to CUs began in late 2002, over three years into project implementation, and disbursements to BGs did not begin until 2003. A Mid-Term Quality Enhancement Review introduced a number of changes which improved project performance. The Agency was replaced by a technical assistance team that performed well, and CU licensing fees were substantially reduced.<sup>13</sup>
- Rapid implementation in the second half of the project enabled most of ADCP's output targets to be achieved. According to the ICR 30 CUs and 905 BGs were established, compared with appraisal targets of 80 CUs and 200 BGs. As of June 30, 2006 (the extended closing date of ADCP) the number of BGs had grown to 1,498. The shortfall in the number of CUs was thus counterbalanced by the greater than anticipated number of BGs. About 38,000 farmers received credit (appraisal target 12,000), and lending totaled US\$26 million at closing, compared with a target of \$10 million. Repayment rates were 97 percent for CUs and 95 percent for BGs, within appraisal expectations. The average loan amounts to farmers were \$1002 for CUs and \$373 for BGs, modest enough to suggest that small farmers were being served. ADCP also fostered the development of a legislative framework for rural finance.
- 3.24 As concerns the impact of the credit program, survey data is limited to the BGs. Nearly all farmers surveyed considered that their BG loan had helped them generate profits, and 92 percent intended to continue using credit. IEG Mission field visits to CUs and BGs also found that farmers had overall positive views of the credit program. But farmers drew attention to the following drawbacks:
  - Periods for seasonal credit are too short
  - Seasonal credit often arrives too late for purchasing inputs.
  - There is a lack of medium-term and long-term credit, hampering crop diversification and on-farm investment.
  - Individual credit limits are too small.
  - CU Members are not able to make deposits.
  - The overall credit ceiling for BGs and CUs is too low.
- 3.25 **Prospects for Commercial Credit**. At present, commercial banks are minimally involved with rural finance which represents a small part of their portfolio (estimated by one banker to be only about one percent on aggregate). Under ADCP-II, a line of credit to commercial banks has been established for medium and longer-term loans to agribusinesses. IEG mission interviews with several commercial banks indicated a potentially larger role for private rural finance the financing not only of agribusinesses, but also of BGs and CUs. Seasonal credit as well as longer-term lending might also be attractive. Thus, PARABANK has successfully provided credit to BGs even to small, geographically dispersed communities, with virtually 100 percent recovery rates, and intends to expand lending to BGs. Also, commercial banks were bringing in more flexible loan terms than those offered

<sup>13.</sup> Subsequently, management of the line of credit was transferred to the Azerbaijan Credit Union Association (ACUA), which is continuing to manage the credit line under ADCP II.

<sup>14.</sup> The manager of a PARABANK branch visited wanted to increase his BG portfolio because he felt the BGs were credit-worthy borrowers. A microfinance institution - CREDAGRO - had expanded rural lending from

14

through the Credit Implementing Agency and Azerbaijan Credit Union Association, the official channel for farm credit. <sup>15</sup> There is, in the words of one commercial banker, "room for multiple actors in rural finance".

## **Irrigation Rehabilitation**

- 3.26 Under FPP, the irrigation and drainage systems of the six pilot areas were rehabilitated and water user associations (WUAs) were created as independent entities, with water charges to recover 100 percent of operations and maintenance (O&M) costs. There was a two-fold rationale for rehabilitation. First, irrigation and drainage systems had not been maintained since dissolution of the collective farms and had fallen into serious disrepair. Second, whereas under the collective farms water could be directed to selected parts of the farm leaving other areas without irrigation, water now needed to reach all of the new farms—for equity reasons, and to gain community acceptance for land redistribution.
- 3.27 All physical targets for the six pilots were met, and funding to the program was subsequently doubled to provide additional coverage. The program reached 17,100 ha compared with the appraisal target of 9,300 ha, 31 WUAs were formed compared with a target of 19, and over 1,600 km of canals were rehabilitated against 900 km targeted. Irrigation conveyance efficiency is reported to have increased from 45 to 65 percent, and field application efficiency from 45 to 80 percent. FPP data indicates a near-doubling of yields for most crops, which is consistent with yield changes reported by farmers during the mission's field visits.
- 3.28 FPP established the first WUAs in the country and helped instill in government the confidence to scale-up the program. By the end of the project some 550 WUAs had been established nationwide. The project also provided a forum for national policy discussions on participatory irrigation management and was the catalyst for the development of legislation for WUAs. Finally, FPP is considered to have contributed to a cultural change in the attitude to water—from considering water as a free and government-provided service, farmers began to consider water management as a community responsibility and started to recognize the need to pay for irrigation.
- 3.29 Nevertheless, WUAs are not yet financially self-sustaining. The mission encountered one WUA (Gilinjli) which was collecting annual water fees of only 3 manat/ha (about \$4). This may be adequate for light maintenance of a newly rehabilitated scheme, but the more normal situation of a system that has had only basic repairs to restore functioning of old infrastructure, requires more than this. Adequate O&M is important to the long-term success of Azerbaijan's agricultural reform program, as, with some 70 percent of the nation's cultivated land under irrigation, rural productivity depends on the sustainability of the irrigation infrastructure. Bank water staff familiar with Azerbaijan's irrigation sector

<sup>\$3.7</sup> million in 2004 to over \$23 million (Manat 20 million) in 2007, and was prepared to make small loans to individual farmers (about \$200 to \$1200 per loan). And AGRARCREDIT was planning to expand the number of its rural branches (from 12 to 25 in the next three years).

<sup>15.</sup> e.g. PARABANK and CREDAGRO have seasonal credit terms of 12 and 14 months respectively and are more flexible on loan amounts.

consider that \$10/ha or more would be typical annual maintenance costs. Further, most WUAs employ staff to operate their schemes, which may cost some \$5-10/ha per annum. The State Irrigation Agency and national WUA administration have also expressed concern about the adequacy of water fees and O&M. The O&M financing issue is now being tackled country-wide under the Irrigation Distribution System and Management Improvement Project (FY03), which is establishing a national support network for awareness building and training of WUAs. For FPP however, the self-sufficiency of its WUAs was an unfinished part of its agenda.

### Agricultural Productivity

Due to data and analytical problems the reform program's impact on agricultural productivity cannot be stated reliably. Attribution is one problem. It is not possible to determine the degree to which changes in yields, crop diversification and agricultural value were due to the influence of the projects rather than other factors. Secondly, there are inconsistencies and gaps in the data collected under the projects themselves, in large part due to weak M&E (paragraphs 2.6 to 2.9). <sup>16</sup> National level data also contains inconsistencies. Hence, the impact below (which cross-check between different information sources including qualitative information and mission observations), must be considered indicative.

#### **Project Level Data**

- **FPP.** Yield data is particularly sparse for FPP. However, the Beneficiary Survey at project completion<sup>17</sup> produced findings which indirectly confirm the land reform's potential for boosting productivity (Table 4). Mission field visits to Barda and Lenkaran regions also found positive farmers' assessments. Most farmers reported yield increases, and were satisfied with the agricultural services provided under the project. Irrigation rehabilitation was reported to have doubled yields.
- 3.32 **ADCP.** The ADCP-II Baseline Survey of 2007 measured yields of representative crops from project and non-project farmers in 50 villages across all ADCP regions. Data is available for the last four years of the project. In the well-performing Beylagan region, starting yields were about the same for project and non-project farmers. But project farmers increased their yields by 45 percent from 2002 to 2006, while the yields of non-project farmers increased by only 10 percent (Figure 2). 18 For all five ADCP regions together,

17. Elat, 2003.

<sup>16.</sup> For instance: (i) Crop yield increases reported in the FPP ICR's project Results Framework (data source uncited) are inconsistent with the increases in pilot farmer incomes reported in the Beneficiary Survey; (ii) the Beneficiary Survey reports a (patently unrealistic) ten-fold increase in incomes; (iii) the ICR states that pilot farmers' productivity increased 250 to 300 percent during the project, which is likely inconsistent with the 400 percent increase in pilot farmers' incomes also reported; (iv) data cited in the ADCP ICR from the State Statistics Committee indicates yield increases from 2000 to 2005 for ADCP and non-ADCP regions of wheat 113% (for ADCP Regions) and 108% (for non-ADCP Regions); for corn of 148% and 137% respectively and for potatoes 175% and 141%, which differ significantly from the FAO data in Table 6; and (v) data sources and survey methodologies are not always clear.

