WORLD BANK SUPPORT to LAND ADMINISTRATION and LAND REDISTRIBUTION in CENTRAL AMERICA

AN IEG PERFORMANCE ASSESSMENT OF THREE PROJECTS
EL SALVADOR, Land Administration Project (LOAN NO. 3982)
GUATEMALA, Land Administration Project (LOAN NO. 4415)
GUATEMALA, Land Fund Project (LOAN NO. 4432)
June 30, 2010
Currency Equivalents (annual averages)

Currency Unit = US$1

Abbreviations and Acronyms

CAS  Country Assistance Strategy
CNR  Centro Nacional de Registros (National Registry Center)
GEF  Global Environmental Fund
ICB  International Competitive Bidding
ICR  Implementation Completion Report
IEG  Independent Evaluation Group
IEGWB  Independent Evaluation Group (World Bank)
LAP I  Land Administration Project (Phase I)
LAP II  Land Administration Project (Phase II)
M&E  Monitoring & Evaluation
PEU  Project Execution Unit
PPAR  Project Performance Assessment Report
PPF  Project Preparation Facility
PRISA  Agricultural Sector Reform and Investment Project
RPRH  Registro de la Propiedad Raíz e Hipotecas (Land and Mortgage Registry)
SAR  Staff Appraisal Report
SIRyC  Sistema de Informacion Registro y Catastro (Property Registry and Cadastre Information System)
UNDP  United Nations Development Program

Fiscal Year

Government:    July 1 – June 30

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IEGWB Mission: Improving development results through excellence 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: http://worldbank.org/ieg).

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

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

**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.
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Preface

This report contains a comparative assessment of the performance of three projects dealing with land administration and redistribution in El Salvador and Guatemala. The main report compares findings from the three projects. This is one of a number of thematically-clustered, cross-country project evaluations that the Independent Evaluation Group has conducted in recent years.

The Project Performance Assessment Report (PPAR) for each project is presented in Annexes 1-3. Annex 1 contains the PPAR for the El Salvador Land Administration Project, for which a loan of US$50 million was approved on March 5, 1996 and closed on June 30, 2005. Annex 2 contains the PPAR for the Guatemala Land Administration Project, for which a loan of US$31 million was approved on December 3, 1998 and closed on March 31, 2007. Annex 3 contains the PPAR for the Guatemala Land Fund Project, for which a loan of US$23 million was approved on January 7, 1999 and closed on June 30, 2005.

The report was prepared by the Independent Evaluation Group (IEG), which conducted a mission to El Salvador and Guatemala in November-December 2009. The report is based on the project appraisal and completion reports, the Loan Agreements, project files, references in the literature produced by academic and advocacy institutions, press reports, and discussions with project participants, Bank staff, government officials and representatives of non-governmental organizations. A list of those interviewed is contained in an appendix to each of the PPARs. The cooperation and assistance of all stakeholders and the support of the World Bank Country Offices in El Salvador and Guatemala is gratefully acknowledged.

Following standard IEG procedures, a draft of the main report and the respective PPAR was sent to each Borrower for comment before being finalized. No comments were received from the Borrowers. The final report will be available to the public following submission to the World Bank's Board of Directors.
Summary

This report assesses the performance of three projects that tackled various aspects of land administration and land redistribution in El Salvador and Guatemala and draws conclusions based on a comparative analysis of the three projects.

The three projects in El Salvador and Guatemala that are assessed in this report were each cases of a long-term, programmatic commitment that the Bank entered into in the late 1990s, building on the Peace Accords that were signed (in 1992 in El Salvador; and in 1996 in Guatemala). The two land administration projects involved a process of systematic adjudication by area, a region-wide sweep whose aim was to generate more accurate information, first, on the geographic characteristics of urban and rural properties (cadastre data) and, second, on the extent of legal property rights (registry data). The Guatemala Land Fund Project (P054462) was launched simultaneously with the Land Administration Project and aimed to sponsor the redistribution of lands to poor families, using a willing-buyer, willing-seller model, with government financing the purchase of land (through loans) and the Bank supporting complementary investments in infrastructure and services (through grants).

The assessment of the three projects yielded five main findings:

- There is a lack of evidence that the land administration projects increased tenure security and associated economic benefits;
- Progress in integrating registry and cadastre institutions was uneven;
- Land regularization is likely to have more impact on urban than rural areas;
- Redistributive land reform in Guatemala has been hampered by deficiencies of project design and wavering commitment; and
- Although the objectives of the land administration projects explicitly referred to the aim of paying special attention to the needs of the poor, project design and implementation did not take sufficient steps to ensure adequate coverage of this group.

The outcome of the El Salvador Land Administration Project is rated satisfactory. There are signs that the project boosted the dynamism of land markets with potentially efficiency-enhancing consequences. More importantly, registry and cadastre procedures were greatly improved and Centro Nacional de Registros (National Registry Center -- CNR) achieved core financial self-sufficiency, serving as a model for other countries. The unit costs for regularization were in the range observed elsewhere. Although there are some doubts about whether land tenure was generally as insecure as assumed at appraisal, the focus on increasing efficiency by creating a unified cadastre and registry was appropriate and the improvement of land use capacity is particularly important for the fast-growing urban areas of El Salvador. The project substantially achieved its objectives. Although only two-thirds of the projected number of parcels was covered, this was what was feasible with the available funds (the cost per hectare of regularization was underestimated at appraisal).

The outcome of the Guatemala Land Administration Project is rated unsatisfactory. While the objectives of the project were substantially relevant, the design of the project contained several flaws, including the questionable appropriateness of Petén as locus of the operation. Although the project successfully developed a parcel-based geographical cadastral database, contrary to appraisal expectations, there is no technological platform for integration
with the deed-based registry database. Also, targets for cadastral surveying and titling were not met. Data inconsistencies raise questions about the 27 percent economic rate of return that the completion report claims.

The outcome of the Guatemala Land Fund Project is rated *moderately unsatisfactory*. Project objectives were highly relevant, seeking as they did to serve the ends of equity and efficiency by redistributing underused land. But there were several flaws in project design, including notably the failure to set a limit per family on the size of the land purchase loan, reducing the incentive for beneficiaries to bargain hard over the price. The project achieved its objectives to a modest extent. Although double the expected number of beneficiary families was served, there is no solid evidence to demonstrate that land productivity increased significantly or that the land market operated more efficiently as a consequence of the land fund. Owing partly to shortfalls in the provision for working capital and the lack of adequate technical assistance for land fund beneficiaries, the economic rate of return is probably lower than expected.

Comparative analysis of the three projects yields the following lessons:

- Assumptions about the boost to tenure security that will result from land administration initiatives (and corollary assumptions about improved access to credit and reduced conflict) should be carefully examined and tested with empirical evidence.
- Integrating the databases of cadastre and registry is important to facilitate land use planning and tax assessments, but this integration can be attained by providing separate cadastre and registry agencies with a common technical platform—it does not presuppose creation of a single cadastre/registry agency (which may not be politically feasible).
- Land administration initiatives need to be prioritized by geographic area; other development programs may be more appropriate for remote rural areas.
- The design problems associated with Guatemala's attempt at market-assisted land reform need to be avoided in subsequent projects; there is much scope for learning from these design flaws and the relevance of land reform should not be lightly dismissed.
- During the design and preparation of land administration and land redistribution projects, mechanisms need to be developed for ensuring that the poor will have access to the land administration process and to opportunities for obtaining land. The effectiveness of these mechanisms needs to be continuously monitored.
- The net gains from land administration and land reform initiatives should not be regarded as self-evident; much more attention must be given to measuring the impact of these initiatives. This means that when projects are prepared—rather than later—provision must be made for conducting baseline and follow-up surveys with appropriate control groups.

Vinod Thomas
Director-General
Evaluation
1. Background

1.1 This report discusses the main findings to emerge from IEG’s assessment of the performance of three World Bank-supported projects on land administration and land redistribution in El Salvador and Guatemala. It examines issues bearing on the legal security of land tenure, the adequacy of registry and cadastre institutions, the scope for redistributive land reform, and the attention to the needs of the poor.

Similarities and Differences: El Salvador and Guatemala

1.2 The countries share a similar colonial legacy, have both experimented with land redistribution based on expropriation and, in the 1980s, both underwent civil wars. Both countries have a concentrated pattern of landholding (originally associated with export-oriented plantation agriculture), a long history of tenure insecurity, a number of indigenous communities with communal property rights, rich biodiversity, and a fast-growing urban population. There are also significant differences between them: Guatemala is less densely populated; a larger proportion of its territory is located in protected areas; a much bigger share of its population is accounted for by indigenous communities; and more of its people are poor (Table 1).

<table>
<thead>
<tr>
<th>Table 1: Country Characteristics</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Population Density/a</td>
</tr>
<tr>
<td>Rural Poverty /b</td>
</tr>
<tr>
<td>Indigenous Population /c</td>
</tr>
<tr>
<td>Protected Areas /d</td>
</tr>
<tr>
<td>Agrarian Reform /e</td>
</tr>
</tbody>
</table>

Sources: (a) World Bank; (b) Socio-Economic Database for Latin America and the Caribbean; (c) CIA, The World Factbook; (d) World Resources Institute; (e) Wikipedia.

1.3 The three projects in El Salvador and Guatemala that are assessed in this report were each cases of a long-term, programmatic commitment that the Bank entered into in the late 1990s, building on the Peace Accords that were signed (in 1992 in El Salvador; and in 1996 in Guatemala).

1.4 The two land administration projects involved a process of systematic adjudication by area, a region-wide sweep whose aim was to generate more accurate information, first, on the geographic characteristics of urban and rural properties (cadastre data) and, second, on the extent of legal property rights (registry data). The
programs were ultimately intended to be nationwide in scope, covering all private property. Coverage of protected areas, indigenous and agrarian reform communities was limited to boundary delimitation; no attempt was made to adjudicate land within these boundaries. Both projects were justified by the Bank on the grounds that they would contribute to more efficient resource distribution and help to reduce poverty, given that the existing cadastral and registration systems were “overly bureaucratic, costly, inaccessible, centralized, corrupt and not transparent to the users”.

A shared theme was decentralization of the cadastre and registry offices, which was intended to bring these services closer to users, encouraging a swelling of the pool of fee-paying customers. A challenge common to both countries was to move land administration onto a business footing, creating autonomous agencies that would raise revenues by selling services and land information.

1.5 There were two important differences between the two projects. The El Salvador project combined cadastre and registry functions in a single agency; and did not include a land titling component. In contrast, the Guatemala project had separate agencies for cadastre and registry; and another agency (Fontierras) was responsible for providing private titles for parcels carved out of public lands (terrenos nacionales) on the rural frontier and common land (ejidos) in towns. Thus, project design needed to provide for mechanisms to ensure coordination between three agencies.

1.6 There was another difference in the approach taken by the Bank in each country. In Guatemala, the Bank advanced both efficiency and equity arguments for supporting a parallel initiative to redistribute land, launching a market-assisted land reform operation to run in parallel with the land administration project. In El Salvador, while still significant, the inequities in the distribution of landholding were not as marked as in Guatemala. Although both countries had witnessed earlier, abortive attempts at land reform, this process had left more of a mark on the agrarian structure of El Salvador (Table 2)—and, concomitantly perhaps, had stirred up greater opposition to the notion of further redistribution. Guatemala was a different story. There are no comparable data on the area of land affected by reform in 1996 but the evidence indicates that the radical redistribution programmed by the Arbenz administration in the early 1950s was reversed by counter-reform. Moreover, unlike in El Salvador, there is no land formally assigned to agrarian reform communities. As some measure of the lack of impact of past land redistribution efforts, the Gini coefficient increased from 0.82 in 1964 to 0.85 in 1979—giving Guatemala the most unequal pattern of landholding for Central American countries in the 1970s; the Gini for El Salvador was 0.61 (in 1996). This helps to explain why the Bank and the government strongly supported market-assisted land reform in Guatemala in the late 1990s. However, a decade later, this support had evaporated, reflecting implementation difficulties and an erosion of government support.

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Table 2: El Salvador: Area Affected by Land Reform

<table>
<thead>
<tr>
<th>LAND TENURE, 1996</th>
<th>HECTARES ('000)</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrarian Reform Land</td>
<td>373</td>
<td>23.3</td>
</tr>
<tr>
<td>Non-Reform Land</td>
<td>1,227</td>
<td>76.7</td>
</tr>
<tr>
<td>Total Farmland</td>
<td>1,600</td>
<td>100.0</td>
</tr>
<tr>
<td>Land Rented or Sharecropped</td>
<td>36</td>
<td>2.3</td>
</tr>
</tbody>
</table>


The Projects

1.7 The El Salvador Land Administration Project (P007174) sought to consolidate and modernize land registry and the cadastre, drawing on the results of a pilot conducted in the Department of Sonsonate that was financed under a Bank-supported project approved in 1993. A single agency, the National Registry Center (CNR), combines registration and cadastral functions. The project was designed to be nationwide in scope but by the end of implementation had covered only two-thirds of the expected number of parcels owing to higher than expected costs. The remaining area was to be covered by a follow-on operation but this was cancelled for political reasons not specific to the project. Bank support was ultimately substituted by a similar operation financed by the Central American Bank for Economic Integration. A GEF Land Administration and Protected Areas Project (P092202) is now being implemented, led by the Environment Ministry (MARN), whose technical capacity and priorities are different from CNR.

1.8 The Guatemala Land Administration Project (P049616) was envisaged as the first of a three-phase program to extend over twelve years. With respect to the part of the program financed by the Bank, the first phase was limited to the Petén Department, a frontier region that was selected because of its relatively favorable land policy and legal framework. One of the aims of the project (not achieved) was to support integration of the databases for registration and cadastre; unlike in El Salvador, the functions remained the responsibility of separate agencies, for political economy rather than technical reasons. A second-phase, Bank-supported, project (P087106) is now underway.

1.9 The Guatemala Land Fund Project (P054462) was launched simultaneously with the Land Administration Project and aimed to sponsor the redistribution of lands to poor families, using a willing-buyer, willing-seller model, with government financing the purchase of land (through loans) and the Bank supporting complementary investments in infrastructure and services (through grants). The project was nationwide in scope and the number of families served was twice the level forecast at appraisal. There was a significant shortfall in repayment of the land purchase loans; and complementary investments were skimped.

Findings

1.10 The assessment of the three projects yielded five main findings, each of which is explored at length in the following sections:
• There is a lack of evidence that the land administration projects increased tenure security and associated economic benefits;
• Progress in integrating registry and cadastre was uneven;
• Land regularization is likely to have more impact on urban than rural areas;
• Redistributive land reform in Guatemala has been hampered by deficiencies of project design and wavering commitment; and
• Although the objectives of the land administration projects explicitly referred to the aim of paying special attention to the needs of the poor, project design and implementation did not take sufficient steps to ensure adequate coverage of this group.

2. Tenure Security and Associated Benefits

2.1 When the Bank prepared its land administration projects in El Salvador and Guatemala in the mid-1990s it made the largely unexamined assumption that cadastral surveying, land registration and titling would necessarily enhance tenure security, thereby facilitating access to credit, improving land management and reducing conflict. Increasing tenure security was not just a question of providing legal title to land. An earlier generation of USAID-funded projects focused narrowly on land titling. By failing to strengthen the supporting infrastructure of registry and cadastre these projects failed to ensure that subsequent transactions would be recorded. Various donors, including the Bank, argued that an alternative approach was needed, focused on building up cadastre and registry institutions.

2.2 In the analytic work that helped to inform preparation of the Guatemalan project, the Bank explained how the tenure security of the poor was hampered by the weaknesses in the registry. "The land registry process... makes it difficult for the poor to gain access to land. This system is antiquated, inefficient, overly centralized, complicated, and until recently was run by corrupt officials. Furthermore, registration requires buyers and sellers to take costly actions, and in some cases they are required to be able to read and write. Most land transactions in the Highlands are not legally registered because of the high costs and inaccessibility of the land registry system. This leaves smallholders vulnerable to usurpation and acts as a barrier to their access to credit. To transfer land, a buyer and seller must reach an agreement and pay a notary or lawyer for a title-deed (Escritura Publica). To guarantee security of ownership rights, Guatemala adheres to the principle of publicity by having a title-deed registered in the Registro General de Propiedades, with offices in Guatemala City and Quetzaltenango. If a land title holder does not properly register the title in the Registry, his or her title cannot be guaranteed. To act in good faith, a buyer is obliged to investigate the current legal status of the parcel in the Registry before purchasing. All transactions are done by hand and involve significant legal and travel costs for smallholders wishing to register their property. Moreover, there is no mechanism in the system for the provision of a field sketch (croquis) of the property to establish its characteristics and boundaries, leaving open the possibility of disputes and rendering the system useless for natural resource management purposes. The

disfunctionality of the registry has become especially apparent in recent years with the return of the refugees from Mexico, for whom available land must be identified and purchased for their resettlement.4

2.3 Clearly, even if it was not enough by itself (as the USAID projects had demonstrated), the possession of title was a necessary part of the land regularization package. The Bank was evidently persuaded that there was a more urgent need for a titling component in Guatemala than in El Salvador. In Guatemala, the Bank noted that “only 41 percent of landowner households possess formal title to their land. Only a third of the poor have land titles compared to almost half of the non-poor… Moreover, the non-poor use land markets more than the poor. In particular, more than half of the land owned by non-poor households was purchased on the market as compared with only a third of the land owned by extreme poor households (the remainder being acquired by inheritance).”5 In contrast, in El Salvador, land titles were widespread (Table 3). (Although possibly the incidence of titling varied by gender: according to one source, in urban areas, 78 percent of untitled properties belonged to women.6) In El Salvador, the land administration program started in the most tenure secure areas (in the west of the country, beginning in Sonsonate), areas where for the most part property was already titled. According to the registry (CNR), the surveying of Sonsonate revealed that only about 5 percent of land owners lacked title; but they recognized that for the country as a whole there was no complete information about the level of titling and the lack of title was probably more marked in the departments not covered by the project.

### Table 3: El Salvador: Incidence of Land Titling, 1995

<table>
<thead>
<tr>
<th>INCOME STRATA</th>
<th>ALL</th>
<th>LOW</th>
<th>MIDDLE</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of households holding title to land</td>
<td>83</td>
<td>73</td>
<td>86</td>
<td>89</td>
</tr>
</tbody>
</table>


2.4 The assumption that regularization necessarily enhances tenure security bears closer examination. In Guatemala, in particular, there is a rich literature from academics and advocacy groups arguing that, to begin with, regularization merely seeks to legitimize the long series of land grabs of which the country’s history is made up (dating back to the Spanish conquest); and that, moreover, even if the tenure status of peasant farmers is regularized this will not protect them from subsequent acts of coercion, intended to make them give up their land.7 In the frontier department of Petén there is a long history of conflict over land, most recently associated with the traffic in narcotics. (Petén is a favorite spot for the landing strips used by small aircraft that ship cocaine, by stages, from Colombia to the United States because it is so lightly populated and policed.) Faced with this extra-economic coercion and in the absence of a broader framework of law and order it is a moot point whether farmers hold legal title or whether the characteristics of their parcels are accurately recorded. There is a whole literature—little

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reflected in the Bank’s discourse of the mid-1990s when these projects were designed—that challenges the “a priori assertions of the benefits of land administration projects: improved land security, access to credit, increased land market activity, efficient land use and poverty reduction”. More recent Bank analytic work is less prone to make these a priori assertions.

2.5 The Bank-supported program of land administration began in Petén. The appraisal document said that land conflict was less of a problem there than in other parts of the country. A different picture emerged in a later Bank report. The Northern lowlands are comprised mainly of the Department of Petén, a frontier agricultural area with abundant natural resources and limited infrastructure. In the 1950s migration into this area was encouraged by the central government. This migration was not a part of a planned process and land grabbing soon followed. Land grabbing persists today and has resulted in uncertain land tenure and security. Municipalities, cooperative and associations of farmers were allocated land for cultivation and exploitation, but often municipality limits, land plot boundaries and rules of land use are ignored. This has created overexploitation of land, which is largely not suited for (traditional) agriculture. Deforestation and overuse of lands threaten protected areas. Indeed, given that the first phase of the Bank-supported land administration program aimed to steer clear of protected areas, Petén was not an obvious starting point: covering 24 percent of the national territory this department contained 76 percent of the land in Guatemala’s protected areas. Petén was chosen as the launch pad for the pragmatic reason that (unlike the rest of the country) it already had a land law; therefore, project implementation could proceed immediately. But, as it turned out, it took five years for additional critical legislation (the Cadastral Information Law) to be introduced: between 2000 and 2005 regularization in Petén proceeded in a legal limbo. Even if progress in Petén had been swift there is still a question about the applicability of the experience acquired in this frontier department to other (longer-settled) parts of the country—given that the ultimate intention was to cover the whole of Guatemala.

2.6 If there is doubt that, from a tenure security viewpoint, the best regions were chosen as launch pads, what is the evidence that tenure security was actually enhanced by these projects? Interviewee statements about their perceived level of security are one measure. But a proper ex-ante analysis of tenure security in a given area (which was not undertaken in any of the reviewed land administration projects) would have examined indicators that are not as subjective as respondents’ security perceptions: for example, the incidence of land disputes and their nature; the frequency and likelihood of land transactions involving outsiders in rural communities; and differences between prices of titled or registered lands and untitled/unregistered lands of the same quality. Such an analysis would have allowed a determination of whether and where the types of interventions considered would address issues of tenure insecurity.

2.7 The following paragraphs focus on the evidence that increased tenure security enhanced access to credit and reduced land conflicts. In El Salvador, data from the

12. However, perceptions were not systematically surveyed in either country.
2007 agricultural census show that, of farmers receiving credit, on average, 36 percent of those in the departments covered by systematic adjudication received credit from private banks, compared to 27 percent for the departments that had not yet been adjudicated. Only one of the six adjudicated departments (San Salvador) showed a lower rate of use of private bank credit (22 percent) compared to the mean for non-adjudicated departments. These findings may suggest the existence of a relationship between adjudication and credit access but without a before/after comparison they are totally inconclusive. There is some evidence that the western departments where the systematic regularization by area started are better off than departments to the east so, irrespective of adjudication, they may have enjoyed better access to bank loans. A Guatemala study was subject to similar limitations. Perez surveyed 48 families in Alta Verapaz who received land titles from Fontierras between 2002 and 2003. He found that the lack of title had not impeded their access to credit previously and that, after title was received, there was a reduction in access because credit terms became less favorable. But the study lacks a control group of the untitled.

2.8 A more rigorous study (referring to Guatemala) focused not on the enhancement of credit access but whether there was an investment and productivity payoff to titling. Based on a survey of ten coffee farms in 1992-1993 (i.e. well before start up of the projects assessed here), Schweigert reported the following. “The data come from what approaches a controlled experiment in which a set of formerly landless, rural households were provided with access to land on which to cultivate a permanent crop. All were provided credit, but only a subset of households had title. On parcels held by those households with title, output and yield were, on the average, higher. The data are consistent with a model of household behavior in which title, by increasing tenure security, increases the investment of family labor in the present to generate higher future output. The amount of additional output associated with title in this case is not only statistically but economically significant”.

2.9 With respect to the incidence of conflict over land rights, there is no decisive evidence from either country to show what effect adjudication had. In El Salvador, the Procuradora General de la Republica mediates in some boundary disputes (providing an alternative to the courts) and its records show a sharp acceleration in the number of cases attended since 1999, mainly reflecting the opening of new offices in the various departments. But it is unclear what proportion these cases represent of the total number of conflicts. The Land Administration Project included a small component to develop alternative dispute resolution mechanisms (which would be particularly relevant to poor people unable to afford legal representation) but the project implementing agency (CNR) indicated that this activity did not proceed. However, absence of evidence is not evidence of absence: the lack of data does not mean that the security objective was not achieved.

2.10 In Guatemala, the number of reported conflicts has risen sharply since the time when the project was prepared (Figure 1). Once again, it could be that the number of actual cases of conflict was constant (or even declined) over this period: there is no indication of the relationship between actual and reported cases. The government agency in charge of mediating land conflicts collects data on cases reported and "files closed"; closing the file does not necessarily mean that the conflict was resolved. Also, negotiated agreements between parties in dispute are not legally binding. More relevant are the data specific to Peten, the focus of the first land administration project. In 2008 and 2009 Peten was the department with the largest number of new conflicts reported. Peten has 3 percent of the population of Guatemala and 10 percent of the people reporting land conflicts. This does not necessarily mean that the project was ineffective in tackling conflict in Peten: if the conflict resolution agency (CONTIERRA) shines a spotlight on disputes that were previously unacknowledged it will serve a useful purpose. However, the published numbers on reported conflicts probably still understate the total number of conflicts. “Key land experts emphasized that up to tens of thousands of additional disputes...remain latent or unregistered”.

2.11 It has been argued that full transferability of property rights is one measure of tenure security. If this is the case, an upturn in property sales following adjudication might suggest that adjudication has enhanced security. In Guatemala, IEG sought but could not obtain data on land sales and mortgages (respectively, from the property registry (GRP) and from Banrural). In El Salvador, the implementing agency (CNR) provided IEG with data in abundance but a simple comparison of the number of sales in adjudicated and non-adjudicated departments was inconclusive (see El Salvador PPAR for details).

16. Data supplied to IEG by Secretaria de Asuntos Agrarias.
2.12 The scope for increasing tenure security was ultimately constrained by the geographic area covered by these projects (plus, in Guatemala, the limited achievement of titling targets). The El Salvador project performed better than that in Guatemala but even it had a substantial shortfall: two-thirds of the expected number of parcels were registered (the intention at appraisal was to cover all 14 departments in the nation but only 6 were completed). In Guatemala, the pace of cadastral surveying and titling exceeded targets in the urban areas of Petén but only 3 percent of rural areas were both cadastered and titled. Much more rural land was cadastered than titled (reflecting differences in the efficiency of the agencies responsible for each task); but it is doubtful that cadastering in the absence of titling greatly enhances tenure security.

2.13 These various considerations call into question the assumption that these projects enhanced tenure security. The increase in land registry revenues suggests that there is an effective demand for the services they provide; implying in turn that those who are willing and able to pay for the services are convinced that there is a payoff, which probably includes tenure security and associated economic benefits. (It is less clear that the poor have a strong demand for these services.) However, the weakness of the monitoring data makes it impossible to draw conclusions about the socioeconomic profile of the paying clients. Also, there is a lack of evidence that the three projects substantially increased the incomes and productivity of project beneficiaries.

3. Integration of Registry and Cadastre

3.1 In El Salvador, registry and cadastre are handled by the same agency (CNR); in Guatemala, they are handled separately by the property registry (RGP) and the cadastral institute (RIC). What can we learn from these two models?

3.2 In its guidance on best practice for investment projects the Bank observes that where possible it is best to bring cadastre and registration under the auspices of a single agency, rather than locate them in separate departments. A single agency may permit savings in the administrative overhead, savings that could potentially be passed on to customers in lower fees. The cadastre function will always generate lower revenues than the registry function, based on the relative volume of services demanded; also, in addition to the revenue from property transactions, registries typically get additional incomes from registering businesses and intellectual property rights. Integrating cadastre and registry makes it possible for the former to be directly subsidized by the latter, thus reducing the need to depend on transfers from the government budget. But the biggest reason for supporting integration is to establish a seamless interface between the separate databases for cadastre and registry, thus speeding up and making more accurate the verification of information about land use and land rights. The payoff in terms of land use planning and tax assessment is likely to be substantial.

3.3 There are two counter-arguments. First, integration of cadastre and registry databases may be achieved by means of a technical fix: a common data platform for two separate agencies. But the difficulty of securing this fix should not be underestimated. Integration needs to be highlighted as a project risk in the appraisal report. The steps toward integration need spelling out and progress needs monitoring. Project design should include provision for mandatory periodic reports on the data integration progress. Making coordination and integration the subject of loan conditionality may be advisable to ensure that it actually takes place. The issue needs to be highlighted in supervision reports and at the mid-term review.

3.4 Second, in countries where the registry is powerful and well established there is likely to be stiff resistance to any proposal that, in the spirit of rationalization, it be merged with the cadastral agency: too much turf and too many rents are at stake. In Guatemala, the General Property Registry (RGP), founded in 1877, is one of the most autonomous entities in the country. The Registrar is appointed by the President of the Republic, and because the institution does not receive regular budget transfers (operating with its own revenues), it is not subject to the standard fiduciary controls of other public entities. It would not have been realistic for the Bank to insist on formal integration. Instead, the focus was placed on creating a common data platform between the registry and the (new) cadastral institution.

3.5 The process of integration in Guatemala has lagged. Enabling legislation was passed five years after the Bank loan became effective for the Land Administration Project; and regulation of the 2005 law was still incomplete when that loan closed. The project successfully developed a parcel-based geographical cadastral database but, contrary to appraisal expectations, it had not been integrated with the deed-based registry database at loan closing. Integration had still not been achieved when IEG conducted its mission in November 2009. Also, although cadastral data is available on-line, in the offices of the cadastre, there are no computer terminals available for use by the public. Under the follow-on project little progress toward integration has been made although steps have been taken to strengthen working relations between the cadastre agency (RIC) and the registry (RGP). A cadastre-registry committee has been set up and the technical linkages have been established to enable the initial steps of the cadastral process to be undertaken.

