



**RE-352**

**COUNTRY PROGRAM EVALUATION:  
GUATEMALA (2004-2007)**

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*Office of Evaluation and Oversight, OVE*

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## ABBREVIATIONS

AED	Academy for Educational Development
AMSA	Autoridad para el Manejo Sustentable de la cuenca y el lago Amatitlán [Authority for Sustainable Management of Lake Amatitlán and its Basin]
ASIES	Asociación de Investigación y Estudios Sociales [Social Research and Studies Association]
BANGUAT	Banco de Guatemala [Central Bank of Guatemala]
BCS-GU	Bank country strategy with Guatemala
CABEI	Central American Bank for Economic Integration
CAFTA-DR	Dominican Republic- Central America-United States Free Trade Agreement
CEA	Country Environmental Analysis
CEMEC	Centro de Monitoreo y Evaluación [Monitoring and Evaluation Center]
CEPIS	Centro Panamericano de Ingeniería Sanitaria y Ciencias del Ambiente [Pan American Center of Sanitary Engineering and Environmental Sciences]
CIACS	cuerpos ilegales y aparatos clandestinos de seguridad [illegal groups and clandestine security apparatuses]
CIGIC	Comisión Internacional contra la Impunidad en Guatemala [International Commission against Impunity in Guatemala]
CNEE	Comisión Nacional de Energía Eléctrica [National Electric Power Commission]
CONAGUA	Comisión Nacional de Agua [National Water Commission]
CONAMA	Comisión Nacional del Medio Ambiente [National Environment Comisión]
COVIAL	Unidad Ejecutora de Conservación Vial [road conservation execution unit]
CPE	Country Program Evaluation
DFID	United Kingdom Department for International Development
DGC	Dirección General de Caminos [Directorate General of Highways]
ECLAC	Economic Commission for Latin America and the Caribbean
ENCOVI	Encuesta Nacional sobre Condiciones de Vida [national standard of living survey]
FAO	Food and Agriculture Organization of the United Nations
FUSADES	Fundación Salvadoreña Para el Desarrollo Económico y Social [Salvadoran Foundation for Economic and Social Development]
IARNA	Instituto de Agricultura, Recursos Naturales y Ambiente [Agriculture, Natural Resources, and Environment Institute]
IBRD	International Bank for Reconstruction and Development
ICEFI	Instituto Centroamericano de Estudios Fiscales [Central American Tax Studies Institute]
IDAEH	Instituto de Antropología e Historia [Institute of Anthropology and History]

IETAAP	Impuesto Extraordinario y Temporal de Apoyo a los Acuerdos de Paz [special temporary tax to support the Peace Accords]
IFAD	International Fund for Agricultural Development
IGSS	Instituto Guatemalteco de Seguro Social [Guatemalan Social Security Administration]
IMF	International Monetary Fund
INAB	Instituto Nacional de Bosques [National Forest Administration]
INCAE	Instituto Centroamericano de Administración de Empresas [Central American Business Administration Institute]
INDE	Instituto Nacional de Electrificación [National Electrification Administration]
INFOM	Instituto de Fomento Municipal [Municipal Development Administration]
INV	investment loan
MAGA	Ministry of Agriculture
MFP	Ministry of Public Finance
MIF	Multilateral Investment Fund
MINEDUC	Ministry of Education
MSPAS	Ministry of Public Health and Social Welfare
NGO	nongovernmental organization
OPEC	Organization of the Petroleum Exporting Countries
PAHO	Pan American Health Organization
PARPA	Programa de Apoyo a la Reconversión Productiva Agroalimentaria [program to support restructuring of food and agriculture production]
PBL	policy-based loan
PBP	programmatic policy-based loan
PCR	Project Completion Report
PPP	Purchasing power parity
PPMR	Project Performance Monitoring Report
PRODEV	Program to implement the external pillar of the medium-term action plan for development effectiveness
PRONADE	Programa Nacional de Autogestión para el Desarrollo Educativo [national community-managed program for educational development]
PRONERE	Programa Nacional de Evaluación del Rendimiento Escolar [National Educational Attainment Evaluation Program]
RBM	Reserva de la Biósfera Maya [Maya Biosphere Reserve]
SAT	Superintendencia de Administración Tributaria [Office of the Superintendent of Tax Administration]
SEGEPLAN	Planning and Programming Department of the Office of the President
SIGOB	Sistema de Programación y Gestión de Gobierno [government programming and management system]
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAT	Value-added tax
WRI	World Resources Institute

## EXECUTIVE SUMMARY

This country program evaluation is intended to examine the relations that the Bank established with Guatemala during the period 2004-2007 in terms of results, in order to extract lessons for establishing a future strategic partnership that will be as productive constructive as possible for the country's development. For the Bank, as a development institution, a successful strategic partnership is one that produces—through its programs and projects—a flow of future benefits of a value that clearly exceeds the financial and nonfinancial costs that its lending activities involve for the country. With the 2004-2007 country strategy that laid out the strategic partnership during the period as a framework, this evaluation discusses its relevance for attaining the proposed results, examines operational efficiency in executing the loans and the main technical-cooperation projects carried out during the period, and concludes by evaluating whether or not they achieved the expected results.

The evaluation covers the period 2004-2007, which reflected the bright and dark sides of the country's social and economic evolution. The economy grew at more than 4% a year on average, and the rates of 4% and 6.3% in 2006 and 2007, respectively, represent the fastest growth in the country's recent economic history. The economic and social policies of the period 2004-2007 were not sufficient to significantly expand the economic and social opportunities of the majority of Guatemalans. According to data pending publication from the World Bank's Poverty Evaluation (GUAPA, 2008), Guatemala has improved its Gini coefficient from 47.6 in 2000 to 44.8 in 2006 although the levels continue to be troubling and are among the highest in Latin America. The percentage of people living in poverty fell from 57% to 52% over the same period but the extreme poverty indicator remained unchanged at 15% (27% for indigenous people).

The diagnostic assessments in the 1996 Peace Accords that linked the social, economic, legal, and political exclusion of the majority of the population to political instability continue to be valid. In recent years, the situation has been compounded by different factors that lie at the root of the violence and that impede progress toward peace. The Bank's diagnostic assessments indicate that since 1996, violence has increased gradually and its origins have diversified, affecting social cohesion and limiting some of the country's opportunities for economic and social development. The violence affects Guatemala's formal economy and public services, according to studies on this subject indicating that violence inhibits private investment, makes production and transportation more expensive, discourages tourism, absorbs part of the social budget, puts pressure on public and private security systems, and influences public decision making. Establishment of the International Commission against Impunity in Guatemala (CICIG) in 2007 was a bold step by the government to combat these worrying trends and an acknowledgement of their gravity to the international community.

This evaluation of the IDB's program with Guatemala represents a second review by OVE of the Bank's strategic partnership with the country. The previous evaluation (1993-2003) pointed out a series of concerns relating to the historic relationship, which can be summarized as: (i) the fragmented strategies and their lack of evaluability; (ii) the use of structures parallel to those of the State for project execution; and (iii) shortcomings in the

Bank's supervision process, particularly in fiduciary aspects, and limitations on the possibility of analyzing the results finally obtained. In tracking the recommendations arising from these concerns, for the period 2004-2007 this evaluation finds: (i) higher evaluability of the 2004-2007 country strategy results framework (evaluability index of 0.81/1) although the programming was unrealistic since in many cases it was not validated by effective country demand (anticipation index of 0.42/1); (ii) persistent use of parallel structures and execution units; (iii) some efforts to improve supervision of investment projects by the Bank, although their share of disbursements has fallen to less than 50% of the total during the period, replaced by larger disbursements of unrestricted loans (policy-based loans (PBLs) and programmatic PBLs).

The 2004-2007 strategy with the country was an ambitious proposal both in terms of the number of *relevant* sectors in which action was proposed and in terms of the expected results of the Bank's contribution in the context of the country's policies. The Bank proposed loans for many sectors, ranging from policy reform in the three branches of government to reforms of the main social policies (education, health care), fiscal reform, strengthening of capital for infrastructure (transportation, water, electricity), support for the export sector under CAFTA-DR, and a portfolio of sustainable development programs. The technical-cooperation projects were scattered, with multiple small projects and multiple beneficiary agencies. In practice, the relevance of the Bank's programming was limited by the materialization of the political and fiscal risks identified in the strategy itself, although it was also affected by the limited contribution to the development objectives initially proposed of the technical-cooperation projects and loans that the Bank did carry into action. The following paragraphs explain this conclusion.

With regard to the risks of the strategy, although Bank Management correctly identified as risks the difficulties in obtaining the support of a splintered Congress and the corresponding difficulties in expanding fiscal leeway, the mitigation measures envisaged, including support for consensus building and modernization of Congress, were only partially effective. The strategy reflected a financial wager that the *Fiscal Pact* would be consolidated, which was supposed to confer considerably more capacity and fiscal maneuvering on the public sector than in the past, in which the Bank intended to play a significant role. Since the *Fiscal Pact* was not fully implemented owing to the constraints inherent in the economics of the reforms, the viability of the government's program and hence of the Bank's program for the period was limited. Given the larger-than-anticipated constraints, the makeup of the portfolio shifted to unrestricted loans, which went hand-in-hand with a series of sizeable cancellations of investment loans, allowing for earmarked expenditures to be unobligated.

With regard to the strategy's development objectives, the 2004 country strategy proposal reflects the general view of the 1996 Peace Accords, establishing *poverty reduction as a basic condition for building a firm and lasting peace that will allow for full participation of the population in the process of economic and social development* (document CP-2877). The relevance of the strategy with respect to its objective of contributing to building peace was limited. Despite the escalating violence and its impact on the economy and society, the strategy did not provide for mitigation measures in that area nor did its diagnostic assessment consider the possible implications of that violence as a

limiting factor in the areas of competitiveness, social development, and improved governance. The only intervention proposed by the Bank in the area of citizen security—which was never disbursed—focused on the social and cultural drivers of violence, even though other factors related to different forms of international organized crime had gained in importance. Second, the relevance of the strategy with respect to its central objective of reducing poverty and exclusion was basically contingent upon an intervention model that equated an increase in the coverage of public services with a direct impact on poverty reduction. The present evaluation has found no evidence of a positive contribution by the Bank to an approach based on the *quality* of services and has found inconsistencies in its support for the *institutional framework models* selected, which has limited its potential for making a significant contribution to the objective of reducing poverty and exclusion.

The results achieved by the Bank's programs during the period have been diverse for sector and investment loans alike. Some of the main conclusions on achievement of the results of these programs are presented below.

The programmatic sector loan and the technical-cooperation projects to support *fiscal administration* helped to boost efficiency in the Office of the Superintendent of Tax Administration (SAT) but the interventions were only partially effective with respect to the objective of increasing government revenues as a percentage of GDP. Faced with this challenge, which was considered fundamental for strengthening the basic competencies of the government and improving the quality of public services, the conditioning of the policy reform loans intended to offer support were complied with but those conditions were unable to bring about the necessary and sufficient changes in the system or the tax code, as initially planned. In its portfolio review of 2006, Bank Management attributes the limited results in this field to "*aspects beyond the Bank's control*" but the evaluation shows that compliance with the set of conditions for the policy reform loan defined during its preparation was insufficient to attain the revenue collection goals despite the relative economic boom. The Bank's technical-cooperation project to build consensus to proceed with these reforms was not successful in obtaining a base of agreements that was broad enough to produce a fundamental rethinking of the role of government in the economy and society.

The sector loan to improve *social spending* partially achieved the program's planned results of better targeting of that spending. Although the level of targeting has improved recently, disaggregated budget information from the Ministries of Education and Health indicates that the departments with the largest percentages of their population in the prioritized municipalities did not receive a substantial increase in the percentage of resources. Compliance with all the conditionalities of the policy-based loan did not make for significant changes in the coordination of social policies or in the stewardship of the line ministries' regular programs.

The results of the investment projects that were financed were not as expected in many cases. In this type of loan, several of the intervention models that were promoted experienced limitations relating to the *quality* of the services provided and to the support for changes in sector *institutional frameworks*. In the different programs, the Bank has supported processes that were insufficient to promote more consistent progress in the

institutional reforms over time, which would have provided a better shield against potential reversals of the progress made. The following examples support this general conclusion.

In *health care*, the Bank's program supported a sizeable expansion in preventive care for groups that had previously been excluded. Despite favorable results, the impact evaluation suggests that it did not have an influence on final indicators, such as the infant mortality rate, that could be considered statistically significant. The model it promoted, which involved services provided by nongovernmental organizations (NGOs), brought along its own technical ceiling on the incorporation of other levels of service, and the outsourcing of services was not accompanied by the institutional support necessary to coordinate the health care system as a whole or to provide services in a more comprehensive manner.

In *justice*, the program to support the sector in rural areas achieved its goals to increase coverage but did not improve the case resolution rate. In a second operation, the Bank tried to address the changing dynamics of the shift of violence towards the cities, with somewhat of a timelag, through a proposed loan that has not reached the disbursement stage. The promoted approach of the Bank's programs involving interagency coordination without creating new entities is out of step with the preference expressed by the government for supranational verification by the CICIG, based on a diagnostic assessment that the government's capacity has been overwhelmed.

In *municipal development*, the results of promoting more equitable and efficient arrangements for the delivery of municipal services were limited. The activities of the program with the Municipal Development Administration (INFOM) did not include work with the more disadvantaged municipios, as was initially envisaged in the program, and there is no evidence of the differential impact of the accreditation processes of some large municipios. As for the definition of municipal service competencies, interventions that conferred a substantive lead role on INFOM coexisted with programs that excluded it from the administration of municipal water and sanitation services, without these movements away from and closer to INFOM apparently responding to a strategic proposal for the sector, which is still to be produced.

In the *environmental sector*, the final results of natural resource conservation and preservation of the cultural heritage in Petén and the Upper Lempa River Basin were limited, although development indicators moved in a positive direction (number of tourists, agroforestry production). The activities promoted as pilot projects were not large enough to contribute significantly to the ambitious environmental objectives originally envisaged. In Petén, the Bank's supervision was unable to resolve disputes relating to the quality of the restoration and compliance with accepted international standards, in a manner consistent with the objective of preserving the cultural heritage.