<sup>18.</sup> National statistics on wheat yields are reported (FAO data) to have been 2.6 and 2.7 mt per hectare for 2002 and 2006 respectively, higher than the yields of the non-project farmers in the ADCP survey. Relative data

average yield increases for project farmers were 30 percent or more, while typical yield increases for non-ADCP farmers were 10-15 percent (Annex B, Table 2).

Table 4. Responses of FPP and non-FPP Villagers to Productivity-Related Questions

Survey Question	Percentage of Respondents		
	From FPP Villages	From Non-FPP Villages	
Credit is "not too difficult" to obtain?	64	18	
Used land as collateral for credit?	78	12	
Had access to extension services?	97	5	
Using fertilizer?	79	38	
Irrigation water supplied according to needs?	81	23	

Source: FPP Beneficiary Survey, 2003, Elat

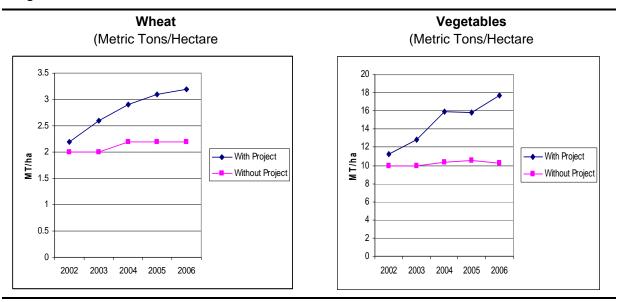
3.33 Most ADCP farmers interviewed by the IEG mission reported increased crop yields. Some obtained more than 50 percent increases. Others saw little change, especially when encountering constraints such as low prices (cotton), difficulties in accessing credit, or where farming on rainfed lands with low response to farm inputs. The overall picture was of moderate to good yield increases. Qualitative data from the ADCP-II Baseline Survey also suggest positive project impact. Farmers were clearly pleased with the project – for instance, 99 percent of ADCP I's surveyed farmers were "very satisfied" or "satisfied" with the project's agricultural extension support.

3.34 **National Level Data:** The nationwide roll out of the land reform program may also be affecting Azerbaijan's overall agricultural productivity. In Thailand, for instance, land titling in itself increased productivity. <sup>19</sup> Caveats apply. First, it is not clear to what extent productivity changes in Azerbaijan can be attributable to the reforms or to other influences. Second, ADCP covered less than 5 percent of the country's farmers. Nevertheless, from land privatization alone, there may be some spillover from FPP/ADCP to Azerbaijan's overall

trends over time are, however, consistent. ADCP project farmers are recorded to have increased yields by 33 percent, while both for nation-wide and for non-project ADCP farmers yield changes were modest.

<sup>19.</sup> Although the "package" of agricultural services with land reform will be required for major impact on agricultural productivity, international experience is that land reform by itself (e.g. Thailand's land registration program) can significantly improve agricultural productivity. Influences (beyond the short-term impact of extra labor effort applied to the farm) can include (K. Deininger, 2003): intensified labor input, greater investment on the land, and use of land as collateral for credit.

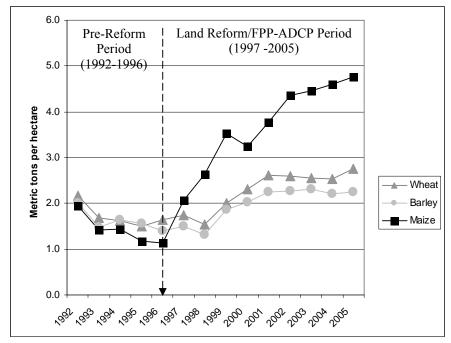
Figure 2. Wheat and Vegetable Yields for ADCP Project and non-Project Farmers – Beylagan Region 2002-2006



Source: ADCP II - Baseline Survey, 2007; Government of Azerbaijan

.

Figure 3. Azerbaijan Cereal Yields, 1992 to 2005)



Based on FAO data

rural development program.<sup>20</sup> Figure 3 indicates that this may be the case. The turnaround in cereals production from decline to progressive increases corresponded closely with the progress in land privatization. Yields and overall production also increased for most other crops, and there has been significant diversification into higher-margin crops (Annex B, Table 3 & 4).<sup>21</sup> Azerbaijan also shows a better progression in value added than the average for the CIS countries (Table 5).<sup>22</sup> However, given the multiple and different variables affecting every CIS country, more analysis would be needed to reach significant conclusions from such country comparisons

Table 5. Annual Percentage Growth in Agricultural Value Added for Azerbaijan and for CIS Country Average 1990 to 1996, 1997 to 2000, and 2001 to 2006

	1990 to 1996	1997 to 2000	2001 to 2006
Azerbaijan	- 9.1%	8.6%	5.1%
CIS Countries Average	- 6.7%	1.4%	3.7%

Source: World Development Indicators, World Bank. For CIS average, Turkmenistan and Tajikistan have not been included due to incomplete data for Turkmenistan and data discrepancies for Tajikistan.

3.35 According to an agriculturalist familiar with Azerbaijan agriculture, <sup>23</sup> significant yield increases following land reform were to be expected. <sup>24</sup> In taking over from the inefficient collectives, the new farmers were starting from a low base in crop husbandry and yields, with ample scope for improvement. The main cause of yield growth was probably the increased time and care devoted to crops. The small size of Azerbaijan's farms (2 ha on average) would have enabled more labor input from underemployed family members, and the scarcity of job opportunities off the farm made this more likely. Better planting, weeding and other cultivation practices can make an appreciable difference to yields. <sup>25</sup> <sup>26</sup>

20. In Thailand, the medium term impacts of land ownership titles were to induce higher investments on the land and higher farming intensity. Land market values increased, and output was found to be 14 to 25 percent higher on titled land than on untitled land ("Land Policies and Farm Productivity in Thailand", G. Feder, 1988).

24. Except cotton for which area declined sharply due to unremunerative prices offered by a government monopoly purchaser. This decline made room for the diversification into additional wheat, maize and horticultural crops.

<sup>21.</sup> Details are at Annex B, Tables 3 and 4. Diversification to horticulture is one trend. The increase in agricultural value added has been driven more by changes in yields and the crop mix than by area expansion—land in crops increased by only 7 percent between 1994 and 2002.<sup>21</sup> The area in cotton (the primary cash crop in Soviet times) fell by 60 percent, a response to the low purchase price offered by the government monopoly buyer. The reduced cotton area provided room for further diversification.

<sup>22.</sup> Three time periods are illustrated. The 1990 to 1996 period was the decline in agriculture in all CIS countries. In 1997 to 2000 most countries were in transition with their reforms. From 2001 to 2006, most reform programs had stabilized.

<sup>23.</sup> Interview with Bank staff member.

<sup>25.</sup> Likely reasons for several apparently counterintuitive trends (Annex B Table 2) were also provided. Vegetable yields did not change appreciably because the farmers were already used to vegetable cultivation on their family plots in the Soviet era, and crop husbandry remains substantially the same. However, there was a

### **Equity**

3.36 **Land Distribution:** The IEG mission found widespread consensus amongst both farmers and government officials that Azerbaijan's land distribution had been equitable. This is confirmed in survey data. Table 6 shows a high proportion of farmers (92 percent) who felt that land distribution had been fair. Azerbaijan also compares well with other countries. The basis for social equity was the decision to allocate equal land for all persons, but the process used in allocating land – full public participation and a transparent lottery system – was also important. Even within this system, there might have been ways to manipulate land allocation, or influence subsequent land ownership<sup>27</sup>, but in Azerbaijan's case this appears not to have been a significant problem.