3.6 Although integration has progressed further in El Salvador than in Guatemala there is some concern about the completeness of the regularization process. The project sought to unify all the topographical and legal information of the parcels covered by the area-based regularization process, creating a new, digitalized base that would seamlessly connect registry and cadastre. In three of the six departments covered by the project (La Libertad, La Paz, San Salvador), this process remained incomplete when implementation ended; it was partially complete in the other three departments (Sonsonate, Ahuachapan and Santa Ana). Several examples of this incomplete integration include the following. First, a notary observed that the problem sometimes arose when the owner was absent.

from the property when the surveyors arrived. Even if the landlord was present, the survey team could still be denied entry. Second, a consultant referred to a specific case in La Paz (one of the “completed” departments) where, after adjudication, it was necessary to pay US$2,000 for a re-survey to rectify measurement of a property of 100 manzanas—calling into question the value of the initial adjudication process.

3.7 Nevertheless, the extent of El Salvador’s achievement is considerable. Since the project closed CNR has made further progress in bringing its offices up to internationally-certified standards (the ISO 9001 process). Between 2006 and 2009 the offices in San Salvador, Santa Ana, Sonsonate and Ahuachapan were all certified to be in line with the international norms both for property registry and for update of the cadastre.

3.8 What is the evidence that El Salvador, with its more integrated service, has performed better than Guatemala where cadastre and registry are handled separately? One performance measure is the time taken to register property. During implementation of the assessed projects (1997-2007), there was a fall, in both countries, in the number of working days needed to register a standard property transaction. The trend is confirmed by an independent, worldwide survey, sponsored by the Bank’s Doing Business initiative. Data from this source suggest that Guatemala has recently outperformed El Salvador (Figure 2). Does this weaken the case for integration? A closer look at the data suggests not. Whereas sale of a property in El Salvador involves an obligatory pass by the cadastre, in Guatemala it is only the registry that is involved: the data generated are less complete in Guatemala, potentially hampering land use planning and tax assessments.

Figure 2: Time Taken To Register Property

![Graph showing time taken to register property](image)

Source: World Bank, Doing Business 2005 to 2010. Note: The years refer to the report title; each report presents data collected the previous year.

3.9 Moreover, the Doing Business data appear to understate progress made in El Salvador. IEG found that in September/October 2008 the average time needed to register a real estate transaction was 7 days in the 6 departments that had been systematically adjudicated compared to 19 days in departments not yet covered. Even within the area covered by systematic adjudication there was substantial variation, ranging from 3 days

22. Information supplied by CNR
in western department of Ahuachapán to 10 days in the capital, San Salvador. These figures compare favorably with the Bank’s Doing Business indicator: in 2008, according to that source, it took 31 days to register property.

3.10 What of financial self-sufficiency?—one of the arguments for integration. Since 2005, the cash flow of the El Salvador agency (CNR) cash has deteriorated, because fees have not increased since 2001 while operating costs rose (Figure 3). However, it could be argued that project costs (which, in addition to World Bank funding, include a follow-on operation financed by the Central American Bank for Economic Integration) should be allocated to the government’s budget rather than CNR since it is quintessentially a public good that is being provided. In this respect it is important to note the difference between the costs resulting from a one-off process of systematic adjudication—where costs might reasonably be borne by the government and funded through an externally funded project because the aim is to jump start institutional development—and the subsequent costs arising from the “regular business” of on-demand, sporadic adjudication (where costs are borne by the person requesting the service). If project costs are subtracted, CNR is still financially self-sufficient. The recent leveling-off of its operating costs increases the likelihood that this outcome will be sustained.

Figure 3: El Salvador: Cash Flow of the Cadastre/Registry Agency

![Figure 3: El Salvador: Cash Flow of the Cadastre/Registry Agency](image)

3.11 There is a further consideration. The design of the El Salvador model gives no incentive for CNR to generate a surplus: any surplus that is generated has to be transferred to the Treasury and cannot be used by CNR to help fund technical upgrading, capacity building or any other efficiency-enhancing investments. The appraisal report states that the legislature had approved CNR autonomy and self-financing by allowing CNR to retain its revenues. But the completion report notes that no law had yet been passed to this effect. This raises the possibility that the Bank had not done due diligence on legal issues prior to project approval. The law had still not been passed when IEG conducted the assessment mission.

3.12 To conclude, while country circumstances may hamper the Bank’s ability to advocate for a single-agency model, there is still an urgent need to integrate cadastre and registry data. While the technical means for doing this may be problematic, of much greater concern is the foot dragging by agencies concerned to defend their turf. Project design needs to spell out the steps needed for integration, laying out a clear timetable and monitoring progress regularly.

4. Urban vs. Rural Impact

4.1 One of the objections that may be raised against systematic, nationwide adjudication is that it involves unjustified costs (low priority areas are included as well as high priority areas) and they tend to neglect the needs of poorer groups. Certain rural areas may not be a high priority for land regularization. Within long-established rural communities information on “who owns what” is typically well spread, and if there is not a lot of mobility, transactions are typically concluded among members of the community, with little asymmetry in information. On the other hand, in places with much mobility, such as urban areas, newly settled frontier areas, and fertile agricultural areas, transactions often take place among strangers and information asymmetry is significant (the seller knows the validity of his/her land rights, but the buyer knows less). It is these areas where the payoff to regularizing land rights is likely to be greatest. By the same token, if a would-be land buyer doubts the authenticity of title documents presented by sellers, registration would alleviate such constraints on land market activities, but such benefits would accrue in areas where land transactions are more likely to be common (urban areas, and fertile agricultural areas, but not remote and less fertile rural areas).

4.2 By definition, systematic adjudication does not allow for this prioritization by area. This section examines how priorities may differ between urban and rural areas. Progress may be faster in urban areas for logistical reasons, costs per parcel are lower in urban areas (Table 4) and, for reasons examined below, there is more likelihood that the data on parcel characteristics will continue to be updated after the one-time sweep of systematic adjudication is complete.

<table>
<thead>
<tr>
<th>Table 4: Cost of Cadastral Survey Work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COSTS PER PARCEL</strong> (US$)</td>
</tr>
<tr>
<td>Rural</td>
</tr>
<tr>
<td>Urban</td>
</tr>
</tbody>
</table>

Note: The large discrepancy between El Salvador and Guatemala in the rural cost reflects the higher rural population density (smaller average parcel size) in El Salvador.

4.3 Regularization of urban land may not only be more urgent but also more feasible than rural land regularization. It is more urgent because the urban population is growing faster than the rural population (Figure 4), pushing up the volume of property transactions and increasing the challenge of land use planning and the demand for services provided
by municipal authorities. It is more feasible because the denser the population the cheaper the cost of cadastral surveying. Also, urban populations are more likely to be better informed about registry and cadastre and because they are closer to the offices they face lower transaction costs. In towns land transactions are more frequent than in rural areas, and they take place mostly among strangers, who therefore have a greater demand for official verification of ownership. In addition, fertile and dynamic rural areas, which tend to be densely settled, may also have more active land markets, and may be more attractive to outside entrepreneurs (who are not part of the traditional community), also offering large potential benefits to regularization.25

4.4 In Guatemala, surveying and titling targets were exceeded for urban areas but fell well short of the target for rural areas, mainly owing to weak operation on rural titling by Fontierras (Figure 5). (There is no urban/rural breakdown in the data IEG obtained for El Salvador).

4.5 There is a genuine concern about the sustainability of the benefits from systematic adjudication; and this is particularly true for rural areas. Given the systematic nature of

area-based regularization, the program covered all rural and urban parcels irrespective of size. But, with the passage of time, the databases may degrade unevenly: property owners who are relatively poor and remote from cadastre/registry offices are probably less inclined to register changes now that they have to pay (Unlike systematic adjudication, sporadic adjudication—adjudication on demand—requires that the owner pay for the service.) In El Salvador, the cost of on-demand regularization may dissuade poorer clients from approaching CNR, an observation made a decade ago that probably still holds true today. “As of 1998, the cost of registering a land area of 3.5 manzanas was $1,800. For farmers who on average earned $120 per month, this cost was definitively excessive”.26 Also, before owners can register a property they need to legalize the title, a process that falls outside CNR’s mandate and is an added cost.

4.6 The poor may be less informed about regularization procedures. Addressing this concern, a baseline study for the Bank-supported follow-on project in El Salvador recommended that CNR improve its communication strategy in order “to ensure that people know of the institution and that potential users are aware of the location of its offices”.27 CNR acknowledges that this issue needs addressing and at the time of the IEG mission were seeking the funds to establish mobile units that would increase CNR outreach in remote areas.

4.7 There is another reason why sustainability of adjudication efforts is likely to be greater in urban areas. Establishing a reliable cadastral database allows for the more accurate assessment of property taxes and charges for municipal services. Equipped with information about the width of storefronts, for example, municipalities have a firm and fair basis on which to calculate the charges made to businesses for a variety of urban services including paving, lighting and trash collection. In Guatemala, although failure to pay property tax does not usually lead to prosecution, the threat of withholding urban services may be an effective lever for persuading service users to pay their taxes. This leverage is mainly limited to built up areas however because municipalities offer fewer services in rural areas; and the rural population typically has less means to pay. But mayors in more commercially vibrant areas are often willing to pay cadastral agencies to keep information up to date, helping to keep these agencies financially self-sustaining.

4.8 Collaboration between municipalities and the registry-cadastre has gone even further in El Salvador, and is seen as key to the ensuring that the positive results from systematic adjudication are sustained.28 By signing an agreement with CNR, municipalities obtain access to existing cadastral information and a guarantee of regular updating. With access to this information municipal authorities can assess fees for municipal services (although, unlike in Guatemala, there is no additional revenue from property tax). Municipalities offering a wide range of services and incurring substantial costs for delivering these services probably have the biggest incentive to sign up; in areas where growth and urban property development is less dynamic there is less interest in cooperating with CNR. As of December 2009, 42 of the 262 municipalities in the country had signed agreement with CNR, up from 17 when the project closed.29 Forty of the 42

municipalities were located in the six Departments that had been covered by the systematic registration campaign sponsored by the Bank-supported project.

4.9 Summing up, there may be more client demand for land administration initiatives in urban areas and covering these areas is likely to be less costly and more sustainable. Rural areas present a wide range of land planning challenges—including tenure of indigenous communities, agrarian reform settlements and protected areas—that may call for more urgent action than private property adjudication. The needs of these special areas have typically been incompletely addressed or neglected by land administration projects.

5. Land Reform Challenges

5.1 Access to land is a problem in both countries. The extent to which land holding is concentrated in a few hands is more marked in Guatemala (where land reform was aborted earlier) than in El Salvador. Currently, the land distribution Gini coefficient for Guatemala is about 0.85 compared to 0.61 in El Salvador; the average for Latin America is 0.79 and for the world 0.64. 30 In both countries there is a history of limited access to land by the poor. The civil wars of the 1980s were partly fueled by land hunger. Given this similarity between the two countries it is striking that the Bank argued against land reform in El Salvador but supported a land reform project in Guatemala, even though land issues figured prominently in the Peace Accords of each country. In El Salvador earlier attempts at land reform had gone further (see Table 2 above), possibly triggering more elite resistance. The Bank clearly needed to take these political realities into account. But this does not fully explain why Bank’s analytic work and theoretical assumptions took a different tack in El Salvador.

5.2 In El Salvador, Bank analysis found that past efforts at land reform had led to inefficient resource use in agriculture. The reform redistributed 295,000 ha (equal to 19 percent of prime farmland) and imposed a ceiling of 245 ha on holding size. 31 According to the Bank, the reform “paralyzed land markets, deterred investment, distorted incentives, and did little to improve tenure security because many transfers could not be completed due to incomplete land records”. 32 The Bank also observed that: “there are no private properties larger than 500 hectares; this is a significant problem, not only because holding size limits prevent the realization of economies of scale but also because the land reform affected 20 percent of the best farm land in the country”. 33 Drawing on the results of a 1996 household survey, the Bank made the case that, in El Salvador, land reform was not an appropriate way to reduce rural poverty. First, landlessness did not significantly increase the propensity to be poor: 30 percent of the landless were extremely poor; but the proportion for farmers was not much lower (27 percent). Second, the Bank estimated that using land redistribution to bring the rural poor above the poverty line would entail

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an increase in average farm size from 2 ha to 12.5 ha, which could not be accommodated by the supply of land of arable potential.

5.3 The conclusion drawn was that “considering the scarcity of farm land in El Salvador, these estimates underline the unreasonableness of relying primarily on land redistribution to alleviate poverty among the rural poor, and the importance of non-land factors (i.e., education, access to infrastructure and credit, technology, economic incentives) in the poverty equation”. The Bank report notes that “the least poor in rural areas are those households which are heavily involved in nonfarm employment, and thus a route out of poverty is to increase access of the poor to non-farm activities”.

5.4 By contrast, in Guatemala, the Bank was comfortable arguing that land redistribution is justified in part by the absence of economies of scale in agriculture, in line with an influential strand of Bank thinking at the time. “Highly concentrated ownership is a major cause of low labor and land productivity. According to official estimates, small farms have higher yields and factor productivity, and labor use in small farms is on average 40 percent higher, than for larger farms”.

5.5 Nevertheless, the appraisal document for the Guatemala land reform project did refer to the Bank’s earlier analytic work on El Salvador. But it used the data to argue against past (administrative) approaches to land reform that had led to efficiency losses. The appraisal document also drew on the El Salvador analytic work to introduce a note of caution. “(a) Land redistribution, by itself, is not a solution to rural poverty. Without complementary services and investments to induce technological change, production and income levels will remain relatively low; (b) A large land distribution scheme may trigger an increase in land prices; (c) Countries should not rely exclusively on land reform as main instrument to reduce poverty in rural areas. Other non-exclusive options include: promoting land rentals and sharecropping, titling and registering land, and land taxation”.

5.6 But the design of the project failed to take sufficient account of these caveats. It contained several mistakes, most notably a failure to contain upward pressure on land prices, one of the shortcomings that the Bank had warned against.

5.7 First, Article 11 of the Fontierras law (which was under discussion at the same time the Bank was preparing the project) set no limit per family on the size of the land purchase loan. The lack of a ceiling made it less likely that beneficiaries would look hard for cheaper properties, or bargain hard over the price. The project design was based on the assumption that obliging beneficiaries to take on a substantial debt to buy land would dissuade all but the most committed applicants for Fontierras financing. Loans would only be granted to applicants with viable productive projects, projects that would generate enough revenue for the loan to be paid back. However, as it turned out, the size

39. World Bank (1998b), Section F [no page number].
of the loan could well exceed the scope of the productive project to amortize it. There was little to stop families assuming debts that exceeded their capacity to pay. Moreover, according to some IEG interviewees, beneficiaries were advised, covertly or overtly, not to pay back the loans they received. Some peasant and indigenous organizations publicly proclaimed that the poor should not be expected to pay for land. The resulting efficiency losses could have been contained if the Bank had pressed harder for a ceiling per family on the amount paid for land.

5.8 The absence in Guatemala of an ethic of impartial property valuation and a trained corps of independent surveyors increased the scope for corruption. According to knowledgeable stakeholders, various press reports, and a CEPAL study, properties were frequently overpriced, with the surplus proceeds being pocketed by landlords, leaders of peasant and indigenous organizations, Fontierras staff, surveyors and the beneficiaries themselves. Once more, the scope for corruption would have been less if a per-family ceiling on land purchase had been implemented.

5.9 A second design weakness arose from the lack of attention at the design phase to ensuring that there was an adequate cadre of technical assistance providers capable of helping land reform beneficiaries to improve farming practices and to develop and implement business plans.

5.10 Third, although the project design included adequate eligibility criteria for selecting beneficiaries, the rules for the selection process contained in the project operating manual could have been tighter. Also, it seems likely that before the project was appraised there was a long list of clients (sponsored by the various parties to the peace process) who needed to be accommodated, rendering formal project selection procedures moot. During the first half of implementation, the vetting of would-be beneficiaries was limited to a sample of the group; and the eligibility assessment questionnaire was applied in Fontierras offices, rather than where the applicants lived (making it impossible to verify asset levels). This proved to be a significant oversight because most of the property purchased under the project was transferred in the first three years of implementation (2000-2002).

5.11 According to the completion report, following persistent advocacy by the project team, Fontierras eventually changed its procedures, introducing a limit per family on the amount of the land purchase credit. IEG found no documentary evidence of a change in procedures; nor when asked about this were the staff of Fontierras able to confirm that such a change had occurred. The lack of change is evident from data in the Fontierras portfolio which shows that, even after adjusting for inflation, the mean size of the financing package per property purchased was no lower by loan closing than it had been at the beginning of implementation.

5.12 And yet, even if the cost per family of land purchase was higher in Guatemala than in two other countries where the Bank supported similar projects, the amount per family of the finance package (land plus complementary investments) was roughly the same (Table 5). Because the complementary investments were squeezed by comparison

40. CEPAL (2001), pp. 61-69
in Guatemala it follows that productive projects were probably less viable; although in the absence of farm survey data this is impossible to verify. Nevertheless, the non-viability of many productive projects in Guatemala would be consistent with the weak performance in repaying the land purchase loan. About 60 percent of the Fontierras portfolio is now at risk, raising doubts about the sustainability of this agency—and the broader commitment to market-assisted land reform.

Table 5: Results of Land Access Projects in Three Countries

<table>
<thead>
<tr>
<th></th>
<th>GUATEMALA</th>
<th>HONDURAS</th>
<th>BRAZIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Cost</td>
<td>$80.1 m.</td>
<td>$12.4 m.</td>
<td>$459.0 m.</td>
</tr>
<tr>
<td>(WB loan, US$ )</td>
<td>($23.0 m.)</td>
<td>($8.84 m.)</td>
<td>($214.0 m.)</td>
</tr>
<tr>
<td>Land Acquisition</td>
<td>$52.0 m.</td>
<td>$3.2 m.</td>
<td>$193.2 m.</td>
</tr>
<tr>
<td>Investments</td>
<td>$9.7 m.</td>
<td>$5.4 m.</td>
<td>$210.4 m.</td>
</tr>
<tr>
<td>Beneficiary</td>
<td>15,487</td>
<td>991</td>
<td>(plus 15,267)</td>
</tr>
<tr>
<td>families</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farms acquired</td>
<td>186</td>
<td>n.a.</td>
<td>2,114 (+609)</td>
</tr>
<tr>
<td>Families per farm</td>
<td>83.2</td>
<td>n.a.</td>
<td>18.9</td>
</tr>
<tr>
<td>Land distributed</td>
<td>71,361 ha</td>
<td>2,398 ha</td>
<td>831,602 ha (+398,732)</td>
</tr>
<tr>
<td>Land per family</td>
<td>4.6 ha</td>
<td>2.4 ha</td>
<td>20.7 ha</td>
</tr>
<tr>
<td>Total cost of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>package (land +</td>
<td>$7,522 / fam</td>
<td>$7,480 / fam</td>
<td>$8,047 / fam</td>
</tr>
<tr>
<td>investment/T.A.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of land:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>per hectare</td>
<td>$1,017 / ha</td>
<td>$1,318 / ha</td>
<td>$195 / ha</td>
</tr>
<tr>
<td>per family</td>
<td>$4,686 / fam</td>
<td>$3,189 / fam</td>
<td>$4,058 / fam</td>
</tr>
<tr>
<td>Debt : Equity Ratio</td>
<td>1 : 1.6</td>
<td>1 : 2.7</td>
<td>1 : 2.0</td>
</tr>
<tr>
<td>Family Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase from:</td>
<td>(only farm models available)</td>
<td>$630 / yr</td>
<td>R$ 1,656</td>
</tr>
<tr>
<td>to:</td>
<td></td>
<td>$1,430 / yr</td>
<td>R$ 4,064</td>
</tr>
<tr>
<td>Percentage</td>
<td>n.a.</td>
<td>130%</td>
<td>145%</td>
</tr>
<tr>
<td>Loan repayment</td>
<td>&lt; 35%</td>
<td>97.3%</td>
<td>97.6%</td>
</tr>
</tbody>
</table>

Source: Munoz (2010).

5.13 Over the space of a decade or so the priority given to land issues in the Bank’s strategy for Guatemala has fallen off significantly. Although the lending implications were not immediately clear, land occupied center stage in the 1995 Country Assistance Strategy (CAS); “The land issue is central to any rural poverty alleviation and peace
consolidation strategy in Guatemala". But already by the 1998 CAS, the slow progress on reforming land administration was highlighted as one of the areas of concern in the Bank’s program. Nevertheless, the land agenda was still identified as a key part of the strategy for FY1999-2001: “In order to improve access to sustainable productive opportunities for the poor, the most important effort would be to help transform the skewed land distribution pattern and clarify land tenure rights”. In contrast, the 2005 CAS was lukewarm about land initiatives, noting “the Fontierras project was affected by the incongruence of the model adopted by the Government”. The 2008 Country Partnership Strategy made no reference to land issues at all even though the second land administration project was at an early stage of implementation.

5.14 The shift of emphasis in the Bank’s strategy was underpinned by a change in the type of recommendations emanating from its poverty assessments. In 1995, improved land access was central to the Bank’s program. The poverty reduction strategy that was proposed listed three key elements: “greater access to land for the poor, investments to raise the human capital of the poor, and infrastructure and support services to increase productivity”. Improving land access “involves efforts not only to make it easier for the landless and land poor to acquire land, but also to strengthen land tenure security for smallholders who already possess land”. By the time of the 2003 poverty assessment, “expanding land titling and land markets programs” was still among the initiatives recommended for support but was just one among many: neither a “top” nor a “medium” priority. It was noted that: “full-fledged land reform is unlikely to serve as a major vehicle for poverty reduction due to the high costs and slow pace of land programs, and low agricultural returns”. In the 2009 poverty assessment there was no reference to land issues (titling or reform), either in relation to poverty reduction or growth. The new emphasis was on conditional cash transfers and the region most in need of assistance was identified as the north-east (not Petén).

5.15 These findings raise an important question. Have the development needs of Guatemala shifted so radically since the late 1990s as to justify this reorientation of Bank strategy? Is land administration and land redistribution no longer relevant to the country’s needs? This is an issue that bears closer examination than it has received in the recent analytic and strategy work of the Bank.

6. Attention to the Poor

6.1 During the design and implementation of these three projects there was insufficient attention to the mechanisms needed to ensure access of the poor to the lands regularization process and to land available for redistribution. This was manifested in the failure to organize comprehensive targeted information campaigns, insufficient facilities for free legal advice, inadequate low-cost dispute resolution mechanisms, no reduced transaction fees for smallholders and socially deprived members of communities, and inadequate monitoring of access and utilization of services by the poor.

7. Lessons

7.1 Assumptions about the boost to tenure security that will result from land administration initiatives (and corollary assumptions about improved access to credit and reduced conflict) should be carefully examined and tested with empirical evidence. The assessed projects make assertions about enhanced tenure security, increased credit access and reduced conflict over land rights but provided no evidence to back these claims up. There is a literature outside the Bank challenging these assumptions and the Bank has only recently begun to take this into account. There are a number of ways to measure tenure security and the progress toward increasing it (see paragraph 2.6 above); and these measures need to be taken into account in project design and monitored during implementation. Summing up, security of land tenure is not automatically boosted by land administration initiatives; good land administration is a necessary (but not sufficient) step toward secure land tenure.

7.2 Integrating the databases of cadastre and registry is important to facilitate land use planning and tax assessments; but this integration can be attained by providing separate cadastre and registry agencies with a common technical platform—it does not presuppose creation of a single cadastre/registry agency (which may not be politically feasible). El Salvador—with its single agency—has made more progress toward technical integration than Guatemala with its separate agencies. A unified agency is preferred, if it can be politically established. If a unified agency is not politically feasible, effective arrangements for data integration must be introduced, otherwise the unsatisfactory experience of Guatemala will be repeated in other places. There are steps that can be taken during project design and implementation to make it more likely that integration will be effective (see paragraph 3.3 above).

7.3 Land administration initiatives need to be prioritized by geographic area; other development programs may be more appropriate for remote rural areas. Regularization may be more urgent, more feasible and more sustainable in urban areas and in fertile rural areas with dynamic land markets. Urban regularization could usefully be accompanied by complementary efforts to improve municipal services, municipal financing and slum upgrading. In rural areas, there is more of a need to adopt an integrated approach to land in private property, protected areas and indigenous communities (the last two typically having been orphaned in land administration projects). While a majority of the poor often
live in rural areas it does not follow that land administration efforts should give special attention to rural areas; there may be more effective ways to reduce rural poverty.

7.4 The problems associated with Guatemala's attempt at market-assisted land reform need to be avoided in subsequent projects; there is much scope for learning from previous design flaws and factors tending to undermine government support—the relevance of land reform should not be lightly dismissed. The justification for the drop off in the government and the Bank's support for land reform in Guatemala and El Salvador merits closer examination. IEG concurs with the findings of a recent Bank policy note: “Considering the pervasive and pernicious inequality of land distribution in Central America and the fact that these inequalities were a major factor that led to civil unrest and civil wars, it is sobering to note that World Bank land projects in Central America have ended up focused on land administration...with a secondary and discontinued effort at piloting market-based land purchase programs”.

7.5 During the design and preparation of land administration and land redistribution projects mechanisms need to be developed for ensuring that the poor will have access to the land administration process and to opportunities for obtaining land; and the effectiveness of these mechanisms needs to be continuously monitored. The three projects assessed here each listed poverty reduction as one of their objectives and yet there was little follow up to ensure that the poor were well served. In the case of land administration, systematic adjudication in principle covers poor and non-poor alike. But coverage of the poor should not be taken for granted; and once systematic adjudication is complete there is a need for special measures to encourage poorer groups to register subsequent changes in landholding. With respect to land reform, the eligibility criteria for participation in redistributive schemes should give weight to the needs of the “poor with a vocation for farming” and application of those criteria should be based on a systematic survey of the socioeconomic profile of the candidates. Also, for land policy initiatives to make a big impact on rural poverty complementary measures are called to boost agricultural productivity.

7.6 The net gains from land administration and land reform initiatives should not be regarded as self-evident; much more attention must be given to measuring the impact of these initiatives and this means that when projects are prepared—rather than later—provision must be made for conducting baseline and follow-up surveys with appropriate control groups. None of the three projects assessed here made adequate provision for impact evaluation. This shortcoming is not limited to land policy projects; but because these projects are politically so problematic the analytical foundation on which they are based probably needs to be more carefully designed and carried out than is the case for many other types of projects.

51. Childress, Siegel and Barham (2009), p. 4.
ANNEX 1: EL SALVADOR – LAND ADMINISTRATION PROJECT

<table>
<thead>
<tr>
<th>Principal Ratings</th>
<th>ICR*</th>
<th>ICR Review*</th>
<th>PPAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Institutional Development Impact**</td>
<td>High</td>
<td>High</td>
<td>—</td>
</tr>
<tr>
<td>Risk to Development Outcome</td>
<td>—</td>
<td>—</td>
<td>Moderate</td>
</tr>
<tr>
<td>Sustainability***</td>
<td>Highly Likely</td>
<td>Likely</td>
<td>—</td>
</tr>
<tr>
<td>Bank Performance</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>Moderately Satisfactory</td>
</tr>
<tr>
<td>Borrower Performance</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>

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

Key Staff Responsible

<table>
<thead>
<tr>
<th>Project</th>
<th>Task Manager/</th>
<th>Division Chief/ Sector Director</th>
<th>Country Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>Cora Melania Shaw</td>
<td>Michael Baxter</td>
<td>Edilberto Segura</td>
</tr>
<tr>
<td>Completion</td>
<td>Frederic de Dinechin</td>
<td>Mark E. Cackler</td>
<td>Jane Armitage</td>
</tr>
</tbody>
</table>
Summary

This report assesses the performance of the US$70 million Land Administration Project. The project was supported by an IBRD loan (No. 3982) of US$50.0 million, which was approved on March 5, 1996. All but US$80,000 of the loan disbursed and it closed on June 30, 2005, after being twice extended for a total of three years.

The project's major objectives were to regularize land registration for El Salvador's estimated 1.6 million parcels of rural and urban land and to create an efficient, streamlined, and financially self-sustaining nationwide cadastral mechanism for mapping and land registration—the new National Registry Center (CNR). According to the appraisal report, land registration would provide land owners—particularly the vast majority of smallholders who lacked clear tenure—with tenure security, enabling them to sell or rent at fair market prices, and pass on their holdings as inheritances. In addition, it was argued that enhanced tenure security would increase smallholder access to credit, raising incentives to invest and to manage land properly.

The project comprised: (a) Institutional Strengthening and Decentralization (planned cost, US$10.6 million; actual cost, US$16.7 million), which involved establishing the institutional framework, structure and procedures for the introduction of an integrated, nationwide cadastre and land registry; (b) Land Data Acquisition (planned cost, US$48.7 million; actual cost, US$41.3 million), which entailed mapping, regularization of land records and the development of alternative mechanism for resolving land disputes; and (c) Project Administration (planned cost, US$10.7 million; actual cost, US$11.4 million), which covered the cost of preparation, plus the strengthening and expanding of the project implementing unit that had been created under the pilot project.