In conclusion, the results obtained were diverse. In some cases, the projects contributed to increasing service coverage (e.g. health care and justice), although this was not reflected in an improvement in impact indicators. There were also design problems, reflected in an inadequate assessment of the relationship between the State and nongovernmental actors, as well as other institutional constraints. These problems explain



the gap existing between the ambitious expectations laid out in the strategy and the concrete results obtained, in the case of sector loans as well as investment loans.

The Bank's operational relationship with the country during the period under evaluation is fundamentally explained by a preference for unrestricted financing, which came to make up 52% of total approvals in the period and accounted for over 64% in 2008. This relationship has required less interaction with the Bank in the monitoring and control of investments and disbursements. Also, in recent years, Guatemala has tended to turn to financing from the Central American Bank for Economic Integration (CABEI) for investment projects, particularly for infrastructure, given that CABEI is more innovative and flexible in its modus operandi. In this context, the proposal in the Bank's strategy to contribute to strengthening fiduciary aspects of national systems did not have a corresponding emphasis in practice, since it was limited to diagnostic studies undertaken together with the World Bank (Country Procurement Assessment Report and Country Financial Accountability Assessment) to facilitate access to more flexible multilateral lending instruments, and some modest technical-cooperation projects to move ahead in some aspects of financial administration. In strengthening national systems, the program to implement the external pillar of the medium-term action plan for development effectiveness (PRODEV) is credited with having helped to place management by results on the country's agenda, although much remains to be done in the area of planning and budgeting decisions and public management by results. Contrary to OVE's fiduciary recommendations, during the period under evaluation, the IDB did not carry out any operation that focused on strengthening public procurement.

Today, Guatemala, like most countries in the region, is being affected by the global financial crisis on account of the repercussions the crisis is having on its main trading and investment partners, and its impact on remittances, which has direct economic and social consequences. The latest forecasts estimate a slowdown in economic growth to 4% in 2008 and 3.5% in 2009. A context of this type can be expected to have a negative impact on the government's limited capacity to collect tax revenue over the next few years, with a simultaneous increase in gross financing needs on account of the potential worsening of existing development and inequality issues.

Based on the experience of recent years and keeping in mind the supervening factors, the present evaluation calls for a frank and realistic partnership to be developed, particularly given the impact of the international crisis, paying attention to the cost-benefit ratio of each loan and not losing sight of longer-term needs in the fiscal area and reform of the State to address economic and social challenges. Given this purpose, the evaluation proposes the following recommendations during the current crisis and for the longer term.

Given the international economic crisis and the liquidity deficit:

**Recommendation 1:** Take the necessary steps to ensure that the Bank's support for the country anticipates and focuses on mitigating the potential impact of the crisis on the most vulnerable population groups, avoiding a reversal of the progress made in recent years in the reduction of exclusion, and promoting the necessary improvements in the quality of social services.

**Recommendation 2:** Support the country in covering part of its financing requirements with the necessary speed and volume defined mainly on the financial benefits of the loans and the sustainability of the debt generated, while providing technical support for the country to effectively manage the liquidity crisis.

As part of the strategy to support the country in addressing its longer-term challenges:

**Recommendation 3:** Given the economic policy difficulties encountered with respect to the policy reforms that remain pending, redouble the institutional support and refocus the Bank's technical and financial cooperation, by developing new instruments that, unlike policy conditionalities, make it possible to identify, establish, and implement real and effective incentives to undertake the necessary reforms. In particular, redefine the tools for supporting consolidation of a State with sufficient weight first to protect and then to increase its spending and public investment capacity and to carry out its regulatory functions.

**Recommendation 4:** Given the importance that the government and the international community have attached to the issue of growing violence, incorporate into the strategy and the Bank's interventions the necessary diagnostic assessments of their implications for the different sectors in which it plans to be involved, including those related to the business climate, governance, fiscal cost, social welfare, and civic cohesion.

**Recommendation 5:** Provide technical and financial support for the design and implementation of a strategy to strengthen the country's internal control and fiduciary administration systems—both financial and procurement-related—to provide citizens with a guarantee that public funds and multilateral financial resources are used efficiently and effectively.

**Recommendation 6:** Increase the Bank's technical capital contribution capacity and the availability of technical-cooperation funds under effective coordination, in order to develop and deepen new sector relations based on the creditability of a technical proposal that supports the country's decisions for the consolidation of the institutional framework and leadership functions that are appropriate for each sector, reflecting its long-term strategic challenges. In particular, carefully evaluate the institutional design requirements with regard to the relationship between the State and nongovernmental actors, to ensure effective implementation mechanisms and solid impacts.

## I. DEVELOPMENTS AND CHALLENGES

1.1 This evaluation covers the years 2004 to 2007, a period of lights and shadows in country's social and economic evolution. The economy experienced the fastest growth in recent history. The pace at which the deficits in infrastructure and social services had been diminishing during the 1990s began to slacken and investment requirements in these sectors clearly continue to be considerable today. Poverty and inequality have improved slightly, although they remain at very worrying levels. The diagnostic assessments that in the 1996 Peace Accords linked the social, economic, legal, and political exclusion of the majority of the population to political instability remain valid. In recent years, the situation has been compounded by different factors that lie at the root of rising violence that hampers progress toward peace.

### A. Macroeconomic developments

1.2 The economy grew at more than 4% a year on average during 2004-2007, with rates of 4% and 6.3% in 2006 and 2007, respectively. This growth was the fastest in recent economic history<sup>1</sup> and offered an economic context conducive to undertaking the reforms needed to expand income-generating opportunities and public benefits for generally excluded groups. The growth rates in 2008 and the medium- and long-term projections are less promising. This expansive economic phase resulted from a general increase in confidence in the economy, thanks to prudent macroeconomic policy, with low fiscal deficit and public debt levels.<sup>2</sup> Another factor was growth in aggregate demand based on an increase in private consumption financed by growth in remittances (12% of GDP in 2007) and in bank credit, which grew by 26% in 2007. On the other hand, growth in investments did not keep pace with growth in GDP.<sup>3</sup>

1.3 The current account deficit has stabilized at 4% to 5% of GDP in recent years. However, this stability masks two important and related underlying phenomena: first, growth in the trade deficit and second, the increase in net transfers as a result of the increase in remittances. Favorable external conditions and maintenance of macroeconomic stability in Guatemala have meant that the entry of financial capital has comfortably offset the current account deficit.<sup>4</sup> The abundant financing was reflected in BANGUAT's capacity to follow a policy of building up international reserves, while the considerable amount of foreign currency available led to a significant real appreciation of the quetzal, of 21.7% between 2003 and 2007.<sup>5</sup>

1.4 The economic cycle in Guatemala is linked to the performance of the United States economy. The last two significant slowdowns in the U.S. economy (1990-1991 and 2001) have coincided with downturns in Guatemala's economic activity.<sup>6</sup> The global financial crisis is affecting Guatemala today, given its repercussions on the country's main trading and investment partners and its impact on remittances. The latest forecasts estimate a slowdown in economic growth of 4% in 2008 and 3.5% in 2009.

## **B. Fiscal developments**

- 1.5 During the period under evaluation, the economic authorities followed a prudent fiscal policy, marked by relatively low levels of fiscal deficit and public debt. The fiscal deficit has fluctuated relatively little in the last four years, averaging 1.5% of GDP (slightly lower than the average in the four previous years), despite the positive shock on fiscal accounts associated with the growth in aggregate demand.
- 1.6 The governing framework for fiscal reform initiatives was established in the so-called Fiscal Pact of 2000. The pact brought an essential discussion to the table on the role of the State and on the need for sufficient counterpart financing to comply with the objectives established in the Peace Accords of 1996. The pact revisits a commitment in the accords to raise tax levels to 12% of GDP (equivalent to 13.2% of GDP after the revision of the national accounts). To attain this objective, the Fiscal Pact included measures such as the revision of existing deductions and exemptions, an increase in the VAT from 10% to 12%, and a rise in the maximum income tax rate from 25% to 31%. Owing to the opposition encountered in the Congress, the Fiscal Pact was revisited in 2004, giving rise to a series of reforms that entailed a lower political cost but a relatively lower potential impact.<sup>7</sup> In short, Guatemala has still not attained its objective of increasing the tax burden and a gap continues to exist between actual tax collection and the tax burden that would be possible given the economic fundamentals, which has been estimated at 7.7% of GDP.<sup>8</sup> The magnitude of the challenge of boosting tax collection is also confirmed on the spending side. Recently, an increase in tax collection to 15% of GDP has been deemed necessary to meet social demands for spending on health care and education.<sup>9</sup> There is also a large deficit in financing the infrastructure needed to spur economic growth, which has been estimated at 5%.<sup>10</sup>

## **C. Infrastructure**

- 1.7 The need to develop basic infrastructure in Guatemala has been a permanent item on the political, economic, and social agenda, given that existing shortfalls reduce the competitiveness of the productive sector and economic growth. They may also contribute to the patterns of poverty and exclusion and undermine the environmental sustainability of the process of economic growth itself.<sup>11</sup> With regard to brakes on competitiveness, estimates suggest that if Guatemala were to improve its infrastructure to bring it up to the level of the 25% of Latin American countries with the best services, the country could add 1.1% to its annual growth rate.<sup>12</sup> Surmounting the constraints on access to basic infrastructure services would have a direct impact on reducing poverty and social exclusion.<sup>13</sup> Extending the coverage of public services to the most disadvantaged groups was another of the commitments in the Peace Accords. Although coverage was expanded in the 1990s, in recent years progress has been slower and uneven both between the different sectors and from the geographic standpoint.

### **1. Drinking water and basic sanitation**

- 1.8 Progress in overcoming the high levels of exclusion and the poor quality of services has not matched the political priority attached to this issue. Fragmented and weak

institutions and low investment levels have stood in the way of effective solutions to reverse the exclusion figures. Although there are difficulties in obtaining reliable figures for service coverage, based on the results of the two most recent population and housing censuses (ENCOVI 2000 and 2006), close to 25% of the population (3.1 million) have no household water connections and almost 50% (6.5 million) have no reliable sewage disposal system.<sup>14</sup> The percentage of households connected to a water distribution system rose from 66.7% to 74.4% between the two censuses, while access to a basic sanitation system rose from 33.5% to 47.3%.<sup>15</sup>

- 1.9 Lack of services mainly affects the poorest rural population, over 40% of which have no household water connection. Although the level of exclusion has improved slightly over the decade, its regressive distribution has also become sharper.<sup>16</sup> Low incomes and limited household connections generate additional exclusion processes that limit the effectiveness of projects to expand the systems. Even when there is a connection, the water quality frequently fails to comply with minimum internationally-accepted standards,<sup>17</sup> limiting the positive impact on health indicators. Seventy-five percent of municipalities do not use chlorine to treat piped water. In addition, 80% of the services are provided intermittently (from 6 to 12 hours), thereby creating additional sources of contamination in the supply system itself.<sup>18</sup> According to an econometric study conducted for the present evaluation, the health benefits of receiving piped water do not appear to be significant in Guatemala, which suggests a problem with water quality.<sup>19 20 21</sup> Under adequate quality conditions, improvements in water supply could lead to savings of about 1.6 percentage points of GDP associated with spending on health care.<sup>22</sup> Data from 2004 indicate that water-borne gastrointestinal diseases affected 12% of Guatemalans and incurred a cost of about US\$50 million a year.<sup>23</sup>
- 1.10 Despite the efforts made since 1996, the sector's institutional framework remains weak, fragmented, with poor coordination among the many agents. The operators exhibit low levels of efficiency and technological capacity.<sup>24</sup> The rates do not cover the costs of the services and there are generalized subsidies that hobble the economic and financial sustainability of the services.<sup>25</sup> Historic investment levels are insufficient to overcome the current shortfall in service coverage and quality or even to maintain existing levels. Although investments almost doubled after the Peace Accords, they stagnated at between 0.15% and 0.20% of GDP<sup>26</sup> between 1997 and 2001. Investments averaged US\$55 million a year during 2004-2007, below what is necessary to maintain current levels of access and significantly below what is required to attain the corresponding Millennium Development Goal.<sup>27</sup>

## **2. Roads and transport**

- 1.11 In terms of length, Guatemala's road network has remained relatively unchanged in the present decade. However, as a result of road quality improvements, the number of paved kilometers in the primary, secondary, and tertiary systems has increased,<sup>28</sup> while unpaved roads have decreased and rural roads have remained stable.<sup>29</sup> The most recent data available (2007) indicate that the country had just over 15,000 km of roads, 42% of which were paved, 34% were unpaved, and 24% were rural roads.<sup>30 31</sup> There are an estimated 9,000 km of rural roads that are not registered and

are the responsibility of the municipalities. These figures imply a road density of 0.13 km per km<sup>2</sup> and 1.14 km for every 1,000 people. These indicators are the lowest in Central America and are low for the size of the economy. Geographically, Guatemala's road system has dual characteristics, with zones where the infrastructure is developed and in good condition coexisting with extensive areas with little or no access to modes of transport.<sup>32</sup> The deficit in rural roads and their poor levels of maintenance mean that 13% of households lack permanent access to passable roads.<sup>33 34</sup>

- 1.12 The institutional progress made between 1996 and 2002 halted and some recent practices could undermine the achievements and limit the possibility of building on them. In 1997, the IDB successfully supported the establishment of a road conservation execution unit, COVIAL, which is a road-maintenance fund financed with proceeds from the fuel tax. However, starting in December 2004 COVIAL was no longer effectively funded and the respective amounts have not been fully transferred in recent years. Also, since 2005, COVIAL has gradually been given responsibilities that are different from road maintenance and should be performed by the Highways Department. This detracts from COVIAL's specific maintenance activities.<sup>35</sup>