**Table 6. Equity in Land Distribution – Country Comparisons** 

	Azerbaijan	Bulgaria	Kazakhstan	Moldova
"Received land during land reform" (% of households)	98%	60%	37%	95%
"Land allocation was fair" (% of households)	92%	56%	60%	53%

Source: N. Dudwick, K. Fock and D. Sedik – Land Reform and Farm Restructuring in Transition Countries – The Experience of Bulgaria, Moldova, Azerbaijan and Kazakhstan; 2007. (The results are based on a survey in 2003.)

3.37 **Agricultural Support Services for Women and the Poor:** Agricultural support services could, however, be more proactively applied to reach women and the poor. In principle, women and poorer households have the same access rights to land services, credit, agricultural training and irrigation as wealthier and male-headed households. But committee membership in Credit Unions and Water User Associations tends to be dominated by men. An agricultural extension worker and a CU President told the mission that special efforts had to be made to get women to come forward to access training and larger loans.

large response in production after privatization due to increased cultivated area. Grape area fell dramatically once the mass purchasing from the Soviet planned market ceased. Apple area declined as large areas had been planted on marginal soils under the collectives. But average yields increased as the remaining orchards were on better soils. The production of all cereals increased, the very high increase for maize may have been because of better seed.

26. Notwithstanding, FAO data shows a nationwide decline in mean fertilizer application per hectare—from 43 kg/ha in 1990-92 to 6 kg in 2003-05. But neither manure nor crop residues were applied in Soviet times, whereas they are now. Also, while the collectives typically applied 200 kg of inorganic fertilizer per hectare, misapplication (aggravated by flood irrigation) could result in 80 percent of fertilizer draining off without benefit to the crop. The new farmers can make more targeted application of fertilizer, with small quantities timed precisely to key plant growth stages. This can boost the efficiency of fertilizer application to 80 percent.

27. Unequal access to knowledge about land rights and land distribution procedures is one inequity cited in the literature; for instance, in Tajikistan, women were found to be twice as likely as men not to have heard of the land reform decrees. Also, in Russia and Kazakhstan, land speculators, including large conglomerates, are cited as having exploited poor or less educated families, through buying up their land immediately after land distribution (Sources: Tajikistan Survey, USAID/World Bank/Government of Tajikistan (2008); Lerman, Csaki and Feder, 2004; and K. Deininger, 2005)

- 3.38 Findings from two surveys in Azerbaijan are consistent with this observation. "Focus group discussions...found women less likely than men to attend public meetings or to consult with authorities, and they are less knowledgeable about the legal and administrative aspects of the reform, as well as its implications for their own households". Participants in the FPP's Beneficiary Survey in 2003 considered that vulnerable social groups, including women, were less likely to benefit from the project than male-headed and younger farmers. <sup>29</sup>
- The Poverty Impact of Borrower Groups. The ADCP's program to provide credit through Borrower Groups achieved high credit recovery (95 percent ) and is even attracting a commercial bank because BGs are seen as low risk borrowers (paragraphs 3.23 and 3.25). Yet, under ADCP II, BGs are to be phased out. In the IEG mission's discussions with farmers, government and the private sector, a common view was that BGs are better at social inclusion than CUs. A BG's small size (about 20 members) and informal structure, with members from the same small community, tends to favor integration of women, sometimes to a very large extent. The poor also have better chances of inclusion in such small groups. The two Credit Unions met acknowledged the better capacity for BGs to serve women and the poor. One CU committee member commented that the membership fee for a CU might be unaffordable for a poor farmer. There was also the question of whether the poor and women sufficiently propose themselves for membership of a CU. In the words of one CU Chairman "You can invite (the poor and women to be CU members) but that doesn't mean they come."

### **Equity versus Efficiency**

3.40 Dissolution of the collectives presented two fundamental allocation choices for Azerbaijan: some form of corporate farming, as typically chosen by the CIS countries, or distribution of the collective's land equally to all persons.<sup>32</sup> Azerbaijan's choice of equal distribution could have reduced efficiency in two ways. First, the resultant very small farms (two hectares on average) would not enjoy the economies of scale that might be possible on larger farms, and second, because land was allocated to everyone, capacity to farm would have

<sup>28.</sup> World Bank Survey of Farms, 2003, reported in N. Dudwick, K. Fock and D Sedik, "Land Reform and Farm Restructuring in Transition Countries. The Experience of Bulgaria, Moldova, Azerbaijan and Kazakhstan." World Bank Working Paper, 2007

<sup>29.</sup> Survey respondents considered that the following categories of people were "losers" as a result of land privatization: pensioners and the old 65%; the disabled 67%; and women 39%. Groups considered "winners" were: "the young and strong" 63%; farmers 61%; men 69%; children in the future 89%; and they (the respondents) themselves 88%.

<sup>30.</sup> Such social constraints are not unusual. For instance, in a farm survey in Tajikistan it was found that, compared to women, "Men are 3 times more likely to attend training, and significantly more likely to see publications, listen to radio, watch TV, read newspapers and engage in interpersonal discussions." (USAID, Government of Tajikistan and World Bank, 2008)

<sup>31.</sup> For instance two groups of BGs known to have a high proportion of women members were interviewed by the mission. From a group of 3 BGs, 78 percent of the combined members were women, and in a group of 9 BGs, 35 percent were women.

<sup>32.</sup> Variations between CEE/CIS countries included, for instance, creation of commercial corporate farms in Hungary, nominal corporations in Russia and the Ukraine, and subdivision of collectives into smaller "brigades" (which were later divided into family farms) in Tajikistan.

varied considerably.<sup>33</sup> Hence, in the short-term at least, a trade-off between equity and efficiency could be expected. However, efficiency does not appear to have been adversely affected. The 2003 World Bank Survey in Azerbaijan found that the productivities of labor, and of land, were twice as high on family farms as on corporate farms.<sup>34</sup> <sup>35</sup> A World Bank staff member familiar with Azerbaijan considered that the possible negative effect from scale diseconomies and varying farming capacities would have been mitigated by the strong incentives from individualized ownership, further enabled by Azerbaijan's high rural under-employment.

3.41 **Developing the Land Market.** An important remaining need is to further develop the land transaction recording system begun under ADCP so that it becomes a nationwide network, close to villages and easy to use. Expansion of the network is proceeding well (paragraph 3.6). Success here would facilitate development of a free market for sale, purchase and lease of land. This would provide the basis for a gradual market-based reallocation of land to those farmers who are able to use the land most efficiently.<sup>36</sup>

## 4. Ratings

#### **Outcome**

4.1 Considering the Relevance, Efficacy and Efficiency of each project, the Outcomes of both FPP and ADCP are rated **Satisfactory**. The results are summarized in Table 7 and amplified below.

#### Relevance

4.2 **Relevance of Objectives:** For both projects, relevance with respect to Objectives is rated High. A radically different approach to agricultural development was needed if the major decline in agricultural productivity following Independence was to be reversed. The projects fitted within the general policy thrusts of the Bank and Government. The decision for equitable privatization of agricultural land, accompanied by provision of agricultural services (agricultural extension, credit and irrigation) agreed with Government and Bank policies for the rural sector. The 1996 Country Assistance Strategy, operative when the FPP/ADCP program began, proposed transition to a market economy, and transfer of ownership of the collective farms. Project objectives are also broadly in line with the current

<sup>33.</sup> The younger and more entrepreneurial households would intrinsically make most productive use of the land. But the elderly, the poor, and the less educated were also given the opportunity to farm.

<sup>34.</sup> World Bank Survey of Farms (2003), as reported in N. Dudwick, K. Fock and D. Sedik, "Land Reform and Farm Restructuring in Transition Countries (2007).

<sup>35.</sup> Overwhelmingly, farming is under private family farms in Azerbaijan, but 2 percent of the land is farmed by agricultural enterprises.

<sup>36.</sup> To this end, Azerbaijan may have a comparative advantage over some other countries in its ability to reach towards optimal land use efficiency. A land-market operating where land has been distributed equitably is starting without the distortions introduced if land or part of the land is under entrenched influence of local elites. CIS countries that were less equitable in distributing land or which created corporations that have become dominated by a few members may have greater difficulty developing a fully liberalized land market.