IEG rates Outcome as satisfactory. Both the design and the objectives of the project were substantially relevant. Although there are some doubts about whether land tenure was generally as insecure as assumed at appraisal, the focus on increasing efficiency by creating a unified cadastre and registry was appropriate and the improvement of land use capacity is particularly important for the fast-growing urban areas of El Salvador. The project substantially achieved its objectives. Only two-thirds of the projected number of parcels was covered but this was what was feasible with the available funds (the cost per hectare of regularization was underestimated at appraisal). There are signs that the project boosted the dynamism of land markets with potentially efficiency-enhancing consequences. More importantly, registry and cadastre procedures were greatly improved and CNR achieved core financial self-sufficiency, serving as a model for other countries. The unit costs for regularization were in the range observed elsewhere.

The Risk to Development Outcome is rated moderate. Notwithstanding a concern that the cadastre and registry databases may not be kept up to date (because the poor may not have the means or incentive to register future changes in property holding), the essential solvency of CNR and the progress made with the signing of municipal agreements are encouraging indications that the project’s principal achievements will be sustained.
**Bank Performance** is rated moderately satisfactory: there were some flaws in quality at entry (including the lack of provision for monitoring and evaluation and the failure to verify that legislation allowing CNR to retain its revenue surplus was in place) but supervision was intensive, demonstrating the necessary flexibility in response to changing circumstances.

**Borrower Performance** is rated satisfactory based on consistent government support for the project and the sound leadership of CNR.

The **Lessons** learned from this project are discussed in the Overview report which draws on findings from IEG performance assessments of three Central American land policy projects.
Background

1.1 The 1992 Peace Accords marked a new departure for El Salvador, including a commitment to regularize land tenure. In 1994 the government formulated a new agrarian policy with substantial assistance from the Bank.52 The new policy aimed to: (a) finalize the land transfers agreed to in the Peace Accords; (b) strengthen security of tenure; (c) streamline state agrarian reform institutions; (d) restructure agrarian debt; (e) create a free market for land; and (f) implement an efficient system of rural finance.53 The Land Administration Project responded to the second item on this agenda: the demand for stronger tenure security. It aimed to consolidate and modernize land registry and the cadastre, drawing on the results of a pilot conducted in the Department of Sonsonate that was financed under a Bank-supported project approved in 1993.54

1.2 According to one estimate, before the Land Administration Project, most of those occupying land had title to it (Table 1) but there was no updateable system to record and manage land-related information. This hampered development of the land market. It also denied government access to vital information needed for planning. As well as addressing these issues the Project indirectly supported a process of individualizing land tenure rights, consistent with new legislation that enabled members of agrarian reform cooperatives to sell or rent their land to anyone they chose.55 A further legislative initiative underpinned preparation of the Project. In December 1994 the government merged three agencies to create the National Registry Center (CNR), unifying the functions of land mapping, cadastre and registration.56 The decree creating CNR required it to charge a fee for services sufficient to make the agency self-financing.

Table 6: Incidence of Land Titling, 1995

<table>
<thead>
<tr>
<th>INCOME STRATA</th>
<th>ALL</th>
<th>LOW</th>
<th>MIDDLE</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of households holding title to land</td>
<td>83</td>
<td>73</td>
<td>86</td>
<td>89</td>
</tr>
</tbody>
</table>


1.3 Recently, progress with land administration initiatives has stalled. Following the presidential election of 2004 power in the National Assembly was divided between the ruling National Republic Alliance Party (ARENA) and the Farabundo Marti National Liberation Front Party (FMLN). The FMLN (now the party in power) had sufficient votes to block the passage of items requiring a two-thirds majority, such as foreign loans requiring a sovereign guarantee. For reasons that were not project specific FMLN chose to vote against the loan

54. The pilot was financed under Loan Number 3576 in support of the Agricultural Sector Reform and Investment Program (PRISA). The pilot covered 5,800 hectares in the municipalities of Santa Catarina Mazahaut and Santo Domingo Guzman.
56. The three agencies were the National Geographic Institute (ING), the Land and Mortgage Registry (RPRH) and the Social Land Registry (RSI). ING was in charge of the cadastre, RPRH was a deed registry (grantee-based not land-based), and ISR was responsible for registering titles in squatter settlements.
supporting the Second Land Administration Project and a raft of other operations (including some sponsored by other donors). The Second Land Administration project was canceled in September 2006. Nevertheless, the Centro Nacional de Registros (CNR) signed a loan agreement for a similar project with the Central American Bank for Economic Integration; and it is still hoping to negotiate a new project with the World Bank.

Project Overview

Objectives

2.1 According to the Loan Agreement, “the objectives of the Project are to: (a) modernize the Borrower’s public registries and the cadastre of real estate; and (b) establish the bases for land regularization in the Borrower’s territory.”

2.2 The statement of project objectives in the appraisal report is more explicit and, for that reason, is used as the template for this assessment. “The proposed project's major objectives are to regularize land registration for El Salvador's estimated 1.6 million parcels of rural and urban land and to create an efficient, streamlined, and financially self-sustaining nationwide cadastral mechanism for mapping and land registration—the new National Registry Center. Land registration would provide land owners—particularly the vast majority of smallholders who lack clear tenure—with the security that will enable them to sell or rent at fair market prices, and pass on their holdings as inheritances. Improving tenure security would also increase smallholder access to credit, raising incentives to invest and to manage land properly.” The appraisal report also assigns the operation to the “Program of Targeted Interventions against poverty because, although all land will be regularized and benefits will accrue to all, of the currently unregistered parcels, more than three quarters are small”.

2.3 The statement of project development objectives has two footnotes. The first defines terms: “Land regularization makes ownership rights public knowledge by perfecting registration procedures and making all records public”. The second clarifies the project’s territorial coverage, stating that there are 1.8 million parcels in El Salvador but the project would cover only 1.6 million because 200,000 parcels in the region of Sonsonate were already being regularized under a pilot operation (PRISA) that preceded the appraised project. Except for Sonsonate, the project was intended to cover all 14 departments of El Salvador, spanning both urban and rural areas.

2.4 The objectives were not revised during implementation.

58. World Bank (1996), Section 2.
60. World Bank (1996), Loan and Project Summary.
Table 7: Project Costs by Component

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>COSTS IN US$ MILLIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expected</td>
</tr>
<tr>
<td>(1) Institutional Strengthening and Decentralization</td>
<td>10.6</td>
</tr>
<tr>
<td>(a) Institutional Strengthening</td>
<td>6.1</td>
</tr>
<tr>
<td>(b) Decentralization</td>
<td>4.5</td>
</tr>
<tr>
<td>(2) Land Data Acquisition</td>
<td>48.7</td>
</tr>
<tr>
<td>(a) Mapping</td>
<td>15.1</td>
</tr>
<tr>
<td>(b) Regularization of land records</td>
<td>33.5</td>
</tr>
<tr>
<td>(c) Alternative Dispute Resolution Mechanisms</td>
<td>0.1</td>
</tr>
<tr>
<td>(3) Project Administration</td>
<td>10.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>70.0</td>
</tr>
</tbody>
</table>

Components

2.5 Institutional strengthening involved consolidating CNR following the three-agency merger (see paragraph 1.2 above). Accounting norms needed establishing along with a fee-for-service schedule that would allow CNR to be financially self-sustaining. Provision was made for integration of the registry and cadastre databases and the further computerization of land information. This included creating the Land Information System, an automated database developed under the PRISA project to identify owners, parcels, and their descriptions, rights, and encumbrances.

2.6 Decentralization entailed setting up, in addition to CNR headquarters in San Salvador (Central Region), three regional offices in Sonsonate (Western Region), San Vicente (Northern Region) and San Miguel (Eastern Region). In addition, land registry and cadastre operations were further decentralized to 52 municipal offices. Each regional office offered a one-stop window for the full menu of services.

2.7 Land data acquisition comprised mapping (to establish a parcel-based database describing every parcel's legal rights, geographic location, and boundary lines), land records regularization (which included legislation to make registration by notaries compulsory and universal), and development of a range of mediation procedures for resolving disputes over rights to parcels. One of the major regularization tasks was to convert the real estate files of CNR from the system of folio personal (grantee-based files) to the system of folio real (parcel-based files), including the identification of the legal status of each parcel.61

2.8 The components were not revised during implementation. The cost of the Institutional Strengthening component was just over double the appraisal projection but this was accommodated by lower than projected costs in other components.

Project Institutional Framework

2.9 The project implementing agency was the CNR, a decentralized agency under the Ministry of Justice with administrative and financial autonomy. Under the PRISA-funded pilot operation CNR set up a Project Executing Unit (PEU), which was expanded under the

Land Administration Project. The PEU was headed by an international manager who reported to the CNR Executing Director through a National Coordinator appointed by the CNR Board. This coordinator was responsible for ensuring smooth liaison with government and the private professional associations involved in the project.\textsuperscript{62}

**Implementation**

2.10 The project was approved in March 1996. Loan effectiveness (March 1997) and the mid-term review (May 1999) took place on the dates projected at the inception. There were two extensions of the closing date and ultimately the loan closed (in June 2005) three years later than originally expected. This was the result of the unsatisfactory performance of the international contractor in the department of Santa Ana, and difficulties in completing the procurement process for the international competitive bidding for San Salvador, owing the difficulty of finding contractors who met the bidding standards and requirements. Also, the 1998 Hurricane Mitch and the 2001 earthquakes delayed project implementation because equipment was lost and loan resource had to be reallocated to cover some emergency infrastructure work. Field work had to be rescheduled and postponed for several months after both the hurricane and the earthquakes.

2.11 At appraisal, the total project cost over five years was estimated at US$70 million, to be financed by an IBRD loan of US$50 million, and US$20 million from the government. The actual project cost over eight years was US$ 69.5 million, of which US$ 49.9 million were from proceeds of the IBRD loan, and US$ 19.6 million from the government. The government released counterpart funds promptly throughout implementation. Loan funds were disbursed and used in accordance with Bank guidelines. Audited accounts were generally maintained satisfactorily.

2.12 Although total project costs did not exceed predictions, unit costs were higher than expected, which explains why only two-thirds of the targeted number of parcels were covered. There was some underestimation at appraisal of the number of parcels per hectare. Since the surveyors were paid per hectare the surveyors faced the prospect of financial loss if the number of parcels per hectare was routinely higher than predicted. (In urban areas the influx of population leads to the fragmentation of lots, creating more boundaries to be traced.) The initial estimate of unit costs did not take sufficient account of the difficulties encountered in the field verification of legal rights and the delimitation of buildings. This in turn reflected the limited experience and capacity of local firms and consultants, the lack of an adequate methodology for surveying densely populated rural areas, unforeseen difficult terrain in various rural areas, and deficiencies in the operating manual which failed to define responsibilities clearly resulting in duplication or shortage of efforts. The poor quality of the original data in the old system required clean-up efforts that had not been budgeted for. Also, owners were often not on hand when regularization was carried out, complicating the verification of rights. Finally, the high incidence of criminality in some areas of the country hampered fieldwork.\textsuperscript{63}

\textsuperscript{63} World Bank (2005c), p. 9.
Relevance

Relevance of Objectives

3.1 The government (and the Bank) perceived land tenure insecurity to be one of the impediments to investment in agriculture and improved natural resource management. The contribution of legally secure land ownership to peace consolidation and environmental management was recognized in the 1993 Country Assistance Strategy. Also, the 1994 Poverty Assessment identified a need to increase the poor's access to assets through strengthening the agencies responsible for land financing, titling, and registration. Nevertheless, at the time of appraisal, the evidence of tenure insecurity was limited. Lack of title did not seem to be a major problem. CNR reported that during the systematic regularization of Sonsonate only about 5 percent of landowners were found to lack title. A Bank survey found that 83 percent of rural households hold title to land (see Table 1 above). There is no discussion in the appraisal report of the level of tenure insecurity, or if there are significant variations in tenure security between different regions or between urban and rural areas. However, the appraisal report does single out El Salvador's botched land reform of the 1970s as a prime cause of tenure insecurity: "the reform program paralyzed land markets, deterred investment, distorted incentives, and did little to improve tenure security because many transfers could not be completed due to incomplete land records". The lack of analysis at appraisal concerning the precise nature of insecurity calls into question the relevance of the tenure security objective.

3.2 Although project objectives sought to encourage investment in land, it could be argued that the absence of a property tax meant that there was no spur for farmers underutilizing their land to rent or sell up (inhibiting transfer of land to producers more likely to use the land fully and invest in it). There has long been stiff resistance to the imposition of such a tax in El Salvador. (On the other hand, in several countries where a property tax does exist it is laxly enforced (e.g. Guatemala); so in practice the spur it provides to intensification may be moot.)

3.3 A more compelling argument for relevance of project objectives concerns the likely efficiency gains from modernizing the cadastre, based on the single-agency model that El Salvador had pioneered. The results of the pilot project demonstrated that modernizing the land registry and cadastre was cost effective. However, the efficiency gains from a modernized and unified cadastre/land registry apply mainly where there is a high level of land transactions, and where land information is frequently needed for planning and taxation purposes. This would seem to point to particularly high relevance in urban areas and perhaps in more fertile agricultural areas.

3.4 Based on circumstances before the project, the focus on promoting registration made sense. Only 40 percent of properties were registered; less than a third of these had cadastral references. Many properties with valid registrations could not be located. Property owners

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64. Report No. 12315.
with title certificates that were not registered could not use their titles as security for mortgages. Some properties were registered by municipalities but this practice did not guarantee their legal rights before third parties.67

3.5 Another argument for relevance centers on El Salvador’s development trajectory. More than 60 percent of the population now lives in towns; and there is a substantial problem of urban squatter settlements associated with rural outmigration. Rural population density (population per hectare of farmland) has fallen since 1975 (unlike neighboring Guatemala). The project concept was consistent with the aim of increasing the revenue base and improving land use planning; the strengthening of the registry/cadastre is a vital adjunct to urban development.

3.6 In the time between project implementation and closing project objectives were wholly in accord with the three Bank Country Assistance Strategies that corresponded to this period (Table 3). After the project closed, however, land policy issues ceased to feature in the Bank’s Country Assistance Strategy; and this was the case at the time of IEG’s assessment mission.68 The omission apparently reflects the higher priority that government and the Bank are now giving to the fiscal and social sector concerns occasioned by the worldwide economic downturn, rather than reversal of an earlier policy. Admittedly, the Second Land Administration Project was canceled in September 2006. But this followed from the absence of the necessary votes in Congress for loan to be made effective (a two-thirds majority is required for multilateral development loans to be ratified).69 This outcome has been interpreted more as a tactical strike against the administration by opposition parties rather than a vote of no confidence in the project itself.70 In short, the lack of reference to land administration in the current strategy seems to be more of a conjunctural phenomenon rather than reflecting a fundamental waning of commitment to the principle of developing registry and cadastre institutions.

68. World Bank (2009).
70. CNR immediately negotiated a new loan for land administration with the Central American Bank for Economic Integration (loans from which do not require a sovereign guarantee).
Table 3: Consistency of Land Administration Project Objectives with the Bank’s Country Assistance Strategy (CAS)

<table>
<thead>
<tr>
<th>ISSUE DATE OF APPLICABLE CAS</th>
<th>CAS Period</th>
<th>Project Phase (Relevant Dates)</th>
<th>Relevant CAS Commitments</th>
<th>Issue</th>
<th>Date</th>
<th>Of</th>
<th>Feb 19, 1997</th>
<th>Nov 2, 2001</th>
<th>Apr 20, 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY1998-2001</td>
<td>Implementation</td>
<td>Aim: “Improve land security to improve farmer incentives to make investments in soil conservation” Benchmark: (1) “Regularize the registration of 25 percent of the national territory and provide technical assistance and agricultural support services for 80,000 small producers”. (2) “Develop a financially self-sustaining cadastral system for mapping and registration”.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FY2002-2004</td>
<td>Implementation</td>
<td>Aim: “Improve land security to improve farmer incentives to make investments in soil conservation”. Benchmark: (1) “Complete regularization of 90 percent of parcels by 2005”. (2) “CNR, the national mapping and registration agency, becomes financially sustainable in 2005”.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FY2005-2008</td>
<td>Closing</td>
<td>Aim: “Provision of efficient, equitable and accessible land administration services”. Benchmark: (1) “85 percent of land parcels cadastrated included and maintained in Registry”. (2) “Financial self-sustainability of the National Registry Center”.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


3.7 The relevance of the project objectives is rated **substantial**.

**Relevance of Design**

3.8 The commitment to a single-agency model for registry and cadastre was consistent with Bank thinking about good practice. Experience elsewhere has shown that delays and bottlenecks, due to rivalries and conflicting interests, are inevitable when a number of competing land agencies are simultaneously responsible for the implementation of land administration projects.

3.9 The focus on developing agreements with municipal authorities was congruent with the urban land use planning and fiscal decentralization needs of the country. Another positive aspect of design was the decision to allow private surveying firms and non-government organizations to bid for contracts rather than financing all fieldwork through force account. The project design allowed for rapid delivery of key outputs (e.g., maps, cadastre, and computerized database) that would help to build commitment from decision makers. The plan to adopt an automated (rather than a manual system) was ultimately justified by

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71 World Bank (2006b), Module 10.
efficiency gains; the project made adequate provision for the extensive training that the switchover entailed.

3.10 In some respects the design was over ambitious. It embodied an optimistic assumption that conditions in Sonsonate (the pilot region) were broadly representative of the rest of the country: Sonsonate was more developed and less remote than conditions in many other parts helping to explain why the unit costs in the pilot were substantially less than those of the full-scale project that followed. Trying to cover the whole nation was, with the benefit of hindsight, too big a stretch; and even if this target had been achievable it may not have been justified. The design could have prioritized areas where the land market was most active—most likely towns or the more fertile rural areas. Also, the legislative changes needed to make registration by notaries compulsory and universal proved not to be achievable. It might have been more practical to rely on executive decree rather than banking on swift action by the legislature.\textsuperscript{72} Moreover, although the Staff Appraisal Report suggested possible impact indicators the design of monitoring and evaluation was limited to tracking physical and financial outputs rather than development outcomes. No provision was made for a baseline survey, complicating any subsequent attempt to assess impacts.\textsuperscript{73} Project design did not provide for specific monitoring of the extent to which the poor have access to (and make use of) project-generated activities and services.

3.11 However, these caveats are outweighed by the path-breaking nature of the single-agency model that the project championed. The relevance of project design is, on balance, rated \textit{substantial}.

\textbf{Overall Rating}

3.12 Overall, relevance is rated \textit{substantial}.

\textbf{Efficacy}

4.1 The Project Development Objective (see paragraph 2.1 above) can be broken down into the following parts: first, regularization of rural and urban land parcels in all the administrative departments of El Salvador except Sonsonate; second, increasing the efficiency of land markets; third, increasing the security of tenure of landowners (particularly small farmers); fourth, facilitating access to bank credit; fifth, creating efficient registry and cadastre procedures; and sixth, ensuring that registry and cadastre institutions were self-financing. Although poverty reduction was not included among the project’s specific objectives some consideration of the likely consequences of this intervention for the poor is in order because this operation was designated at appraisal as a targeted intervention.\textsuperscript{74}

\textsuperscript{72} World Bank (2005b), pp. 15-16.  
\textsuperscript{74} World Bank (1996), Loan and Project Summary.
Table 4: Progress toward Project Targets by Loan Closing

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>APPRAISAL TARGET (SAR)</th>
<th>ACTUAL (ICR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Reduction of transaction costs (%)</td>
<td>Not quantified</td>
<td>-57% (from US$28 to US$12)</td>
</tr>
<tr>
<td>(2) Regularization of land registration (Number of parcels)</td>
<td>1.6 million (exc. Sonsonate)</td>
<td>1.0 million (plus 0.1 million in Sonsonate)</td>
</tr>
<tr>
<td>(4) Increased land value (%)</td>
<td>Not quantified</td>
<td>Price of properties with secure tenure (registered) is 17% higher than those not registered</td>
</tr>
<tr>
<td>(5) Improved access to credit (% of owners using land as collateral)</td>
<td>Not quantified</td>
<td>See footnote*</td>
</tr>
<tr>
<td>(6) More efficient land registration services (days per transaction)</td>
<td>Not quantified</td>
<td>From 38 to 16 days</td>
</tr>
<tr>
<td>(7) Investment in land improvement (% of owners)</td>
<td>Not quantified</td>
<td>See footnote*</td>
</tr>
</tbody>
</table>


*The ICR lists data from the previous pilot project here, comparing Sonsonate with another “without project department”, Usulutan. This is not relevant because Sonsonate was not included in the Land Administration Project that is being assessed here.

**Parcel Regularization**

4.2 The appraisal target was to regularize the registration of 1.6 million parcels. By loan closing 1.0 million parcels had been regularized. The remaining 600,000 parcels had still not been fully regularized when IEG conducted its November 2009 assessment mission. The shortfall is attributed to the higher than expected costs of regularization. The cost estimates at appraisal were based on experience from the Sonsonate pilot; but, in terms of level of development and extent of land titling this was a comparatively unproblematic department of the country, so costs here were not likely to be representative of the rest of the country. Additionally, the Project completed the regularization of the 100,000 parcels in Sonsonate Department, work begun under the PRISA-financed pilot operation.

4.3 There is a concern about the completeness of the regularization process. The project sought to unify all the topographical and legal information of the parcels covered through systematic area-based regularization, creating a new, digitalized base that would seamlessly connect registry and cadastre. In three of the six departments covered by the project (La Libertad, La Paz, San Salvador), this process remained incomplete when implementation ended; it was partially complete in the other three departments (Sonsonate, Ahuachapan and Santa Ana). Two of the persons interviewed by IEG referred to the incompleteness of data conversion and linkage. A notary observed that the problem arose when the landowner was absent from the property when the surveyors arrived; in some cases the survey team was denied entry. A consultant referred to a specific case in La Paz (one of the “completed” departments) where, after adjudication, it was necessary to pay US$2,000 for a re-survey to rectify measurement of a property of 100 manzanas.

75. World Bank (2005a), p. 27.
4.4 Although the number of parcels covered was less than expected, it was still substantial. The apparent shortfall was in relation to an unrealistic target that, in turn, derived from the underestimate at project appraisal of the cost per hectare of regularization. Given that the final cost per hectare was in the range observed for other countries (see Efficiency section below), progress toward this objective is rated substantial.

**Efficiency of Land Markets**

4.5 Did the project help to make land markets in El Salvador more efficient? Efficient markets tend to be associated with higher level of sales compared to less efficient markets where information gaps about rights to land and parcel characteristics may discourage transactions. One way to gauge the program’s impact in this respect is to compare, first, the level of sales per year before and after project implementation; and, second, areas covered early on by a registration sweep (barrido) and other areas covered later, or still awaiting coverage.

**Figure 6: Sales of Registered Parcels of Land**

![Figure 6: Sales of Registered Parcels of Land](image)

Source: Centro Nacional de Registros, El Salvador

4.6 Figure 1 shows that over the period covered by the land registration program in El Salvador, sales picked up substantially, particularly in rural areas. When the level of sales is broken down by program phase the picture is more complex (Figure 3) but still shows that there was a dramatic increase in land sales coinciding with project implementation (but also influenced by GDP growth rates and the availability of mortgage finance and remittances—all of which contracted sharply after the worldwide downturn in 2007). In the absence of good baseline data and follow-up surveys it is impossible to say how much of the observed increase in property sales was attributable to the project; but the data at least admit of the possibility that there was a significant project impact. Although correlation does not mean causation, it is at least possible and maybe likely that the initiative to regularize property titles, with its attendant publicity and outreach efforts, may have helped energize land sales.

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While the global financial crisis and economic downturn within El Salvador seems to have dampened these sales, they remain much higher than at the outset of the project.

**Figure 7: Proportion of Registered Rural Parcels Sold by Program Phase**

Source: Centro Nacional de Registros & Sistema SIRyC, El Salvador; see Appendix B, Table B1 below for raw data. Data for 2009 are up to October 31 only. *Note:* The data refer to annual sales of rural parcels recorded by the Central Nacional de Registros, expressed as a proportion of all the rural parcels recorded in the CNR database (SIRyC).

**Key:** Phase 1: Department of Sonsonate (systematic registration completed between 1993 and 2000 under pilot project); Phase 2: Departments of Ahuachapan, Santa Ana, La Libertad, La Paz and San Salvador (systematic registration completed between 2001 and 2005, under Land Administration Project I); Phase 3: Departments of Chalatenango, Cuscatlan, Cabanas, San Vicente, Usulutan, San Miguel, Morazan, and La Union (systematic registration pending under Land Administration Project II, approved in 2006).

4.7 Is there a price premium to systematic registration? In the economic analysis conducted for preparation of the (aborted) Bank-supported follow-on project it was estimated that as a consequence of applying the regularization sweep (*barrido*) to departments previously untouched by the program there would be a 17 percent increment in the property price relative to the “without project” case. The raw data on trends in rural land prices make it hard to substantiate the existence of such a premium, based on simple comparison of departments by program phase (Figure 4) but, in the absence of a more detailed econometric analysis controlling for other differences between departments these results are in no way conclusive. (Also, it is not clear why prices spiked in Phase II Departments in 2001.)

4.8 Because the data are *not inconsistent with* a project-induced, efficiency-enhancing rise in property transactions the achievement of this objective is rated **substantial**.

**Tenure security**

4.9 IEG was unable to find any data on tenure security: either in terms of surveys of beneficiary perceptions of changes in security due to regularization; or in terms of changes in the level of conflict over ownership rights and boundary disputes. The Procuradoria General de la Republica mediates in some boundary disputes (providing an alternative to the courts) and its records show a sharp acceleration in the number of cases attended since 1999, mainly reflecting the opening of new offices in the various departments. But it is unclear what proportion these cases represent of the total number of conflicts. The Land Administration Project included a small component to develop alternative dispute resolution mechanisms (which would be particularly relevant to poor people unable to afford legal representation) but CNR indicated that this activity did not proceed. The lack of data does not, of course, mean that the security objective was not achieved. It is reasonable to suppose that regularization reduced uncertainty for those transacting in land (and the willingness to pay for registration suggests that the payers believed that their security would be enhanced). But this implies improved security for selected groups in certain areas (e.g., towns); most likely not the poor. The sustainability of this achievement is addressed in the section on Risk to Development Outcome.

4.10 Based on the data deficiencies progress toward this objective is rated modest.
Access to credit

Table 5: Farmers’ Access to Credit from Private Banks, 2006

<table>
<thead>
<tr>
<th></th>
<th>1. (I)</th>
<th>2. Farmers Receiving Credit</th>
<th>3. (II)</th>
<th>4. Farmers Receiving Credit from Private Banks</th>
<th>7. (III)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Departments Systematically Registered by 2005</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonsonate</td>
<td>1,358</td>
<td>3,612</td>
<td>37.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ahuachapan</td>
<td>2,025</td>
<td>5,031</td>
<td>40.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Ana</td>
<td>1,591</td>
<td>4,435</td>
<td>35.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>La Libertad</td>
<td>1,263</td>
<td>4,276</td>
<td>29.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Salvador</td>
<td>435</td>
<td>2,000</td>
<td>21.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>La Paz</td>
<td>1,237</td>
<td>2,651</td>
<td>46.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total: “Registered” Departments (N=6)</strong></td>
<td>22,005</td>
<td>7,909</td>
<td>35.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total: “Non-Registered” Departments (N=8)</strong></td>
<td>19,153</td>
<td>5,085</td>
<td>26.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


4.11 According to the completion report, “as a result of secure tenure, preliminary studies carried out upon the project’s closure indicate that owners in both urban and rural areas have had better access to the formal credit market.” This may be so but the evidence limitations make it hard to draw a definitive conclusion. IEG was only able to obtain department-specific data for rural areas (drawn from the 2007 agricultural census). This limited evidence offers some support for the ICR claim about the positive effect of systematic registration on credit access. Private banks probably have tougher requirements than other lenders for proof of land ownership and parcel characteristics: access to credit from this source is a good test of whether registration makes a difference in terms of credit access. Table 5 above shows that the mean access to bank credit for farmers in the departments covered by systematic registration was higher than for the departments not covered by this program; only one of the six “registered” departments (San Salvador) showed a lower rate of use of private bank credit compared to the mean for non-registered departments. But without a before/after comparison this finding is inconclusive. Also, it is not clear whether the departments are similar enough.

in terms of level and source of income, and growth rates for the comparison to be meaningful. Moreover, to conclude that the project enhanced credit access presupposes that the actions of other donors have been controlled for: while the project was being implemented there were concurrent initiatives by USAID and IFAD to strengthen financial intermediation in rural areas, opening new offices and attempting to increase outreach to the poor.