### **3. Electricity**

- 1.13 Over the last decade, Guatemala has made significant progress in the electricity sector which, in turn, has generated new challenges. A reform was undertaken in 1996 making it possible to manage the sector, incorporate private agents into the market, and establish a regulatory framework and a specialized technical body to promote the market and oversee the principles of the reform. Simultaneously, with the income from the privatizations, a rural electrification fund was established that made for a significant increase in service coverage. However, the reforms introduced have produced a rise in prices, the consolidation of subsidies to consumers, and the need for new actions to ensure long-term sustainability. Coverage rose from 53% in 1996 to 81% in 2001. Since then, progress has been slighter, up to 85% in 2007.<sup>36</sup> A comparison of the information provided by ENCOVI in 2000 and 2006, shows that at every consumption level the percentage of households without electricity was reduced. However, in 2006 more than 1.5 million people in the three poorest deciles still had no service, with significant regional differences in access remaining.<sup>37</sup>
- 1.14 The business model selected to increase electric power generating capacity, based on take-and-pay contracts with private generators using petroleum products, has led to a significant rise in rates and heavy dependence on imported oil. The increase in generation capacity was obtained through take-and-pay contracts that lowered the initial investment and its risks. The consequence of expanding generation in this way was a more than 60% dependency on imported oil and coal even through the country has significant alternative energy resources, such as hydro (6,000 MW), geothermal (1,000 MW), wind (7,800 MW) and biofuels.<sup>38</sup> Electricity sector reform has not been able to provide the long-term incentives necessary to guarantee expansion of the system and today the market is showing clear signs of stress. It is

estimated that demand for power will outstrip the supply by the end of 2008 or 2009. The increases in generating capacity have not been sufficient to ensure that demand will be met, since it continues to grow at a rate that will demand the installation of approximately 1,500 MW over the next five years and doubling them every 12 years. Guatemala's transmission system does not currently comply with reliability and performance standards despite the expansion of the transmission system between 2001 and 2007 (which grew from 2,235 km to 3,658 km). According to the National Electric Power Commission (CNEE), the only short-term alternative to address the coming crisis is the start-up of the interconnection line with Mexico, which is expected to supply an additional 200 MW to the system, ensuring provisions until 2010 or 2012. In the medium and long terms, the country will have to invest about US\$3.3 billion to guarantee electric power supplies and, to a large extent, it will have to draw on different sources of financing, including private sources.<sup>39</sup>

#### **D. Social sector**

- 1.15 Despite the improvements during the recent period of growth, poverty and high inequality continue to be a distinctive feature of the country. The percentage of people living in poverty fell from 57% to 52%, in the period 2000 to 2006 according to ENCOVI. However, the percentage of people living in extreme poverty remained unchanged in that period at about 15%. Poverty is mainly concentrated in indigenous and rural populations, for whom extreme poverty was three times higher in 2006 than for the nonindigenous population (27%).<sup>40</sup> In international comparisons, Guatemala is one of the countries with the highest inequality indexes and ranks 13th out of 126 countries in terms of the Gini coefficient.<sup>41</sup> The poverty and inequality levels in question are largely due to historical causes and are perpetuated because about half of that inequality is explained by factors predetermined at birth. These conditions are explained by the lack of opportunities for the most vulnerable sectors and by low levels of social spending, poor targeting, and inefficiencies in the use of resources.
- 1.16 Social spending was 6.4% of GDP in 2006 and has remained relatively stable around this level since 1999.<sup>42</sup> This level is insufficient to cover the education, health care, and social welfare needs of large segments of the population. In 2007, social spending as a percentage of GDP in Guatemala was less than half of the average for Central America.<sup>43</sup> Also, social spending accounts for about one half of the country's tax revenues, clearly indicating that increases will depend heavily on the capacity to raise more taxes. According to own estimates based on ENCOVI data, public spending on health care, education, and social welfare in 2006 was distributed almost equally among individuals in the different consumption quintiles.<sup>44</sup> Spending on health care is slightly concentrated in the third and fourth quintiles and social welfare spending is progressive. These same general patterns existed in 2000 although their comparison with 2006 indicates an improvement in progressiveness—i.e. spending has moved from being slightly regressive to being neutral.

## 1. Education

- 1.17 The most significant expansion in social indicators is in education system coverage since the Peace Accords were signed. Guatemala has achieved a net enrollment rate similar to that of the other Central American countries and to the average in the countries of Latin America and the Caribbean.<sup>45</sup> These improvements have also translated into reductions in inequity since they have been concentrated in segments that were previously excluded—indigenous and rural children. However, major differences remain in the education indicators (coverage, internal efficiency) in terms of geographical area, ethnicity, and poverty level.<sup>46</sup> For example, for children from 7 to 12, coverage in urban areas was 89%, while in rural zones it was just 79%.<sup>47</sup> For the nonindigenous population this indicator was 87% while for indigenous groups it was 76%.
- 1.18 Major problems with quality and efficiency are set against these improvements in coverage and reduce their potential benefits. Dropout rates are high, at 8% in the first, seventh, and tenth grades. Repeater rates are particularly high in grade one (28%) and point to significant problems for subsequent learning success. The results of standardized tests for sixth grade students administered by the National Educational Attainment Evaluation Program (PRONERE) in 2006 show that just 48% of the students tested were able to interpret the meaning of a short text and just 55% were able to perform arithmetic operations with three digits. Indigenous children—especially in rural areas—had markedly lower levels, particularly for reading skills.<sup>48</sup> Despite these shortcomings, and fundamentally because of the lack of skilled labor supply, returns on education are high in Guatemala.<sup>49</sup> For primary and basic secondary education they are 13%. Returns on upper secondary and higher education are higher—22% and 16%, respectively. These high returns underline the importance of prioritizing resources to raise the education levels of the population, particularly for the most vulnerable groups, to reduce the high levels of inequality that exist at present.
- 1.19 The improvements mentioned have been obtained through higher spending. Joint spending by the Ministry of Education and PRONADE climbed from 1.8% of GDP in 1996 to 3.3% in 2001, although after which there were signs of growth fatigue and levels have remained the same since then. However, this fiscal effort is low compared with other countries in the region and appears to be insufficient to support the improvements obtained. Public spending per primary school student is 5% of per capita GDP, which is markedly lower than the 12% spent by the countries of the region. Guatemala spends just 4% of per capita GDP on secondary education compared with an average of 13% in the region. In terms of targeting public spending on education, measured by distribution of such spending per individual consumption quintile for each level of schooling, total spending went from being slightly regressive in 2000 to being neutral in 2006. This slight improvement in targeting is mainly due to the increase in the percentage of spending received by the lower quintiles for the primary and secondary levels, associated with increases in coverage on those levels for the most underprivileged groups.<sup>50</sup>



## 2. Health care

- 1.20 The key health care indicators in Guatemala are below the average for the group of Central American countries. In 2006, life expectancy at birth, the infant mortality rate, and the rate of mortality among children under five compared unfavorably with regional rates and with the average for Latin America and the Caribbean. These high infant mortality rates are even higher for indigenous and rural populations, highlighting the recurrent social inequalities already described.<sup>51</sup> Changes in the indicators appear to show that despite some improvement in the coverage of health care services, inequalities in the quality of services have diminished slightly in geographic terms but have increased on the basis of ethnic origin.
- 1.21 One of the main challenges in the health sector is to reduce currently high malnutrition levels. Although the rate has declined slowly between 1987 and 2002, it has remained virtually unchanged for the indigenous population and is significantly higher in the most vulnerable groups.<sup>52</sup> Indigenous children have a rate of 70%, which is double the rate for nonindigenous children. The consequences of current malnutrition levels are very costly in terms of mortality, morbidity, loss of human capital, and limitations on achieving the productive potential of individuals.<sup>53</sup>
- 1.22 Using data from the 2000 and 2006 ENCOVI, improvements in access to health care services can be identified, particularly for mothers and infants. In terms of immunization, over the same period the percentage of children under six receiving vaccinations rose from 90% to 93%. This improvement was concentrated in the rural (89% to 92%) and indigenous (87% to 92%) populations. The result has been a significant reduction in geographic and ethnic differences in immunization rates, except for the pentavalent vaccine. On the other hand, large differences persist in access to health care professionals for children suffering from diarrhea and pneumonia. While 56% of children in the highest quintile suffering from diarrhea or acute respiratory infections are seen by a professional, the figure for the lowest quintile is just 14%. These inequities are also seen in geographic areas (rural, 18% versus urban, 45%) and ethnic group (indigenous, 18% versus nonindigenous, 33%). As for care during pregnancy and delivery, some improvement can be seen over the period, although significant shortfalls still exist, particularly for indigenous women living in rural areas.
- 1.23 Last, the health care system is marked by some degree of fragmentation and shortcomings in coordination. The different providers act without an adequate division of functions and simply provide services for different population groups.<sup>54</sup> As for the health care budget, effective spending by the MSPAS climbed from 1% of GDP in 1996 to 1.5% in 1999 and then remained at that level. In those four years, its makeup varied considerably. According to OVE calculations based on the MSPAS budget, the weight of the coverage extension program has grown by 5.5%, while the budget for health care centers has been cut by 1.7%, for hospitals by 0.7%, and for central activities by 1.8%. As for the targeting of health care spending, in 2000 it was slightly regressive, concentrating on quintiles 3 and 4,

which together absorbed 48% of the spending. In 2006, the pattern of spending by quintile became virtually neutral, with spending on quintiles 1 and 2 at 38%, which is the same as for quintiles 4 and 5.<sup>55</sup> This reduction in regressivity occurs in the three categories examined, although the change was most pronounced for services offered at community centers. Also, spending on this category, which is the most progressive of the three for both years, grew as a percentage of total spending from 8% to 13%, which also has a positive impact on the level of aggregate targeting.

## **E. Environment**

1.24 Different environmental diagnostic assessments of Guatemala point to many and serious environmental problems in the country,<sup>56</sup> including the loss of forest cover and biodiversity, deterioration of water resources, and high vulnerability to natural disasters, which can adversely affect the country's economy, its natural resource base, and the livelihoods of a large percentage of the population. The rate of deforestation around the country in the last decade ranged from 54,000 ha to 90,000 ha a year, depending on the sources consulted.<sup>57</sup> This is relatively high when compared with countries like Brazil and Mexico, and is more than three times the average for Latin America and the Caribbean.<sup>58</sup> The department with the largest loss of forest cover was Petén, with an average loss of 1.8% of its surface area as a result of large-scale and haphazard settlement brought on by certain government policies, strong population pressure from nearby departments, and the limited presence and weakness of government institutions in the department (Chán 2007). Petén turned into an agricultural frontier zone that is difficult to reconcile with the biological conservation objectives of the Maya Biosphere Reserve established in 1990, which covers more than 40% of the department. The environmental diagnostic assessments of Guatemala also underline the difficult situation in the upper watersheds, where 56% of the land is highly degraded and/or deforested, making it extremely vulnerable to natural disasters, and water recharge is threatened. In the upper Lempa River Basin, studies conducted for the Trifinio Strategic Plan report forest cover of just 34.3%, with 15% in permanent crops that offer better soil protection. The basin is highly susceptible to erosion.

1.25 Losses owing to extreme events are not considered large in scale and the country's capacity to manage them is acceptable compared with a sample of 12 countries.<sup>59</sup> However, this does not mean that the costs of natural disasters are low. For example, tropical storm Stan in 2005 caused material damage worth US\$996 million and extensive personal losses (ECLAC). The World Bank calculates that the costs of natural disasters amount to 0.57% of GDP each year (CEA 2006).<sup>60</sup> Other indicators show the high risk of the country to recurrent "low intensity" events that are widely scattered and have a very severe impact on local and regional poverty.<sup>61</sup>

## **F. Violence, social cohesion, and democracy**

1.26 The diagnostic assessments in the 1996 Peace Accords that linked the social, economic, legal, and political exclusion of the majority of the population to political instability remain valid. In recent years, the situation has been compounded by

different factors that lie at the root of the violence and that hamper progress toward peace, according to the Bank's diagnostic assessments. The country has undergone a significant increase in violence, which has a considerable economic and social cost.<sup>62</sup> Over the last seven years, the murder rate has risen by more than 120%, from 2,655 in 1999 to 5,781 in 2007. In 2007, the homicide rate per 100,000 inhabitants was 46. The economic cost associated with the violence calculated by the UNDP is estimated at US\$2.386 billion, equivalent to 7.3% of GDP. This is more than double the amount allocated to the ministries directly responsible for reducing social and economic exclusion in 2006.<sup>63</sup> Violence has a great impact on economic and social development and is a factor in the lack of social cohesion, which has historic roots. These conditions are the consequences of a new type of organized violence that transcends the considerations of poverty and exclusion as the sole determining factors.<sup>64</sup>

- 1.27 The establishment of the International Commission against Impunity in Guatemala (CIGIC) under a United Nations agreement in 2007, just three years after the end of the U.N. verification mission, represents a recognition of the State's concern regarding the existing violence.<sup>65</sup> This measure is a response to the observation that limitations in the performance of the justice system favor the existing levels of impunity. Although the justice system to some extent expanded its coverage, out of all the cases filed between 2003 and 2004, sentences were handed down in just 13%, while in 2005 and the first half of 2006, the figure was 7%.
- 1.28 Public opinion polls reflect the importance of violence and the lack of public confidence in security institutions. A survey by the Office of the Deputy Minister for Community Support of the Ministry of Government in 2007 found that 56% of Guatemalans believe that the police do not have the capacity to combat crime and 64% believe that they are involved in delinquency.<sup>66</sup> Moreover, the perception that the public is not protected from crime has an impact on the stability and effectiveness of the democratic system. In Guatemala, support for democracy is weaker in relative terms than in most Latin American countries, and voter turnout is the lowest in the region. In the 2003 presidential election, just 49.6% of registered voters went to the polls and 53.3% voted in the 2007 elections.<sup>67</sup>
- 1.29 Political system and social cohesion limitations in Guatemala are exacerbated by the historical exclusion and limited role of the indigenous population in political life. According to the 2002 national census, indigenous communities make up close to 40% of the country's population. Although they voted in the 2007 elections in similar percentages to the nonindigenous population, just 18 of the 158 representatives were indigenous<sup>68</sup> and the only presidential candidate of indigenous origin, Rigoberta Menchú, obtained just 3.1% of the votes.<sup>69</sup>

## II. RELEVANCE OF THE BANK'S STRATEGY

- 2.1 According to the Bank's country strategy with Guatemala 2004-2007 (document GN-2355), the central objective of the Bank's program was to *reduce poverty understood as a basic condition for building a firm and lasting peace that*

*will allow for full participation by the population in the process of economic and social development.* To attain the central objective that defines it, the strategy was structured around the following two strategic objectives and one cross-cutting element:

- Strategic objective I: To improve the conditions for efficient production and to incorporate excluded sectors into the productive process.
- Strategic objective II: To increase human capital with equity.
- Cross-cutting element: To support stronger governance, covering the three branches of government.