22

Country Partnership Strategy (November 2006), and Government's State Program on Poverty Reduction and Economic Development (April 2003), which emphasize development of the non-oil sector, participatory development processes, decentralization, and transfer of economic activities from Government to private parties. More specific sector analysis of land reform options was not, however, undertaken.<sup>37</sup>

Table 7. Ratings of Development Objectives and Outcome

Development Objectives	Relevance	Efficacy	Efficiency	Outcome
1. Land Registration:				
<b>FPP:</b> Pilot land registration.	High	High		High
<b>ADCP:</b> Pilot/expand land registration.	High	High		High
2: Farm Information Advisory Services:				
FPP: Pilot farm information and	High	High		High
advisory services	High	High		High
<b>ADCP:</b> Pilot/expand farm information	8	8		
and advisory services 3: Credit Services and On-farm and rural				
investments:	Substantial	Substantial		Substantial
<b>FPP:</b> Provide credit services	Substantial	Substantial		Substantial
ADCP: Farmers expand investment in	Substantiai	Suostantiai		
their farms and other rural business				
4: (FPP only): Rehabilitate irrigation and drainage infrastructure	High	Substantial		Substantial
5: (FPP only): Develop an enabling environment to build linkages between key institutions	High	High		High
6: (FPP only): Provide community-based social services in support of land privatization and farm restructuring	Modest	Modest		Modest
7: (ADCP only): Build Government capacity to formulate policy to improve productivity of the rural economy.	Modest	Modest		Modest
Overall Rating				
FPP:	Substantial	Substantial	Substantial	
ADCP:	Substantial	Substantial	Substantial	
Outcome: FPP: Satisfactory				
ADCP: Satisfactory				

<sup>\*</sup> Under IEG procedures, efficiency is rated for the project overall, and not by objective.

4.3 The projects' objectives were and remain Highly relevant to the agriculture reform agenda for the CIS countries. A significant "value-added" from FPP and ADCP is the experience they provided as the Bank started to roll out other CIS land reform projects in the late 1990s. Prior to FPP, there had only been one project – the Russia, Land Reform Implementation Support Project (FY94) - dedicated to land reform, and this was limited primarily to cartography and land registration. The FPP, prepared in 1995-96, thus had little

\_

<sup>37.</sup> Through extensive discussions with stakeholders and amongst policy makers, a de facto strategy was developed and brought into the designs of FPP and ADCP. There are potential gaps in such an approach, however, as discussed at Annex C.

prior Bank experience from CIS countries to utilize. The first group of projects following FPP - in Kazakhstan (FY97), Tajikistan ((FY99) and Armenia (FY99) <sup>38</sup> – had FPP's initial experience to learn from, and interviews with Bank project staff indicate that this was useful.

23

- Relevance of Design: Relevance of design was Substantial for both FPP and ADCP. The only significant weakness in design of FPP's components was the minor component promoting community services which lacked a clear purpose and action program. But with respect to land privatization and extension, the design of FPP was sound. ADCP's main design shortfall concerned management arrangements for the credit program—private equity in credit provision did not work, and there was no exit strategy for the implementing agency (paragraph 3.21). The land reform and agricultural extension programs were, however, well designed. But, for both projects, M&E arrangements were weak (paragraphs 2.7 to 2.9), moderating the highly relevant designs of most aspects of the projects.
- 4.5 Overall, relevance is rated **Substantial** for FPP and **Substantial** for ADCP.

#### **Efficacy**

- 4.6 **Objective 1 Land Privatization**. FPP and ADCP achieved their objectives to pilot land reform and facilitated a nationwide process of land privatization, far exceeding expectations. Both projects are rated High.
- 4.7 **Objective 2 Agricultural Extension Services:** These were established, strengthened considerably, and expanded. Both projects are rated High.
- 4.8 **Objective 3 Rural Finance**: The credit programs of both projects had problematic and delayed starts, but credit targets were eventually reached. The FPP's and ADCP's credit achievements, and corresponding on-farm investments (mainly seasonal inputs and livestock), were important because they forged a new culture of rural finance and repayment (FPP was the initiator of this), and developed successful models for farmer-owned financing organizations (ADCP's CUs and BGs). ADCP's apex organization was unsuccessful, but the project's field achievements were important. They provided the models and experience for the scaling-up of credit unions now underway under ADCP-II. Both projects are rated Substantial.
- 4.9 **Objective 4 Irrigation Rehabilitation** (under FPP). The project achieved its physical targets and efficacy is rated Substantial. However, inadequate O&M raises sustainability concerns (paragraphs 3.30 and 4.18).
- 4.10 **Objective 5 Inter-agency Coordination** (under FPP) is rated High. It was also critical to have a management structure and collaboration between the many agencies involved in the reforms, in short, as stated in FPP's objectives "an enabling environment to build linkages between key institutions". The past tendency for institutions to operate in separate "silos" was effectively tackled through a coordinating unit sponsored primarily

\_

<sup>38.</sup> Kazakhstan, Real Estate Registration Pilot Project (FY97), Tajikistan Farm Privatization Support Project (FY99) and Armenia, Title Registration Project (FY99).

24

under FPP. Coordinating cells at field level were staffed with individuals from each relevant agency. Management under this unit (now part of the State Agency for Agricultural Credits) is strong, while the line agencies are mostly effective in implementing their areas of responsibility.

- 4.11 **Objective 6 Community Development** (under FPP) is rated Modest. An NGO was hired to sponsor community construction of social and production-oriented infrastructure. The underlying rationale was to protect the welfare of vulnerable groups such as the poor, women, the elderly and the infirm. It was considered that such people might be disadvantaged in the land privatization process due to limited capacity to work the land or to access other project services. The component was not successful. Pre-independence community mobilization had been "directive" rather than bottom-up and voluntary, and neither the NGO nor Government was experienced with community-driven development. Nevertheless, one achievement appreciated by the villagers was the establishment of water and sanitation facilities in each of the six FPP pilots.
- 4.12 **Objective 7 Building Government Capacity for Policy Reform** (under ADCP) is rated Modest. A Rural Policy Unit was set up by the project, and was placed under a senior-level Government commission. Several useful strategy documents were produced. <sup>39</sup> However, at the end of the project the Unit was disbanded. There is no longer an analytical capacity and institutional structure to overview and formulate adjustments to policy as events and understanding evolve, yet the building of such capacity was the development objective.
- 4.13 Based on these assessments of each development objective, overall, Efficacy is rated **Substantial** for FPP and **Substantial** for ADCP.

#### **Efficiency**

4.14 An economic rate of return was not calculated for either FPP or ADCP, and inconsistent project-specific data (paragraph 3.31) precludes an ERR estimation at PPAR stage.

From the perspective of the national program, however, some insights can be gained from assessing what gains in national productivity would be required to make the reform program economically viable. If, for instance, FPP and ADCP set the stage for national net agricultural value added to increase by 0.9 percent per year over 15 years, this would result in an economic rate of return above 12 percent (Annex B). A 0.9 percent growth rate compares with the 1990-2005 growth in net value added of 2.8 percent per annum (WDR, 2008). <sup>40</sup> The national data on crop-wise productivity presented at paragraphs 3.36 to 3.40 indicate quite dynamic increases in agricultural yields and production. But the share of Azerbaijan's agricultural growth that can be attributed to the reform program is undetermined.

<sup>39.</sup> Three documents were prepared: a Policy Framework in 2004, a sector Strategy in 2005 (both approved by the Commission), and an Investment Policy and Financing Plan prepared in draft in 2006 (discussed with stakeholders though not yet formally approved).

<sup>40.</sup> Excluding the first half of the 1990s, when production declined, agricultural value added would actually have grown by more than this rate in the past decade.