4.12 Given the importance of these caveats progress toward this objective is rated modest.

Efficiency of procedures

4.13 CNR installed a fully automated and decentralized information system (SIRyC) which stores and links legal and cadastral/geographical data for each registered land parcel. The system provides timely and reliable information. By loan closing, 10 departmental offices were opened (compared to the target of 4 specified at appraisal), covering about 90 percent of the population. Service users were able to access SIRyC directly through terminals installed in the departmental offices and in 4 municipalities. To contain costs it was decided during implementation not to set up the expected 52 municipal offices. But cooperation agreements were signed with 17 municipalities for the exchange and maintenance of cadastral information. Ten of these municipalities have been connected to and trained in the management of the SIRyC. In these municipalities, SIRyC has become the basis for the local government land planning and tax revenues.

4.14 An important indication of efficiency is the time needed to register a real estate transaction. The completion report says that this fell from 38 days in 1997 to 16 days in 2005. There has been further progress since the loan closed. IEG found that in September/October 2008 the average time needed to register a real estate transaction was 7 days in the 6 departments that had completed the systematic registration program, compared to the 19 days in those departments not yet systematically registered. Even within the area covered by systematic registration there was substantial variation, ranging from 3 days in western department of Ahuachapan to 10 days in the capital, San Salvador. These figures compare favorably with the Bank’s Doing Business indicator: in 2008, according to that source, it took 31 days to register property. The reason for the large discrepancy between the Bank survey finding and IEG’s own finding is not apparent. The reference property worldwide for the Bank survey was a commercial enterprise in a periurban setting. Generally, transactions in towns are faster to expedite than those in rural area. In other words, it was to be expected that the data for the project (which emphasized rural areas) would point to a longer delay than that reported in the Bank survey.

4.15 Finally, a significant efficiency gain concerns the reduction in petty corruption. According to one source, “petty corruption in the old registry was rampant.” Now that customers can freely access information on-line from the capital and the regional offices of CNR there is no longer any need to bribe officials to obtain the requisite documentation.

81. Information supplied by CNR.
4.16 Progress toward this objective is rated **substantial**.

**Financial self-sufficiency**

4.17 At loan closing, a cash flow projection of CNR was carried out for the 1996–2015 period to determine the agency’s capacity to continue financing the modernization process. A baseline scenario was developed and a sensitivity analysis was made to calculate the CNR’s likely surplus. The analysis showed that CNR was capable of financing the loan and the counterpart contribution. 83 By the time that the LAP1 loan closed the CNR had fully lived up to appraisal expectations concerning its financial self-sufficiency, despite the weakness of the incentive to do so. Incentive was lacking because any surplus generated was transferred to the Treasury and could not be retained by CNR for investment purposes. The sharp increase in income between 2001 and 2002 (Figure 1) was mainly driven by a 25 percent increase in the average fee for property registry services (RPRH). There has been no increase in the property registry fee since December 2001. The property registry generates two-thirds of CNR’s total income, the balance deriving mainly from the commercial registry service (28 percent); cadastre services (including agreements with municipalities) account for only 2 percent of CNR’s income.

![Figure 9: Cash Flow of the Centro Nacional de Registros](source)

4.18 Since 2005 CNR’s cash flow has deteriorated somewhat, reflecting mainly a sharp rise in operating costs after 2004 (Figure 5) relative to the growth of CNR incomes. However, it could be argued that project costs (which in addition to World Bank funding for LAP1 include funding by the Central American Bank for a follow-on operation) should be allocated to the government’s budget rather than CNR since it is quintessentially a public good that is being provided. In this respect it is important to note the difference between the costs resulting from a one-off process of systematic adjudication—where costs might reasonably be borne by the government and funded through an externally funded project

because the aim is to jump start institutional development—and the subsequent costs arising from the “regular business” of on-demand, sporadic adjudication (where costs are borne by the person requesting the service). If project costs are subtracted, CNR is still financially self-sufficient. The recent leveling-off of its operating costs increases the likelihood that this outcome will be sustained.

4.19 Progress toward this objective is rated **substantial**.

**Targeting the Poor**

4.20 There is a risk that whatever achievements the project made, they are not shared by the poor, a relevant consideration given that the appraisal report designates this project as a targeted intervention. The poor may be less informed about regularization procedures. Addressing this concern, a baseline study for the Bank-supported follow-on project recommended that CNR improve its communication strategy in order “to ensure that people know of the institution and that potential users are aware of the location of its offices”.

CNR acknowledges that this issue needs addressing and at the time of the IEG mission were seeking the funds to establish mobile units that would increase CNR outreach in remote areas.

4.21 Although parcel information needs to be up-to-date if bank loans are to be secured, the transaction costs that banks bear to extend credit to small landowners may debar even the “regularized poor” from obtaining credit. This may lessen the incentive for the poor both to seek credit and to report changes in ownership rights and parcel characteristics. Indeed, few rural landowners seek credit from private banks—a mere 3 percent according to the 2006 agricultural census. Even though the census data suggest that the project had some impact on use of bank credit by farmers as a whole (paragraph 4.15), the evidence is not strong enough to support firm conclusions and the impact for the poorest farmers is likely to have been slight.

**Overall Efficacy Rating**

4.22 Overall, efficacy is rated **substantial**, because progress toward four of the six specific objectives was rated substantial.

**Efficiency**

5.1 The economic rate of return was not estimated, either at appraisal or for the ICR. The ICR does refer to cost effectiveness indicators. It notes that the appraisal assumption that both institutional development and regularization activities could be realized at a cost of $40/ha was not realistic. The final estimate was US$85/ha, compared to US$200/ha in Indonesia and US$80/ha in Thailand. IEG was informed that the actual cost of systematic adjudication for the departments covered by the project (excluding the institutional overhead) varied from US$19/ha in the San Salvador Metropolitan area to US$51/ha in La

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85. World Bank (1996), Annex E. (The Thailand figure is from the early 1990s.)
Libertad, averaging US$28/ha for the whole area covered.\(^{86}\) Thus, the institutional overhead is high in relation to the actual cost of carrying out a systematic registration.

5.2 The key point is that the achievement of objectives was rated substantial and the cost of this effort was within the range observed for other countries. Moreover, the evidence adduced in previous sections on increased efficiency of procedures (paragraphs 4.13-4.16) and the core financial self-sufficiency of CNR (paragraphs 4.17-4.19) has a particular bearing on the efficiency rating. Taking all of these factors together efficiency is rated **substantial**.

**Outcome**

6.1 Given that relevance, efficacy and efficiency are rated substantial, the outcome rating is **satisfactory**.

**Risk to Development Outcome**

7.1 The institutional framework established by the project is the strongest guarantor of sustainability. CNR has emerged as a center of excellence, an international exemplar of an efficient, single-agency approach to registration and cadastre. The Project set up an efficient and reliable decentralized cadastre and title registration system for real estate property, covering the entire country, and this progress has since been consolidated. There is now full capability for map production. Private surveying was promoted by the project and continues to flourish. CNR has developed high service standards, reflected in the awards conferred on several of its units. The main risk to development outcome lies at the local level: more still needs to be done to strengthen the ability of municipalities to maintain the parcel-based property registry and to provide land administration services.\(^{87}\)

7.2 The sustainability of the parcel-based property registry has probably been enhanced by the various cooperation agreements that CNR has signed with municipalities.\(^{88}\) Signing an agreement with CNR ensures that, for a fee, municipalities can obtain the cadastral data they need to charge for municipal services (e.g. the amount charged to a store for street lighting was a function of the linear footage of the store front, precise measurement of which could be derived from the cadastre). Thus, municipalities offering a wide range of services and incurring substantial costs for delivering these services arguably had a bigger incentive to sign up with CNR than municipalities offering few services. As of December 2009, 42 of the 262 municipalities in the country had signed agreement with CNR; 40 of these were located in the six Departments that had been covered by the registration sweep (*barrido*) when implementation of the first project ended (Table 6).

\(^{86}\) Information supplied by CNR.

\(^{87}\) World Bank (2005b), p. 11.

\(^{88}\) Pipes (2004).
### Table 6: Proportion of Municipalities in Project Departments with CNR Agreements

<table>
<thead>
<tr>
<th>Departments (Sweep [barrido] dates)</th>
<th>Municipalities with CNR Agreement by Year of Sign Up</th>
<th>Total</th>
<th>% of All Municipalities in Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonsonate (PreLAP1 Pilot)</td>
<td>3 1 2 1 1</td>
<td>8</td>
<td>50%</td>
</tr>
<tr>
<td>Ahuachapan (Jun98-Dec02)</td>
<td>1 2 2 4</td>
<td>9</td>
<td>75%</td>
</tr>
<tr>
<td>Santa Ana (Jun98-Dec02)</td>
<td></td>
<td>1</td>
<td>8%</td>
</tr>
<tr>
<td>San Salvador (Nov02-Dec04)</td>
<td>1 4 2 1</td>
<td>9</td>
<td>47%</td>
</tr>
<tr>
<td>La Libertad (Oct01-Dec04)</td>
<td>1 1 2 2</td>
<td>7</td>
<td>32%</td>
</tr>
<tr>
<td>La Paz (Oct02-Mar05)</td>
<td>2 1 2 1</td>
<td>6</td>
<td>27%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6 3 11 8 9 2 1</td>
<td><strong>40</strong></td>
<td><strong>39%</strong></td>
</tr>
</tbody>
</table>

Source: Centro Nacional de Registros

7.3 The level of coverage of CNR municipal agreements bears on the sustainability of the land administration initiative in two ways. First, the agreements are an annual cash inflow to CNR; but, at around US$150,000 per year, this amounts to less than 1 percent of CNR’s 2009 income. (By December 2009 they had had generated a cumulative amount of US$541,645). Second, and more important, municipalities with agreements have an incentive to report any changes in ownership and physical characteristics of property, helping to keep the cadastre and registry database up to date; and saving CNR the expense of commissioning a new sweep (barrido) if the accuracy of the database is eroded. Table 6 shows that the coverage of agreements is patchy (only 39 percent of municipalities have signed up) and the sign-up date was often well after the sweep is completed, possibly reducing the accuracy of the database. Nevertheless, nationwide, the number of municipalities signed up, rose from 17 when the loan for the first project closed to 42 today.89

7.4 Since the project closed CNR has made further progress in bringing its offices up to internationally-certified standards (the ISO 9001 process). Between 2006 and 2009 the offices in San Salvador, Santa Ana, Sonsonate and Ahuachapan were all certified to be in line with the international norms both for property registry and for update of the cadastre.

89. World Bank (2005b), p. 8; CNR data.
7.5 The other sustainability consideration relates to the financial self-sufficiency of CNR. Despite some recent deterioration in its cash flow the CNR is, for reasons given in paragraph above, still essentially solvent. The recent shortfall is largely driven by the economic downturn which has reduced the volume of transactions and, thereby, CNR’s revenues from service fees. There is a strong positive correlation (0.95) between the growth in GDP and the growth in CNR’s income. Since macroeconomic management is sound it is reasonable to assume that growth will resume and that when it does so CNR will once again be in the black.

7.6 The long-term impact of regularization is unclear. Although, in the first instance, given the systematic nature of the regularization sweep (barrido), the program covered all rural and urban parcels irrespective of size, it is possible that, with the passage of time, the databases may degrade unevenly: property owners who are relatively poor and remote from CNR offices are probably less inclined to register changes. The cost of sporadic regularization may dissuade poorer clients from approaching CNR, an observation made a decade ago that still holds true today. “As of 1998, the cost of registering a land area of 3.5 manzanas was $1,800. For farmers who on average earned $120 per month, this cost was definitively excessive.” Before owners can register a property they need to legalize the title, a process that falls outside CNR’s mandate and is an added cost.

7.7 Notwithstanding the concern about the possible degradation of databases over time, the continuing core solvency of CNR and the progress made with the signing of municipal agreements point towards a risk rating of moderate.

Monitoring and Evaluation

Design

8.1 A comprehensive M&E system was envisaged at appraisal, including a suite of impact indicators, but the system was never developed. No steps were taken to conduct the baseline survey that had been proposed. Monitoring arrangements were incomplete when the loan became effective.

Implementation & Use

8.2 An attempt was made to improve the M&E system and to retrofit a baseline, taking into account inputs from the Bank’s regional assessment of land administration projects. Monitoring of the project’s physical and financial execution was broadly satisfactory. Monitoring activities—information collection, analysis, reporting and presentation—developed during the Project were further refined in the preparation of the second-phase operation (although this did not ultimately disburse).
8.3 The M&E component of the project was not well designed; nor was it given sufficient priority. As a consequence, it was not possible to derive reliable conclusions regarding land market activities, credit utilization, and productivity of farms, land values, access and utilization of land administration services by the poor and overall return to the project. Therefore, the quality of monitoring and evaluation is rated as modest.

**Bank Performance**

**Quality at Entry**

9.1 The Project was consistent with the spirit of government strategy, including the Peace Accord principles. It was also fully in line with the Country Assistance Strategy which emphasized the need to modernize the public sector and to facilitate private sector growth. Specifically, the Project was timely in its support to the government’s attempts to modernize the real estate registry and establish a single land agency. The Bank cooperated closely with the government and the National Registry Center (CNR). Staffing and skill mix from the Bank’s side appear to have been adequate during the project preparation phase. On the other hand, there was a failure to assess to what extent tenure security was really lacking in El Salvador, or to consider how it varied between different areas (denying the possibility of a geographically-focused intervention). Also, little attention was given to designing mechanisms for ensuring benefits to the poor and, as noted above, monitoring and evaluation design was weak.\(^93\) The appraisal estimate of the cost per hectare of regularization proved to be unrealistic based as it was on a questionable extrapolation of experience from the Sonsonate pilot (see paragraph 4.2 above). The appraisal report states that the legislature had approved CNR autonomy and self-financing by allowing CNR to retain its revenues.\(^94\) But the completion report notes that no law had yet been passed to this effect. This raises the possibility that the Bank had not done due diligence on legal issues prior to project approval. The law had still not been passed when IEG conducted the assessment mission.\(^95\)

9.2 Quality at entry is rated **moderately satisfactory**.

**Supervision**

9.3 The frequency and intensity of supervision was appropriate. There were four task managers during project implementation but all were land administration specialists with broad project experience so there was no loss of supervision continuity or quality. The Bank did its best to minimize project delays resulting from procurement difficulties by stepping up the supervision effort and pressuring the procurement agent to provide CNR with the assistance needed to execute large work contracts. In response to the procurement problems the Bank gave timely approval to an extension of the Project's closing date. Also, in the wake of natural disasters, the Bank responded flexibly in approving the reallocation of funds for emergency civil works.\(^96\)

---

94. World Bank (1996), paragraph 2.12, p. 15.
9.4 Quality of supervision is rated **satisfactory**.

**Overall Rating**

9.5 Where there are differences in the sub-ratings on Bank performance the IEG-OPCS convention is to base the overall rating on the lower of the two sub-ratings. Therefore, Bank performance is rated **moderately satisfactory**.

**Borrower Performance**

**Government**

10.1 The Project received sustained support from the highest levels of government. However, effectiveness was delayed by one year, owing to the time taken to negotiate two-step Congressional approval. Also, approval of key legal reforms was delayed because of difficulties in passing new laws in a Congress that was politically divided. Once the loan was made effective counterpart funds were delivered on time.  

10.2 Government performance is rated **satisfactory**.

**Implementing Agency**

10.3 CNR provided consistently strong leadership. When there were problems with the quality of regularization works, CNR developed several technical operational manuals, provided comprehensive training to private contractors, established a supervision unit, and set up a quality control mechanism. There was continuity in the staffing of the agency. CNR also adjusted quickly to the emergencies arising from earthquakes and Hurricane Mitch. The one shortfall in its performance concerned the excessive delay in establishing an adequate monitoring and evaluation system.

10.4 Implementing agency performance is rated **satisfactory**.

**Overall Rating**

10.5 Overall Borrower performance is rated **satisfactory**.

---

Appendix A. Basic Data Sheet

EL SALVADOR - Land Administration Project - (Loan No. 3982)

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

<table>
<thead>
<tr>
<th></th>
<th>Appraisal estimate</th>
<th>Actual or current estimate</th>
<th>Actual as % of appraisal estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total project costs</td>
<td>70</td>
<td>69.5</td>
<td>99.3%</td>
</tr>
<tr>
<td>Loan amount</td>
<td>50</td>
<td>49.92</td>
<td>99.8%</td>
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**Project Dates**

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<td>03/05/1996</td>
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<tr>
<td>Signing</td>
<td>--</td>
<td>12/11/1996</td>
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<tr>
<td>Effectiveness</td>
<td>03/11/1997</td>
<td>03/21/1997</td>
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<tr>
<td>Closing date</td>
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<td>06/30/2005</td>
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**Staff Inputs** (staff weeks)

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<tr>
<td>Appraisal/ Negotiations</td>
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<tr>
<td>Supervision</td>
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<td>ICR</td>
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<td>Total</td>
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## Mission Data

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<th>Specializations represented</th>
<th>Performance rating</th>
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<td></td>
<td></td>
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</tr>
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<td></td>
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<td><strong>Appraisal</strong></td>
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<td>12/02/2000</td>
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<td>MGR. (1); FIN. CONS.</td>
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**Notes:**
- Implementation Status: S (Satisfactory) or HS (Highly Satisfactory)
- Development Objectives: S (Satisfactory) or S (Satisfactory)
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<tr>
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<th>Specializations represented</th>
<th>Performance rating</th>
</tr>
</thead>
<tbody>
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Appendix B. Supplementary Tables

Table B1. Number of Registered Rural Parcels Sold per Year, 1997-2009*

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<td>453</td>
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<td>3,589</td>
<td>4,354</td>
<td>4,157</td>
<td>5,606</td>
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<td>3,918</td>
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<td>6,837</td>
<td>8,602</td>
<td>8,484</td>
<td>7,797</td>
<td>7,477</td>
<td>7,428</td>
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<td>Sonsonate</td>
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<td>897</td>
<td>3,579</td>
<td>4,119</td>
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<td>5,529</td>
<td>5,892</td>
<td>7,088</td>
<td>7,356</td>
<td>5,742</td>
<td>6,847</td>
<td>6,270</td>
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<td>Chalatenango</td>
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<td>12</td>
<td>7</td>
<td>43</td>
<td>173</td>
<td>466</td>
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<td>943</td>
<td>852</td>
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<td>La Libertad</td>
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<td>284</td>
<td>185</td>
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<td>1,624</td>
<td>2,244</td>
<td>3,740</td>
<td>7,689</td>
<td>9,104</td>
<td>9,550</td>
<td>12,116</td>
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<tr>
<td>San Salvador</td>
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<td>326</td>
<td>386</td>
<td>576</td>
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<td>5,576</td>
<td>10,165</td>
<td>10,181</td>
<td>10,210</td>
<td>9,080</td>
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<td>Cuscatlán</td>
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<td>108</td>
<td>252</td>
<td>288</td>
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<td>2,160</td>
<td>2,512</td>
<td>2,958</td>
<td>2,499</td>
<td>2,093</td>
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<td>La Paz</td>
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<td>86</td>
<td>154</td>
<td>182</td>
<td>310</td>
<td>724</td>
<td>1,960</td>
<td>4,983</td>
<td>7,116</td>
<td>7,899</td>
<td>6,196</td>
<td>6,532</td>
<td>6,287</td>
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<td>Cabañas</td>
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<td>37</td>
<td>38</td>
<td>55</td>
<td>175</td>
<td>325</td>
<td>1,304</td>
<td>2,090</td>
<td>2,462</td>
<td>2,707</td>
<td>2,162</td>
<td>1,656</td>
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<td>San Vicente</td>
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<td>39</td>
<td>128</td>
<td>128</td>
<td>476</td>
<td>1,614</td>
<td>3,332</td>
<td>3,683</td>
<td>3,961</td>
<td>3,840</td>
<td>3,971</td>
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<td>Usulután</td>
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<td>2,639</td>
<td>3,747</td>
<td>6,577</td>
<td>7,949</td>
<td>8,459</td>
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<td>6,903</td>
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<td>496</td>
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<td>4,143</td>
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<td>8,511</td>
<td>6,586</td>
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<td>Morazán</td>
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<td>67</td>
<td>107</td>
<td>927</td>
<td>1,603</td>
<td>1,373</td>
<td>1,913</td>
<td>2,328</td>
<td>2,243</td>
<td>2,309</td>
<td>1,838</td>
<td>1,780</td>
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<td>La Unión</td>
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<td>89</td>
<td>132</td>
<td>201</td>
<td>1,417</td>
<td>2,267</td>
<td>2,161</td>
<td>2,901</td>
<td>3,999</td>
<td>4,106</td>
<td>4,079</td>
<td>3,928</td>
<td>2,906</td>
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<td>TOTAL</td>
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<td>2,888</td>
<td>6,718</td>
<td>9,883</td>
<td>19,126</td>
<td>30,827</td>
<td>40,876</td>
<td>62,583</td>
<td>75,863</td>
<td>80,675</td>
<td>81,458</td>
<td>75,683</td>
<td>72,603</td>
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</table>

*2009 Data until October 31 only.

Source: Centro Nacional de Registros, El Salvador

Table B2: Mean Price of Rural Land Sold by Department and Program Phase, 1997-2009 (US$ per square meter)

<table>
<thead>
<tr>
<th>Department</th>
<th>PHASE I</th>
<th>PHASE II</th>
<th>PHASE III</th>
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<tbody>
<tr>
<td>SONSONATE</td>
<td>0.879</td>
<td>1.599</td>
<td>0.822</td>
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<tr>
<td>$M2 97</td>
<td>1.038</td>
<td>0.483</td>
<td>0.106</td>
</tr>
<tr>
<td>$M2 98</td>
<td>0.911</td>
<td>1.158</td>
<td>0.290</td>
</tr>
<tr>
<td>$M2 99</td>
<td>1.592</td>
<td>0.715</td>
<td>0.687</td>
</tr>
<tr>
<td>$M2 00</td>
<td>1.944</td>
<td>0.845</td>
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</tr>
<tr>
<td>$M2 01</td>
<td>0.715</td>
<td>0.856</td>
<td>0.816</td>
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<td>$M2 02</td>
<td>1.236</td>
<td>0.106</td>
<td>0.909</td>
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<tr>
<td>$M2 03</td>
<td>0.106</td>
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<tr>
<td>$M2 04</td>
<td>0.166</td>
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<tr>
<td>$M2 05</td>
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<td>0.553</td>
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<tr>
<td>$M2 06</td>
<td>0.472</td>
<td>0.670</td>
<td>0.553</td>
</tr>
<tr>
<td>$M2 07</td>
<td>0.687</td>
<td>0.670</td>
<td>0.553</td>
</tr>
<tr>
<td>$M2 08</td>
<td>0.835</td>
<td>0.670</td>
<td>0.553</td>
</tr>
<tr>
<td>$M2 09</td>
<td>0.724</td>
<td>0.670</td>
<td>0.553</td>
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*2009 Data until October 31 only.

Source: Centro Nacional de Registros, El Salvador
### Table B3. Cash Flow, Centro Nacional de Registros

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<tbody>
<tr>
<td>(I) Income</td>
<td>18898</td>
<td>19923</td>
<td>21408</td>
<td>20725</td>
<td>21026</td>
<td>23565</td>
<td>29944</td>
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<td>30825</td>
<td>32473</td>
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<td>33692</td>
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<tr>
<td>(II) Operating Costs</td>
<td>13943</td>
<td>13211</td>
<td>15625</td>
<td>16182</td>
<td>16334</td>
<td>18268</td>
<td>18088</td>
<td>19229</td>
<td>23861</td>
<td>29536</td>
<td>30262</td>
<td>30154</td>
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<tr>
<td>(III) Project Costs</td>
<td>1177</td>
<td>2677</td>
<td>2617</td>
<td>4293</td>
<td>6772</td>
<td>6157</td>
<td>7039</td>
<td>7142</td>
<td>5761</td>
<td>5230</td>
<td>5551</td>
<td>6577</td>
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<tr>
<td>(IV) Total Costs = (II+III)</td>
<td>13943</td>
<td>14388</td>
<td>18302</td>
<td>18799</td>
<td>20627</td>
<td>22554</td>
<td>24425</td>
<td>25127</td>
<td>26371</td>
<td>29622</td>
<td>34766</td>
<td>35813</td>
<td>36731</td>
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<tr>
<td>(V) Surplus= (I)-(IV)</td>
<td>4955</td>
<td>5535</td>
<td>3106</td>
<td>1926</td>
<td>399</td>
<td>1011</td>
<td>5519</td>
<td>5171</td>
<td>4454</td>
<td>2851</td>
<td>-1678</td>
<td>-2121</td>
<td>-2325</td>
</tr>
</tbody>
</table>

Surplus Projected in 2004*

*Roger Pipes Report

Source: Centro Nacional de Registros; Pipes (2004), pp. 3-4.
Appendix C. Persons Interviewed

At Bank Headquarters

Cora Melania Shaw (Task Team Leader, El Salvador, Land Administration)
Jorge Munoz (Task Team Leader, Guatemala, Land Administration I)
Enrique Pantoja (Guatemala, Land Administration II)
Mary Lisbeth Gonzalez (Task Team Leader for pipeline land administration project)
Anne J. Glauber (Protected Areas Project Task team Leader)

In El Salvador

Ruth Jeannette Cuestas, Sub-Director, Centro Nacional de Registros (CNR)
Fernando Arturo Batlle Portillo, Director Ejecutivo (CNR)
Alberto Leyton, World Bank Representative
Rafael Juárez Rodríguez, Director, Instituto Geográfico y del Catastro Nacional (CNR)
Ernesto Castillo Chicas, Economista/Asesor Técnico del Proyecto (CNR)
Carlos A. Hernández, Coordinador de Contratos, Unidad Coordinadora del Proyecto (CNR)
Eduardo Alexy Solórzano, Encargado de la Unidad Financiera, LAP1 (CNR)
Sandra Margarita Bennett Herrarte, Directora, RPRH (CNR)
Lourdes Georgia Álvarez Gómez, RPRH (CNR)
Adela Fidelina Estrada Guidos, IGCN (CNR)
Ana del Rosario Calderón de Viscarra, IGCN (CNR)
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Jenny Berganza, M&E Specialist, Protected Areas Project (PACAP)
Miguel Estrada Palacios, Regional Coordinator (PACAP)
Carlos Enrique Figueroa Flores (PACAP)
Luis Salvador Hernández Avilés, Land Administration Specialist (PACAP)
Felix Garrid Safie P., Director (CNR) (1999-2006)
David Ernesto Henríquez Canjura, Director Ejecutivo, Instituto Libertad y Progreso
Nidia Hidalgo Celarie, Coordinadora de Área de Genero, UNDP.
# ANNEX 2: GUATEMALA – LAND ADMINISTRATION PROJECT

## Principal Ratings

<table>
<thead>
<tr>
<th></th>
<th>ICR*</th>
<th>ICR Review*</th>
<th>PPAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>Moderately Satisfactory</td>
<td>Moderately Unsatisfactory</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>Risk to Development</td>
<td>Moderate</td>
<td>Significant</td>
<td>Significant</td>
</tr>
<tr>
<td>Outcome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Performance</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
<td>Moderately Unsatisfactory</td>
</tr>
<tr>
<td>Borrower Performance</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
<td>Moderately Unsatisfactory</td>
</tr>
</tbody>
</table>

* 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.

## Key Staff Responsible

<table>
<thead>
<tr>
<th>Project</th>
<th>Task Manager/</th>
<th>Division Chief/</th>
<th>Country Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>Cora Melania Shaw</td>
<td>Maritta Koch-Weser</td>
<td>Donna Dowsett-Coirolo</td>
</tr>
<tr>
<td>Completion</td>
<td>Jorge A. Munoz</td>
<td>Ethel Sennhauser</td>
<td>Jane Armitage</td>
</tr>
</tbody>
</table>
Summary

This report assesses the performance of the US$36 million Land Administration Project. The project was supported by an IBRD loan (No. 4415) of US$31.0 million, which was approved on December 3, 1998. Three extensions were granted and the loan closed on March 31, 2007, almost four years later than originally anticipated.

The project was intended to be the first phase of a twelve-year program that would cover the whole country. The first phase (1997-2002) would cover six of Guatemala’s administrative departments with the World Bank project supporting work on the single department of Petén. The objectives of the Project were: (i) to increase legal security of land tenure in the Petén Department; and (ii) to strengthen the legal and institutional framework for land registry and cadastre services in Petén.

The project comprised the following components: (a) Cadastre and Land Regularization (planned cost, US$27.2 million; actual cost, US$21.7 million), which involved mapping, field-level participatory data acquisition and clarification of property claims, demand-based title adjudication to eligible beneficiaries, conflict resolution supervision and quality control and maintenance; (b) Land Registry (planned cost, US$2.2 million; actual cost, US$1.2 million), which entailed the opening of a new registry office in Petén and design of an integrated registry and cadastre system; and (c) Project Management (planned cost, US$5.2 million; actual cost, US$10.9 million), which covered capacity building of the implementation unit, studies on land legislation, preparation of proposals for the integrated parcel-based cadastre and registry system, review of registry and cadastre tariffs, and survey of the status of land tenure in various areas of the country.