2.2 The 2004-2007 country strategy was an ambitious proposal both in terms of the relevant sectors in which action was proposed and in terms of the expected results of the Bank's contribution in the context of the country's policies. The Bank proposed loans and technical-cooperation operations in many sectors, ranging from policy reform in the three branches of government to reforms of the main social policies (education, health care), fiscal reform, strengthening of investment in infrastructure (transportation, water, electricity), support for the export sector under the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-DR), and a portfolio of sustainable development programs. In practice, the relevance of the Bank's programming was limited by the fact that the political and fiscal risks identified in the strategy itself materialized,<sup>70</sup> although it was also affected by the limited contribution of the Bank's technical-cooperation projects and loans to attaining the development objectives initially proposed.

2.3 With regard to the risks of the strategy, although Bank Management correctly identified as risks the difficulties in obtaining the support of a splintered Congress and the corresponding difficulties in expanding fiscal leeway, the mitigation measures envisaged, including support for consensus building and modernization of Congress, were not put into effect. The strategy reflected a financial wager that the Fiscal Pact would be consolidated, which was supposed to confer considerably more capacity and fiscal maneuvering room on the public sector than in the past, and in which the Bank intended to play a significant role. Since the Fiscal Pact was not fully implemented owing to the constraints inherent in the economics of the reforms, the viability of the government's program and hence of the Bank's program for the period was limited. Given the larger-than-anticipated constraints, the portfolio makeup shifted to unrestricted loans, which went hand-in-hand with a series of sizeable cancellations of investment loans, allowing for earmarked expenditures to be unobligated.

2.4 With regard to the strategy's development objectives, the country strategy reflects the general view of the 1996 Peace Accords, establishing *poverty reduction as a basic condition for building a firm and lasting peace that will allow for full participation of the population in the process of economic and social development.* First of all, the relevance of the strategy with respect to its objective of contributing to building peace was limited. Despite the escalating violence of a different source and its impact on the economy and society, the country strategy did not provide for

mitigation measures nor did its diagnostic assessment consider the possible implications of that violence in the areas of competitiveness, social development, and governance.<sup>71</sup> Second, the relevance of the strategy with respect to its objective of reducing poverty and exclusion was contingent upon an intervention model that equated an increase in the coverage of public services with a direct impact on poverty reduction. The present evaluation has found no evidence of a positive contribution by the Bank to an approach based on the *quality* of services and has found inconsistencies in its support for the *institutional framework models* selected, which has limited its potential for making a significant contribution to the objective of reducing poverty and exclusion.

- 2.5 The following section analyses the Bank's actions in the different programming areas from the standpoint of two questions: (i) did the Bank target relevant problems based on its proposed objectives; (ii) in the end, did the Bank promote relevant models of intervention to attain them.

**A. Strategic objective I: To improve the conditions for efficient production and incorporate excluded sectors into the productive process**

- 2.6 The relevance of the Bank for this objective was limited, with an approved portfolio whose makeup was very different from the one initially proposed, particularly on account of the failure to foresee the budgetary difficulties that would arise. The relevance in this sector is analyzed below.

**1. Tax administration**

- 2.7 The strategic objective defined for this area was to bolster economic competitiveness by supporting consolidation of the Fiscal Pact and spending efficiency. The objective was relevant although it entailed some risk, given that the overall programming seemed to depend on the Fiscal Pact attaining its objectives of boosting collection which, as was apparent in 2004, already would be difficult to do. In fact, the lending instrument selected to support fiscal reform was not suitable for building consensus on a broader base or for prompting deeper tax reforms. Thus, the activities promoted in the area were not consistent with the challenges identified in the country strategy. The difficulty in obtaining approval of the initially-proposed tax program meant that efforts focused on reducing tax evasion and on improvements in the efficiency, transparency, and equity of public spending. After it was rescaled, the fiscal program was not deep enough to simultaneously achieve significant increases in social investment and spending in a context of fiscal prudence and low borrowing levels.
- 2.8 In this new context, the Bank determined to support public deficit financing, basically with fast-disbursing loans. After the tax on trading and agricultural companies was declared unconstitutional, the tax authorities found themselves in a situation of fiscal weakness between 2003 and 2005. This situation justified the processing of a programmatic sector loan that began in 2005 as support during a time of budget constraints. From the Bank's standpoint, it was an opportunity to reverse the net negative transfers of funds between the Bank and Guatemala during the first half of the period the strategy was in effect. However, the operation was

not approved until 2006 for disbursement in 2007, by which time the urgent need for resources had passed as a result of the economic recovery and the entry into force of the special temporary tax to support the Peace Accords (IETAAP) and the law to combat tax evasion.

- 2.9 According to this analysis, the Bank's programmatic sector loan was financially suitable to address a cyclical situation of fiscal deterioration, but it was only disbursed after the situation had improved, which points to a problem of timeliness that undermined the relevance of its contribution. In cases like this, the Bank's relevance in promoting real reforms is not clear when, in the short term, it proposes to act as alleviation for budget constraints, thereby taking the pressure off the economic actors to undertake reform of the tax structure in order to meet the challenge of boosting real capacity to obtain tax revenues. Nor does the trend toward increased multilateral financing, in the absence of measures to generate higher tax revenues, work in favor of the relevance of the lending agencies from the standpoint of sustainable long-term fiscal management.

## **2. Basic infrastructure**

- 2.10 In the context of the central objective of poverty reduction, the specific objective defined for this area was to help improve basic infrastructure in potable water, sanitation, roads, and electricity. The objective defined by the country strategy was relevant and consistent with the government's effort to expand coverage of services to increase production and reduce exclusion. However, the Bank's action evolved into a portfolio that could barely produce the approvals envisaged in the country strategy and was not necessarily disbursed for the purposes initially specified. It was marked in advance by the inertia of the operations approved during the previous strategy and the negotiations under way.<sup>72</sup> Their inclusion in the 2004-2007 country strategy was not explicitly preceded by an adjustment in the conditions that had hampered execution during the previous period, nor did it include provisions to adapt them to the new program. The strong competition of CABEL, which in the end captured a large part of the IDB's portfolio, and the greater availability of funds from national sources, with support from the fast-disbursing operations, limited the demand for loans.
- 2.11 Lastly, the strategic proposal for the infrastructure sector and the loans that were negotiated and executed revealed general limitations in the sector vision that stood in the way of a more technically relevant position for the following reasons: (i) the limitations of the models for increasing coverage vis-à-vis its genuine objectives of expanding benefits and generating development opportunities; and (ii) a mismatch with respect to the dynamics of change and the search for new solutions in institutional models in the public services sectors. Many reasons lie behind these limitations and they are examined below for each of the sectors.

### **a. Water and sanitation**

- 2.12 The Bank's action in water and sanitation had the objective of providing universal access to those services and consolidating their financial sustainability. The only activity programmed to that end was to execute the loan approved in 2003 for water

and rural sanitation investments that had not been disbursed. The Bank's strategy in the sector was relevant to the extent that it focused on addressing the problem of exclusion from services, but the models promoted omitted complementary measures to improve the treatment and supply of water delivered to guarantee its quality and its positive impact on health.

- 2.13 The institutional model proposed by the Bank in the loan was intended to surmount the institutional limitations in the sector by increasing the number of agents to expand the services and incorporate specialized organizations, under the management of a company or NGO. In particular, three aspects of the proposal were ill adapted to sector institutional dynamics, which conspired against its relevance: (i) it did not include the public authority (INFOM) and did not offer an alternative for the necessary leadership and coordination in the sector; (ii) it was out of tune with a municipal development program that did give INFOM the capacity to certify competencies in the management of municipal services; and (iii) the project eligibility scheme to address proposals did not resolve the inequalities of the communities in terms of their social and financial capital, thus undermining the possibilities of reaching the poorest groups. The recent reformulation of the loan takes these limitations into account and seeks to target communities with higher levels of unmet needs and reestablishes INFOM's sector leadership.

#### **b. Transportation and roads**

- 2.14 As for roads, the country strategy sought to help boost competitiveness and reduce exclusion in the poorest rural communities by upgrading their road systems. The Bank's contribution had limited relevance measured against its objective of reducing their exclusion. The Bank's program mainly targeted rehabilitation and maintenance of sections of the paved system, whose improvement does not appear to have been one of the main impediments to growth and competitiveness, based on the diagnostic assessments performed by the Bank itself. From the institutional standpoint, despite having supported the establishment of COVIAL originally, the Bank made no progress in a relevant strategy for consolidating the road fund or deepening institutional and regulatory reforms.
- 2.15 The most important feature of the Bank's involvement in the transportation and roads sector in the period under evaluation was the disintegration of a relationship that had been built up slowly since 1995 and in which problems in the Bank's fiduciary supervision were detected. Today, the Bank has virtually lost its presence in the sector. Under these conditions, the reactivation of disbursements during the period was only achieved as a consequence of a redirection of funds to deal with the emergency caused by tropical storm Stan in October 2005, which is considered both relevant and timely.

#### **c. Electricity**

- 2.16 In its original design, the Bank's strategy in the electric power sector was relevant and comprehensive in light of the challenges identified. Overall, the series of operations already approved, together with the incorporation of new proposals, addressed all of the sector's main challenges. In addition to the rural electrification

operation, operations were programmed to support the transmission system, integration into the Central American market, development, use of renewable and alternative sources (hydro, geothermal, biofuels), and support for renewal of the sector's institutional framework.

- 2.17 Despite the relevance of the intervention strategy proposed for the sector, the Bank was unable to position itself effectively to surmount the challenges identified, particularly in generation and expansion of supply for rural communities. In practice, operations under the private sector window for power generation were not approved and, in some cases, they found financing through CABEL. The rural electrification program was under negotiation for the entire period and was only approved recently. It is now in the process of national ratification.<sup>73</sup> Since the availability of additional funds for this national program constituted a limitation on expanding its scope, the Bank's institutional rigidity for capitalizing the fund has meant a lost opportunity to support a process with high economic and social returns.

### **3. Competitiveness**

- 2.18 The objective identified for this area was to tap the opportunities offered by CAFTA and improve the country's international positioning. Signature of CAFTA-DR in May 2004, months before the strategy was approved, offered an interesting opportunity to support the strengthening of the government's capacity and the economic and social transition to the new conditions of freer trade. Annex VII of the strategy outlined the so-called CAFTA Action Plan and called for technical-cooperation activities in this area. Despite its having been one of the most important elements in Guatemala's changed economic outlook in recent years, the strategy was a long way from being relevant with regard to the challenges of incorporating excluded sectors into the productive process and its compatibility with the possible impact of the agreement on Guatemala's productive fabric.
- 2.19 The Bank made a loan to directly support compliance with the conditions of CAFTA-DR and the reformulation of activities under the program to support restructuring of food and agriculture production (PARPA). The importance of the agrifood sector in generating employment and foreign currency and the tight budget facing the Ministry of Agriculture (MAGA) pointed clearly to the need for this intervention to be as relevant as possible. However, the Bank was unable to perform a strategic diagnostic assessment to target the program's actions that would be most effective in reactivating the sector and support a significant agrifood production restructuring process at the crucial moment when commitments were being implemented and the new challenges associated with the signature of CAFTA-DR were emerging.

### **4. Productive development and the environment**

- 2.20 The objective for this area was to expand the sources of sustainable growth and incorporate excluded groups into the productive sector. A good part of the operations envisaged in the strategy were not approved, particularly programs to incorporate indigenous groups into the productive process and to develop



microenterprises and small and medium-sized businesses that would have been relevant in terms of the strategy's central objective, which was to combat exclusion and poverty through the provision of production opportunities. Geographic and thematic prioritization of interventions in this sector was adequate in that it was consistent with the main environmental challenges identified (deforestation and degradation of water resources) and focused on areas with the highest rates of loss of forest cover in recent decades—the agricultural frontier in the lowlands (Petén), the high watersheds and slopes (upper Lempa River basin), and rapid environmental deterioration in the Lake Amatitlán watershed.

- 2.21 However, the Bank's intervention in Petén does not offer a strategic proposal of the magnitude necessary to make a significant contribution to the objective of reversing degradation of the environment and the cultural heritage. The program proposes an improvement in the environmental management of small rural parcels, the restoration of archeological sites, and the provision of infrastructure to promote tourism as solutions to deforestation. On the contrary, according to the most recent data on deforestation (CEMEC 2008), fires and new roads have been the main causes of deforestation since they allowed the settlement of new forested areas through slash and burn farming. Studies on the tourism potential of the region prepared at the time the strategy was being formulated warned about the danger of promoting an "enclave" tourism model that did not include participation by the local population.<sup>74</sup> The interventions in the area have not stressed concepts such as the quality of restoration, its conformity to the corresponding international agreements (Venice Charter), the load capacity of archeological sites and their natural surroundings, the direct inclusion of the local population in the tourism model promoted, and aspects of governance.
- 2.22 The relevance of acting in the upper basin of the Trifinio region is also justified by diagnostic assessments that point to rapid deterioration of the natural resource base as a result of inappropriate land use on steep slopes,<sup>75</sup> and heavy pollution of surface water.<sup>76</sup> This assumes an increase in the vulnerability of the rural communities that live in the zone to natural disasters, problems of water recharge, health consequences for the population from high levels of water pollution, and a reduction in agricultural productivity.<sup>77</sup> The long history of trinational environmental management calls for reflection on the strategic contribution of the Bank's loan to solving the region's development challenges. The type of intervention that the Bank is promoting appears to be insufficient to address the region's environmental and development challenges.<sup>78</sup> The Bank's proposal in the Lake Amatitlán watershed approved in 2005 is also relevant on account of the heavy pressure on its resources from population concentration and the proliferation of industries and unplanned settlements.<sup>79</sup> The loan does not appear to address the long-term determining factors of the deterioration of the watershed, given that it proposes a basically palliative or emergency approach the implementation of which has not been managed.