With such limited analytical material, proxy indicators may provide the best assessment of the projects' efficiency. The following may be taken into account:

The speed with which the pilots were implemented (paragraph 3.1)

- The swift scaling-up of the pilots to a nation-wide program (paragraph 3.3)
- Reduction in the time taken to register land transactions, and the rapid increase in land transactions (paragraph 3.6)
- Provision for competition between private and public service providers (paragraph 3.11)
- Willingness of farmers to pay for veterinary drugs (paragraph 3.12)
- High uptake of credit backed by sound repayment rates (paragraph 3.23)
- Reports that farmers participating in the extension program received higher yields and incomes than non-participants (paragraph 3.34)
- Evidence that yields for ADCP farmers rose more than for non-ADCP farmers (paragraph 3.33).
- Diversification into higher-margin crops (paragraph 3.35)
- 4.15 Based on these considerations, the Efficiency of both FPP and ADCP is rated Substantial, although this must be a qualified best assessment, pending the availability of more complete data on, especially, productivity, and sufficient quantitative information on costs and benefits to calculate an economic rate of return.

#### **Risk to Development Outcome**

- 4.16 The **Risks to FFP's outcomes** are rated **Moderate**. FPP's central objective—private land ownership—is strongly supported by Azerbaijan's farmers, who are a major political force, and Government continues to be a zealous reform champion. The agricultural support services that FPP supported have evolved well beyond the initial model, and this core thrust can also be expected to continue in some form or another. Together, the likely sustainability and further consolidation of the land and agricultural services reforms justifies the moderate assessment of risk for the project overall. Nevertheless, this assessment is on the margin as it does not apply to one component, irrigation. The inadequate revenues being collected by WUAs for O&M, poses significant sustainability risks. Prospects for addressing this risk have been enhanced since FPP, through the ongoing Irrigation Distribution System and Management Improvement Project (FY03). This nation-wide project has been specifically devised to tackle the O&M issue.
- 4.17 The **Risks to ADCP's Outcomes** are rated **Significant**. ADCP's central objective—to increase agricultural productivity—set the bar higher than FPP. To increase and sustain productivity the ADCP program (phases II and III of the APL) will face tougher challenges—provision of rural finance being perhaps the largest.

#### **Bank Performance**

4.18 The Bank's overall performance was **Satisfactory** for both FPP and ADCP. For both projects, the Bank was a reform champion and motivator, had a close partnership with Government, and contributed international best practice.

- 4.19 **Quality at Entry.** FPP (Satisfactory): Reform championship was outstanding. The task team leader spent considerable time with Government officials advocating reform and discussing how to achieve it. The team had significant practical experience in rural development, and practical knowledge of reform initiatives in other countries. But there were shortcomings in M&E and the design of the Community Development pilot.
- 4.20 ADCP (Satisfactory): The task team designed a long-term program, and learned and built on FPP's experience, adding substantial further innovation. A significant shortfall was in designing the management arrangements for the rural finance program. Requiring an implementing agency to contribute its own equity introduced incentives to be risk averse and top-down.
- 4.21 **Quality of Supervision.** FPP (Satisfactory): The supervision team had a close and progressive partnership with Government, and Bank management provided active support, especially in policy dialogue. A contribution going well beyond the bounds of the pilot project was the Bank team's technical support when Government decided on rapid roll-out of the land reforms nationwide. But weaknesses in the implementation and use of M&E make it hard to draw definitive conclusions about the success of the program.
- 4.22 ADCP (Satisfactory): The supervision team continued the progressive partnership with Government begun under FPP, strongly supported by Bank management. But a plan for the continued management of credit after ADCP's closure was not prepared. Also, issues such as the overly short seasonal credit periods (paragraph 3.24) could have been resolved.

#### **Borrower Performance**

- 4.23 Overall performance was **Highly Satisfactory** for FPP and **Satisfactory** for ADCP.
- 4.24 **Government Performance.** For both FPP and ADCP, Government Performance was Highly Satisfactory. The Government successfully combined long-term vision with practical and inclusive implementation. The reform agenda was bold and clearly articulated. The reforms were well championed with unwavering commitment by the nation's most senior political leaders.
- 4.25 **Implementing Agency Performance.** Performance for FPP was Highly Satisfactory. The line agencies successfully discharged the tasks for which they were responsible. The Project Management Unit helped to improve inter-agency coordination and involved stakeholders in decisions and implementation. The one weak performer was Agroprombank which had no experience with credit, although, ultimately, targets were achieved.
- 4.26 The performance of ADCP's Implementing Agencies was Satisfactory overall. Relations between technical agencies were good, and the program was strongly managed by the Project Management Unit and its successor entities (ASDAP and SAAC). The agricultural extension program was energetically pursued, with strong technical leadership, and continuous adaptation. Strong management of the land reform program enabled its ambitious targets to be met. However, in comparison with the highly satisfactory

implementation of these two programs, the credit program was poorly managed—the implementing agency was ineffective in motivating and training credit unions, and was eventually replaced by a technical assistance team.

#### **Safeguard Issues**

4.27 The **social impact** of the projects has been positive, particularly the equitable land distribution. FPP had a direct positive **environmental impact** resulting from the rehabilitation of irrigation systems - waterlogged/saline areas on the pilot farms fell from 32 percent to 15 percent of land area. As the reform program continues, however, increased use of pesticide may pose a contamination risk. Also, the growth of livestock may result in overgrazing of common lands. These issues go beyond the projects in question, though they are a consequence of Azerbaijan's broadening rural reform program. Major reforms, if they are effective, should generate major changes in farm management and land use. Accordingly, environmental monitoring and management is a necessary adjunct to a reform program.

## 5. Lessons

- 5.1 Azerbaijan's largely successful land reform program has been characterized by individualized privatization of land, a package approach combining agricultural services as well as land reform, and a rapid and single-step change rather than gradual or phased implementation. While the great diversity of experience across countries indicates that there is no uniquely right land reform model, Azerbaijan's approach to land and agricultural reform would be an option for other countries to consider.
- 5.2 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 influence on social inclusion was from the initial choice to distribute collective lands equally. Also, there have been no restrictions on access to agricultural extension, training and credit. However, women and the poor are less assertive than other households in applying for such services, and proactive steps to encourage participation are needed.
- 5.3 The reform *process* is critical for determining whether land reform works. 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. Some aspects of Azerbaijan's reform process could have been stronger. Both projects had weak monitoring and evaluation, and more comprehensive sector analysis is called for.
- 5.4 Land reform needs powerful champions to succeed. Exceptional commitment by champions in the Government and the Bank is fundamental to success. Both parties were effective champions of Azerbaijan's reform program. For Government, the President himself was the lead champion.

### Annex A. Basic Data Sheet

## FARM PRIVATIZATION PROJECT (CREDIT NO. 2P330)

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

	Appraisal estimate	Actual or current estimate	Actual as % of appraisal estimate
Total project cost	26.2	23.8	91.0
IDA Credit	14.7	13.2	90.0
Cofinancing**	9.3	8.6	92.0
Government	2.2	2.0	91.0
Cancellation		0.2	

<sup>\*</sup> Cofinancier is IFAD.

**Cumulative Estimated and Actual Disbursements** (US\$ million)

	FY98	FY99	FY00	FY01	FY02	FY03	FY04
Appraisal estimate	6.1	9.4	12.0	14.0	14.7	14.7	14.7
Actual	1.9	5.2	8.8	11.3	12.7	13.3	13.4
Actual as % of estimate	31	55	73	81	86	90	91

**Project Dates** 

	Original	Actual
Appraisal Mission		05/25/1995
Appraisal		04/10/1996
Board approval		01/16/1997
Effectiveness	04/16/1997	05/20/1997
Mid-Term Review	10/01/1999	11/01/2000
Closing date	06/30/2002	12/31/2003

<sup>\*\*</sup> Table does not show appraisal estimate of contribution from Privatized Farm Units. The value of this was projected at US\$1.94 million to Component A and US\$0.71 to Component B. A final estimate of this contribution is not available.