IEG rates Outcome as unsatisfactory. While the objectives of the project were substantially relevant the design of the project contained several flaws, including the questionable appropriateness of Petén as locus of the operation. Although the project successfully developed a parcel-based geographical cadastral database, contrary to appraisal expectations, there is no technological platform for integration with the deed-based registry database. Also, targets for cadastral surveying and titling were not met. Data inconsistencies raise questions about the 27 percent rate of economic rate of return that the completion report claims.

The Risk to Development Outcome is rated significant. Since project closing there has been no progress toward integration of the cadastre and registry data bases, raising the possibility that project investments will not lead to an enduring improvement in tenure security.

Bank Performance is rated moderately unsatisfactory: there were several flaws in quality at entry (including concerns about the wisdom of selecting Petén as a starting point; and the limited provision for monitoring and evaluation); these flaws were only partly offset by an intensive supervision effort. Borrower Performance is also rated moderately unsatisfactory: although one of the implementing agencies (UTJ/RIC) performed soundly, government support for project objectives was lackluster and the other implementing agency (Fontierras) failed to reach rural land titling targets.
The **Lessons** learned from this project are discussed in the Overview report which draws on findings from IEG performance assessments of three Central American land policy projects.
Background

1.1 Land policy issues lie at the heart of the reconciliation process that was initiated by signing of the Peace Accord on December 29, 1996. This formally marked the end of thirty-six years of civil conflict. The Accord included specific commitments to establish: (i) a decentralized, cadastral-based land registry; (ii) a land fund to promote market-driven land reform; (iii) land conflict resolution mechanisms, with particular reference to the needs of indigenous communities; (iv) a national geographic information system; (v) a comprehensive land tax system; (vi) agricultural development; and (vii) rural investment programs. Under the Accord an Inter-institutional Commission for the Development and Strengthening of Land Property Rights (Protierra) was set up to provide oversight of the initiatives taken in support of the Accord commitments.

1.2 Land administration in Guatemala has for more than a century been held back by the lack of systematic data on the geographical characteristics of land parcels, reflecting the absence of cadastral institutions. There is a corresponding inability to cross-reference the geographical data on parcels with the legal data on ownership rights that is contained in the General Property Registry (RGP). This failing in principle reduces tenure security and limits the incentive to invest in property development, including improvements to farming. The land administration program that was supported by the Bank in the wake of the Peace Accords sought to address this deficiency.

1.3 There was limited scope for creating a new agency that would handle both cadastre and registry functions. This is mainly because RGP (which dates back to 1877) is one of the most autonomous entities in the country. The Registrar is appointed by the President of the Republic, and because the institution does not receive regular budget transfers (operating with its own revenues), it is not subject to the standard fiduciary controls of other public entities. The special status of the RGP creates particular challenges when it comes to integrating RGP’s deed-based registry database with the parcel-based geographical database that was being developed.

Project Overview

Objectives

2.1 The project was intended to be the first phase of a twelve-year program that would cover the whole country. The first phase (1997-2002) was originally intended to cover six of Guatemala’s administrative departments with the World Bank project supporting work on the single department of Petén. According to the appraisal document, “the objectives of the Project are: (i) to increase legal security of land tenure in the Petén Department; and (ii) to strengthen the legal and institutional framework for land registry and cadastre services in Petén”. This statement of objectives is consistent with that given in the Loan Agreement.

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2.2 The objectives for the first phase and the program as a whole were the same. The statement of objectives for both project and program said that goals would be “achieved through a participatory process for conflict mitigation and resolution that includes indigenous and non-indigenous communities.”\(^\text{101}\) With respect to the sector-related goal in the Bank’s Country Assistance Strategy it was noted that: “This project will contribute to poverty alleviation and exclusion reduction, by providing the basic input for efficient, equitable and sustainable land management in Petén: land rights information and knowledge.”\(^\text{102}\)

2.3 The preamble to the statement of long-term goals that is contained in the government’s “letter of development program” stated that: “Land administration is a continuous process whereby land information is captured, recorded, maintained and analyzed. This process is crucial for the appropriate management of land and forest resources, for regional and urban planning, for better monitoring of land-related conflicts, in addition to being the fundamental technical support for ascertaining land tenure security. Establishing a national land administration program is a long and expensive process, particularly because accurate data ought to be collected at the parcel level, reviewed at several stages to ensure its quality, and maintained. This requires a firm and long-term commitment from the government in accordance with the Peace Accords.”\(^\text{103}\)

2.4 The project’s objectives were not revised in the course of implementation, although the 2003 mid-term review resulted in a clearer specification of the indicators and targets underpinning these objectives.\(^\text{104}\) A slight extension of the geographic area covered by the project, involving selected municipalities in Alta and Baja Verapaz was approved in April 2005.

Components

2.5 According to the development program letter, “the outputs of the Program will be: (i) Digital maps for the entire country; (ii) Eligible beneficiaries titled; (iii) National multi-purpose integrated cadastre and registration system.”\(^\text{105}\) In the case of the Bank-supported project, these outputs would be derived from separate components for cadastre and registry.

**Table 8: Project Costs by Component**

<table>
<thead>
<tr>
<th>Component</th>
<th>Costs Estimated at Appraisal (US$ Million)</th>
<th>Actual Costs (US$ Million)</th>
<th>Actual/Estimated Cost (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Cadastre and Land Regularization</td>
<td>27.2</td>
<td>21.7</td>
<td>80%</td>
</tr>
<tr>
<td>(2) Land Registry</td>
<td>2.2</td>
<td>1.2</td>
<td>55%</td>
</tr>
<tr>
<td>(3) Project Management Unit</td>
<td>5.2</td>
<td>10.9</td>
<td>210%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>38.5</strong></td>
<td><strong>35.5</strong></td>
<td><strong>92%</strong></td>
</tr>
</tbody>
</table>


*Including physical and price contingencies, project preparation fund and IBRD front-end fee.

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102. World Bank (1998b) Annex 1C.
103. World Bank (1998b), Annex 1B.
105. World Bank (1998b), Annex 1B.
2.6 **Cadastre and Land Regularization** involved the mapping of the Petén cadastre, infield adjudication upon demand, and data processing of areas subject to regularization. The component was intended to establish a parcel-based cadastre that could be integrated with the registry system. Specific activities comprised mapping, field-level land data acquisition, conflict resolution, supervision and quality control, and maintenance and updating of mapping data.

2.7 The **Land Registry** component entailed support to the decentralization of registry offices to departments, as mandated by the 1985 Constitution. When the project was appraised there were only two registry offices in the country, located in the cities of Guatemala and Quetzaltenango. The component financed the opening of a new registry office in Petén and design of an integrated registry and cadastre system. This was designed as a pilot exercise, which would lay the foundations for a nationwide rollout.

2.8 Financing of the **Project Management Unit** included an allocation for studies to review and propose appropriate land legislation, make proposals for the integrated parcel-based cadastre and registry system, review registry and cadastre tariffs and potential new products and survey the status of land tenure in various areas of the country.106

2.9 The components were not altered during project implementation.

**Institutional Framework**

2.10 Cadastre and registry functions in Guatemala are handled by separate agencies, respectively the National Geographic Institute (IGN) and the General Property Registry (RGP). Another agency, Fontierras, was responsible for titling rural national lands. Titling of urban lands was handled by each of the 12 municipalities of Petén. The project was carried out under the aegis of the Ministry of Agriculture. The Ministry headed two commissions responsible for policy and coordination, the Inter-Institutional Commission for the Development and Strengthening of Land Property Rights (Protierro) and the Petén Land Commission (CTP), the latter responsible for adjudicating land in the department. The Presidential Land Office for Conflict Resolution (Contierro), created in 1997, played a supporting part, providing mediation and other alternative conflict resolution mechanisms and legal assistance on demand, as well as social monitoring.107

2.11 Project operational matters were handled by coordinating units located in Guatemala City (UTJ) and in the nascent registry office in Petén (UTEC). In June 2005, project implementation responsibility shifted from UTJ to the Registry of Cadastral Information (RIC), an autonomous public institution responsible for establishing, maintaining, and updating the cadastre. “This law effectively replaced a temporary unit created by decree (UTJ) with a permanent entity created by law”108

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Implementation

2.12 Although the project was approved by the Bank’s Board in December 1988 it was not approved by the Guatemala Congress until March 2000. Between 1997 and 2000, the implementing agency (UTJ), carried out pilot activities in the Municipality of San Francisco using resources from a project preparation facility (PPF). Government approval of the project was delayed by debate in Congress about the new land law and by the run up to general elections in 1999. The Land Law was approved by Congress in May 1999 and its regulations were completed in May 2000. The completion report concluded that Congress was “understandably” reluctant to endorse a project loan before clarification of the national land rights framework.109 (This reasoning rather undercuts the rationale for the decision to carry out the project in the Petén region: according to the appraisal document, that province was selected as a starting point because, as a special frontier region, it already had its own land law, enabling the project to make a head start before the national law was passed.)

2.13 The project closed in March 2007, almost three years later than expected. The project’s closing date was extended three times. The first extension was granted from June 30, 2003 until May 31, 2005 and was intended to help make up for nineteen-month delay between Board approval and loan effectiveness. The second extension was granted from May 31, 2005 to May 31, 2006. The Government requested this extension in order to take advantage of the Bank’s recently-approved changes in financing procedures which allowed for more flexible counterpart funding arrangements. A third and final extension was granted from May 31, 2006 until March 31, 2007, the reasoning being that rural titling still needed to be completed and there was also the need to provide a bridge until Phase II of the Adaptable Program Loan could begin.110

2.14 In April 2005, the geographic scope of the project was expanded slightly to include selected areas in the border area between the departments of El Petén and Alta Verapaz. The extra costs resulting from this expansion were covered by savings generated through work on the cadastre in the urban parts of Petén. By 2002 the implementing agency (UTJ) had developed the capacity to implement land regularization activities in urban areas on its own, so it was no longer necessary to subcontract the work to foreign firms, thereby reducing costs (and helping to strengthen local capacity).

2.15 Implementation of the project was impeded in four ways. First, the transfer of counterpart funds from government to the implementing agency was erratic. Second, the RIC Law was not approved by Congress until June 2005. This law effectively replaced a temporary unit created by decree (UTJ) with a permanent entity, an autonomous public institution responsible for establishing, maintaining, and updating the cadastre. The delay in setting up RIC meant that cadastral procedures developed under the Project were in legal limbo for about five years. Third, UTJ was slow to launch the international bidding process for rural land regularization work. This activity was vital for meeting rural surveying and titling targets. Given that the international contract represented roughly one-fifth of the loan, its delay by about two years substantially delayed implementation. By loan closing in March

2007, the most significant shortcoming was the limited number of titled rural properties. This problem was aggravated by a fourth implementation shortfall: Fontierras, the agency responsible for titling of rural lands, performed poorly, proving unable to keep up with the rapid pace of the cadastral survey work.

2.16 The Bank carried out a thorough mid-term review between May and October 2003, seeking to remedy the implementation delays. Monitoring and evaluation was strengthened, with UTJ henceforth reporting at least quarterly on progress toward the agreed targets. The international contract to implement regularization activities in rural lands was signed in May 2003. Also, as a result of mid-term review recommendations, the project team worked more closely with the General Property Registry in an attempt to redress delays in the development of an integrated cadastre-registry information system.**111**

Relevance

Relevance of Objectives

3.1 The objectives of the project were central to the broader program laid out by the Peace Accord and enjoyed government support at the highest level. Before the project was appraised, the centrality of land policy issues to the government’s development agenda had already been demonstrated through the creation of Protierra when the Accord was signed in 1996. (The broad remit of Protierra is set out in paragraph 1.1 above.) This framework helped to ensure that land regularization was not treated in isolation, but approached as one part of a larger process, including new approaches to land reform (supported by the Bank under the complementary Land Fund Project that was launched simultaneously). The operation in Petén was part of a concerted effort, involving similar initiatives elsewhere in Guatemala. Other donors (European Union, Netherlands, Germany, and Sweden) supported smaller pilots in other parts of the country, under the leadership and coordination of Protierra.

3.2 It would appear that the continuing relevance of the project’s objectives was substantiated by passage of the Cadastral Information Registry (RIC) Law in August 2005 and the government’s strong support for a Phase II. The two Bank country assistance strategies that spanned the lifetime of the project make explicit commitments echoing the project objectives (Table 2). Also, the literature from the academy and from advocacy organizations leaves little doubt that the objective of strengthening the security of land tenure is of paramount importance for Guatemala.**112** Aside from enhancing tenure security, the project had another valid objective. Giving the municipalities a cadastre would enhance the information base they needed to collect property taxes and service fees (particularly in urban areas), thus helping to underpin local-level development. Based on these considerations the relevance of project objectives is rated substantial.

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**111** World Bank (2007), pp. 9-12.

Table 9: Consistency of Land Administration Project Objectives with Corresponding Country Assistance Strategy (CAS)

<table>
<thead>
<tr>
<th>Issue Date of Applicable CAS</th>
<th>Jun 19, 1998</th>
<th>Apr 11, 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAS Period</strong></td>
<td>FY1999-2001</td>
<td>FY2005-2008</td>
</tr>
<tr>
<td><strong>Project Phase</strong></td>
<td>Preparation</td>
<td>Implementation and Closing</td>
</tr>
<tr>
<td><strong>Relevant CAS Commitments</strong></td>
<td>Aim:</td>
<td>Aim:</td>
</tr>
<tr>
<td></td>
<td>(1) “Create a transparent, fluid land market, with secure ownership and tenure rights based on cadastre, registry and titling systems, and establish more agile and culturally appropriate dispute resolution mechanisms”.</td>
<td>(1) “Improve land tenure security and land transactions through the provision of efficient, accessible, and more transparent administration services”.</td>
</tr>
<tr>
<td></td>
<td>(2) “Broaden land tax collection to improve municipal land use planning and revenues”.</td>
<td></td>
</tr>
<tr>
<td><strong>Progress Benchmark</strong></td>
<td>(1) “Start cadastre and registry in 4 pilot zones, with acceptance of new dispute resolution mechanisms”</td>
<td>(1) “Congress has approved the cadastral information registry law (RIC)”</td>
</tr>
<tr>
<td></td>
<td>(2) “50 percent of the country’s territory has been adequately surveyed and cadastered by 2008”.</td>
<td>(2) “50 percent of the country’s territory has been adequately surveyed and cadastered by 2008”.</td>
</tr>
<tr>
<td></td>
<td>(3) “20 percent of rural and urban parcels have been surveyed and cadastered by 2008 out of which 40 percent have been titled and registered, of which at least 30 percent to be jointly titled (women and men) or titled to women heads of household”</td>
<td>(3) “20 percent of rural and urban parcels have been surveyed and cadastered by 2008 out of which 40 percent have been titled and registered, of which at least 30 percent to be jointly titled (women and men) or titled to women heads of household”</td>
</tr>
</tbody>
</table>


Relevance of Design

3.3 The commitment to a long-term, phased operation (funded through an adaptable program loan) made sense. It can take from 10 to 20 years to build cadastre and registry institutions and to develop efficient and sustainable processes of land administration. (A similar approach, involving four projects, bore fruit in Thailand.)\(^{113}\)

3.4 There were other positive aspects to project design. First, it incorporated lessons learned from a similar pilot in neighboring El Salvador. These lessons included the importance of a launching a publicity campaign in each area before survey work began and the need to develop mechanisms for resolving land conflicts that did not involve a lengthy and expensive process through the courts.\(^{114}\) Second, the emphasis on decentralization was

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justifyable on equity and efficiency grounds given that, when the project was prepared, clients had to go to Guatemala City to register their land, facing considerable transaction costs.

3.5 But there were also some weaker points in the design. The choice of Petén as the program starting point was not self-evident. The appraisal document does not discuss the tenure issues in Petén in any detail except to note that this is a "colonization" area with a history of disputed settlement,\(^{115}\) while also conceding that there may have been a greater need for regularization in the more densely-settled Altiplano.\(^{116}\) But Petén was thought to be more suitable as a pilot. The government requested that the program start in Petén and the Bank accepted. The appraisal document cites several reasons for this choice, including the following:

- The existing Petén 1971 Land Law allowed the government to cadastre and adjudicate land—not the case in the rest of the country because there was no national cadastre law. (The cadastre pilots carried out elsewhere in Guatemala by other donors only included a physical cadastre, with neither titling nor registration.);
- Most of the Petén lands were formally not under private tenure but belonged to the nation, facilitating the title adjudication process;
- The adjudication of national lands was being handled in lots of 45 ha (due to soil fragility), thus allowing for economies of scale;
- A Social Assessment conducted during project preparation indicated that, relative to the rest of the country, land conflicts were least common in Petén;
- The General Property Registry (RGP) had all registered Petén properties (about 10,000 records) scanned and available on-line;
- Petén was a priority area for Peace Accords as most of its population was poor.\(^{117}\)

3.6 These justifications at appraisal somewhat overstated the extent to which land regularization in Petén would be unproblematic. In commenting on the completion report, the government observed that in the three decades between the start of adjudication of Petén and the Peace Accord an informal land market had developed, creating uncertainty about the rights of land users and generating conflict.\(^{118}\) Academics and advocacy groups have between them generated an abundant academic literature about land conflict and dispossession of peasant farmers in Petén.\(^{119}\) This is a frontier region which has a long history of land grabs; most recently associated with the traffic in narcotics (because it is so lightly populated and policed Petén is a favorite spot for the landing strips used by small aircraft that ship cocaine, by stages, from Colombia to the United States). There are several accounts, in the press and the academic literature, of peasant farmers being harassed into giving up their land.\(^{120}\) Faced with this extra-economic coercion and in the absence of a broader framework of law and order it makes little difference whether farmers hold legal title or whether the characteristics

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\(^{116}\) World Bank (1998b), p. 8, Section D(1a).
\(^{120}\) Grandia (2009); Ybarra (2008).
of their parcels are accurately recorded. Legal security of land tenure is not likely to have much relevance in an area characterized by lawlessness and disregard for legal status.

3.7 If tenure security is to be enhanced by this type of project it is important that the process of regularization be embedded in a wider program to strengthen law and order and reduce the scope for physical coercion of property owners. This wider commitment was missing when the project was prepared and its absence was particularly marked in Petén. These considerations were not mentioned in the appraisal document.

3.8 Moreover, even if the project had succeeded in Petén, in the absence of a nationwide law for land administration, it would have remained at best an island of success, with little demonstration effect. What needs to be remembered is that the project only got underway when the nationwide law was passed (although this was not a condition for loan effectiveness), thus removing one of the basic rationales for starting in Petén anyway. The approach to adjudication set out in the appraisal document may be characterized as "systematic, with a caveat". Systematic adjudication aims to cover all the parcels in a given area, regardless of the socio-economic status of the property right holder, and is preferable to sporadic adjudication (which involves coverage "here and there, now and then") because it is more equitable and yields economies of scale. But under the terms of the Petén Land Law, certain people holding national land may not have been eligible to do so and de jure may have been required to hand the land back to the nation. This possibility might have reduced demand to participate in the adjudication process—leading to gaps in coverage and a patchy cadastre/registration database. Although, in keeping with the demand-driven approach adopted by the project land holders had the right to opt out of the adjudication process the appraisal document describes this risk as "negligible" because the part of the Law referring to land seizure had never been enforced. (Also, the publicity campaign in advance of adjudication may have made a powerful enough case for the advantages of adjudication to offset any misgivings on the part of potential clients.) Moreover, a condition of project effectiveness was reform of the Petén Land Law to remove these sources of uncertainty about the status of holders of national lands. (The law was superseded by the 1999 Fontierras Law, which was regulated in 2000.)

3.9 If the overarching objective of the country program was to promote growth there are other questions to be raised about the choice of Petén as a starting point for the land administration push. A Bank study found that Petén had middling potential for agricultural growth compared to other parts of the country: “The Northern and Petén Regions have moderate to high productivity soils... but these areas have limited access to infrastructure”. The study found weak incentives to invest in Petén relative to other parts of the country. “Results for Petén are somewhat troubling as low returns to assets compound the problems of low mean asset levels. Higher returns to all assets in North and Northwest regions might induce asset migration into these areas, but few incentives exist for the private market to

121. World Bank (1998b) p. 8, Section D1.
improve asset bases in Petén. Aggregate returns in Petén to these assets are sufficiently low, most likely because many households in the region lack complementary assets to raise returns to existing ones.\textsuperscript{127}

3.10 There is a further consideration: Petén had only 4 percent of all the poor in Guatemala and 3 percent of the extreme poor.\textsuperscript{128} The 2004 Bank study recommended that rural development investments give priority to the Western Altiplano on the grounds that “if the development objective is to reach the largest number of poor [it is preferable to] invest in a variety of social and productive household assets in high potential areas with the high rural poverty densities”.\textsuperscript{129} Given the frontier characteristics peculiar to Petén it is valid to ask to what extent lessons learned and procedures developed here could subsequently be generalized to other parts of Guatemala, which is what the program sought to do.

3.11 The completion report also notes that “project design suffered from a few weaknesses related to readiness for implementation, monitoring arrangements, and a weak legal framework which limited the operational capacity of the Project’s implementing agency”.\textsuperscript{130} One indication that the project was not ready for implementation concerns the failure to provide measures to ensure that the three agencies jointly responsible for cadastre, titling and registration would work together effectively. Lack of coordination and integration are significant and predictable sources of risk when the functions are handled by different agencies and the design should have included credible arrangements, as well as budgets and performance indicators to contain and detect such risks. Also, the limited provision for monitoring and evaluation was a significant design flaw given that this was essentially a pilot operation and the first-phase of a long-term program: in order to fine-tune the design preparatory to nationwide rollout it was important to have in place a system capable of generating information about project performance.

3.12 In addition to the poor arrangements for monitoring and evaluation in general, there was an absence of baseline data about land markets or land values or access to credit, all of which the project was claiming to affect. This project could have looked more closely at El Salvador's Land Administration project, which at the time of the Guatemala appraisal mission, had been under implementation for over a year and had no baseline data. The appraisal for the Guatemala project included a social assessment with focus groups and interviews. It could have used the opportunity to gather information on the land market as well, if it existed. The presentation of the project introduced a hypothetical economic rate of return, which remained hypothetical ex post because of absence of data on land values.

3.13 The relevance of project design is rated \textit{modest}.

\textbf{Overall Rating}

3.14 Based on the considerable reservations expressed about project design, overall, relevance is rated \textit{modest}.

\begin{flushleft}
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Efficacy

(i) Increase legal security of land tenure in the Petén Department

4.1 In order to assess progress toward this objective it is important to know how much the lack of tenure security is explained by the deficiencies in the cadastre and registry that this project was intended to remedy. In the absence of a controlled comparison between farmers in the same district who were and were not covered by land regularization it is impossible to conclude that, even if the project had met its targets, there would have been any increase in tenure security resulting from the project.

4.2 As it is, the project fell substantially short of its targets. It is difficult to say by exactly how much there was a shortfall because the units of measurement underpinning the targets ("parcels", "municipal areas", "hectares") varied between appraisal and completion. Nevertheless, the completion report makes it clear that the lack of progress was confined to rural areas, mainly reflecting weak performance by Fontierras on titling. With respect to cadastral survey, 64 percent of the target for rural areas was met. But only 3 percent of the target area was covered (if the reference point is areas that were titled as well as surveyed) (Table 3).

4.3 There is another indication that progress was limited. The municipality of San Francisco was the first part of Petén to be covered by the project (at the request of the mayor). Pilot work began in 1997-2000, before the loan was made effective. Yet in 2008, roughly a decade since work began, only 55 percent of the 5,174 parcels that had been covered by the cadastral survey were logged in the database of the General Property Registry.\textsuperscript{131} The mismatch between the cadastral and registry databases is likely to be even greater in other municipalities that were covered later. Inadequate provision for agency coordination at the project design phase (paragraph 3.12) increased the likelihood of this outcome. Until the data on the physical characteristics and location of properties is congruent with the description of ownership rights in the registry it is difficult to talk of a significant increase in tenure security. According to one account, the dynamism of land markets in Petén is such that the survey data that were collected in all probability no longer reflect the reality of today’s pattern of use and ownership rights.\textsuperscript{132}

\textsuperscript{131} RIC (2007), p. 17.
\textsuperscript{132} Calderon Pontaza (2007).
Table 10: Performance Indicators as Reported at Completion

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>APPRAISAL TARGET</th>
<th>STATUS AT LOAN CLOSING</th>
<th>LEVEL OF ACHIEVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passage of legislation on cadastral framework and procedures</td>
<td>None</td>
<td>Cadastral Information Registry (RIC) Law passed (2005), regulation pending</td>
<td>Substantial</td>
</tr>
<tr>
<td>Area digitally mapped</td>
<td>35,500 km²</td>
<td>36,000 km² (rural) 116 km² (urban)</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>(rural)</td>
<td>40 km² (urban)</td>
<td></td>
</tr>
<tr>
<td>Number of hectares surveyed, <em>national rural lands</em></td>
<td>1,140,000 ha</td>
<td>723,938 ha</td>
<td>Moderate</td>
</tr>
<tr>
<td>Number of hectares titled and registered, <em>national rural lands</em></td>
<td>1,140,000 ha</td>
<td>29,889 ha (765 titles)</td>
<td>Negligible</td>
</tr>
<tr>
<td>Number of parcels surveyed, <em>municipal urban lands</em></td>
<td>Non-specific (all 12 municipalities)</td>
<td>67,706 parcels (cf. mid-term target, 50,000 parcels)</td>
<td>High</td>
</tr>
<tr>
<td>Number of parcels titled and registered, <em>municipal urban lands</em></td>
<td>Non-specific (all 12 municipalities)</td>
<td>28,747 parcels (cf. mid-term target, 15,000 parcels)*</td>
<td>High</td>
</tr>
<tr>
<td>Municipal boundaries measured</td>
<td>None</td>
<td>1,305 km (cf. mid-term target, 1,100 km)</td>
<td>High</td>
</tr>
<tr>
<td>Financial sustainability of newly-established RGP branch office in Peten</td>
<td>None</td>
<td>Office had NPV of US$702,922 and a cost-benefit ratio of 2:7</td>
<td>High</td>
</tr>
<tr>
<td>Number of land conflicts successfully resolved</td>
<td>None</td>
<td>CONTIERRA met 88% of rural and 87% of urban mid-term targets</td>
<td>Substantial</td>
</tr>
<tr>
<td>Proportion of population aware of project activities</td>
<td>None</td>
<td>95% rural, 65% urban (cf. mid-term target, 75% in both)</td>
<td>Substantial</td>
</tr>
<tr>
<td>Creation of a national, multipurpose integrated cadastre and registration system</td>
<td>Complete integration</td>
<td>RIC and RGP did not arrive at a joint proposal</td>
<td>Negligible</td>
</tr>
</tbody>
</table>

*Plus 5,046 parcels surveyed outside El Petén (in Bartolomé de las Casas, Alta Verapaz).

4.4 At the time of IEG’s mission in December 2009, although cadastral surveying targets had been exceeded, the full process of regularization had not been concluded in any of the 12 municipalities, reflecting delays in the judicial process, the lack of appropriate technology for storing the data and the absence of agreement on matters such as tariffs.

4.5 On the other hand, there has been some progress in addressing land-related conflicts. The completion report states that “the project facilitated the opening of three new regional branch offices of CONTIERRA, the Presidential Commission for Resolution of Land Conflicts, to increase the outreach to project beneficiaries. The offices provided bilingual and free legal assistance to municipalities and beneficiaries. In addition, participatory conflict management programs for municipal mayors and beneficiaries were organized. As a result of these efforts, between 1998 and 2007, 1,266 land conflict cases in the project area were submitted to
CONTIERRA, of which 78 and 79 percent of urban and rural cases, respectively, were satisfactorily solved.\textsuperscript{133} The completion report also notes that the “participatory and conflict resolution methodology is accepted”.\textsuperscript{134} In 2008 and 2009 Petén was the department with the largest number of new conflicts reported to the agency responsible for resolving land disputes. Petén has 3 percent of the population of Guatemala and 10 percent of the people reporting land conflicts (Table 4). This does not necessarily mean that the project was ineffective in tackling conflict in Petén: if the presence of CONTIERRA shines a spotlight on disputes that were previously unacknowledged it will serve a useful purpose. Nevertheless, it is of some concern that around 15 percent of these conflicts were triggered by the regularization process itself.\textsuperscript{135} Also, the published numbers on reported conflicts probably still understate the total number of conflicts. “Key land experts emphasized that up to tens of thousands of additional disputes…remain latent or unregistered”.\textsuperscript{136}

4.6 Progress toward this objective is assessed as modest.

Table 11: Cases of Conflict over Land reported to Authorities, 2008-2009

<table>
<thead>
<tr>
<th></th>
<th>PETEN</th>
<th>MEAN PER DEPARTMENT (N=22 DEPARTMENTS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Cases</td>
<td>No. of People</td>
</tr>
<tr>
<td>2008</td>
<td>116</td>
<td>11,315</td>
</tr>
<tr>
<td>2009*</td>
<td>110</td>
<td>7,782</td>
</tr>
</tbody>
</table>

Source: Secretaria de Asuntos Agrarias
*To October

(ii) Strengthen the legal and institutional framework for land registry and cadastre services in Petén

4.7 In 2005, five years after loan effectiveness, the law establishing the Registry of Cadastral Information (RIC) was passed; but regulation of the law was still pending when the loan closed. RIC is an autonomous public institution responsible for establishing, maintaining and updating the cadastre. In support of RIC’s mission, the project accomplished a series of tasks, including establishment of a basic geodetic network, aerial photography, mapping and the marking of municipal boundaries.