**B. Strategic objective II: To strengthen human capital with equity**

2.23 This strategic objective constituted the second pillar for poverty reduction through better distribution of social spending and its benefits, measured in terms of more equitable accumulation of human capital, particularly in health care and education. The following sections discuss programming in these areas.

**1. Efficiency and progressiveness of social spending**

2.24 The objective for this area was to *improve the efficiency and progressiveness of social spending and protect spending of programs with the greatest impact on poverty reduction*. This objective is presented as direct support for the country's poverty reduction strategy (*Guate Solidaria*) although the IDB project was expected to change the incentive structure for the different social actors and introduce a management by results model. The proposal was relevant given the magnitude of the challenge, with a regressive distribution of social spending at the start of the period and clear signs of inefficient management. However, from the design of the Bank's strategy with Guatemala, questions were raised about the actual capacity of the loan to attain the proposed objectives. On the one hand, the decision of the *Guate Solidaria* program to target social programs in the 41 most vulnerable municipios presented limitations, both because of the error of inclusion from the start, in that municipios with similar characteristics of vulnerability were left out, and because of the lack of precise targeting inside each municipio. To achieve effective geographic targeting of spending it would have been necessary to modify the real incentives in the allocation of budget funds and their final application, for which the policy-based instrument proved to be inadequate.

**2. Education**

2.25 Although the Bank had experience in the country's education sector with two earlier operations, for the strategy under consideration it had no lending operation and therefore its relevance in the sector was small, to the benefit of the World Bank's portfolio. Given the central objective of the strategy of increasing human capital, it is noteworthy that the Bank did not participate more actively in the sector. This temporary absence demonstrates the Bank's difficulties in maintaining an active long-term strategic relationship in this area. Although the two technical-cooperation operations carried out—a comprehensive report on the education sector and a census of its infrastructure—have produced high quality information that is relevant for decision making, they have not allowed the Bank to participate in the sector policy reforms.

**3. Health care**

2.26 The Bank intended to improve the health status of Guatemalans through increases in the coverage of basic health care services, particularly for people in rural areas, and to modernize the sector's institutions. Given the major inequities in terms of access to health care services from the geographic, ethnic, and socioeconomic standpoints, the program was relevant. Also, objectives were propounded to improve hospitals and the general organization of the public health care system. In

principle, these objectives were in line with sector problems, but they were not met in full. The Bank's program has not made a relevant contribution to the sector's institutional modernization in terms of health care system strategic planning and coordination needs.

- 2.27 The Bank's program emphasized the expansion of coverage. According to the analysis performed for the present evaluation, this was a relevant strategy but the model selected had limitations, particularly for the following reasons: (i) the outsourcing of the delivery of preventive health care services to NGOs is probably cost-efficient but is limited in scope, since it does not resolve the problems of lack of access by the target population to more comprehensive services; and (ii) a vision of health care as a comprehensive system with different levels of care that ideally should operate in cascade was not maintained. The levels of care offered at the health care centers and in hospitals did not receive commensurate attention under the Bank's program, in a context of reduced functionality of health care centers and a financing crisis in the hospitals.

**C. Crosscutting element: To support stronger governance**

- 2.28 The country strategy proposes institution-strengthening measures for the three branches of government. In general, the program's relevance is slight, given that it is based on a limited diagnostic assessment of the main determining factors of violence, is out of step in the justice sector with respect to the transfer of violence to urban zones, and does not succeed in designing the interventions envisaged in the country strategy to support modernization of the Congress.

**1. Citizen security and justice**

- 2.29 The Bank has not contributed to a country strategy approach for addressing the problems created by the phenomenon of violence in the country and its growing complexity. Consideration of violence and its implications for the objectives of socioeconomic development objectives and the public sector was a key omission that limited the potential impact of the Bank's interventions in the different sectors.
- 2.30 The strategy to prevent violence gave rise to a program that has not yet begun disbursing, which is intended to enhance the government's capacity to design and execute strategic, interagency, and participatory actions for violence prevention with emphasis on juvenile and domestic violence. The present evaluation finds that Bank support for the national violence prevention program has limited relevance since it offers a pertinent but partial approach to prevention requirements.<sup>80</sup> In a context of growing violence with high levels of impunity, the Bank's relevance in the justice sector was limited because it was out of step. Its interventions focused on rural municipios with high percentages of indigenous populations and high rates of violence. Given the transfer of violence to urban areas, the Bank proposed to support an urban justice program but has not yet been able to disburse the loan. The relevance of this strategy has been limited by the promotion of a model to expand coverage of justice services that does not place balanced emphasis on improving the quality of the actions of justice, particularly with regard to boosting its capacity to reach verdicts, thereby reducing impunity. From the institutional

standpoint, while the Bank proposed an approach involving interagency coordination in the sector without creating new entities, the government revealed a different preference when it created the International Commission against Impunity in Guatemala (CICIG).

## **2. Institutional strengthening**

- 2.31 The Bank's strategy proposed to support stronger public management, particularly fiduciary and procurement capacity. It proposed two studies: an evaluation of public sector fiduciary capacity and an evaluation of government procurement and contracting, carried out jointly with the World Bank, and some conditions relating to the Guatecompras system as part of the policy-based loan in the fiscal area. These contributions had limited relevance and significant contributions by the Bank to developing national fiduciary administration systems are still pending. PRODEV's cooperation appears to be relevant in relation to the challenges of central public management. However, it does not appear to have promoted a comprehensive approach in its vision of the country's results-based management system. When it was approved, PRODEV's monitoring and evaluation component did not include SEGEPLAN's presidential targets initiative (SIGOB), which was being put forward by the country at that time, and a coordination effort is not being promoted.

### **III. PROGRAM EXECUTION**

#### **A. The IDB's financial relations with Guatemala**

- 3.1 From a strictly financial viewpoint, the IDB maintains a highly relevant position as the Republic of Guatemala's main creditor, with an outstanding balance of US\$1,456,900,000 at 31 January 2008, or 20% of the country's total public debt, 34.9% of the external public debt,<sup>81</sup> and 50.4% of the debt contracted by Guatemala with multilateral lending institutions.<sup>82</sup> This privileged position can be explained by the favorable conditions offered by the IDB to the country.<sup>83</sup> Lastly, the IDB has moved toward instruments that allow for faster approvals and more flexible use of resources.
- 3.2 During 2004-2007, disbursements amounted to an average of US\$130 million a year, equivalent to 28.6% of the central government's total financing requirements. Except in 2005, when disbursements fell significantly, net transfers of resources were positive, reversing the problem of previous years.<sup>84</sup> Two unrestricted lending programs, the PBL to improve the quality of social spending and the PBP for the management of public finances, accounted for about 40% of disbursements during the period and were equivalent to almost all the Bank's net transfers to Guatemala in the period under evaluation.<sup>85</sup> <sup>86</sup> Using GDP growth as a measure of the business cycle, the flows do not appear to behave countercyclically. In particular, PBL disbursements exhibit a positive correlation with growth in GDP and do not exhibit correlation with the financing requirements of the public sector or of the external sector of the economy and do not appear to have been used for the purpose of macroeconomic or financial stabilization.

## **B. The IDB's portfolio in the period 2004-2007**

- 3.3 **Approvals and cancellations.** In the period covered by this evaluation, 13 lending operations for US\$573 million were approved, with 52% of the amounts corresponding to unrestricted loans, 42% to public investment loans, and 6% to the private sector window. Although a slackening in the Bank's activities in Guatemala was observed in 2004-2005, with a reduction in approvals and disbursements and an increase in cancellations, the country's historic trend in terms of amounts and numbers of approvals was maintained. However, compared with earlier programming cycles, there was a large increase in the proportion of unrestricted loans (PBLs and PBPs) in the total portfolio. This trend was consolidated during 2008, when more than 64% of total approvals corresponded to unrestricted loans.<sup>87</sup>
- 3.4 Approvals of new operations during 2004-2007 and the operations under way demonstrated a balanced distribution among the three strategic objectives established in the strategy. However, most of the cancellations related to the objective of improving production conditions. In the period, partial cancellations of projects amounted to US\$77 million equivalent, particularly projects involving environmental investments (US\$45 million) that lost priority on the government's agenda owing to their complicated designs. The other investment projects cancelled presented low levels of disbursements or reported problems relating to procurement and contracts. The percentage of cancellations in Guatemala (15%) is higher than the Bank average (11%).<sup>88</sup>
- 3.5 **Acceleration and improvisation.** The strategy's acceleration capacity, defined as the number of projects finally approved out of the number programmed, was low. Only eight of the 19 projects proposed in the 2004-2007 lending program were approved, for an acceleration rate of 42%. As a counterpoint, five projects that were not programmed for the period were approved, for an improvisation rate of 38%. Most of the projects approved but not for had the objective of improving conditions for efficient production.<sup>89</sup>

## **C. Portfolio performance<sup>90</sup>**

- 3.6 **Efficiency in preparation and execution.** Portfolio performance in terms of preparation times and the start of the first disbursement is significantly below the Bank average, for both investment and policy-based projects. The delays exceed the Bank average and may be associated with the loss of relevance of projects whose preparation began during the preceding administration and whose ratification by the Congress was requested during the strategy period. There was a significant improvement in preparation efficiency in 2006-2007, although it continues to be below the Bank average.
- 3.7 **Disbursements.** Disbursements in the period were heavily concentrated in the last two years of the country strategy. The total disbursed was US\$541 million, with 54% of that figure in disbursements of unrestricted loans, 41% in investment loans, and 5% in private sector loans. Compared with the US\$427 million disbursed in 2000-2003, disbursements increased by 27%. Efficiency in the disbursement of investment loans is higher than the Bank average.<sup>91</sup>

- 3.8 **Quality of the portfolio.** The increase in the number of problems reported in the Project Performance Monitoring Reports (PPMRs) coincides with the low activity in terms of approvals and disbursements during 2004-2005. In that period, the quality of the portfolio deteriorated sharply in terms of problems with progress in implementation and in terms of the possibilities of attaining the development objectives. These indicators improved during the period 2007-2008. The risks most frequently identified in the PPMRs for projects in execution were the lack of government commitment (52%) and problems with institutional capacity (48%).
- 3.9 **Compliance with Bank supervision instruments.** The previous CPE raised a series of concerns related to shortcomings in the Bank's supervisory processes, mainly in fiduciary and financial aspects, and the need to build up national supervision systems. The present evaluation recognizes the Bank's efforts, particularly in 2004 and 2005, in the supervision of the investment projects. The latter, however, have seen their share of disbursements fall to under 50% during the period in favor of larger amounts for unrestricted loans (PBLs and PBPs). Although they were reduced, the problems detected in the portfolio continue to be considerable. The percentage of qualified audited financial statements remained significantly higher than the Bank and regional averages. With regard to the Bank's internal supervision instruments, during the period inspection visits were stepped up and there was better monitoring and dissemination of procurement processes. However, judging from the requirements for technical inspection visits reported in the systems, they were not sufficient in number. Lastly, although all the PPMRs and all the Project Completion Reports (PCRs) were produced, just 37% of the PCRs were presented on time.

#### IV. PROGRAM RESULTS

##### A. Evaluability

- 4.1 Based on the application of the evaluability methodology to the 2004-2007 country strategy, the framework of results, indicators, baselines, and targets was satisfactory, with an evaluability index of 0.82. This level would ideally have permitted the formal relationship between the Bank and Guatemala to be guided by a results framework that could be monitored and administered on the basis of the outcomes and risks. However, the proposed strategy presents—ex ante—some basic problems in the attribution of the proposed indicators to the interventions proposed. Also, the Bank's programming—ex post—had limited capacity to make the proposals viable and, as a consequence, presents a low anticipation index (42%) and a high improvisation index (38%), which points to a considerable deviation between the proposed program and the program finally carried out. These two considerations have made it unviable to use the country strategy's results matrix to evaluate the Bank's actual program with the country over the period.
- 4.2 Keeping these limitations in mind, the analysis of the results of the Bank's program over the period was based on the projects approved during the period or that disbursed most of their resources during that time. The loan documents for each

project were used as a reference for evaluating the results. Unfortunately, in the case of the individual projects, the evaluability index is significantly low (0.38) which makes the work of evaluating the results difficult.

## **B. Analysis of results**

4.3 For each area of intervention defined in the strategy, the following sections set out the objectives established by the Bank in its loan documents, describe the results in each area, and present the corresponding data and documented evidence. The section is arranged following the structure established by the Bank in its strategy paper.

### **1. Strategic objective I: To improve conditions for efficient production and to incorporate excluded sectors into the productive process**

4.4 To support this first strategic objective, the Bank programmed actions in the areas of: (i) tax administration; (ii) basic infrastructure; (iii) competitiveness; and (iv) environment and productive development. The results obtained in these areas are analyzed in the following sections.