# Staff Inputs (staff weeks)

	Actual/Latest Estimate		
	N° Staff weeks	US\$US\$('000)	
Identification/Preparation	62.7	218.4	
Appraisal/Negotiation	17.9	127.5	
Supervision	179.0	561.1	
Completion (ICR)	10.4	24.0	
Total	270.0	931.1	

# **Mission Data**

	Date	No. of		Performar	nce rating
	(month/year)	persons	Specializations represented	Implementation status	Development objectives
Identification/ Preparation	07/08/1995	7	Task Team Leader, Economist, Privatization and Banking, Finance and Project Management, Land Registration and Management (2), Financial Management		
	12/08/1995	14	Task Team Leader, Privatization and Banking, Economist, Irrigation and Water Management, Finance and Project Management, Land Registration, Social Aspects and Participation (3), Procurement, Financial Restructuring, IFAD Representative, IFAD Economist, IFAD Lawyer		
Appraisal/ Negotiation	05/20/1996	10	Task Team Leader, Economist, Finance and Project Management, Irrigation and Water Management, Financial Restructuring, Procurement, IFAD Representative, IFAD Water Management Specialist, IFAD Sociologist, IFAD Legal Consultant		
Supervision 1	06/04/1997	2	Task Team Leader, Finance and Project Management	S	HS
Supervision 2	11/21/1997	2	Financial Management, Farm Privatization	S	S
Supervision 3	06/11/1998	3	Credit and Comm. Development, Finance and Accounting, Farm Privatization	S	S
Supervision 4	12/17/1998	5	Rural Credit, Financial Management, Project Accounts, Monitoring and Evaluation, Farm Privatization	S	S
Supervision 5	08/21/1999	5	Agriculturalist, Finance, Rural Credit, Procurement, Irrigation Systems, Social Development	S	S
Supervision 6	06/22/2000	4	Task Team Leader, Finance and Credit Management, Procurement, Financial Management	S	S

	Date	No. of		Performa	ice rating
	(month/year)	persons	Specializations represented	Implementation status	Development objectives
Supervision 7	11/13/2000	7	Project Implementation, Irrigation Engineer, Land Registration and Agronomy, Finance and Credit, Procurement Planning, Social Development, Project Costs	S	S
Supervision 8	12/08/2001	5	Task Team Leader, Environment Economist, Procurement Specialist, Organization Specialist, Finance and Accounts Management	S	S
Supervision 9	05/17/2002	7	IFAD Representative, IFAD Consultant, Institutional Specialist, Financial Specialist, Organization Specialist, Task Team Leader, Irrigation Specialist	S	S
Supervision 10	11/22/2002	6	Organization Specialist, Institution Specialist, Task Team Leader, Sociologist, IFAD Representative, IFAD Finance Consultant	S	S
ICR					
	04/2003	2	Task Team Leader, Operations Analyst		
	10/2003	1	Operations Analyst		
	02/2004	2	Task Team Leader, Operations Analyst		

Performance Rating: HS: Highly Satisfactory; S: Satisfactory

# **Other Project Data**

Borrower/Executing Agency:

FOLLOW-ON OPERATIONS			
Operation	Credit no.	Amount (US\$ million)	Board date
Agricultural Development and Credit Project	3236	30.0	06/08/1999
Rehabilitation and Completion of Irrigation and Drainage Infrastructure Project	3390	42.0	06/22/2000
Agricultural Development and Credit Project II	4207 & 4208	29.2	06/27/2006
Real Estate Registration Project	7435	30.0	03/21/2007

# AGRICULTURAL DEVELOPMENT AND CREDIT PROJECT (CREDIT NO. 32360)

Key Project Data (amounts in US\$ million)

	Appraisal estimate	Actual or current estimate	Actual as % of appraisal estimate
Total project cost	33.65	34.51	102.6
IDA Credit	30.0	31.06	103.0
Cofinancing	2.30	2.26	98.3
Government	1.35	1.19	88.1
Cancellation		0.06	

### **Cumulative Estimated and Actual Disbursements** (US\$ million)

	FY00	FY01	FY02	FY03	FY04	FY05	FY06
Appraisal estimate	1.5	7.5	17.5	26.5	30.0	30.0	30.0
Actual	1.0	3.9	7.6	12.9	18.9	28.8	30.9
Actual as % of estimate	67	52	43	49	63	96	103

# **Project Dates**

	Original	Actual
Departure of Appraisal Mission		09/15/1998
Appraisal		02/26/1999
Board approval		06/08/1999
Effectiveness	09/08/1999	12/21/1999
Mid-Term Review	03/15/2002	11/07/2003
Closing date	03/31/2004	06/30/2006

## **Staff Inputs** (staff weeks)

	Actual/Lat	test Estimate
	N° Staff weeks	US\$US\$('000)
Preparation		807.6
Supervision		815.3
Completion (ICR)		25.0
Total		1,647.8

# **Mission Data**

	Date	No. of		Performance rating		
	(month/year)	persons	Specializations represented		Development objectives	
Preparation		15	Team Leader, Operations Officer, Land Registration Experts (3), Rural Financial Experts (4), Extension Expert, Financial Management Specialist, Procurement Officer, Economist/Rural Finance, Social Scientists (2)			
Supervision 1	02/22/2000	4	Team Leader, Project Officer, Extension Specialist, Land Registration Specialist	S	S	
Supervision 2	10/04/2000	2	Extension Specialist, Land Registration Specialist	S	S	
Supervision 3	05/06/2001	3	Team Leader, Operations Officer, Consultant	S	S	
Supervision 4	11/16/2001	3	Team Leader, Extension Specialist, Land Registration Specialist	S	S	
Supervision 5	06/28/2002	6	Team Leader, Land Registration Specialist, Social Scientist, Financial Analyst, Agricultural Officer, Animal Health Officer	S	S	
Supervision 6	12/20/2002	5	Team Leader, Procurement Officer, Extension Specialist, Land Registration Specialist, Microfinance Specialist	S	S	
Supervision 7	06/27/2002	8	Team Leader, Ag. Research Extension Specialist, Land Registration Specialist, Social Scientist, Financial Analyst, Animal Health Officer, Microfinance Specialist	S	S	
Supervision 8	11/25/2003	8	Team Leader, Rural Finance Specialist, Ag. Research, Operations Officer, Financial Analyst, Extension Specialist, Land Registration Expert, Rural Policy Expert	U	U	
Supervision 9	02/23/2004	2	Team Leader, Senior Microfinance Specialist	U	U	
Supervision 10	06/03/2004	2	Team Leader, Senior Microfinance Specialist	U	U	
Supervision 11	06/24/2004	4	Team Leader, Financial Analyst, Agricultural Officer, Consultant	U	U	
ICR	12/08/2004	7	Team Leader, Rural Finance Specialist, Financial Analyst, Rural Policy Expert, Extension Services Expert, Land Registration Expert, Operations Officer	S	S	
	05/24/2005	6	Team Leader, Rural Finance Specialist, Ag. Research, Financial Analyst, Extension Specialist, Animal Health Officer	S	S	

Performance Rating: S: Satisfactory; U: Unsatisfactory

# **Other Project Data**

Borrower/Executing Agency:

FOLLOW-ON OPERATIONS									
Operation	Credit no.	Amount (US\$ million)	Board date						
Rehabilitation and Completion of Irrigation and Drainage Infrastructure Project	3390	42.0	06/22/2000						
Agricultural Development and Credit Project II	4207 & 4208	29.2	06/27/2006						
Real Estate Registration Project	7435	30.0	03/21/2007						

### **Annex B. Economic Analysis**

In the absence of sufficient data to calculate an economic rate of return, an indicative analysis has been undertaken to ascertain the degree to which national Agricultural Value Added (AVA) would need to increase in order for the FPP/ADCP program to be economically viable. The "minimum gain" would be the increase in AVA required to result in a viable ERR; i.e. an ERR exceeding the Opportunity Cost of Capital (assumed at 12%). Alternative assumptions can be made about the impact of the projects on AVA, and can be compared with the model result. If the model shows that the program only needs to have a small impact on AVA relative to expectations or emerging data, the reasonable assumption would be that the program is viable.

One illustrative scenario is provided in the table. It is assumed that FPP/ADCP pushes national AVA (Gross value of agricultural output less input costs) up by 20% over a 15 year period (1.2% per annum). The national increase in benefits (AVA) is accompanied by a proportional increase in the costs of agricultural extension and the administrative costs of credit and land transactions. Thus, the full costs of an expanding national program are included in the model.