4.8 The registry office that was opened in Petén helped to speed up the exchange of information between the province and the headquarters of the General Property Registry (RGP) in the nation’s capital. Persons in Petén wishing to register property transactions no longer had to incur the expense of traveling to Guatemala City.

4.9 An international survey conducted by the World Bank showed that the time taken to register property in Guatemala dropped significantly after 2005 (Figure 1). There was no corresponding target for this indicator in the project but given that the project closed in 2007

\textsuperscript{133} World Bank (2007), p. 18.
\textsuperscript{134} World Bank (2007), p. 16.
\textsuperscript{135} Data supplied to IEG by Secretaria de Asuntos Agrarias.
\textsuperscript{136} Brown, Daly & Hamlin (2005), p. 3.
it is not unreasonable to assume that some of the post-2005 improvement was attributable to reforms in the General Property Registry (RGP) that were supported by the project. There was no exact correspondence between the time estimates in the Bank survey and the estimates given to IEG by the property registry (also the case in El Salvador) but both sources showed a downward trend in processing time. RGP said that the time taken to register property now averages 5 working days. Since passage of the 2005 cadastre law registration should also involve an obligatory stop at the cadastral office; but so far this has not been enforced. Guatemala lags El Salvador in this respect (and therefore has made less relative progress than Figure 1 suggests).

![Figure 10: Time Taken To Register Property in Guatemala and El Salvador](image)

**Source:** World Bank, “Doing Business” database.

4.10 The project successfully developed a parcel-based geographical cadastral database but, contrary to appraisal expectations, it had not been integrated with RGP’s deed-based registry database at loan closing. Integration had still not been achieved when IEG conducted its mission in November 2009. Also, although cadastral data is available on-line, in RIC’s offices, there are no computer terminals available for use by the public.

4.11 A further concern is the lack of evidence that cadastre and registration procedures were made more accessible to the poor—attention to the poor being part of the project’s overarching purpose (see paragraph 2.2 above). The completion report addresses poverty impact by arguing that there were a significant number of poor people in Petén and then makes the inferential leap that the poor must have benefited from the increase in property values. The completion report does not discuss the appropriateness of access mechanisms: whether the communications campaign had sufficient outreach to poor and indigenous groups; whether the conflict resolution process was tailored to the poor; or whether there was a justification for not introducing lower service charges for poor people.

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4.12 On a more positive note, one of the results flowing from the establishment of a cadastral database is the possibility of more accurately assessing property taxes and charges for municipal services. Thus, equipped with information about the width of storefronts, municipalities have a firm and fair basis on which to calculate the charges made to businesses for a variety of urban services including paving, lighting and trash collection. Although failure to pay property tax does not usually lead to prosecution, one mayor told IEG that the threat of withholding urban services is an effective lever for persuading service users to pay their taxes. This leverage is mainly limited to built up areas however because municipalities offer fewer services in rural areas; and the rural population typically has less means to pay. Nevertheless, this is one illustration of how cadastral surveying can contribute to fiscal decentralization. Given this incentive, mayors—particularly those in more commercially vibrant areas—are often willing to pay cadastral agencies to keep information up to date, helping to keep these agencies financially self-sustaining.

4.13 Given the continuing failure to integrate the cadastre and registry databases (which substantially reduces the return to the investment thus far made in regularization), progress toward this objective is assessed as **modest**.

4.14 Overall, efficacy is rated as **modest**.

**Efficiency**

5.1 At appraisal it was estimated that the project’s economic rate of return would be 12 percent. The completion report re-estimates the rate of return at 27 percent. Given that final project costs were 92 percent of the appraisal estimate and that there was a substantial shortfall in meeting the target for rural surveying and titling, it is not clear how the level of net benefits needed to support a 125 percent increase in the rate of return was generated. IEG was unable to find any additional data in the course of this evaluation that might support the re-estimate.

5.2 The implementing agency (RIC) did however supply IEG with a consultant report that was prepared as an input to the completion report. This report presents detailed estimates of the area actually cadastered and titled and the increment in land values resulting from this regularization process. The area and price estimates (which are purportedly based on data supplied by RIC and by real estate agents in Petén) are significantly different from those finally presented in the completion report, showing that the aggregated increment from increased land values was less than the total cost of the project (Appendix B, Table B1). The discrepancies in the core data between the completion report and the consultant’s input call into question the reliability of the re-estimated rate of return.

5.3 Because of these inconsistencies, efficiency is rated **modest**.

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Outcome

6.1 Given that the rating of relevance, efficacy and efficiency is in each case modest the outcome rating is unsatisfactory.

Risk to Development Outcome

7.1 The passage of both the Fontierras Law in 1999 and the Registry of Cadastre Information Law (2005) helped to strengthen the foundations of land administration in Guatemala and thereby reduced risk that the project’s regularization efforts will be undermined (although only the second of these laws fell under the project remit).

7.2 However, although the Bank-supported follow-on operation (approved in December 2006) provides an opportunity to consolidate what was achieved by the first project, at the time of the IEG mission in November 2009, several issues left over from the earlier operation had not been resolved. Little progress has been made in clearing up the rural titling backlog in Petén. The integration of the cadastral and registry databases has stalled and, according to many of those interviewed by IEG, communication between RGP and RIC was sometimes strained. As the completion report observed, this failure to integrate the databases could “threaten the reliability of some of the cadastral information obtained through the project. Over time, this could lead to a reinformalization [sic] of land transactions, as people lose faith in the accessibility, reliability, and overall value of registering transactions”.

However, some steps have been taken to strengthen working relations between the cadastre agency (RIC) and the registry (RGP). A cadastre-registry committee has been set up and the technical linkages have been established to enable the initial steps of the cadastral process to be undertaken.

7.3 The risk to development outcome is rated significant.

Monitoring and Evaluation

Design

8.1 There were some design weaknesses. The indicators bearing on project development objectives mixed up measures of output, outcome and impact. There were no quantified baselines or specific target values. In particular, there was no baseline for beneficiary living standards, for land markets or for environmental conditions. The appraisal made no provision for measuring progress in delimiting municipal boundaries, an essential part of regularization.

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140. Second Land Administration Project (P087106).
Implementation and Use

8.2 There was limited attention paid to monitoring and evaluation before 2003 and reporting on performance indicators was inadequate. The 2003 Mid-Term Review tightened up the specification of indicators and targets and established a timelier schedule for reporting on progress. 143 Data obtained from this project helped inform preparation of the second phase.

8.3 The quality of monitoring and evaluation is rated as modest.

Bank Performance

Quality at Entry

9.1 The Bank played a critical role in the Peace Accords that underpinned the project. 144 During the 1997 Country and Sector Administration Review the government asked the Bank to play a coordinating role and provide technical assistance on land administration. The Bank rose to this challenge providing sound advice to government during the preparation. 145

9.2 Quality at entry was rated satisfactory by QAG although with some reservations about project readiness for implementation and the failure to allow for direct cost recovery. QAG applauded the project’s focus on reducing exclusion and mediating land conflicts, the fruit of a thorough social assessment which had highlighted the gravity of these issues in Petén. 146 According to the completion report, particular care was taken during preparation to consult with and facilitate participation by indigenous communities, in line with OD 4.20 (although the project did not address indigenous lands’ rights issues directly).

9.3 But IEG identifies several shortcomings in quality at entry. First, there are concerns about the choice of Petén as a starting point for the Bank-supported program (see paragraphs 3.5-3.10 above). Second, there was inadequate attention in the design to mechanisms of coordination and integration of data between the cadastre and registration agencies; this lack of integration could nullify the value of the investment in a detailed cadastre. Third, the design of, and provision for, monitoring and evaluation needed to be stronger. This was a pilot and there was no evaluation plan/design adequate to establish its effectiveness. There was no baseline survey on beneficiaries, land markets, and access to credit: subsequent phases of this adaptable program loan would depend for their justification on evidence of progress against the baseline. Also, the monitoring indicators identified at appraisal were not realistic. Fourth, the time needed for project implementation was underestimated. Targets

144. "Support for Peace Initiatives. The Bank is actively supporting the peace process in close interaction with the UN. This has involved providing technical advice to the mediation team on financing issues and technical and institutional issues associated with selected peace accords (indigenous, socioeconomic and agrarian topics). Implementation of these accords will provide enhanced access by the poor and indigenous communities to land, productive assets and basic social services. The Bank is also doing some preparatory work to mobilize donor support for eventual implementation of a Peace Plan, beginning by convening an Informal Donors Meeting in Paris in June 1995" (World Bank, 1995b, p. 9).
were unrealistic, to the extent that at the mid-term review they were cut by more than 40 percent. Fifth, although the executive branch of government may have been willing to press ahead in Petén, the legislature evidently took a different position. Those who prepared the project appear to have misread Congress’s position and underestimated its power to hold up approval of the loan. If Congress agreed to go ahead in Petén because of its unique legal situation, why did it delay approving the project until a federal land law had been passed covering the whole country?

9.4 Quality at entry is rated **unsatisfactory**.

**Supervision**

9.5 Supervision was timely and the Bank provided close support at three critical moments: the hiatus between approval and effectiveness (1998-2000); the “credibility crisis” faced by the General Property Registry (2003); and the transition when RIC replaced UTJ as implementing agency (2005-2006). The comprehensive Mid-Term Review (May-October 2003) strengthened project implementation substantially. It addressed the earlier neglect of monitoring and evaluation by filling gaps in the specification of targets, specifying indicators more precisely and increasing the frequency with which UTJ was required to report on performance. The long delay in the international bidding for rural land regularization was brought to an end. Pressure was brought to bear on the General Property registry to enter more seriously into dialogue about the procedures needed to integrate registry and cadastre.\(^{147}\)

9.6 However, there are some questions about the extent of coordination with other donors. Before passage of the RIC law in 2005, the other donors (Germany, Spain, Sweden, Netherlands, and European Union) had halted work on the bilateral land regularization projects that were proceeding in various parts of the country, in an attempt to pressure the government to move swifter toward legislative reform; but the Bank pressed on.\(^{148}\) It is therefore doubtful to what extent the Bank-supported project provided a locus of coordination for donor efforts, contrary to what the completion report says.\(^{149}\)

9.7 Despite the possibility that donor coordination could have been stronger supervision is rated **satisfactory** based on the strong effort made by the Bank during the latter part of implementation.

**Overall Rating**

9.8 Overall, Bank performance is rated **moderately unsatisfactory**.

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Borrower Performance

Government

10.1 According to the completion report, there was continuity of high-level support for the project, through three administrations. Government played a key role in the passage of enabling legislation—the Fontierras Law (1999) and the Registry of Cadastre Information Law (2005)—without which the project's institutional development objectives would not have been achieved. It also had a hand in encouraging the General Property Registry to begin a long-overdue review of its procedures, a pre-requisite for integration of cadastre and registry functions. But government was unable to ensure that this integration was achieved before the loan closed.

10.2 A consultant report presented to USAID in 2005 was less sanguine about the government's overall role on land administration: “Since signing the Peace Accords [1996], the political will to address land-related matters in a committed way has been consistently lacking”. The report argued that there was a split within government with respect to the resolution of land conflicts. One group, influential within the Ministry of Agriculture, concentrated on “promoting the rule of law to protect private property rights, and is not supportive of efforts to address the historical root causes of land disputes”. A second group, centered on the Vice-President, “sees that the country must address the root causes of land disputes in order to modernize and develop economically”.150

10.3 Also, it has been alleged that, in September 2004, the Ministry of Agriculture undermined the Fontierras land titling effort by dismissing, for political reasons, the Sub-Director of Regularization and 40 of his staff, stripping the agency of some of its most technically qualified professionals.151

10.4 Congress was slow to approve the loan. The project was approved by the Bank's Board in December 1998 but was only signed in April 2000, becoming effective in July of that year. The delay was partly attributable to the need to first shepherd through the Fontierras Law (approved in May 1999), which provided necessary clarification of the legal framework for land rights. Subsequent delays were harder to justify and were associated with slowness in the release of counterpart funds and limited progress with rural land titling (reflecting government's lack of leverage over Fontierras, an autonomous entity). Government was also implicated in the substantial delay in passing the RIC Law, meaning that from 2000 to 2005 the cadastral procedures developed by the project lacked legitimacy. Finally, government failed to exert the pressure needed to bring the General Property Registry and the National Geographic Institute into agreement on integration of registry and cadastre.152

10.5 Government performance is rated moderately unsatisfactory.

Implementing agency

10.6 There were two implementing agencies (UTJ/RIC and Fontierras) and the rating is a weighted average of their performance. UTJ (which operated from 2000 to 2005, and was replaced by RIC) was competently led with few changes at the top during project implementation. It had a well-trained staff that performed well, particularly in field operations. By 2002 UTJ had developed the capacity to implement, on its own, land regularization activities in urban areas. It therefore chose to use its own staff for these activities rather than using foreign firms, an approach that saved money (freeing up the resources for the project to extend to one municipality outside Petén) and helped build local capacity. Sound partnerships were developed with the General Property Registry, the 12 municipalities of Petén, and with other donors working on land administration. UTJ played a key role in ensuring that the cadastral surveying activities taking place in various regions of the country (under the auspices of different donors) shared a minimum set of techniques and standards. The communications campaigns used by UTJ to mobilize support for regularization from (often leery) local populations were particularly effective. 153

10.7 Less positive was UTJ’s delay in launching international bidding for rural land regularization contracts. “Since this activity was critical for achievement of the rural surveying and titling targets and the international contract represented roughly one-fifth of the loan, its delay by about two years seriously handicapped the Project”. This contributed substantially to the project’s failure to meet its rural land titling target. UTJ could also have done more to push for baseline surveys to be conducted. 154

10.8 Project management costs were more than double the appraisal estimate (Table 1) for reasons that emerged during IEG’s review of the completion report. According to the Region, it was not expected at appraisal that UTJ would develop the capacity to carry out, by itself, land regularization in urban areas. Thus there was no expenditure category in the Loan Agreement for investments costs arising from the field activities of UTJ. These costs were charged to the category intended for UTJ administrative costs, greatly pushing up the total expenditures allocated to project management. It is not clear what UTJ’s actual administrative costs were but in its response to IEG’s query the Region said that the expansion of the project’s geographical coverage approved by the Bank in April 2005 was possibly precisely because of savings generated by UTJ’s urban cadastral work (which obviated the need to hire foreign firms). 155 The transfer of implementation from a temporary coordinating unit (UTJ) to a permanent agency (RIC) meant that the investment in staff development and infrastructure was more likely to be sustained. The performance of UTJ/RIC is rated satisfactory.

10.9 The performance of Fontierras, the agency with specific responsibility for rural land titling, is rated unsatisfactory. It proved incapable of matching the brisk pace with which cadastral surveying proceeded. This was possibly explained by its dual mandate (there was much greater pressure for it to deliver on the land redistribution part of its brief than to title

155. IEG, ICR Review, December 27, 2007, Section 2d.
rural lands). Equally important, Fontierras is an autonomous entity run by a Board over which RIC or the Ministry of Agriculture (which chairs the Board) had limited suasion. 156

10.10 Aggregating the performance of the two entities, implementing agency performance is rated moderately unsatisfactory.

Overall Rating

10.11 Overall, Borrower performance is rated moderately unsatisfactory.

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Appendix A. Basic Data Sheet

GUATEMALA - LAND ADMINISTRATION PROJECT (LOAN NO. 4415)

<table>
<thead>
<tr>
<th>Key Project Data (amounts in US$ million)</th>
<th>Appraisal estimate</th>
<th>Actual or current estimate</th>
<th>Actual as % of appraisal estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total project costs</td>
<td>38.5</td>
<td>33.7</td>
<td>86</td>
</tr>
<tr>
<td>Loan amount</td>
<td>31.0</td>
<td>29.9</td>
<td>96</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Project Dates</th>
<th>Original</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
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<td>06/18/1997</td>
</tr>
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<td>Board approval</td>
<td>12/03/1998</td>
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<td>Effectiveness</td>
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<td>07/26/2000</td>
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<tr>
<td>Closing date</td>
<td>06/30/2003</td>
<td>03/31/2007</td>
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**Staff Inputs** (staff weeks)

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<thead>
<tr>
<th></th>
<th>No. Staff weeks</th>
<th>US$ (‘000)</th>
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<td><strong>Lending</strong></td>
<td></td>
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<tr>
<td>FY88</td>
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<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>895.50</td>
</tr>
</tbody>
</table>

|               |                 |             |
| **Supervision/ICR** |             |             |
| FY97          | 3.15            |             |
| FY98          | 63.06           |             |
| FY99          | 61.09           |             |
| FY00          | 23              | 51.39       |
| FY01          | 15              | 57.37       |
| FY02          | 15              | 86.08       |
| FY03          | 20              | 79.12       |
| FY04          | 17              | 55.68       |
| FY05          | 15              | 71.99       |
| FY06          | 15              | 14.34       |
| **Total:**    | 124             | 543.27      |
# Task Team Members

<table>
<thead>
<tr>
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<th>Title</th>
<th>Unit</th>
<th>Responsibility/ Specialty</th>
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<tr>
<td>CORA M. SHAW</td>
<td>SR. AGRICULTURAL ECON.</td>
<td>ECSSD</td>
<td>FORMER TTL</td>
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<td><strong>Supervision/ICR</strong></td>
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<tr>
<td>JORGE A. MUNOZ</td>
<td>SR. LAND ADMINISTRATION SPEC.</td>
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<td>TTL</td>
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<tr>
<td>NADIM KHOURI</td>
<td>SR. TECHNICAL SPEC.</td>
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<tr>
<td>MARIA ALEJANDRA BOUQUET</td>
<td>RURAL DEV. SPEC.</td>
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<td>ZHONG TONG</td>
<td>AGRIC. ECON.</td>
<td>LCSAR</td>
<td>ECONOMIST</td>
</tr>
<tr>
<td>FERNANDO GALEANA</td>
<td>JR. PROF. ASSOC.</td>
<td>LCSAR</td>
<td>LAND/OPERATIONS</td>
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<tr>
<td>ANN JEANNETTE GLAUBER</td>
<td>ENV. SPEC.</td>
<td>LCSEN</td>
<td>ENVIRONMENT</td>
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<tr>
<td>GEORGE CAMPOS LEDEC</td>
<td>LEAD ECOLOGIST</td>
<td>LCSEN</td>
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</tr>
<tr>
<td>IRMA YOLANDA AVILA</td>
<td>CONSULTANT</td>
<td>LCCGT</td>
<td>SOCIAL</td>
</tr>
<tr>
<td>WALESKA GARCIA-CORZO</td>
<td>ET CONSULTANT</td>
<td>LCCGT</td>
<td>OPERATIONS</td>
</tr>
<tr>
<td>VIRGINIA BARRIOS</td>
<td>ET CONSULTANT</td>
<td>LCCGT</td>
<td>OPERATIONS</td>
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<td>ANTONIO BLASCO</td>
<td>FIN. MGMT. SPEC.</td>
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<td>FABIENNE MROczKA</td>
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<td>MANUEL VARGAS</td>
<td>SR. FIN. MGMT. SPEC.</td>
<td>LCSFM</td>
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<tr>
<td>MONICA LEHNHOFF</td>
<td>PROC. ANALYST</td>
<td>LCSPT</td>
<td>PROCUREMENT</td>
</tr>
<tr>
<td>LUIS R. PRADA VILLALOBOS</td>
<td>SR. PROC. SPEC.</td>
<td>LCSPT</td>
<td>PROCUREMENT</td>
</tr>
<tr>
<td>KETTY MORALES</td>
<td>LANGUAGE PROGRAM ASSISTANT</td>
<td>LCSAR</td>
<td>ADMINISTRATIVE</td>
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</table>
Appendix B. Supplementary Tables

Table B1: Inconsistency between data presented in the ICR and a consultant report intended as an input to its preparation.

<table>
<thead>
<tr>
<th></th>
<th>12. ICR</th>
<th>13. Consultant (Calderon)</th>
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<tbody>
<tr>
<td>Rural target:</td>
<td>1,140,000</td>
<td>1,000,000</td>
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<tr>
<td>Rural achievement:</td>
<td>29,889</td>
<td>11,295</td>
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<tr>
<td>Urban target:</td>
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<td>Not specified</td>
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<tr>
<td>Urban achievement:</td>
<td>2,483</td>
<td>950</td>
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<tr>
<td>Added value per unit of land resulting from cadastral survey plus title (US$/ha)*</td>
<td>Rural, $370</td>
<td>Rural, $635</td>
</tr>
<tr>
<td>Increase in land value (=added value per unit x area actually cadaastered and titled), US$ millions</td>
<td>Rural, $120.3 m.</td>
<td>Rural, $7.2 m.</td>
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<tr>
<td>Total project cost (US$ millions)</td>
<td>$35.5 m.</td>
<td>$35.5 m.</td>
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15. *The increment was derived as follows: ICR assumes that the price before both cadastering and titling was US$210/ha (rural) and US$3,700/ha (urban); and the price after was US$580/ha (rural) and US$10,700/ha (urban); Calderon assumes that the price before both cadastering and titling was US$230/ha (rural) and US$6,495/ha (urban); and the price after was US$865/ha (rural) and US$25,975/ha (urban).
Appendix C. Persons Interviewed

Registro de Información Catastral
Eddy Díaz Visquerra, Gerente de Programación y Cooperación Internacional
José Rodolfo Aspuac Aspuac, Coordinador Departamental de Petén
Fernando Amilcar Boiton Velásquez, Gerente Técnico
Héctor Oliva, Especialista en Catastro
Carlos Archila, Coordinador, Proyecto de Administración de Tierras, Fase II

Registro General de Propiedad
Adolfo Alarcón M., Director de Coordinación Catastral
Edgar Márquez, Encargado, Oficina de Petén
Carlos Guillermo Herrera M., Consultor

Fondo de Tierras
Luis Fernando Peña, Gerente General
Edgar De León, Cooperación Externa
Luis Felipe Méndez, Coordinador, Unidad de Planificación
Mario Rodolfo Paiz García, Coordinador, Área de Asistencia Técnica
Carlos Alberto Zamora Herrarte, Coordinador, Unidad de Créditos
René Orlando Muñoz, Asistente de Coordinación, Área Socioeconómica
Bernardo Vásquez, Coordinador Ejecutivo, Programa Especial de Arrendamiento de Tierras
Erick E. Castellanos Romero, Encargado, Oficina de Flores, Petén

Other Agencies
Max Molina, Director de Incidencia y Cabildeo, Secretaría de Asuntos Agrarios
Jorge Luis Morales, Subdirector Financiero, Secretaría de Asuntos Agrarios
José Paul López Estrada, Monitoreo y Evaluación, Secretaría de Asuntos Agrarios
Erick González, Director de Operaciones, Secretaría de Asuntos Agrarios
Jaime Roberto Mejía Salguero, Subgerente Técnico, Instituto Nacional de Estadísticas
Carlos Mancia Chua, Asesor Técnico, Censos y Encuestas, Instituto Nacional de Estadísticas
Rómulo Dimas Gramajo Lima, Viceministro de Ganadería, Ministerio de Agricultura y Ganadería
Luis Joel Fernández Rojas, Director de Fideicomisos, Banrural
Carlos René Caal, Alcalde Municipal, Flores, Petén
Carlos Morales, Coordinador General, Coordinadora Nacional de Organizaciones Campesinas
Helmer Velásquez, Director Ejecutivo, Coordinación de ONG y Cooperativas
Susana Gauster, Coordinadora, Instituto de Estudios Agrarios y Rurales, Coordinación de ONG y Cooperativas
Alberto Alonso Fradejas, Responsable de Estudios, Instituto de Estudios Agrarios y Rurales, Coordinación de ONG y Cooperativas
Eliseo Pérez Mejía, Subcoordinador, Coordinadora Nacional Permanente sobre Derechos relativos a la Tierra de los Pueblos Indígenas
René Chacón, Coordinadora Nacional Permanente sobre Derechos relativos a la Tierra de los Pueblos Indígenas

**Fontierras beneficiaries**

...from the following farms:
San Benito, Genoa Costa Cuca, Quetzaltenango*; El Tesoro y Anexos, San Antonio, Suchitpéquez*; San Bernandino, Chimaltenango; El Rejón, Sumpango, Sacatepequez; La Florida, Taxisco, Santa Rosa; Alianza, El Palmar, Quetzaltenango; La Fe y Chantel, Reforma, San Marcos; Santa Teresa, Tucuru, Alta Verapaz; Horizonte y Esquipulas, Santa Ana, Petén; El Huacutual, San Andrés, Petén; Cooperativa Los Limones, Dolores, Petén; Las Mercedes y Pacoc, Grande; Panzamola II, San Pedro Carcha, Alta Verapaz (*interviewed during field visits; beneficiaries from the other farms were interviewed at the Exposición de Emprendedores Rurales del Fondo de Tierras, Guatemala City, on 30 November 2009.)

**World Bank**
Anabela Abreu, Country Manager, World Bank, Guatemala City
Fernando Paredes, Operations Officer, World Bank, Guatemala City
Cora Melania Shaw, Senior Agriculture Economist, World Bank, Washington, DC
Jorge A. Muñoz, Lead Rural Development Specialist, World Bank, Washington, DC
Enrique Pantoja, Senior Land Administration Specialist, World Bank, Washington, DC
Klaus Deininger, Lead Economist, World Bank, Washington, DC
### ANNEX 3: GUATEMALA – LAND FUND PROJECT

#### Principal Ratings

<table>
<thead>
<tr>
<th></th>
<th>ICR*</th>
<th>ICR Review*</th>
<th>PPAR</th>
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<tr>
<td><strong>Outcome</strong></td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>Moderately</td>
</tr>
<tr>
<td><strong>Institutional</strong></td>
<td><strong>Development</strong></td>
<td><strong>Impact</strong></td>
<td><strong>Modest</strong></td>
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<tr>
<td><strong>Risk to Development</strong></td>
<td><strong>Outcome</strong></td>
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<td><strong>Sustainability</strong>*</td>
<td>Likely</td>
<td>Non-evaluable</td>
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<tr>
<td><strong>Bank Performance</strong></td>
<td>Satisfactory</td>
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<td>Moderately</td>
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<tr>
<td><strong>Borrower</strong></td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>Unsatisfactory</td>
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* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.

** As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.

*** As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.

#### Key Staff Responsible

<table>
<thead>
<tr>
<th>Project</th>
<th>Task Manager/Leader</th>
<th>Division Chief/ Sector Director</th>
<th>Country Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>Cora Melani Shaw</td>
<td>Maritta Koch-Weser</td>
<td>Donna Dowsett-Coirolo</td>
</tr>
<tr>
<td>Completion</td>
<td>Nadim Khouri</td>
<td>Laura Tuck</td>
<td>Jane Armitage</td>
</tr>
</tbody>
</table>
Summary

This report assesses the performance of the US$77.2 million Land Fund Project. The project was supported by an IBRD loan (No. 4432) of US$23.0 million, which was approved on January 7, 1999. The loan became effective nearly two years later than expected partly owing to a change of government and the project closed 30 months behind schedule, fully disbursed.

The project was an innovative attempt to redistribute farmland in favor of poor farm families and the landless. The project’s specific objectives were to (a) facilitate access to land to beneficiaries; (b) support beneficiaries to access technical assistance and productive subproject financing; and (c) initiate improvements to the efficiency of land markets in Guatemala. The project set up a land fund (Fontierras) which was designed to help finance the purchase of land from willing sellers and to transfer it to beneficiaries using a package of loan and grant financing. The project ran parallel with the Land Administration Project, which was separately assessed by IEG.

The project components comprised: (a) Access to Land (planned cost, US$52.2 million; actual cost, US$56.2 million), which provided credit to groups of low-income and landless people to purchase land from private owners; and (to a lesser extent) covered the cost of land leases (none of this component was financed by the Bank); (b) Institutional Strengthening (planned cost, US$2.0 million; actual cost, US$2.00 million), which financed the equipment and operating costs of the project management unit; (c) Community Strengthening (planned cost, US$13.3 million; actual cost, US$5.4 million), which helped communities to establish themselves as legal entities, register land ownership, organize, review the legal status of land offered for sale, prepare investment proposals, obtain financing and contract technical assistance before and after land purchase; and (d) Community Subprojects (planned cost, US$9.7 million; actual cost, US$1.5 million), which financed complementary investments, including small-scale water supply systems, access roads, community mills, and storage and marketing facilities.