#### **a. Tax administration**

4.5 The Bank's program in the fiscal area was comprised of a family of projects carried out under a programmatic policy-based loan, the public financial management reform program (GU-L1005) and two associated technical-cooperation operations. As one expected outcome, the Bank established an increase in tax revenues from 10.3% of GDP in 2004 to 12% in 2007, which reflects the agreement with the IMF and the commitment—already rescheduled—of the Peace Accords (13.2% of GDP according to the updated system of national accounts). The increase in tax revenues as a percentage of GDP was not achieved even by 2008 (12.1%), although there was a statistically significant intertemporal rise, despite a setback between 2004 and 2005. In the period 2006-2007 in the context of a strong economic recovery, the tax burden recouped considerably, with year-on-year changes (0.55%) above the average of the preceding decade (0.26%).<sup>92</sup> According to the Bank's portfolio review, *these targets were difficult to achieve on account of aspects beyond the Bank's control.*<sup>93</sup> Given the economic policy difficulties, and even with the favorable climate, the policy conditionalities stipulated by the Bank when the loan was designed were clearly insufficient for attaining the hoped-for collection results.<sup>94</sup>

4.6 The improvements envisaged in the loan for a reduction in tax evasion and an increase in the productivity of the VAT exceeded the original expectations of 2% in both cases, with increases of 6% and 5.7%, respectively.<sup>95</sup> Favorable results cannot be found for direct taxes, where scant revenues and high evasion rates remained virtually unchanged.<sup>96</sup> In this area, the Bank's technical-cooperation efforts to build the agreements envisaged in the Fiscal Pact that would lead to changes in the VAT and the maximum income tax rates or to a revision of current deductions and exemptions, whose impact on the government's revenue collection capacity was expected to be significant, did not bear fruit.

## **b. Basic infrastructure**

### **(i) Transportation**

- 4.7 Actions to improve basic transportation infrastructure also form part of the strategic objective of *improving conditions for efficient production and incorporating excluded sectors into the productive process*. The Bank's action in the road sector was limited to executing the remainder of phase II of the road program, which had been suspended since 2002 and could not be unblocked until 2006, largely to address the emergency caused by tropical storm Stan. The objective of the project was fully in line with the strategy, and was defined as *support for the maintenance and rehabilitation of the road system to improve serviceability and access by rural producers to markets for their agricultural products*. The project only achieved some of the expected results in maintenance and rehabilitation but was unable to improve market access for rural producers because it abandoned this part of its objective. According to information on sections subject to rehabilitation and maintenance (COVIAL 2007), 50% of the planned 450 km of paved highways were rehabilitated and 86% of the paved network was being maintained compared with the target of 95%. Information obtained for the present evaluation indicates that of the 86% being maintained, just 46% can be classified as being in good condition.
- 4.8 For rural roads, the initial objective of rehabilitating 350 km—already a small fraction of the total length of the rural system—was virtually abandoned since, after the cancellation of US\$10 million of the loan and the reallocation of US\$25 million in the wake of tropical storm Stan, the goal was reduced to 34 km, of which just 19.3 km were rehabilitated with project funds. The abandonment of this objective in practice, coupled with the failure to approve the planned programs for rural electrification and rural development, has affected the Bank's contribution to attaining the objective of the strategy of incorporating excluded sectors into the productive process. However, the Bank did attain emergency objectives not envisaged in its strategy for the road sector. Phase II of the road program was restructured in 2006 to address emergencies declared in the aftermath of tropical storm Stan at the end of 2005. The funds were used to rebuild 19 bridges and 37 sections of main highways and rural roads damaged by the storm.

### **c. Competitiveness**

- 4.9 The Bank's program in the area of competitiveness during the period under evaluation includes a program to support foreign trade (1318/OC-GU) and the program of support for the restructuring of food and agriculture production (PARPA) (GU-0070). The objective of this section of the program is defined as *helping to boost competitiveness in international markets, with particular support for the competitiveness of the food and agriculture sector*. The expected results of the increase in exports of Guatemalan products to the United States in response to the opportunities opened up under CAFTA-DR have been favorable. However, this evaluation finds that the results of the increase in exports attributable to the foreign trade support program had a smaller quantitative influence in terms of obtaining the export results.



- 4.10 The Bank's funds for PARPA were useful for a broad set of working areas in the Ministry of Agriculture, particularly in a context of tight budgets. The expected results relating to a sustained increase in the competitiveness of the food and agriculture sector, defined as an increase in agricultural GDP, were not obtained. Although it is difficult to link them to agrifood restructuring, the coverage targets for forest environmental services in the upper watersheds were partially attained (33,400 ha compared with the 50,000 ha initially planned), although the low-income rural population was incorporated. The activities were complementary to other national forest management programs. The proposal for a water act promoted by the program was left with no regulatory effect.<sup>97</sup> Last, the results of higher investments in agricultural research under the program were limited because the selection mechanism did not promote prioritization of themes as they related to competitiveness requirements, particularly in plant and animal health aspects that are especially relevant for CAFTA-DR.<sup>98</sup>

#### **d. Productive development and the environment**

- 4.11 In the area of productive development and the environment, the Bank's program consisted of a family of projects approved prior to 2004: the Petén program (GU-0081), the upper Lempa River watershed program (GU-0034), and a new loan approved during the strategy, environmental sanitation of the Lake Amatitlán watershed (GU-0066). They were designed to correspond to the objectives of *combating degradation and making sustainable use of natural resources, with special attention to the low-income population.*
- 4.12 For the Petén program (GU-0081), both the results relating to the conservation of natural resources and those for preservation of the cultural heritage have been limited. The planned activities were unable to resolve the root environmental problems and some questions have arisen about the approach taken to archeological restoration and the limited inclusion of the population in the tourism development model. Data obtained for the present evaluation indicate that annual deforestation rates in the buffer zone climbed from 1.91% in the period 1986-2001 to 2.2% between 2002 and 2007 (CEMEC 2008).<sup>99</sup> The two types of interventions promoted to curb the high rates of deforestation in the buffer zone where the project is being implemented faced limitations in terms of producing results.
- 4.13 The first model planned by the project to address this problem, based on the regularization of land ownership to halt the advance of the agricultural frontier in the Mopán zone, led to short-term drops in the deforestation rate in 2001 and 2005, but the rate has grown significantly since 2006 (Rainforest Alliance 2008).<sup>100</sup> Some studies suggest that far from promoting the stabilization of small farm owners, the regularization model for lowlands in Guatemala may have promoted the expansion of livestock farming and the accumulation of land by large plantations for the production of biofuels, with a debatable contribution to the expected outcomes of sustainable management.<sup>101</sup>
- 4.14 The second model proposed, based on the promotion of sustainable agroforestry projects for small producers in the buffer zone, does not provide the expected

environmental benefits or the benefits of mainly favoring the poorest communities. The program's low coverage,<sup>102</sup> coupled with insufficient attention to targeting and certification of uses based on environmental criteria, have turned into limitations on attaining the proposed conservation objective.<sup>103</sup> The loan document did not spell out the advantages that execution of this second model in coordination with the model for land regularization might have brought, which restricted the project's capacity to offer a package of sufficient incentives to deter the sale of land once it was titled and to have a larger impact on producers' incomes. In practice, the program's resource allocation mechanism has translated into an emphasis on small livestock projects (33 out to 56 projects) which, although they have led to better land use, do not present as many environmental benefits as other productive options considered in the loan document.<sup>104</sup> Although these supports had a positive impact on the income of the beneficiary rural families, an analysis of targeting performed for the present evaluation, considering the total population in the buffer zone, confirms that the goal of mainly reaching the poorest communities was not achieved, with just 13% of the beneficiary communities belonging to the poorest quintile by level of consumption.

- 4.15 The results of the Petén development project relating to preservation of the cultural heritage were affected by the initial lack of technical specifications for restoration by the ministry and the dispute among archeologists about the techniques to be used. A report preceding the main restoration works at the two archeological sites targeted identified problems with the techniques used.<sup>105</sup> The Bank did not monitor this aspect. The monitoring reports only make reference to physical progress in the works, without considering the concerns about the quality of the restoration. Some recent technical reports question whether the good restoration practices established in the Venice Charter were followed in the end.<sup>106</sup>
- 4.16 The results of tourism development in Petén, measured in terms of the increase in the number of visitors, have been positive although lower than expected.<sup>107</sup> The management model for the archeological sites promoted by the project has been private administration. At some sites—Yaxhá—an admission fee to the site was established but implementation of the trust to manage the site was rejected by the Institute of Anthropology and History (IDAEH) as being legally and technically incompatible with the proposal. The project shows limited progress in the work with communities located close to the archeological sites, to the detriment of equity in the distribution of the income generated by tourism. The project only offered some isolated training events for the communities to establish tourism microenterprises. There is no information on the income or quality job opportunities created for the population in the zone. Through the MIF, the Bank has supported the development in Guatemala of a system of “sustainable” tourism certification under the Green Deal, but it was not used for this project although it could have been instrumental in attaining its results.<sup>108</sup>
- 4.17 The objective of the trinational program for the upper Lempa River watershed (GU-0034) was to *reduce environmental degradation and fight the poverty of the residents of the area*. The project targets low-income groups living on the slopes of

the watershed, which is shared by Honduras, Guatemala, and El Salvador. The most recent progress report on the project by the executing agencies (August 2008)<sup>109</sup> documents a reduction in the funds originally planned in the three countries, with the figure for Guatemala reduced by 69%, making it the country that is executing the fewest resources comparatively (21.6% of the total). The results obtained in attenuating environmental degradation are difficult to assess since the project has generated scant field data. Estimates of effectiveness in terms of reducing the deforestation rate in the project zone give rise to some questions. The program monitoring reports consider that the reforestation reported (almost 2,300 ha out of a total of 2,800 planned for Guatemala) can offset the deforestation. However, the capacity of the reforestation campaigns to make up for the loss of forest cover does not necessarily match industry reforestation practices and rates, contrary to the rationale of the project reports.<sup>110</sup> The results reported on water quality improvement are difficult to assess and present problems of attribution, particularly those on the improvement in drinking water and solid and liquid waste management, since the project only performed a few studies and they are in the feasibility analysis stage. The expected results in terms of the fight against poverty have probably been limited by targeting 27 priority microwatersheds selected in the trinational strategic plan based on criteria that combine the extent of potentially-reversible environmental degradation and poverty rates. A targeting analysis performed for the present evaluation suggests that the poverty criterion has not prevailed.<sup>111</sup> Furthermore, the mechanism for allocating funds in the component to promote economic diversification through the development of microenterprises and small businesses encountered difficulties in reaching the target low-income rural population compared with urban beneficiaries.

- 4.18 The program for environmental cleanup of the Lake Amatitlán watershed (GU-0066) had the goal of *reversing the current trend of environmental degradation in the watershed*. It was approved in 2005 but disbursements have not begun yet. An analysis of the project design reveals problems that could limit its future results. The actions planned (solid waste management and works to stabilize the bed and banks of the river to reduce sedimentation and water pollution) appear to leave out several basic problems that explain the environmental difficulties in the watershed, i.e., uncontrolled urbanization and illegal settlements, problems with institutional and regulatory aspects (dumping control) and rates.

## **2. Strategic objective II: To strengthen human capital with equity**

- 4.19 To address this challenge, the Bank planned actions in the areas of (v) social spending and (vi) social services and poverty (education and health care) in its strategy.

### **a. Targeting of social spending**

- 4.20 The program to improve the quality of social expenditure (GU-0175) was approved as a sector loan for US\$100 million in 2004. The objective of the program was to improve the targeting and efficiency of social expenditure and to protect its budget, based on management by results. To attain these objectives, the government's

strategy, which was known as *Guate Solidaria*, intended to target social programs geographically in highly vulnerable areas.

- 4.21 The expected results of improving the targeting and efficiency of social expenditure are positive in the case of the program to extend health care coverage but limited for the other programs considered in the strategy. As documented in chapter I, the targeting of public spending has improved recently but disaggregated budget information from the Ministries of Education and Health indicates that the departments with the highest percentage of people living in the prioritized municipios did not receive a substantial increase in the percentage of resources.<sup>112</sup> Thus, the budget earmarked for those 41 municipios does not appear to have been modified to any considerable extent and continued to be very small.<sup>113</sup> Results were obtained in terms of protection for specific spending items but this evaluation harbors doubts about whether these were items likely to have been cut, given their lack of volatility in the past. Although the loan document maintained the need to protect certain essential expenditures, in practice the loan conditions entailed an increase of almost four times in the budget of one program in particular—the program to expand health care coverage—financed in parallel by the Bank itself.

#### **b. Health care**

- 4.22 In the last 10 years, the Bank has played an important role in health care reform. The health care services enhancement program, phase II (GU-0125) was approved as a continuation of a sector loan carried out during the 1990s. The program's objective was to increase the effectiveness and efficiency of the public system and improve the coverage and quality of the health care services provided for poor rural populations. The program was based on contracting NGOs to deliver a basic package of services with emphasis on preventive mother and child health care services, through the establishment of traveling medical teams that visited the communities monthly.
- 4.23 The expected results for improvements in the health of poor rural populations indicate positive impacts in service indicators such as vaccinations and prenatal check-ups, but do not have a statistically significant impact on final indicators such as the infant mortality rate. An analysis of secondary databases performed for this evaluation does not show statistically significant impacts for this indicator when comparing program beneficiaries and the control group.<sup>114</sup> The program's impact on infant malnutrition rates was low and the rates have remained virtually unchanged for indigenous children. Differential improvements are identified in the indicator relating to access to prenatal check-ups for rural and indigenous women.<sup>115</sup> However, the populations and geographic areas covered by the program experienced insignificant improvements in key service quality indicators such as percentage of deliveries and prenatal checkups performed by health care personnel.<sup>116</sup>
- 4.24 The results for improvements in the effectiveness and efficiency of the public health system were limited. Reform of the MSPAS only related to introduction of the integrated financial management system, but most of the other planned

improvements were not carried out. Virtually no progress was made in improving the Guatemalan Social Security Administration (IGSS) since it was not possible to get this independent institution to participate in the planned reforms. With regard to the pilot project to reform seven hospitals, a significant amount of funding was used to contract a management company but the intervention models were not implemented.

### **3. Cross-cutting element: To strengthen governance**

- 4.25 In this area, the Bank's program was active only in the justice sector. It made a proposal for violence prevention that was not endorsed by the Congress and carried out some isolated interventions to strengthen the public administration. The results obtained in these areas are described below.