The assumption that AVA increases by 1.2% per annum compares to the growth in national agricultural value added of 2.8% in the 1990-2005 period. A 2.8% annual increase would result in a 50% increase in AVA over 15 years, and an increase of over 70% in 20 years. While the degree to which agricultural value added is, and will be, affected by the reform program is not known, a 70 percent increase is substantially over the 20% assumed in the model. (Also, agricultural value added has been growing at over 5 percent per annum since 1997.)

The 20% increase in AVA assumed in the model's base case (see Table and Table footnotes) results in an ERR of 33%. Assuming a lower increase in AVA – of 15% (0.9% per annum) – but keeping the build-up of support service costs at the same rate as for the 20% increase, an ERR of 14% is obtained, just above the opportunity cost of capital.

**Table 1. Minimum Gains Analysis of Azerbaijan's Land-based Agricultural Reform Program** (The data in the table is for a base case of an assumed 20% increase in national agricultural value added)

Year	Combined Project Costs (US\$ million, 2007 prices) (a)	National Extension, Land and Credit Administration Costs (US\$ million) (b)	National Incremental Agricultural Value Added (US\$ million) (c)	Net Benefits/Costs (US\$ million)		
1998	5.4	3.0		-8.4		
1999	5.2	6.0		-12.0		
2000	12.8	12.0		-24.8		
2001	6.2	18.0	28.9	4.7		
2002	10.1	24.0	38.6	4.5		
2003	9.1	30.0	48.2	9.1		
2004	6.2	36.0	57.9	15.7		
2005	11.9	42.0	67.5	13.6		
2006	3.6	54.0	86.8	29.2		
2007		66.0	106.1	40.1		
2008		78.0	125.4	47.4		
2009		96.0	154.4	58.4		
2010		114.0	183.3	69.3		
2011		126.0	202.6	76.6		
2012		126.0	202.6	76.6		
2013		126.0	202.6	76.6		
2014		126.0	202.6	76.6		
2015		126.0	202.6	76.6		
2016		126.0	202.6	76.6		
2017		126.0	202.6	76.6		

ERR assuming a 20% increase in agricultural value added: 33% ERR assuming a 15% " 14%

#### **Notes:**

(a) Actual project costs for FPP and ADCP, with annual distribution of costs following the profile of disbursements. Costs are expressed in 2007 constant prices.

(c) The \$202.6 million incremental agricultural value added reached in 2011 is 20% of the 2007 national agricultural value added (World Development Report, 2008).

<sup>(</sup>b) Costs (like benefits) are estimates for the country as a whole. Project costs are also added to these costs in the analysis. Costs are estimated, and assumed to grow over time as follows. Costs of agricultural services are assumed to increase over 15 years as a function of increasing area affected by the agricultural reform program. Arable land area is 2.06 million ha. Land services are the administrative costs of transaction services; assuming an average roll-over of ownership every 5 years at U\$\$25 per transaction administration costs per ha, hence on an annual basis, \$5/ha. Credit Services: Annual credit administration costs are assumed at 10% of loans: average sized loan for credit unions are \$1002/farmer and \$373/farmer for borrower groups; CU size loans are assumed as averages; halved to express on per ha basis - \$500/year credit - thus, credit administration costs of \$50/ha. Costs progress in line with build-up of land under the reform program. Agricultural Extension services: \$10/farmer (ADCP ICR) = \$5/ha.

Table 2. Yield Changes (2002 to 2006) for ADCP Project and Non-project Farmers

0	Project Farmers			Non-Project Farmers			
Crop _	2002	2006	% Increase	2002	2006	% Increase	
Wheat (MT/ha)	2.2	2.9	32%	2.0	2.2	10%	
Potato (MT/ha)	10.5	15.4	47%	7.7	9.9	29%	
Vegetables (MT/ha)	12.0	15.7	31%	10.8	12.0	11%	
Cows Milk (liters/lactation)	1211	1527	26%	1055	1188	13%	

Source: ADCP II — Baseline Survey, 2007; Government of Azerbaijan

Table 3. Changes in National Average Yields, Area and Production for Selected Major Agricultural Products – 1994-96 to 2003-05 (Source: FAO data)

Crop	Yield (% Change per annum)	Area (% Change per annum)	Total Production (% Change per annum)		
Wheat	5.6%	3.5%	9.4%		
Barley	4.8%	-0.3%	4.0%		
Cotton	2.3%	-9.4%	-6.8%		
Potato	3.6%	11.2%	16.5%		
Meat	n.a.	n.a.	6.0%		
Milk	n.a.	n.a.	4.3%		

Table 4. Azerbaijan: Changes in National Crop and Livestock Production

		1994-19	996	2003-2005								
	(3 y	ear ave	rages)			(3 ye	ar average	es)				
Сгор	Yield (MT/ ha)	Area ('000 ha)	Produc- tion ('000 MT	Yield in MT/h a	Yield Change 03/05 as % of 94/96	Area ('000 ha)	Area change 03/05 as % of 94/96	Produc- tion. In '000 MT	Production. change 03/05 as % of 94/96			
Wheat	1.6	444	708	2.6	+62%	603	+36%	1577	+123%			
Barley	1.5	160	246	2.3	+53%	155	-3%	350	+42%			
Maize	1.2	11	13	4.6	+383%	32	+190%	149	+1046%			
Cotton	1.3	213	267	1.6	+23%	86	-40%	143	-53%			
Potatoe	9,4	18	173	13.1	+39%	65	+261%	856	+394%			
Tomato	18.1	2?	210	17.3	-5%	25	+1150%	427	+103%			
Cucumber	11.4	5	52	12.5	+10%	12	+140%	155	+198%			
Onions	10.5	5	48	11.2	+7%	14	+180%	156	+483%			
Cabbage	15.7	4	56	14.6	-7%	6	+50%	94	+59%			
Watermelo ns	6.8	7	46	11.7	+72%	31	+343%	359	+680%			
Apples	4,2	53	219	6.5	+55%	22	-62%	150	-32%			
Grapes	3.4	89	299	7.5	+220%	8	-89%	65	-78%			
Pears	7.7	2	18	7.6	-1%	4	+100%	33	+83%			
Meat	-	-	84	-	-	-	-	142	+69%			
Milk	-	-	818	-	-	-	-	1193	+46%			
Eggs	-	-	27	-	-	-	-	44	+63%			

Source: FAO data

39 Annex C

# **Annex C. Implementation Processes That Facilitate Land Reforms**

Azerbaijan's land-based agricultural reform program was significantly facilitated by most of the implementation processes used to carry out the reforms. The processes that were most influential are highlighted in Lesson Four (Section 5). These processes are detailed below, including actions that complicated rather than improved reform implementation:

- (i) Stakeholders played a major role in reform implementation. Client orientation and transparency fostered this: For each collective farm, the allocation of land was preceded by workshops to discuss the process, farmers were involved in determining the land parcels for distribution; and allocation was by public lottery. On the other hand, some processes, such as loan applications under FPP, were overcomplicated (FPP's application system was later simplified), and training, demonstrations and media began prescriptively before becoming more client- responsive.
- (ii) A learning-oriented, adaptive and innovative culture was important to success: A "reform culture" was fostered from the beginning, using study tours to a diversity of countries, followed by workshops. Legal provisions on land and WUAs were adjusted as experience was gained. The RACs were encouraged to welcome the involvement of individual NGOs or aid agencies in piloting new technologies. The Competitive Grants program became fairly responsive to farmer interests.
- (iii) Decentralization of agricultural support services improved implementation: Land registration and transaction services became more effective once they were managed from field offices. The RACs were given substantial freedom in implementing extension and training, the center providing technical advice and strategic guidance rather than detailed management.
- (iv) The private sector could handle the major growth of agricultural support services needed under Azerbaijan's package approach. Without a major private sector role Azerbaijan could face burgeoning government staff requirements as support services develop. The FPP/ADCP program was largely successful in piloting use of the private sector for agricultural extension, veterinary services and research. The commercial banking sector could become more involved.
- (v) Reform actions need to be sustained over time, without interruptions: The reform program could have fared better in this respect. For instance: (i) ADCP's policy formulation cell could have been continued; (ii) an institutional plan was needed under ADCP for managing the credit program after handover by the temporary Implementing Agency; and (iii) the credit program would have been better as a continuous rural finance program rather than stopping at closure of each project
- (vi) Strong and continuous M&E is essential: The FPP/ADCP program had disjointed M&E, with inconsistencies in methodologies, a lack of focus on outcomes, and no continuity

40 Annex C

between FPP and ADCP. Resultantly, impacts on agricultural productivity are difficult to determine, and opportunities to improve the reform program may have been foregone.