IEG rates Outcome as moderately unsatisfactory. Project objectives were highly relevant, seeking as they did to serve the ends of equity and efficiency by redistributing underused land. But there were several flaws in project design, including notably the failure to set a limit per family on the size of the land purchase loan, reducing the incentive for beneficiaries to bargain hard over the price. The project achieved its objectives to a modest extent. Although double the expected number of beneficiary families was served, there is no solid evidence to demonstrate that land productivity increased significantly or that the land market operated more efficiently as a consequence of the land fund. Owing partly to shortfalls in the provision for working capital and the lack of adequate technical assistance for land fund beneficiaries the economic rate of return is probably lower than expected.

The Risk to Development Outcome is rated significant. Owing to shortfalls in the repayment of loans obtained for land purchase, two-thirds of Fontierra’s portfolio for land purchase is at risk.
Bank Performance is rated moderately unsatisfactory. Although this was an innovative project with worthwhile objectives, there were important design flaws which lowered quality at entry. Supervision failed to rectify the design flaws and there was a significant lack of candor in supervision and completion reporting. Borrower Performance is also rated moderately unsatisfactory based on ineffectual support by government and erratic leadership by the implementing agency.

The Lessons learned from this project are discussed in the Overview report which draws on findings from IEG performance assessments of three Central American land policy projects.
Background

1.1 Land Reform. There has been no comprehensive redistribution of agricultural land in Guatemala; but there is nevertheless a complex legal and institutional framework for agrarian reform. A radical attempt at land reform in 1952 (Decreto 31) was aborted following overthrow of the government of Jacobo Arbenz. Several laws were passed annulling the Arbenz agrarian reform law, replacing it with other mechanisms for land re-distribution such as a land tax and an idle land provision (Decreto 559). The Agrarian Transformation Law (Decree 1551), which was passed in October 1962, established the National Institute of Agrarian Transformation (INTA), an agency charged with distributing land to the landless and land-poor, implementing a titling program, and establishing a land purchase program. INTA’s mandate was to extend the program of distributing state-owned land and continued to do so until the supply of these lands was largely exhausted. The Land Fund (Fondo de Tierras, known as Fontierras) was created after the 1996 Peace Accords, initially to provide a land fund to provide properties to returning war refugees. Returning refugees were settled on land already owned by the state—much of this land consisted of farms that were abandoned by their owners and whose ownership was taken over by the state and administered by INTA. When INTA was disbanded, Fontierras took over many of its activities, such as adjudicating state-owned land and issuing definitive land titles. 157

1.2 Before the market-assisted land reform option was introduced by the project, there were three legal mechanisms of land redistribution: distribution of state-owned land (terrenos baldios) by state agencies such as INTA from the 1950s until the late 1990s, and by Fontierras since 1999; taking of privately-owned idle lands (tierras ociosas) to be distributed by INTA and Fontierras; and taxing underproductive land in order to move it into the land market. The option of taking and distributing idle lands was, for the most part, not pursued. Although INTA had legal jurisdiction to distribute idle land, INTA did not have the capacity to identify these lands. Also, a land tax that motivates owners to put unproductive lands on the market has not been put into practice either. 158

1.3 Poverty Map. The rural areas of Guatemala house about fifty percent of the population but account for roughly three-quarters of the poor. The agricultural sector represents 22 percent of GDP, compared to around 10 percent in Costa Rica and El Salvador and 14 percent in Honduras. 159 The concentration of poverty in rural areas has been attributed partly to the increasingly skewed distribution of agricultural land: the Gini coefficient for land ownership was 0.82 in 1964 and is around 0.85 today (the same level as in 1979). Between the agricultural census of 1964 and 1979, farms under 2 manzanas (1.5 hectares) made up about 44 percent of farms. By 1979, farms of that size had increased to 60% of farms; but the average size of farms in this category had decreased from 0.7 to 0.5 hectare. On the other hand, owners of farms 450 hectares or larger had increased the total area they controlled by 10 percent. Land concentration tends to be highest in areas with the most fertile land: the departments of Quetzaltenango, Suchitepéquez, Retalhuleu, and Izabal. Small properties are located mainly in the western highland departments of San Marcos, Quiché, Totonicapán,

159. World Development Indicators, 2009; and ENCOVI (National Household Survey).
Sololá, Huehuetenango and Quetzaltenango. These departments also have the highest indigenous population density as well as the highest levels of poverty and social marginalization in Guatemala.  

Project Overview

Objectives

2.1 According to the appraisal document (and consistent with the statement in the Loan Agreement), the project’s specific objectives were “to (a) facilitate access to land to beneficiaries; (b) support beneficiaries to access technical assistance and productive subproject financing; and (c) initiate improvements to the efficiency of land markets in Guatemala”.

Components

2.2 According to the Country Assistance Strategy, under the project, the Bank would support “complementary investments for sustainable improvements in land productivity (but not land purchase) for over 10,000 families”; the government would finance the land purchase part of the package through the newly-established Land Fund.

2.3 The access to land component—none of the financing of which was provided by the Bank—accounted for 70 percent of actual project cost (Table 1). This component provided credit to groups of low-income and landless people to purchase land from private owners; and (to a lesser extent) covered the cost of land leases.

2.4 The institutional strengthening component financed the equipment and operating costs of the project management unit. The community strengthening component helped communities to establish themselves as legal entities, register land ownership, organize, review the legal status of land offered for sale, prepare investment proposals, obtain financing and contract technical assistance before and after land purchase. The technical assistance following land purchase was provided as a three-year grant, and was intended to cover 100 percent of costs in the first year, 65 percent in the second year and 30 percent in the third year. Finally, the community subprojects component financed complementary investments, including small-scale water supply systems, access roads, community mills, and storage and marketing facilities. Subproject selection was based on a negative list of ineligible subprojects. Beneficiary communities were expected to contribute to the total costs of each investment.

---

Table 12: Project Costs by Component

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>ESTIMATED COST AT APPRAISAL</th>
<th>ACTUAL COST AT CLOSING</th>
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<tr>
<td>Institutional Strengthening</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Community Strengthening</td>
<td>13.3</td>
<td>5.4</td>
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<tr>
<td>Community Subprojects</td>
<td>9.7</td>
<td>16.5</td>
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<tr>
<td>Access to Land</td>
<td>52.2</td>
<td>56.2</td>
</tr>
<tr>
<td>Total</td>
<td>77.2</td>
<td>80.1</td>
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</table>


2.5 The project was intended to be the first of three phases in a ten year program for which the government requested adaptable program loan financing.

Institutional Framework

2.6 In May 1997, the Fontierras trust fund was created under the auspices of the Ministry of Agriculture, providing for the first time a market-assisted option for land redistribution. The Fontierras Law was passed in May 1999, establishing Fontierras as an autonomous legal entity, with its own management and specialized staff and five regional offices. In addition to its responsibility for market-assisted land reform, Fontierras inherited the land regularization responsibilities of INTA, which was liquidated. Oversight of Fontierras was provided by a Board of Directors (Consejo Directivo) whose seven members represented the Ministry of Agriculture (chair), Ministry of Finance, the commercial farming lobby (CONADEA and Camara del Agro), and indigenous, peasant and cooperative organizations. The Board selected the General Manager of Fontierras. An additional governance mechanism was introduced in 2002: the Control and Verification Commission, which reported to the Board and was intended to provide greater transparency and tighter screening for procedural irregularities. The project coordinating unit was located in the External Cooperation Department of Fontierras.

Implementation

2.7 The Bank’s Board approved the Project in January 1999. The 1999 national elections in Guatemala resulted in delays and Congress only approved the loan in April 2000. The loan was made effective in July 2000, a year later than expected. It closed 30 months behind schedule in June 2005. No safeguard or fiduciary failings were reported by the Bank during supervision.

2.8 During project implementation, the Minister of Agriculture was replaced six times, leading to various policy reversals that negatively affected implementation. By 2002-2003 government commitment to the land reform agenda presented in 1998 had substantially eroded. After the change of administration in 2004, the earlier decision to proceed with a second phase of the Land Fund adaptable program loan was reversed.
2.9 Project execution was also hindered by two external shocks. First, there was an international coffee crisis throughout the implementation period, reducing the capacity of coffee farmers to repay the land purchase credits received from Fontierras. Second, in 2004, a serious drought in the southwest municipality of Champerico affected farm production and was another factor tending to prevent farmers from repaying their loans.

Relevance

Relevance of Objectives

3.1 This was one of an innovative series of Bank projects developed around the mid-1990s that sought to make redistributive land reform a realistic option for Bank financing. The case for supporting land reform was made in a 1975 Bank policy paper but, owing largely to an adverse international political environment, this did not result in projects. In the 1990s, supported by new analytic work, the Bank placed land reform back on the negotiating table, developing proposals for a market-assisted model which was subsequently tested in Brazil, Colombia, Guatemala, Malawi, South Africa, and Thailand. For most of its existence the Bank did not permit its funds to be used to purchase land in most types of development projects; but its operating guidelines were revised in 2004 to make this possible.

3.2 Each of the specific objectives was highly relevant. First, there was a clear need to improve access to land by poorer groups, on political, moral and economic grounds. Various persons interviewed by IEG described the provision of land as a safety valve—a means to reduce the scope for the civil strife and disruption likely to arise from the failure to respond to land hunger. It was an essential part of the peace accords process of the late 1990s. One interviewee said that giving poor people land was an issue of basic human dignity and a way to enhance the self-worth of the poor. An evaluation found that Fontierras has "contributed substantially to maintaining social peace".

3.3 The economic case for increasing the poor's access to land was made in a 1995 poverty assessment, which argued that a more equitable distribution of land would employ more labor and increase efficiency. It stated that empirical evidence strongly suggested that: (a) small farms have higher yields and higher total factor productivity than large farms; and (b) small farms use more labor and less capital per hectare cultivated than large farms. The project was an integral part of the Bank's support for the broader process of bringing peace to Guatemala after 36 years of insurgency and was fully in line with the Country Assistance Strategy (Table 2).

165. SARES/AGRIDE (2003), p.161. This evaluation was based on visits to 35 of the 124 farms purchased by Fontierras between January 2000 and December 2002.
167. See also Binswanger, Deininger, and Feder (1995).
Table 13: Consistency of Land Fund Project Objectives with Corresponding Country Assistance Strategy (CAS)

<table>
<thead>
<tr>
<th>Issue Date of Applicable CAS</th>
<th>Jun 19, 1998</th>
<th>Apr 11, 2005</th>
</tr>
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<tr>
<td>Project Phase (Relevant Dates)</td>
<td>Preparation</td>
<td>Closing</td>
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<td>Relevant CAS Commitments</td>
<td>Approved, Jan 7, 1999</td>
<td>Closed, Jun 30, 2005</td>
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<tr>
<td>Aim</td>
<td>“Create a transparent, fluid land market, with secure ownership and tenure rights based on cadastre, registry and titling systems, and establish more agile and culturally appropriate dispute resolution mechanisms”.</td>
<td></td>
</tr>
<tr>
<td>Progress Benchmark:</td>
<td>(1) “Establish pilot market-assisted land reform program and land market information system”.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) “Through Land Fund, finance land purchase and complementary investment for displaced and poor families”.</td>
<td></td>
</tr>
<tr>
<td>Aim</td>
<td>“Improve land tenure security and land transactions through the provision of efficient, accessible, and more transparent administration services”.</td>
<td></td>
</tr>
<tr>
<td>Progress Benchmark:</td>
<td>[None specified relating to land redistribution]</td>
<td></td>
</tr>
</tbody>
</table>


3.4 Technical assistance and complementary investments were supported by the project in order to boost the productivity gains from land redistribution. Experience worldwide has shown that giving the poor land is not enough to ensure growth in their incomes and productivity: they need training in order to fully exploit the land and they need working capital; and the structure of financing needs to reward the most profitable and sustainable subproject proposals.

3.5 The case for the third objective—increasing the efficiency of land markets—emerges from studies showing a high level of segmentation in land markets: the poor buy from the poor and the rich buy from the rich; only in a few cases are poor families able to buy parts of large estates, or are able to group together to buy the whole estate. Efficiency is also constrained by the lack of information about ownership and parcel characteristics (a problem

addressed by the parallel, Bank-supported land administration project). “Verifying ownership information in the property registry is time-consuming and costly. It requires the services of a lawyer who travels to one of the two registry locations. Inaccuracies in the registry often have to be resolved before a transfer can be completed, thus adding to the costs”.

3.6 Based on these considerations the relevance of project objectives is rated high.

Relevance of Design

3.7 The Fontierras market-assisted land reform process works as follows. Applicants for Fontierras land purchase credits are officially limited to: men and women without land, peasant men and women with insufficient land (less than 1 hectare), and peasant men and women with an income of less than four minimum rural salaries. According to the rules, groups of would-be beneficiaries approach Fontierras once they have identified a farm they want to buy. The group may have already started negotiating a price with the owner of the farm. Fontierras commissions an independent assessment of the farm, as well as a technical assessment of its productive capacity. Using these assessments as a benchmark, the seller and the group of buyers negotiate a price, with the technical assistance of Fontierras—and also possibly of an NGO. If buyer and seller agree on a price, Fontierras extends the buyers a loan, using the land as collateral. Purchase of the land by Fontierras is contingent on presentation of a viable productive project by the would-be beneficiaries. If approval is given, the farm is turned over as a whole unit to the beneficiaries and, until the loan is paid off, only a collective legal title (Patrimonio Agrario Colectivo) is available to the group. However, beneficiaries decide among themselves whether to farm the land collectively or individually. Once the loan is paid off, the group can opt for the land to be officially subdivided into family parcels, each with a fully transferable title.

3.8 Under the terms of the Bank-supported project, the government had sole responsibility for financing the land purchase credits while the Bank limited itself to funding the complementary investments (in line with the then prevailing restrictions on the Bank’s ability to finance land purchases). Complementary financing was provided as a grant equal to 26 times the official monthly minimum wage for farm laborers. Beneficiaries themselves decided how to allocate the grant between three categories of expenditure: food to cover immediate subsistence needs; working capital; and repayment of the credit for land purchase.

3.9 There are several positive features to consider. First, project design was based on experience from similar projects. “The program built upon lessons learned from a small-scale program supported with USAID assistance, which financed a total of 30 farms for beneficiaries in 1998 and 1999”.

171. These are the eligibility criteria set out by Article 21, Ley de Fondo de Tierras, 1999 (pp. 34-35).
organizations, as well as the private sector. Third, a land administration project was designed in parallel (by the same task manager) and approved by the Bank’s Board almost simultaneously. By building up the institutions for regularizing land rights this parallel operation was an important complement to the Fontierras project. Fourth, the Bank loan was modest in size, which was appropriate given the innovative nature of the project.

3.10 On the other hand, there are four respects in which project design could have been stronger. First, there were difficulties associated with setting a ceiling to the loan amount that each beneficiary family could receive for the purpose of buying land. Although the initial project design allowed for such a ceiling, this was dropped when the Fontierras law was passed, on the grounds that regional variations in land prices made it impractical to legislate for a panterritorial ceiling: instead, the price of land per hectare was used as the benchmark for deciding whether applications would proceed. This presupposed that there was a rigorous and transparent approach to setting the threshold price; and close monitoring of price trends up and down the country.

3.11 Thus, Article 11 of the Fontierras law (which was under discussion at the same time the Bank was preparing the project) set no limit per family on the size of the land purchase loan. The lack of a ceiling made it less likely that beneficiaries would look hard for cheaper properties, or bargain hard over the price. The project design was based on the assumption that obliging beneficiaries to take on a substantial debt to buy land would dissuade all but the most committed applicants for Fontierras financing. Loans would only be granted to applicants with viable productive projects, projects that would generate enough revenue for the loan to be paid back. However, as it turned out, the size of the loan could well exceed the scope of the productive project to amortize it. There was little to stop families assuming debts that exceeded their capacity to pay (Figure 2 below shows the consequences for the Fontierras portfolio). Moreover, according to some IEG interviewees, beneficiaries were advised, covertly or overtly, not to pay back the loans they received. Some peasant and indigenous organizations publicly proclaimed that the poor should not be expected to pay for land. The resulting efficiency losses could have been contained if there had been a ceiling per family on the amount paid for land. Since the Bank did not finance the land purchase component it had little leverage over this matter.

3.12 In Guatemala the practice of impartial property valuation was not fully developed and there was a shortage of appropriately trained independent surveyors. According to several persons interviewed by IEG, to various press reports (Appendix D, Table D2), and to a CEPAL study175, properties were frequently overpriced, with the surplus proceeds being pocketed by landlords, leaders of peasant and indigenous organizations, Fontierras staff, surveyors and the beneficiaries themselves. Once more, the scope for corruption would have been less if a per-family ceiling on land purchase had been implemented.

3.13 There was a second design limitation, concerning the selection of beneficiaries. Before the project was appraised there was a long list of clients (sponsored by the various parties to the peace process) who needed to be accommodated, rendering formal selection

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174. World Bank (1998b), Section F [no page number].
procedures moot. During the first half of implementation, not all of the would-be beneficiaries were vetted; and the eligibility assessment questionnaire was applied in Fontierras offices, rather than where the applicants lived (making it impossible to verify asset levels). This proved to be a significant oversight because most of the property purchased under the project was transferred in the first three years of implementation (2000-2002)—that is, in the period when vetting was weakest—increasing the likelihood that beneficiaries would not perform well.

3.14 Third, project design paid insufficient attention to the quality and availability of the technical assistance on which the performance of beneficiaries depended. While it would not have been feasible or appropriate for the project to attempt to plug the gap left by the absence of a public extension service, more attention could have been given to establishing a roster of proven private-sector professionals from which beneficiaries could select; coupled with separate training programs for service providers and beneficiaries.

3.15 Fourth, the appraisal report provided no details on the design for M&E and its institutional arrangements. Given that this was the first phase of a ten-year adaptable program loan, the absence of a carefully-designed M&E component is a serious weakness.

3.16 Based on these considerations, the relevance of project design is rated **modest**.

**Overall Rating**

3.17 The overall rating of the project’s relevance is **substantial**.

**Efficacy**

4.1 This section takes the three specific objectives of the project and asks to what extent each was achieved.

**Objective 1: “Facilitate access to land to beneficiaries”**

4.2 Achievement of this objective is rated **substantial**. During project preparation, a large pool of potential beneficiaries built up. “By mid-1998 around 240 groups have requested assistance for the purchase of land. These groups represent a population of approximately 24,000 families: eight communities comprising 8,200 families, and around 230 groups comprising 15,800 families”. In relation to this universe, the appraisal target was modest. The aim was to reach 7,425 families during the project (that is, during the first three years of what was envisaged as a ten-year program of Bank support). The actual number of beneficiaries served was double the target (15,487 families); although the implementation period turned out to be five, not three, years. For reasons set out above (Paragraph 3.12) the socioeconomic profile of beneficiaries was not adequately monitored so it is not possible to say what proportion were poor. A separate target was set for the number of properties to be

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purchased during the project (100); the actual number was 186. No appraisal target was set for the number of indigenous and female-headed households to be covered; the actual proportion of these was respectively 30 percent and 11 percent.\textsuperscript{179} A survey of beneficiaries found that 88 percent of those interviewed deemed the selection process to have been gender equitable.\textsuperscript{180} The performance indicators bearing on this objective also included the time taken to process land claims, although no target was specified. According to the ICR, the average time elapsed from acceptance of an application to effective disbursement was 18 months,\textsuperscript{181} which was still the case in December 2009 when IEG conducted the assessment mission. According to another source, over the period 2004-2006, 56 percent of surveyed beneficiaries reported that their application was processed in not more than 24 months (16 percent said it took over 4 years).\textsuperscript{182}

**Objective 2: “Support beneficiaries to access technical assistance and productive subproject financing”**

4.3 Phrased in these precise terms, the objective is an output (“support to...”), rather than an outcome (“increased productivity”). As noted above, this expected output was exceeded: double the target number of families was served. But it is legitimate for this evaluation to ask whether the underlying outcome was realized. To what extent did the technical assistance and subproject financing provided by the project result in increased agricultural productivity? This was arguably an explicit intention of the project because “change in land productivity in parcels of beneficiaries during the 3-year period” was included as a performance indicator.\textsuperscript{183} Admittedly, it is perhaps unreasonable to expect productivity to be turned around in such a short period. But the trend of change—based partly on doubts about the extent and quality of technical assistance (see paragraph 7.1 below)—suggests that progress toward the ultimate objective of enhanced productivity should be rated modest.

4.4 The project financed 240 subprojects, of which 161 supported productive activities and 79 supported social infrastructure. The productive subprojects included livestock production (59), planting of cash crops, such as coffee, cardamom and pineapple (30), farm mechanization (20), reforestation (14), irrigation (13), commercialization (16), and storage facilities (6). This breakdown indicates a substantial deviation from the subproject focus that was envisaged at appraisal. The appraisal document states that subprojects were intended to be “complementary infrastructure investments”.\textsuperscript{184} The completion report does not acknowledge this slippage: it states that project components were not revised but elsewhere refers to “intra-predial” and “extra-predial” productive investments, that clearly extend beyond infrastructure.\textsuperscript{185} With respect to “farm-level productive investments” the appraisal document makes it clear that "Long-term financing for farm investments other than common

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\textsuperscript{180} Fontierras (2008), Statistical Annex. This evaluation was based on a random sample of 50 farms drawn from the universe of 187 farms purchased by Fontierras up to 2004. Of course, it is not clear if a similar proportion of persons who had applied for land but not received it had the same view of the gender neutrality of the selection process.
\textsuperscript{182} Fontierras (2008), Statistical Annex.
\textsuperscript{183} World Bank (1998b), Annex 1B [no page number].
\textsuperscript{184} World Bank (1998b), p. 5.
\textsuperscript{185} World Bank (2006), pp. 4-5.
infrastructure should be provided by other development programs or financial intermediaries at market interest rates." In other words, Bank funds were used to fund a wider range of investments than initially envisaged.

4.5 The project also provided grants to finance technical assistance for three years after land was transferred to the beneficiaries, with the grant covering 100 percent of costs in the first year, 65 percent in the second year and 30 percent in the third year. Fontierras staff reported that, in practice, none of the costs have actually been recovered; technical assistance remains a free good and a recent survey found that most beneficiaries were not willing to pay for it.

4.6 The completion report found that “average land productivity has not changed significantly during these initial years of implementation, largely due to (i) the need for newly-established families to attend to basic needs such as housing, water supply, and schools, all of which delayed families from initiating productive activities; (ii) the fact that many farms had been abandoned prior to purchase under the Land Fund, which implied the need for significant time and financial resources to restore land productivity; and (iii) the technical assistance aimed at increasing agricultural productivity was somewhat weak and plagued with delays.”

4.7 This finding from the completion report needs to be treated carefully. It was based on a survey carried out in 2004. The project began implementation in 2001 and, given the slowness of the settlement process, most beneficiaries would not have taken possession of their land until 2002 or later; it was likely some time after that before significant productivity gains could be realized with respect to the “without project” comparator. It is unfair to draw definitive conclusions about the productivity impact of the whole project based on a survey conducted so soon after the beneficiaries were installed.

4.8 But a separate survey found that the crop yield of the Fontierras farms was 21 percent lower than that of neighboring properties, based on comparing survey findings on Fontierras farms with agricultural census data on average yields of farms in the same municipality. The farms in the sample that were operated collectively were 43 percent less productive than the municipal average while farms that had been divided into family holdings were 17 percent less productive. (The collectively-operated farms accounted for 30 percent of the sample). Yields may have been lower because the lands in question had been abandoned or neglected before redistribution, making the comparison with neighboring (fully operational) farms an unfair one. Also, this was obviously a rough-and-ready comparison because it was not possible to control for land quality.

4.9 The relative difference in revenue generation between Land Fund lands and other lands is also hinted at by data comparing income changes for beneficiaries and non-

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beneficiaries. Of 50 beneficiary households surveyed, 74 percent reported that income was higher at the time of the survey than it was before land was transferred. Among non-beneficiary households in the same locality, 54 percent reported an income increase over a comparable period.\footnote{Fontierras (2008), Statistical Annex (Questions 85 and 86 from survey).} Another source assessed beneficiary perceptions of the change in household income, comparing the period before transfer with the present. The results suggest that income rose between the two periods for most beneficiary households: of the sample as a whole, 75 percent reported an increase; among the subset of extremely poor households 70 percent said that income rose.\footnote{Miethbauer (2005), pp. 22-24.} This second set of data shed less light on project impact because there is no indication of how much income changed for a matched group of non-beneficiaries. Also, it is not clear how much non-farm changes drove the income increase.

4.10 In summary, although the project undoubtedly led to some increase in land productivity overall (given that much of the land transferred was not being exploited previously) it is not clear by how much. In any case, changes in land productivity need to be set against the prices paid by farmers for this land to assess the net impact on farmers' incomes; reports of inflated prices paid for land (see paragraph 3.11) point to at best a modest impact on farmers' net incomes."

Objective (3): “Initiate improvements to the efficiency of land markets in Guatemala”

4.11 Achievement of this objective is rated \textit{negligible} because through a combination of faulty project design and misallocation of project funds the efficient working of the land market was compromised. The project operated within the following conceptual framework. When land markets operate efficiently land will gravitate from lower productivity to higher productivity use. From an efficiency standpoint there is no difference whether the transfer occurs through sales or through rental markets. Governments do well to remember that “rental markets may contribute more to efficiency than sales markets”.\footnote{Carter and Olinto (1996), cited in Deininger and Binswanger (1999), p. 255.} Imperfections in land markets arise: from incomplete knowledge about the physical characteristics of, and claims to, land; from incomplete credit markets (e.g. difficulty of borrowing to buy land or finance working capital); from the costs involved in selling land (e.g. notary and surveyor fees); and from various distortions generated outside the land market (e.g. inflation, lower tax on rural land compared to other assets) which tend to influence the price of land, possibly pushing the price out of alignment with the present value of profits derived from putting land to its most productive use.\footnote{Deininger (2003), Chapter 3.}

4.12 In the case of Guatemala, at the time this project was prepared, making land markets more efficient presupposed: strengthening the institutions of registry and cadastre; removing the distortions which encouraged less efficient landholders to hang onto land; facilitating access to land by poorer persons able to use the land more productively than those selling it or leasing it—but without the means to fully pay the market price; and protecting landholders from extra-economic coercion (e.g. physical intimidation or expropriation without compensation).
4.13 Strengthening registry and cadastre institutions was tackled by a parallel project (assessed separately by IEG). Progress was made but the expected integration of the separate databases for cadastre and registry remains incomplete, adding to the cost of land transactions. The project launched a series of actions to free up the supply of and demand for land, aiming partly to redress market segmentation (see paragraph 3.5 above). From the supply side, the introduction of a negotiated process of land reform was intended to encourage the owners of large, underexploited estates, to sell up, secure in the knowledge that they would obtain a fair price. According to knowledgeable stakeholders the tardiness of the Fontierras process (see paragraph 4.2 above) led a number of landowners to withdraw offers they had made. The number of properties offered to Fontierras peaked around 2001, partly driven by the collapse of the world coffee price; as coffee prices recovered and as prospects for other crops (particularly sugar cane and oil palm) became more attractive, the available supply of land diminished. The absence of a tax on rural properties reduced the incentive for owners to sell underexploited land. All in all, the supply of land available for negotiated land reform was well under the demand for it. In these circumstances, providing a mixture of concessional credits and subsidies to help finance the purchase of land was liable to drive up the price beyond a level equal to the present value of farm profits, contrary to the efficiency objective of the project. Added to this there was lax oversight of the property valuation process leading to various press reports (endorsed by Fontierras)\(^\text{194}\) that properties had exchanged hands for amounts well above their productive value (see paragraph 3.11 above). There were various reports of small farmers who had been forced, through a combination of physical threats and “encirclement” (involving denial of access to farm-to-market roads) to abandon their land. Thus, land market efficiency was not enhanced through Fontierras-mediated sales.

4.14 What of the Fontierras initiative on rentals? This initiative was contemplated by the Bank-supported project but was initially a minor sideline; today it is the primary focus of Fontierras, reflecting the government’s decision not to seek Bank support for the second phase of the market-assisted process that was initially envisaged. There were mixed reports about the effectiveness of this initiative. One view is that the program was sound because it encouraged the land poor to acquire farming skills at low risk (without assuming heavy debt), a first step toward eventual purchase of land. The discipline obtained in paying off the small debts incurred from rental would stand these farmers in good stead when the time came to take out larger loans. On the other hand, these small debts are not actually being collected. Another view argues that while the rental program helped to improve the food security of the tenants, because the land was primarily used for staple crops it was not necessarily being employed as productively as it might be.

4.15 Fontierras made a modest contribution to improving land market information, setting up a database on land purchases that is open to public. According to the ICR, the project supported “development of a website with information on land price and location of land”.\(^\text{195}\) But it also says: “The establishment of a land market information system proved particularly

\(^{194}\) E.g. “Abandonan fincas adquiridas por Fontierras”, La Hora (Guatemala), 9 January 2009; also, see Appendix D, Table D2 below.

difficult and would require a well-established line agency with strong financial backing". Although the Fontierras website continues to operate, at present there is no active link to a land market data base.