#### **a. Citizen security and justice**

- 4.26 This program is comprised of a loan, the violence prevention support program (GU-0163), associated with two technical cooperation projects. The program's objective was to *improve the State's capacity to prevent violence, particularly juvenile and domestic violence*. The program was not endorsed by the Congress and the new government has expressed interest in reformulating it.
- 4.27 The results of the pilot technical-cooperation project on economic and social integration of at-risk young people in marginal urban areas (TC-0212005-GU) are positive, although there are limitations with respect to validation of the model and its scalability. Validation of the effectiveness of the training model for youths who live in marginal neighborhoods, as a measure for reducing crime in the short term and breaking the cycle of violence encounters difficulties in terms of assessing the true risk of young people becoming involved in criminal behavior prior to being included in the program. Although the work done in the marginal areas of Guatemala City appears promising, the scalability of the pilot project to a program that is large enough to have a significant impact is limited, given that the momentum of its execution stems from the capacity and commitment of the executing agencies, factors that are essentially idiosyncratic.
- 4.28 In the justice sector, the Bank's program consisted of a project in support of judicial reform (GU-0092) and a second phase (GU-0177). The second project was not disbursed and therefore had no practical impact. The objective of the program was to *increase access to justice in areas with a high incidence of violence*. The expected results for the project of increasing access to basic justice in rural areas indicate that coverage was expanded, although there were no positive results in terms of the quality or the capacity of the justice centers to dispose of cases.<sup>117</sup> The selection of the municipios in which the centers were set up was appropriate from the standpoint of coverage of rural areas with large indigenous populations. In terms of the capacity to dispose of cases, which is correlated with impunity, the different services offered by the centers did not improve between 2002 and 2006 and have not consistently exceeded the goal of 60% proposed in the design. Last, the program has not produced statistical information to make it possible to evaluate

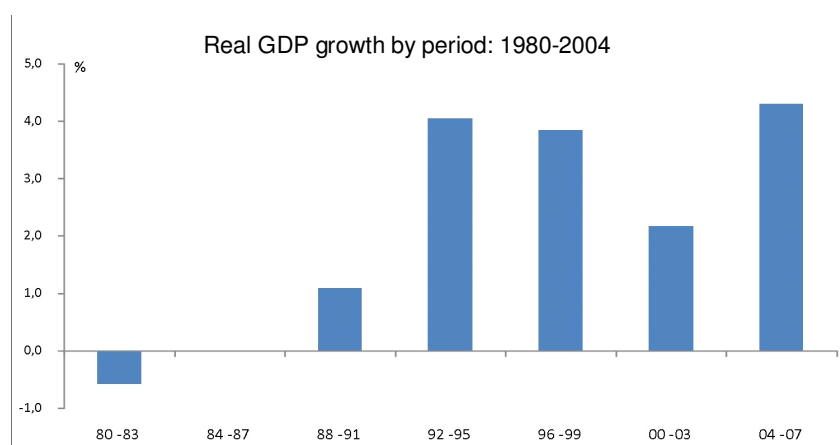
the impact of the centers or the other program actions on crime and violence rates in its areas of influence.

**b. Institutional strengthening**

- 4.29 In the area of strengthening public sector management at the central and local levels, the program was comprised of the municipal development program (GU-0134) and, more recently, a technical cooperation project under PRODEV (ATN/OC-9554-GU). The program has the objective of *enhancing the equity, efficiency, and effectiveness of service delivery by the municipalities and the central government.*
- 4.30 PRODEV's contribution (ATN/OC-9554-GU) is credited with having placed the topic of management by results on the national agenda, but there is still much to be done to implement budgeting by results. The municipal development program (GU-0134) to promote more equitable and efficient arrangements for the delivery of municipal services and to support reforms in the Municipal Government Administration (INFOM) had limited results. Contrary to its equitable approach, the financing conditions and requirements skewed the project toward municipios that were relatively better off. The municipal development results were limited to the certification of 36 municipalities. Of these, just nine obtained loans to finance infrastructure works and there is no evidence that the modernization processes mentioned have been implemented in practice. The program's activities did not include complementary work in the disadvantaged municipios as called for in the program's initial rationale.<sup>118</sup>

## ENDNOTES

<sup>1</sup> The following figure illustrates this point.



Source: OVE 2008.

<sup>2</sup> IMF. Article IV Consultation. IMF Country Report # 05/362. October 2005.

<sup>3</sup> In 2007, the gross fixed investment/GDP ratio of 19.6% was lower than the Latin American average.

<sup>4</sup> ECLAC. Economic Study of Latin America and the Caribbean 2006-2007. Chapter on Guatemala, June 2007.

<sup>5</sup> Economist Intelligence Unit. Country Data.

<sup>6</sup> Guatemalan exports to the United States grew from 2.2% of GDP in 2003 to 7% in 2007. Moreover, remittances have risen from 6.9% of GDP to 10.3% in 2007.

<sup>7</sup> Efforts in this area have been aimed at improving the efficiency of collection, in particular of the VAT, with limited potential range, given that it was not possible to raise the rates of the main taxes (VAT, ISLR). On the contrary, in the case of the income tax, a simplified payment alternative was created (5% of gross income) which, in practice, may have meant a reduction in the tax burden.

<sup>8</sup> FUSADES (2005). *Dinámica centroamericana. Desafíos para un desarrollo sostenible*. Department of Economic and Social Studies. San Salvador.

<sup>9</sup> They are fundamentally related to the need to increase the supply of public education and health care services. In education alone, ICEFI estimates that an increase in spending of between 1.7% and 2.6% of GDP will be needed to attain the proposed objectives (increase in the coverage and quality of education, considering the bilingual and multicultural nature of education, gender equality, and the promotion of a sense of citizenship) between now and the year 2021. ICEFI Más y Mejor Educación en Guatemala (2008-2021) ¿Cuánto nos cuesta? Project: "Diálogo para la Inversión Social en Guatemala" USAID-AED [http://www.icefi.org/docs/costoseduccion/1\\_educ.pdf](http://www.icefi.org/docs/costoseduccion/1_educ.pdf).

<sup>10</sup> CABEL, 2008.

<sup>11</sup> In this regard, two recent studies are particularly illuminating: World Bank 2005. Guatemala. *Country Economic Memorandum. Challenges to Higher Economic Growth*. Report No. 29145/GT; and Inter-American Development Bank 2007. *Tearing Down the Walls: Growth and Inclusion in Guatemala. An IDB Research Project*.

<sup>12</sup> World Bank 2005. Report No. 29145/GT.

<sup>13</sup> World Bank 2003 and 2006. IDB 2004 and 2007.

<sup>14</sup> The figures for service coverage in Guatemala vary widely depending on the source used. The differences begin to appear when other forms of access to water or sewage disposal are added to the residential coverage percentages. In this case, access is defined as the availability of a piped connection inside or outside the dwelling and a reliable sanitation system refers to connection to a sewer or a septic tank.

<sup>15</sup> The following tables illustrate these points.

**Access to a water sources (national and urban-rural average)**

Water source	Total 2000		Total 2006	
	Urban	Rural	Urban	Rural
Piped connection inside or outside the dwelling	66.7		74.4	
	87.2%	53.7%	89.3%	60.6%
Access within 200 m (public standpipe, public or private well)	19.6		13.7	
	7.2%	27.4%	5.9%	20.9%
With no water service (river, lake, cistern, rain water, other)	13.7		11.9	
	5.6%	18.9%	4.8%	18.5%

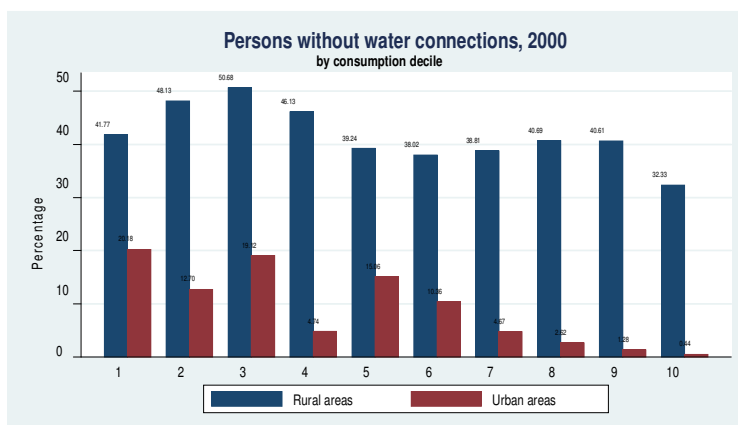
Source: OVE calculations based on ENCOVI data 2000 and 2006.

**Access to basic sanitation (national and urban-rural average)**

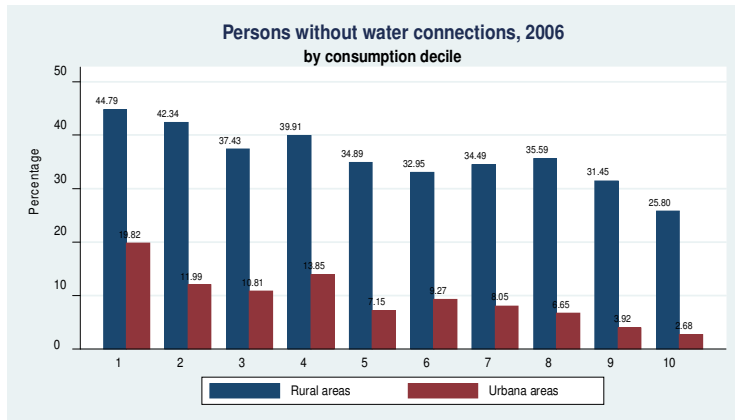
Sanitation source	Total 2000		Total 2006	
	Urban	Rural	Urban	Rural
Drains/sewers	30.3		40.2	
	63.37%	4.92%	68.44%	7.62%
Septic tank	3.2		7.1	
	31.6%	3.20%	6.41%	7.74%
Washable privy	10.8		7.2	
	16.75%	6.16%	7.66%	6.64%
Latrine	42.5		36.5	
	14.19%	64.38%	15.73%	60.6
None	13.2		9.0	
	2.54%	21.35%	1.76%	17.4%

Source: OVE calculations based on ENCOVI 2000 and 2006.

<sup>16</sup> The following graphs illustrate these points.







Source: OVE calculations based on ENCOVI 2006.

<sup>17</sup> The trend toward eliminating “access to drinking water” from the statistics has been reflected in the reports of the World Health Organization and UNICEF, which talk about access to “improved” water sources and “adequate” sanitation, assuming that certain technologies offer better guarantees of the quality of service in the absence of data obtained through water quality monitoring.

<sup>18</sup> CEPIS/PAHO 2002. Analysis of the potable water and sanitation sector in Guatemala. The Regional Investment Plan in Health and the Environment estimated that 73% of municipalities received water that was heavily contaminated with fecal matter, while just 45% of that water was chlorinated and only 57% of the population received water up to public health standards.

<sup>19</sup> As the following table suggests, when the figures on access to water are linked to the probability of suffering from a gastrointestinal disease (in this case diarrhea), although the availability of piped water reduced the likelihood that children under five would suffer from diarrhea in 2000, by 2006 that impact had disappeared.

**Probability of diarrhea in children under five (rural areas 2000-2006)**

	2000			2006		
	Households without diarrhea (omitted)	Households with under 80% of children with diarrhea	Households with over 80% of children with diarrhea	Households without diarrhea (omitted)	Households with under 80% of children with diarrhea	Households with over 80% of children with diarrhea
<b>Model I. Type of water supply and diarrhea</b>						
Piped water inside	---	-1.2%	-7.5%	---	0.9%	-2.7%
Piped water outside	---	-2.0%	-2.3%	---	1.0%	-1.7%
Public standpipe	---	-4.3%	-9.6%	---	2.5%	-0.3%
Other sources (omitted)	---	---	---	---	---	---
Sewer connection	---	-6.5%	2.9%	---	-1.6%	-3.6%
Latrine	---	-2.5%	5.3%*	---	-4.1%	0.6%
Other sources (omitted)	---	---	---	---	---	---
<b>Model II. Continuity of service and diarrhea</b>						
Days with water service/month	---	-0.9%*	-0.2%	---	-0.2%	-0.2%
Sewer connection	---	-5.7%*	1.2%	---	-1.5%	-7.8%**
Latrine	---	-1.9%	4.6%	---	2.6%	-3.3%
Other sources (omitted)	---	---	---	---	---	---

Notes: (1) Unreported variables: household size, age of the head of household, ethnic group; (2) \* indicates significance at 10%; \*\* indicates significance at 5%.

Source: OVE 2008, based on ENCOVI data.

<sup>20</sup> Access to water supply is considered fundamental for improving public health and, in particular, for reducing infant mortality and morbidity. However, studies show that the effectiveness of the intervention is associated with good quality water delivered continuously, with appropriate wastewater disposal systems, and with a population that has adequate health education. SEGEPLAN 2006, Diagnóstico para la Gestión Integrada de Recursos Hídricos, financed by the IDB.

<sup>21</sup> CEPIS/PAHO 2002 compiles the results obtained in studies in different parts of the world, including Guatemala, which indicate that the construction of water and sanitation works without providing health education does not change the rates of morbidity or mortality from diseases related to water and sanitation.

<sup>22</sup> World Bank 2006. The same study determines that the cost of air pollution is 1.2% of GDP, the cost of soil degradation is 0.55% of GDP, and vulnerability to natural disasters is 0.57% of GDP.