- (vii) Parallel projects supporting different activities of a land-based reform program are more manageable than a single comprehensive project. Each of FPP's and ADCP's three core activities land privatization, agricultural extension and credit are challenging by themselves. Of the four other CIS countries where Bank projects have supported land-based reforms Armenia, Kazakhstan, Russia and Tajikistan only Tajikistan attempted one multi-component project. Armenia, Kazakhstan and Russia had two parallel projects each; one project financing land reform, and the other the agricultural support services. Azerbaijan is now also following a multi-project approach for supporting land-based reforms. Thus, complementing the agricultural extension and credit services promoted under ADCP-II, land services are now being taken forward under the Real Estate Registration Project (FY07). Also, the Irrigation Distribution and Management Improvement Project (FY03); is fostering O&M and self-sufficiency for WUAs.) This approach is likely to be more manageable for Azerbaijan's increasingly larger reform program.
- (viii) Reforms should be based on comprehensive and up-to-date sector analysis. During preparation of FPP an in-depth understanding of the sector was gained through extensive discussions with stakeholders. De facto, these discussions amounted to preparation of a strategy, which was brought into the designs of FPP and ADCP. Proceeding without a more formally articulated strategy (the more classic approach) worked at inception of the two projects, but may be working less well today. There is still no detailed sector work on Azerbaijan's land-based agricultural reform program. Longer-term and broader perspectives might be being missed in the absence of such analytical work. Also, shorter-term and more project specific opportunities to improve the program or better address emerging issues might be identified.
- (ix) Reforms need complementing with improved environmental management. A significant reform program will generate major changes in production, agricultural technologies, crop diversification and other effects, with both positive and negative impacts on the environment. Negative impacts may develop fast if not monitored and mitigated. In Azerbaijan's case, overgrazing from an increasing livestock population (livestock investments are a common use of credit) is already an issue, and, while present usage is minimal, pollution from pesticides and fertilizer could be problems in the longer term. These and other possible environmental impacts need to be taken account of, but environmental protection is not yet a prominent focus of the reform program.

To Mr. A. Sharifov

**Deputy Prime** 

#### **Annex D. Borrower Comments**

Ministry of Finance of the Azerbaijan Republic

83, S.Vurghun street, Baku city AZ1022 Minister

Phone: 493 81 03, 493 05 62, Fax: 493 05 62 of the Azerbaijan

**Republic** 

E-mail: office@maliyye.gov.az

July 08, 2008 No. 11/01-1-124-886

No. 17/B-405-15/10 dated June 25, 2008

"About Assessment Report prepared with respect to the "Farm Privatization" and "Agricultural Development and Credit" projects

#### Dear Mr. Sharifov,

The report of Independent Evaluation Group involved by the Bank regarding assessment of the result of the "Farm Privatization" and "Agricultural Development and Credit" projects carried out in our country at the expense of credits from the World Bank (WB) were accordingly reviewed by the Ministry of Finance of the Republic and taking into account high mark given by the said group of the Bank observing execution of both projects and controlling conformity to the terms of reference submitted by them regularly, we would like to note that we do not have any comment and additions to the submitted document in general.

At the same time, we would like to inform you that at present, though already two years have passed from the date of signing of the credit agreement on "Agricultural Development and Credit – phase 2" the project carried out at the

expense of WB's credit in our country, totally USD 5.3 million has been used from

the credit amount up to day (18.4 % of credit amount) and this fact shows that it is

staying behind the project execution schedule acutely.

Therefore, in the background of inflation dynamics presently observed in the

country economy and in the world, taking into consideration that non-utilization of

the credit amount in time will cause a decrease of the effectiveness factor of the

project on one hand and increasing of expenses related to financing the project and

as well as costs regarding service to credit, we propose You to make respective

instruction to take serious actions for the purpose of implementation of the

mentioned project according to the fixed schedule.

Minister: signed / S. Sharifov

To Mr. Abid Sharifov Deputy Prime Minister

of the Azerbaijan Republic

Ministry of Agriculture of the Azerbaijan Republic

40, Uzeyir Hajibekov street, Baku city AZ1000

Phone: 498 64 49 Fax: 498 64 49

E-mail: agry@azerin.com

July 03, 2008 No. 01/29-08-351

About execution of Your instruction No. 17/B-405-15/10 dated 25.06.2008

Dear Mr. Sharifov,

According to Your instruction, Initial Version of Report on Assessment of Project Activity entered from the World Bank on "Farm Privatization Project" and "Agricultural Development and Credit Project" was reviewed by the Ministry of

Agriculture.

We would like to inform You for reference that the results of both projects in Initial Version of Report on Assessment of Project Activity was evaluated satisfactory by the independent expert of the World Bank.

The Ministry of Agriculture has no comments and proposals to the Initial Version of Report on Assessment of Project Activity.

Please, take this fact into account.

Regards,

Minister: signed / Ismat Abasov

To Mr. Abid Sharifov
Deputy Prime Minister
of the Azerbaijan Republic

#### Dear Mr. Sharifov!

According to Your instruction No. 17/B-405-15/12 dated 25.06.2008, Initial Version of Report on Assessment of Project Activity entered from the World Bank on "Farm Privatization Project" and "Agricultural Development and Credit Project" was reviewed by the Ministry of Economic Development.

We would like to inform you, that we welcome the preparation of Report on Assessment of Project Activity produced by Independent Evaluation Group on the above mentioned two projects carried out by the World Bank in Azerbaijan. Taking into consideration that at present, more than one hundred projects are implemented in Azerbaijan with the World Bank or other International Financial Agencies, measure of effectiveness of these projects is of great importance.

As you know, the present report is to control both execution status of the Farm Privatization and Agricultural Development and Credit projects that have already been completed and correctness of Completion of Execution Report prepared by the specialists of respective sector of the World Bank.

Regarding the issue, we express below-mentioned comments of ours on the said report:

 Firstly, we would like to note that assessment in Report on Assessment of Project Activity prepared by Independent Evaluation Group is quite different than assessment in Execution Completion Report produced by the specialists of the Bank who are not

working under the project (excluding category of Bank's and Borrower's activity),

- Bank's activity was assessed satisfactory, and Borrower's activity
  as very satisfactory on both projects. And this means that during
  execution of the project Bank's representatives did not pay
  sufficient attention to the quality of execution due to certain reasons
  and it was assessed as substantial in overall assessment of the
  projects,
- Execution of the project continued unsatisfactorily especially after
  the eighth Aide Memoire prepared by Bank's mission on
  Agricultural Development and Crediting project, however in the
  end, the project was closed satisfactorily,
- According to the report, it is indicated that Monitoring and Evaluation that was of a special importance for the project was assumed and unduly conducted.
- In the result of unduly performance of Monitoring and Evaluation, economical indicators were not fully collected and economical effectiveness of the project was not calculated.
- The indicators of conformity and effectiveness in the section of assessments that the forth chapter of the report are different than those mentioned in the table 7.

Taking into consideration the above-mentioned, we would like to inform you that we consider expedient for both the Bank and respective state authorities who are beneficiaries of the project that they would approach this issues more

attentively in order to avoid the re-occurrence of the said problems in projects that are under execution at present or to be implemented in future.

We kindly request You to take these facts into consideration.

Regards,

H.Babayev / signed