**Overall Rating**

4.16 The overall rating of the project’s efficacy is rated *modest*.

**Efficiency**

5.1 At appraisal the economic rate of return was estimated at 23 percent based upon the projected increases in land productivity and farm revenues in the newly acquired farms purchased through Fontierras credits and supported by Bank–financed technical assistance and productive investments. Rates of return ranged from 7 percent in coastal and southern regions of Guatemala to 32 percent in the lowland areas of northern Guatemala. At the mid-term review, based on a representative survey of farms, it was concluded that “in most cases, the level of productivity had not increased to the levels estimated at appraisal” owing to “delays in getting farms under production, the relatively high cost of land, the lack of working funds for production, and a decline in commodity prices (e.g., coffee)”. The economic rate of return was not re-estimated for the completion report.

5.2 The analysis of efficiency is necessarily incomplete because while there are a complete set of data on Fontierras expenditures per farm there are no recent survey data on farm production making it impossible to assess net benefits. Despite the multiple reports about the inflated prices paid for properties bought by Fontierras the average price of land purchased was Q7,310 (c. US$950) per hectare, comparable to the appraisal estimate. Total project costs were as expected, but twice the number of households benefited, and 75 percent of survey respondents in two separate surveys said their income went up. Much of the land redistributed was not being used previously. These are the positive factors with respect to the rate of return actually achieved.

5.3 However, there is some evidence that the there was less scope for raising productivity than expected: only 40 percent of the grant provided to each family was used as working capital, compared to the 50 percent expected (55 percent was used to amortize the loan and 5 percent to purchase food (to tide over families waiting the first harvest). This, together with the various reports about the failings of technical assistance, may have depressed the economic rate of return; but it is not clear by how much.

5.4 There is some evidence that the proposals for productive projects—the quality of which was supposed to determine whether the land purchase credit was granted—were only cursorily reviewed. The proposal did not give detailed consideration to the productive potential of the land being offered for sale and the infrastructure and marketing constraints.

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that would confront any farm enterprise. It did not specify the expected cash flow and the extent to which this was likely to be sufficient to pay off the land purchase debt.\footnote{Fontierras (2008), p. 43.}

5.5 Efficiency is rated \textit{modest}. 

\textbf{Outcome}

6.1 Based on substantial relevance, modest efficacy and modest efficiency, project outcome is rated \textit{moderately unsatisfactory}.

\textbf{Risk to Development Outcome}

7.1 There are two concerns. First, it is not clear that Fontierras will survive as an agency capable of financing itself. Second, the lack of long-term provision for agricultural extension raises doubts about the viability of the farm enterprises that were established. The financing package included three years of technical assistance, administered by an (overstretched) team within Fontierras. The absence of a nationwide system of extension (outside the project) reduced the scope for productivity improvements. Staff members of non-government organizations were candid about the poor quality of the technical assistance available from non-government sources.

7.2 Given the sharp fall in the number of farms purchased by Fontierras the agency overhead accounts for a rising proportion of the financing for each farm that is created (Figure 1). The other concern is the large proportion of beneficiaries with loan payments due who are either not paying at all or are behind with payments (Figure 2). Almost two-thirds of Fontierra’s portfolio for land purchase is at risk. At the time of the IEG mission it was unclear whether the government would approve a new financing package for Fontierras now that the ten years originally budgeted for has expired.

7.3 Risk to development outcome is rated \textit{significant}. 

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Figure 11: Fontierras Land Reform Program: Costs per Hectare

Source: Appendix D, Table D1 below.

Figure 12: State of Fontierras Land Reform Portfolio at 31 October 2009

Source: Appendix D, Table D3 below.
Monitoring and Evaluation

Design

8.1 The appraisal document included no details on the design of M&E, nor any indication of the institutional arrangements. Performance indicators were sketchy and targets (e.g., for participation by women and indigenous peoples) were not always specified. No provision was made for a baseline survey. The Project Coordinating Unit recruited M&E specialists and the staff of the Unit received M&E training. In addition to the usual arrangements for setting up a management information system, M&E features included a survey designed to inform selection of applicants for land purchase credits. The survey collected information on the socioeconomic profile of applicants (incompletely—see paragraph 3.12 above) and the current land use of the property they were seeking to buy.

Implementation and Use

8.2 Project processes were satisfactorily monitored and the financial management system performed adequately. M&E data were fruitfully deployed in the mid-term review and also informed preparation of the completion report. For most of the implementation period the survey used to filter applicants for land purchase credits was only administered to those members of the farmer group presenting themselves at the Fontierras office; no attempt was made to visit the place where the group was living (which would have been important to help verify assets), or to follow-up with all members of the group (see paragraph above). Also, IEG was not able to obtain any information from the surveys of those whose applications for credit had been turned down. The failure to preserve this information made it hard to assess the rigor and the transparency of the selection process; and removed information that could have been used to construct a control group for subsequent impact evaluation. Towards the end of project implementation a consultant was hired to make an independent assessment of beneficiary living conditions; but in the absence of any baseline survey this report does not provide a solid basis for drawing conclusions about project impact.

8.3 There is an additional consideration. The standard for monitoring and evaluating the first phase of an adaptable program loan should be set higher than for a one-time project, because of the learning insights that the first phase is supposed to generate. The quality of monitoring and evaluation is rated modest.

Bank Performance

Quality at Entry

9.1 The completion report notes that “there was no initial QAG review of quality at entry, but the fifth Quality of Supervision Assessment evaluated quality at entry as Satisfactory with respect to the realism and quality of objectives and the agreement between components

and objectives". The Bank played a key advisory role in the land policy initiatives that flowed from the 1996 Peace Accords and had a close working relationship with government. The land fund project was suitably complemented by a parallel Bank-supported project to develop the registry and cadastre that was approved almost simultaneously. The support for a long-term commitment based on a ten-year adaptable program loan made sense given the level and complexity of the institutional development called for. This was a risky project mainly because there was no way to be sure in advance that the supply of land to the market would be enough to cover demand. (The level of risk was underplayed in the appraisal document.) However, given the inequities in land distribution, the risks were worth taking. The Bank’s approach was innovative and, if the project succeeded, there would likely have been a high payoff through replication in other countries. There were, however, a number of design weaknesses (see paragraphs above) and, given the need for thorough evaluation to build a case for market-assisted land reform, the absence of any provision for baseline and follow-up surveys was a major oversight. On the other hand, preparation fully addressed environmental concerns and there was careful screening to ensure that land transfers did not involve protected areas or natural savannas.

9.2 The relevance of project design was rated modest (paragraph 3.14 above) and consistent with that rating quality at entry is rated moderately satisfactory.

Supervision

9.3 Two QAG reviews rated supervision satisfactory. There were two task managers in the course of implementation and supervision missions were staged regularly every six months. The Bank organized study tours to Brazil and Honduras to inform project and Fontierras staff about the design and performance of similar projects.

9.4 During supervision the Bank had limited leverage over the operation of Fontierras. The completion report said that, “the Bank provided external and internal (i.e., Bank staff) experts to assist the Board [of Fontierras] in defining policy changes that would address perverse incentives in the processing of land access credits…One of the key changes was the establishment of a ceiling for overall financial assistance per family.” But IEG was unable to obtain from Fontierras any documentary evidence of this putative change in lending procedures; and a close review of the financing packages provided per family failed to show any trend for the land purchase component to diminish over time, either in absolute terms or relative to the farm development and other elements of the package. IEG sought but was unable to obtain confirmation from Fontierras of the following statement in the completion

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202. “Support for Peace Initiatives. The Bank is actively supporting the peace process in close interaction with the UN. This has involved providing technical advice to the mediation team on financing issues and technical and institutional issues associated with selected peace accords (indigenous, socioeconomic and agrarian topics). Implementation of these accords will provide enhanced access by the poor and indigenous communities to land, productive assets and basic social services. The Bank is also doing some preparatory work to mobilize donor support for eventual implementation of a Peace Plan, beginning by convening an Informal Donors Meeting in Paris in June 1995” (World Bank, 1995b, p. 9).
report: “The Bank's mid-term review, implemented as an in-depth and virtual "reappraisal" of the project, led to the formulation of fundamental recommendations for policy changes that were discussed with the Fontierras Board; these reforms were eventually adopted by Fontierra.”

9.5 Also, the supervision reporting process did not refer to the various incidents of corruption involving Fontierras, knowledge of which was widespread in Guatemala. For example, in the final phase of implementation, investigations began that ultimately culminated in a Fontierras internal audit finding that ex-functionaries were involved in irregularities in processing contracts to design productive projects for two of the properties purchased. Also, there is no evidence that the supervision effort detected and highlighted the poor quality and inadequacy of the technical assistance provided, and the risks to sustainability due to non-repayment of loans.

9.6 Supervision performance is therefore rated moderately unsatisfactory.

Overall Rating

9.7 Following IEG-OPCS convention, the outcome ratings determines whether the two sub-ratings of Bank performance are averaged up or down. Given that in this case outcome was rated in the unsatisfactory range the overall rating for Bank performance is rated moderately unsatisfactory.

Borrower Performance

Government

10.1 Government was strongly committed to the project during the preparation process, considering that improving the poor’s access to land was a vital part of the Peace Accords mandate. This commitment was reflected in the Borrower’s agreement to bear 70 percent of the project cost; a necessity given that the Bank was not permitted at that time to finance the land purchase component of the project. The institutional framework that government set up (with PROTIERRA as the apex agency) was sound. However, there was an eighteen-month lag between approval of the project by the Bank’s Board and loan effectiveness which may have been linked to a falling-off in commitment (although delays occasioned by the election cycle were also to blame).

10.2 Fontierras was run by a Board representing the full spectrum of interests, from commercial farmers to peasant and indigenous organizations. On the one hand, the governance arrangements have been criticized because the Board was not sufficiently independent: some have argued that because it was chaired by the Ministry of Agriculture it was too beholden to the commercial farm lobby. On the other hand, it could be argued that government was too “hands off” in relation to the Fontierras Board, failing to intervene expeditiously when the reports about corrupt dealings involving staff and Board

206. Prensa Libre (Guatemala), December 23, 2005; see Appendix D, Table D2 for more details.
representatives first surfaced (see Appendix D, Table D2). There was a serious loss of leadership continuity: the Ministry of Agriculture changed six times during project implementation.

10.3 The government did little to support policies and operations complementary to the land purchase program. For example, the need to strengthen the framework for agricultural research and extension was not addressed. Also, the completion report notes that the government could have introduced “transparent policies on land expropriation—with fair compensation” in order to increase the supply of land on the market. In the absence of these accompanying policy interventions, the Project had to confront a situation of excess demand on its services, increased political intervention, and continuous upward pressure on the price of land purchased through Fontierras.\footnote{World Bank (2006), p. 11.}

10.4 According to the 2005 Country Assistance Strategy Completion Report there was a “lack of government commitment during 2000-2003 to aspects of the reform agenda laid out in 1998.” The waning of government commitment to the Fontierras land purchase program was partly associated with the change of administration in 2004 and was underscored by the government’s decision not to proceed with the second phase of the program it had originally signed up to.\footnote{World Bank (2006), p. 11.} The government was slow to address the issue of Fontierra’s long-term financial needs and failed to provide leadership on the matter of cleaning up the Fontierras portfolio.

10.5 Government performance is rated \textit{moderately unsatisfactory}.

\textbf{Implementing Agency}

10.6 The completion report notes that the project coordinating unit in Fontierras discharged its responsibilities satisfactorily. “The fact that the project exceeded its original targets with respect to beneficiaries and investments in productive subprojects may be attributed to the effectiveness of the PCU”.\footnote{World Bank (2006), p. 15.} Financial management was generally satisfactory. But IEG came across allegations from various sources about corrupt dealings involving Fontierras staff, including one General Manager who resigned in 2005 (see Appendix D, Table D2). Although the ICR says that there was leadership continuity, by the time of IEG’s visit Fontierras had had 12 General Managers in the previous ten years. There were apparently frequent tensions between the GM and the Fontierras Board.

10.7 The performance of the implementing agency is rated \textit{moderately unsatisfactory}.

\textbf{Overall Rating}

10.8 Overall, Borrower performance is rated \textit{moderately unsatisfactory}.
Appendix A. Basic Data Sheet

GUATEMALA - Land Fund Project (Loan No. 4432)

Key Project Data (amounts in US$ million)

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Project Dates

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<td>8.8</td>
<td>42.6</td>
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<tr>
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<td>212.4</td>
<td>1,111.6</td>
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Mission Data

<table>
<thead>
<tr>
<th>Stage of Project Cycle</th>
<th>No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.)</th>
<th>Performance Rating</th>
</tr>
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<tr>
<td>Month/Year</td>
<td>Count</td>
<td>Specialty</td>
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<tr>
<td>Identification/Preparation</td>
<td>06/01/1997</td>
<td>TTL (1) ; AGRICULTURALIST (1)</td>
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<tr>
<td>Appraisal/Negotiation</td>
<td>10/13/1998</td>
<td>TTL (1) ; SOC. SCIENTIST (2); FIN. MGT. SPEC. (2); ECONOM. (1); OPER. OFFICER (2); PROCUREMENT OFFICER (1); LAND SPEC.</td>
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## Mission Data

<table>
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<tr>
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<tbody>
<tr>
<td>05/21/1999</td>
<td>4</td>
<td>TTL (1); FIN. MGT. SPEC. (1)</td>
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<td>S</td>
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<tr>
<td>04/28/2000</td>
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<td>S</td>
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<td>TTL (1); CONSULTANT (1)</td>
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<td>04/21/2001</td>
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<td>TTL (1); CONSULTANT IN LAND ADMIN. (1)</td>
<td>S</td>
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<tr>
<td>09/15/2001</td>
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<td>TTL (1); PROC. SPEC. (1); FIN. SPEC. (1)</td>
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<tr>
<td>02/17/2002</td>
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<td>TT; (1); ENV. SPEC. (1); SOC. SPEC. (1);</td>
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<tr>
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<td>TTL (1); LAND ADMIN. SPEC. (1); POVERTY SPEC. (1)</td>
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<td>10/23/2003</td>
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<td>TTL (1); LAND ADM. SPEC. (1); PROC. SPEC. (1)</td>
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<td>S</td>
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<tr>
<td>02/18/2004</td>
<td>6</td>
<td>TTL (1); SOC. SPEC. (1); COMMUN. SPEC. (1); REFINANCING SPEC. (1); PROC. SPEC. (1); M&amp;E (1)</td>
<td>S</td>
<td>S</td>
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<tr>
<td>10/28/2004</td>
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<td>TTL (1); ECONOMIST (1)</td>
<td>S</td>
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<tr>
<td>05/06/2005</td>
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<td>TTL (1); ECONOMIST (1)</td>
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### ICR

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<th>S</th>
</tr>
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<tbody>
<tr>
<td>08/08/2005</td>
<td>2</td>
<td>TTL (1); ECONOMIST (1)</td>
<td>S</td>
<td>S</td>
</tr>
</tbody>
</table>
Appendix B. Persons Interviewed

Registro de Información Catastral
Eddy Díaz Visquerra, Gerente de Programación y Cooperación Internacional
José Rodolfo Aspuaca Aspuac, Coordinador Departamental de Petén
Fernando Amilcar Boiton Velásquez, Gerente Técnico
Héctor Oliva, Especialista en Catastro
Carlos Archila, Coordinador, Proyecto de Administración de Tierras, Fase II

Registro General de Propiedad
Adolfo Alarcón M., Director de Coordinación Catastral
Edgar Márquez, Encargado, Oficina de Petén
Carlos Guillermo Herrera M., Consultor

Fondo de Tierras
Luis Fernando Peña, Gerente General
Edgar De León, Cooperación Externa
Luis Felipe Méndez, Coordinador, Unidad de Planificación
Mario Rodolfo Paiz García, Coordinador, Área de Asistencia Técnica
Carlos Alberto Zamora Herrarte, Coordinador, Unidad de Créditos
René Orlando Muñoz, Asistente de Coordinación, Área Socioeconómica
Bernardo Vásquez, Coordinador Ejecutivo, Programa Especial de Arrendamiento de Tierras
Erick E. Castellanos Romero, Encargado, Oficina de Flores, Petén

Other Agencies
Max Molina, Director de Incidencia y Cabildeo, Secretaría de Asuntos Agrarios
Jorge Luis Morales, Subdirector Financiero, Secretaría de Asuntos Agrarios
José Paul López Estrada, Monitoreo y Evaluación, Secretaría de Asuntos Agrarios
Erick González, Director de Operaciones, Secretaría de Asuntos Agrarios
Jaime Roberto Mejía Salguero, Subgerente Técnico, Instituto Nacional de Estadísticas
Carlos Mancia Chua, Asesor Técnico, Censos y Encuestas, Instituto Nacional de Estadísticas
Rómulo Dímas Gramajo Lima, Viceministro de Ganadería, Ministerio de Agricultura y Ganadería
Luis Joel Fernández Rojas, Director de Fideicomisos, Banrural
Carlos René Caal, Alcalde Municipal, Flores, Petén
Carlos Morales, Coordinador General, Coordinadora Nacional de Organizaciones Campesinas
Helmer Velásquez, Director Ejecutivo, Coordinación de ONG y Cooperativas
Susana Gauster, Coordinadora, Instituto de Estudios Agrarios y Rurales, Coordinación de ONG y Cooperativas
Alberto Alonso Fraadejas, Responsable de Estudios, Instituto de Estudios Agrarios y Rurales, Coordinación de ONG y Cooperativas
Eliseo Pérez Mejía, Subcoordinador, Coordinadora Nacional Permanente sobre Derechos relativos a la Tierra de los Pueblos Indígenas
René Chacón, Coordinadora Nacional Permanente sobre Derechos relativos a la Tierra de los Pueblos Indígenas

**Fontierras beneficiaries**
From the following farms:
San Benito, Genoa Costa Cuca, Quetzaltenango*; El Tesoro y Anexos, San Antonio, Suchitepéquez*; San Bernardino, Chimaltenango; El Rejón, Sumpango, Sacatepequez; La Florida, Taxisco, Santa Rosa; Alianza, El Palmar, Quetzaltenango; La Fe y Chantel, Reforma, San Marcos; Santa Teresa, Tucuru, Alta Verapaz; Horizonte y Esquipulas, Santa Ana, Petén; El Huacutual, San Andrés, Petén; Cooperativa Los Limones, Dolores, Petén; Las Mercedes y Pacoc, Grande; Panzamola II, San Pedro Carcha, Alta Verapaz (*interviewed during field visits; beneficiaries from the other farms were interviewed at the Exposición de Emprendedores Rurales del Fondo de Tierras, Guatemala City, on 30 November 2009.)

**World Bank**
Anabela Abreu, Country Manager, World Bank, Guatemala City
Fernando Paredes, Operations Officer, World Bank, Guatemala City
Cora Melania Shaw, Senior Agriculture Economist, World Bank, Washington DC
Jorge A. Muñoz, Lead Rural Development Specialist, World Bank, Washington DC
Enrique Pantoja, Senior Land Administration Specialist, World Bank, Washington DC
Klaus Deininger, Lead Economist, World Bank, Washington DC
## Appendix C. Supplementary Tables

### Table C1: Fontierras Land Reform Program: Hectares Purchased and Cost Components in Current US$

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Ha</th>
<th>Credit, $</th>
<th>Grant, $</th>
<th>Overhead, $</th>
<th>Credit/Ha</th>
<th>Grant/Ha</th>
<th>Overhead/Ha</th>
<th>Total/Ha</th>
</tr>
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<tbody>
<tr>
<td>2000</td>
<td>17,276</td>
<td>8,269,410</td>
<td>5,403,860</td>
<td>375,846</td>
<td>479</td>
<td>313</td>
<td>22</td>
<td>813</td>
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<tr>
<td>2001</td>
<td>26,793</td>
<td>28,284,085</td>
<td>14,081,550</td>
<td>608,945</td>
<td>1,056</td>
<td>526</td>
<td>23</td>
<td>1,604</td>
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<tr>
<td>2002</td>
<td>8,481</td>
<td>12,150,030</td>
<td>5,956,188</td>
<td>2,331,326</td>
<td>1,433</td>
<td>702</td>
<td>275</td>
<td>2,410</td>
</tr>
<tr>
<td>2003</td>
<td>8,987</td>
<td>10,710,017</td>
<td>7,499,287</td>
<td>2,116,655</td>
<td>1,192</td>
<td>834</td>
<td>236</td>
<td>2,262</td>
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<tr>
<td>2004</td>
<td>6,150</td>
<td>7,376,140</td>
<td>6,412,051</td>
<td>1,957,831</td>
<td>1,199</td>
<td>1,043</td>
<td>318</td>
<td>2,560</td>
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<tr>
<td>2005</td>
<td>6,017</td>
<td>4,183,122</td>
<td>4,080,167</td>
<td>1,566,593</td>
<td>695</td>
<td>678</td>
<td>260</td>
<td>1,634</td>
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<tr>
<td>2006</td>
<td>743</td>
<td>843,332</td>
<td>1,076,361</td>
<td>1,536,074</td>
<td>1,135</td>
<td>1,449</td>
<td>2,068</td>
<td>4,653</td>
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<tr>
<td>2007</td>
<td>1,903</td>
<td>1,837,393</td>
<td>1,872,360</td>
<td>1,714,756</td>
<td>965</td>
<td>984</td>
<td>901</td>
<td>2,850</td>
</tr>
<tr>
<td>2008</td>
<td>3,266</td>
<td>1,578,913</td>
<td>1,760,262</td>
<td>1,774,298</td>
<td>483</td>
<td>539</td>
<td>543</td>
<td>1,566</td>
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<tr>
<td>2009</td>
<td>343</td>
<td>410,380</td>
<td>462,138</td>
<td>1,264,919</td>
<td>1,196</td>
<td>1,346</td>
<td>3,685</td>
<td>6,227</td>
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Source: Fontierras

Data for 2009 are until 30 November only.
<table>
<thead>
<tr>
<th>Date</th>
<th>Source</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003 Jul 07</td>
<td>Prensa Libre</td>
<td>Alleged corrupt purchasing of overpriced farms using FONTIERRAS credit (Finca La Cresta, El Estor, Izabal; and Finca El Desconsuelo, Cahabon, Alta Verapaz).</td>
</tr>
<tr>
<td>2003 Nov 29</td>
<td>Prensa Libre (Editorial)</td>
<td>A commentator reflects on overpricing of farms purchased with FONTIERRAS credit and other alleged evidence that the scheme to buy land is not working.</td>
</tr>
<tr>
<td>2004 Mar 22</td>
<td>Prensa Libre</td>
<td>Alleged corrupt deals between FONTIERRAS officials and landowners to sell farms at inflated prices using bogus documents (Finca Los Andes, San Luis, Petén); FONTIERRAS sets up Comision de Control y Verificacion to investigate alleged anomalies.</td>
</tr>
<tr>
<td>2004 Jun 19</td>
<td>Prensa Libre</td>
<td>Productive farms purchased with FONTIERRAS credit using export earnings to pay off debt (Finca Santa Isabel, Patulul, Suchitepequez).</td>
</tr>
<tr>
<td>2004 Aug 02</td>
<td>Prensa Libre</td>
<td>FONTIERRAS issues a gender equity policy.</td>
</tr>
<tr>
<td>2004 Oct 11</td>
<td>Prensa Libre</td>
<td>Lack of adequate housing for FONTIERRA reform beneficiaries (Finca Venezuela, La Reforma, San Marcos); 50 bamboo houses built—although FONTIERRAS credits do not as a rule finance housing.</td>
</tr>
<tr>
<td>2005 Dec 13</td>
<td>La Hora</td>
<td>Allegations of corruption against FONTIERRAS General Manager (following his resignation); irregularities in contracts to design productive projects for 2 farms in Alta Verapaz (Finca El Arenal and Finca Panquib).</td>
</tr>
<tr>
<td>2005 Dec 23</td>
<td>Prensa Libre</td>
<td>FONTIERRAS internal audit finds that ex-functionaries were involved in irregularities in processing contracts to design productive projects for Finca El Arenal and Finca Panquib (see previous item).</td>
</tr>
<tr>
<td>2006 Feb 27</td>
<td>Prensa Libre</td>
<td>Allegations that FONTIERRAS credits are used to buy ‘phantom’ or overpriced farms; allegations that a FONTIERRAS functionary tried to buy and sell the archaeological site of Cancuen, Sayaxche, Petén to Vanderbilt University, USA; Constitutional Court rules in favor of a landowner in San Luis, Peten who claims that his farm was sold by FONTIERRAS even though he had not put it up for sale; a similar incident involved suspension of the sale of Finca Los Andes, Izabal; no rotation of representatives of peasant and indigenous organizations on FONTIERRAS Consejo Directivo, contrary to the rules.</td>
</tr>
<tr>
<td>2006 Apr 12</td>
<td>Prensa Libre</td>
<td>Government cancels its support to indigenous and peasant organization (CONIC) for alleged use of FONTIERRAS credit to buy overpriced farms.</td>
</tr>
<tr>
<td>2006 Jun 19</td>
<td>Prensa Libre</td>
<td>Allegations that narcotraficantes work through FONTIERRAS to regularize properties in protected areas (Petén); threat to Waka Peru archaeological site in Petén, which falls within land regularized by an alleged narcotraficante.</td>
</tr>
<tr>
<td>2006 Jul 03</td>
<td>El Periodico</td>
<td>Allegations that FONTIERRAS purchased farm (El Desconsuelo) at an overvalued price from a known fraudster in 2001 (see item for 2003 Jul 07 above).</td>
</tr>
<tr>
<td>2006 Jul 11</td>
<td>Prensa Libre</td>
<td>So far FONTIERRAS has spent only Q3 million of the Q147 million allocated to it from this year’s government budget and has purchased only 1 of the 25 farms that it forecast to buy in 2006.</td>
</tr>
<tr>
<td>2006 Nov 11</td>
<td>Prensa Libre</td>
<td>The government seized nine farms in Petén that were falsely registered, with alleged complicity of FONTIERRAS and Registro General de la Propiedad (follows up on item for 2006 Jun 25).</td>
</tr>
</tbody>
</table>
Table C2: Items on FONTIERRAS in the Guatemala Press

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>2007 Aug 12</td>
<td>Prensa Libre</td>
<td>Group of nine families obtained a FONTIERRA credit to buy land which they are successfully paying off by exporting vegetables to the USA (Finca San Juan, Patzun, Chimaltenango).</td>
</tr>
<tr>
<td>2007 Aug 22</td>
<td>Prensa Libre</td>
<td>Group of 92 families obtained a FONTIERRA credit to buy land which they are successfully paying off by producing non-traditional products for export (El Rejon, Sumpango, Sacatepequez).</td>
</tr>
<tr>
<td>2009 Jan 09</td>
<td>La Hora</td>
<td>30 percent of families that have received FONTIERRAS credit to buy land have abandoned their farms because they were less productive than expected (particularly in the departments of Quetzaltenango, San Marcos and the Verapaces); in response to abandonment, the remaining inhabitants of 80 farms are renegotiating their debt with FONTIERRAS; the cases of Finca El Desconsuelo (see item for 2003 Jul 07) and Finca Suchi III, Puerto Barrios, Izabal (bought in 1998-2000) are cited as cases of unpromising farms purchased by FONTIERRAS at an excessive price.</td>
</tr>
<tr>
<td>2009 Jan 09</td>
<td>Prensa Libre</td>
<td>FONTIERRAS manager requests extension of government funding for a further 10 years at least.</td>
</tr>
<tr>
<td>2009 Mar 12</td>
<td>Siglo XXI</td>
<td>Most of the beneficiaries of lands regularized by FONTIERRAS in 39 communities of Petén have sold their lands (some to narcotraficantes), says a peasant leader from Poptun, Petén.</td>
</tr>
<tr>
<td>2009 Nov 25</td>
<td>Prensa Libre</td>
<td>Thousands of peasant farmers blocked highways in western Guatemala to pressure government to change the law in order to obtain more FONTIERRAS funding for land leases.</td>
</tr>
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</table>

Table C3: State of Fontierras Land Reform Portfolio, 31 October 2009

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<tr>
<th>Disbursements</th>
<th>Farms</th>
<th>Families</th>
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</thead>
<tbody>
<tr>
<td>Farm paid off: entirely with grant</td>
<td>Q30.7 m.</td>
<td>5%</td>
</tr>
<tr>
<td>Farm paid off: part with grant, part with beneficiary contribution</td>
<td>Q39.6 m.</td>
<td>6%</td>
</tr>
<tr>
<td>Payments made, up-to-date</td>
<td>Q132.8 m.</td>
<td>20%</td>
</tr>
<tr>
<td>No payments yet due (grace period)</td>
<td>Q40.4 m.</td>
<td>6%</td>
</tr>
<tr>
<td>Some payments made but overdue</td>
<td>Q143.7 m.</td>
<td>21%</td>
</tr>
<tr>
<td>No payments made, overdue</td>
<td>Q264.9 m.</td>
<td>39%</td>
</tr>
<tr>
<td>Disputes, other cases</td>
<td>Q23.4 m.</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Q675.5</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Fontierras
References


Burns, T.A. (2007), Land Administration: Indicators of Success and Future Challenges, Agriculture and Rural Development Department, World Bank, Washington, DC.


FAO (2007), Good Governance in Land Tenure and Administration, Land Tenure Studies No. 9, Rome.


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