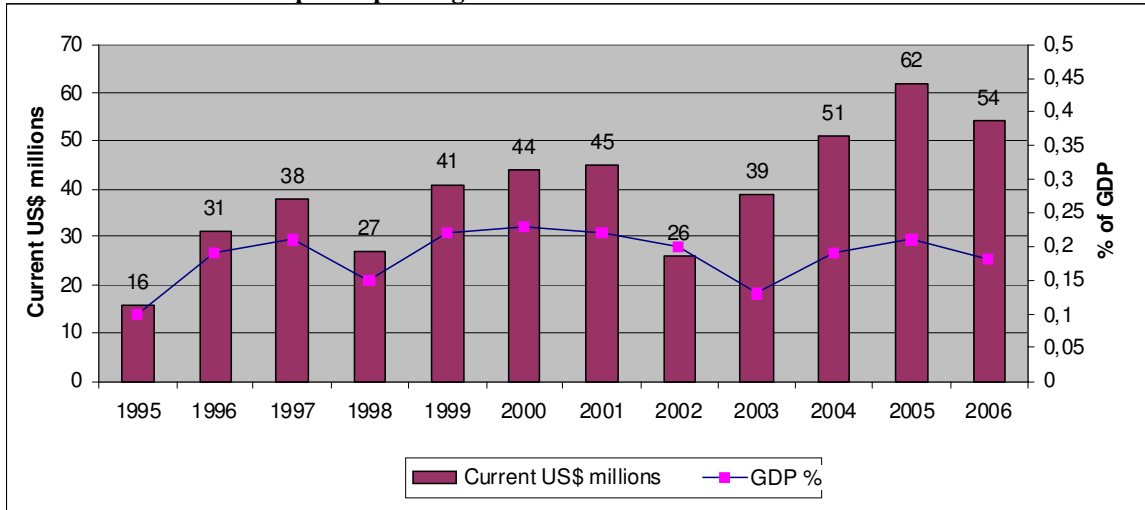
<sup>23</sup> MSPAS and IGSS. Hoddinot, John. *Water, Health, and Income: A Review*. Food Consumption and Nutrition Division, International Food Policy Research Institute. Washington, D.C., February 1997.

<sup>24</sup> Five different government agencies are responsible for sector planning (SEGEPLAN, INFOM, MAGA, MSPAS, and CONAMA). The regulatory function is not defined, with the exception of MSPAS responsibilities for aspects of physical and chemical quality that affect health. The operational functions assigned by law to the municipalities are carried out by 332 entities with no regulatory framework to establish basic standards for service delivery.

<sup>25</sup> IDB 2007. Guatemala: desafíos del sector de Agua Potable y Saneamiento.

<sup>26</sup> The following graph illustrates these points. Considering population growth of 2.5% a year, in order to maintain 2003 coverage levels, annual investments of US\$60 million are needed, and to achieve the Millennium Development Goals annual investments of close to US\$80 million will be needed for the next 10 years.

**Graph 1. Spending on safe water and sanitation 1995-2006**



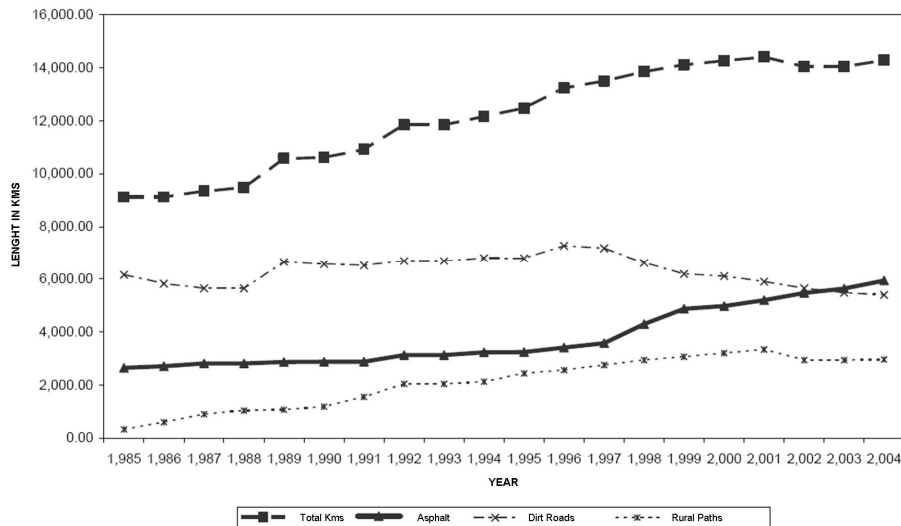
Source: OVE based on Avendaño, 2008; Galindo and Molina, 2007; and World Development Indicators.

<sup>27</sup> Target 10 of Millennium Development Goal 7 calls for reducing by half the percentage of people without access to safe water by the year 2015.

<sup>28</sup> The DGC classifies the system into primary, secondary, and tertiary roads on the basis of their technical and functional characteristics—primary: the Central American regional network, which has the best characteristics; secondary: the national communications system that links the main departmental capitals to the primary network; tertiary: that link the chief municipalities to their subordinate municipios and hamlets. Rural roads are also included.

<sup>29</sup> The following graph illustrates these points.

**Road length by type 1985-2004**



Source: Cifuentes I, 2006.

<sup>30</sup> Maintenance of the paved system improved considerably, with the percentage of highways in good condition increasing from 28% in 1996 to 78% en el 2000. The situation for 2007 indicates that the improvements in the system are being consolidated in the maintained system, with more than 86% of paved roads reported as being in acceptable condition (good plus average).

<sup>31</sup> According to the 2007 IDB study, *Tearing Down the Wall: Growth and Inclusion in Guatemala*, the highway system serves large businesses (for example, the sugar industry) and they are satisfied with the road improvements since the 1980s. A survey in 2000 indicated that satisfaction with the quality of highways among Guatemala’s entrepreneurial sector exceeded the Central American average of 59%. Despite the difficulties in comparing data from different countries, in 1998, the World Bank ranked Guatemala second after Panama in percentage of paved roads.

<sup>32</sup> The regions with the highest poverty levels (north and northwest) have the lowest density of passable roads. These differences in access availability also are apparent between indigenous and nonindigenous populations. World Bank 2006.

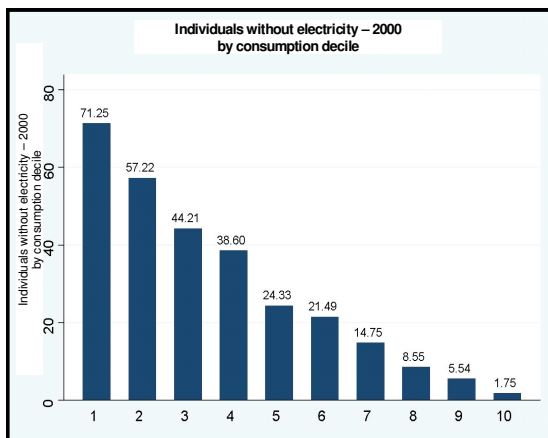
<sup>33</sup> Puri, J., 2000. Transport and Poverty in Guatemala: A Profile using Data from the ENCOVI 2000. World Bank Technical Paper No. 8.

<sup>34</sup> For example, in San Marcos and Huehuetenango, most households are located more than an hour away from the markets where they buy and sell products, visit a medical center, or obtain wood (World Bank, 2006).

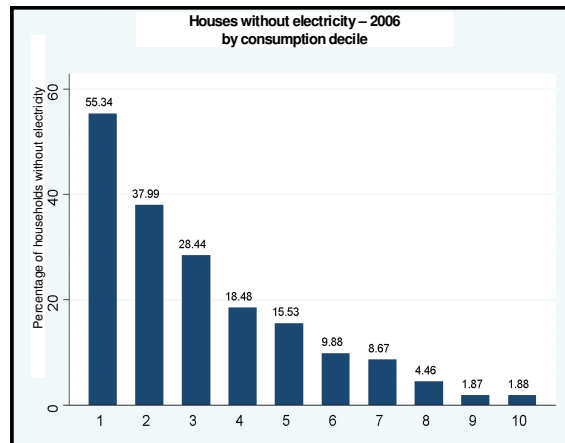
<sup>35</sup> Based on estimates, just 30% of the funds executed by COVIAL in 2008 are used for routine maintenance, while the remaining 70% are used for new road construction (44%) and infrastructure rehabilitation. During the period 2004-2007 it was not possible to approve a legal framework that would provide incentives for and regulate public-private partnerships in the sector.

<sup>36</sup> Plan de Expansión del Sistema de Transporte Eléctrico 2008-2018. OVE’s calculations on access to electric power, which take data from ENCOVI 2000 and 2006, arrive at figures that are similar but not identical—coverage of 71.23% in 2000, rising to 81.75% in 2006.

<sup>37</sup> The following graphs illustrate these points.



Source: OVE based on ENCOVI 2000.



Source: OVE based on ENCOVI 2006.

<sup>38</sup> The increase in oil prices in the last decade had an enormous impact on the economy of supply. The oil bill in 2007 was US\$2 billion, equivalent to 32% of the value of exports, and has placed significant pressure on rates. In addition, to offset the increases in prices, a generalized subsidy was introduced for residential demand going to more than 90% of users. In 2007 the subsidy was US\$75 million, financed by the public generating company (INDE) out of income from hydraulic generation. Nonetheless, clients not receiving the subsidy and companies, in particular, paid rates in 2007 between 25% and 70% higher than equivalent Central American companies, which has adversely affected their competitiveness. IDB 2007 in preparation for the new country strategy.

<sup>39</sup> Generation Expansion Plan 2008-2012 and Transportation System Expansion Plan 2008-2018. According to these documents, an average investment of US\$3.365 billion will be necessary to increase the power supply (the figure is the average of the three scenarios considered in the plan, referring to the year 2008), while US\$495 million will be required for the transmission system, although the plan will provide a savings of US\$522 million.

<sup>40</sup> The following table illustrates these points.

	<b>Total</b>	<b>Indigenous</b>	<b>Nonindigenous</b>
Total population (millions)	13.0	5.0	8.0
% rural	52	67	42
% poverty	51	75	36
% extreme poverty	15	27	8
Average monthly consumption (US\$)	115	67	145

Source: OVE calculations based on ENCOVI 2006.

<sup>41</sup> UNDP 2007/2008 Human Development Report.

<sup>42</sup> For the present report, social spending is defined as spending by the Ministries of Health and Social Welfare, Education, and Housing, and by the different social funds.

<sup>43</sup> ICEFI 2007.

<sup>44</sup> The following table illustrates these points.

<b>Quintiles</b>	<b>2000</b>				<b>2006</b>			
	<b>Education</b>	<b>Health</b>	<b>Social welfare</b>	<b>Total</b>	<b>Education</b>	<b>Health</b>	<b>Social welfare</b>	<b>Total</b>
<b>1</b>	17%	16%	20%	16%	19%	19%	23%	19%
<b>2</b>	20%	18%	25%	19%	20%	19%	24%	20%
<b>3</b>	21%	24%	25%	22%	20%	24%	24%	21%
<b>4</b>	20%	24%	20%	21%	20%	24%	20%	21%
<b>5</b>	23%	18%	11%	21%	20%	15%	9%	19%

Source: OVE calculations based on ENCOVI 2000 and 2006.

<sup>45</sup> The net enrollment rate for the primary level is the percentage of children between 7 and 12 enrolled in that level out of all the children in that age range.

<sup>46</sup> The following table illustrates these points.

**Net schooling rate by level 1995 – 2006 (percentages)**

Year	Preschool	Primary	Basic secondary	Comprehensive upper secondary
1995	21	72	21	14
2006	48	95	35	20

Source: Álvarez and Schiefelbein (2007) based on MINEDUC ongoing statistics.

<sup>47</sup> Porta and Laguna, 2007.

<sup>48</sup> The following table illustrates these points.

**Test results for grade six students, 2005 (% educational attainment)**

	Reading	Math
Rural	41%	49%
Urban	63%	66%
Girls	47%	54%
Boys	49%	57%
Indigenous	45%	54%
Nonindigenous	57%	60%
<b>Total</b>	<b>48%</b>	<b>55%</b>

Source: Own calculations based on PRONERE (2006).

<sup>49</sup> Return on education refers to the percentage increase in hourly wages obtained for one-year increases in education.

<sup>50</sup> The following table illustrates these points.

<b>Public spending on education by individual consumption quintile</b>						
	<b>2000</b>			<b>2006</b>		
	<b>1</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>5</b>
Preschool	38%	25%	5%	34%	22%	4%
Primary	21%	23%	10%	26%	24%	7%
Secondary	3%	23%	31%	7%	21%	28%
Higher	0%	6%	82%	0%	4%	76%
<b>Total</b>	<b>17%</b>	<b>21%</b>	<b>23%</b>	<b>19%</b>	<b>20%</b>	<b>20%</b>

Source: OVE calculations based on ENCOVI 2000 and 2006.

<sup>51</sup> The following table illustrates these points.

**Health outcomes indicators 2006**

Indicators	Guatemala	Rest of Central America	Latin America and the Caribbean	Low middle-income countries
Life expectancy at birth	69.9	72.9	72.9	70.8
Infant mortality rate up to 1 year	31	21	22	28
Infant mortality rate up to 5 years	41	25	26	36
Per capita GDP (PPP, US\$ 2005)	5015	5452	8690	4784

Source: World Development Indicators 2006.

<sup>52</sup> Children in the lowest quintile have a rate that is four times higher than children in the highest consumption quintile. Although it is difficult to establish the contribution of individual factors, the main determinants of malnutrition are: (a) the level of education of the parents; (b) diseases such as diarrhea and pneumonia (which are also the consequences of malnutrition); (c) teenage pregnancy and short birth spacing; (d) the nutritional condition of the mother: (e) breast feeding; (f) availability of piped water, sanitation, electricity, and trash collection; (g) geography, ethnic group, and language; and (h) poverty. World Bank 2000.

<sup>53</sup> For example, Muller and Krawinkel (2005) argue that malnutrition is the most significant risk factor for morbidity and mortality worldwide. Alderman, Hoddinot, and Kinsey (2002) find that episodes of malnutrition at an early age are associated with reductions in earnings of between 7% and 12%.

<sup>54</sup> The main components of the public health care system are the Ministry of Public Health and Social Welfare (MSPAS) and the Guatemalan Social Security Administration (IGSS). The private sector is comprised of hospitals, clinics, pharmacies, and laboratories. Last, more than 1,000 NGOs are active in health care in the country and traditional medicine also plays an important role, particularly among indigenous and rural populations. The MSPAS's health care services are stratified into three levels depending on complexity. In 2005, the first level was composed of 926 health care stations, which are staffed by a registered nurse. To strengthen this level of care and as part of the coverage expansion program, the MSPAS contracted NGOs to provide preventive care with a mother and infant approach in poor rural communities with difficult access to the traditional system. The second level was composed of 335 health care centers of different kinds, which are generally located in the 330 municipal seats. The third level was composed of 43 hospitals with a total of about 6,000 beds.

<sup>55</sup> The following table illustrates these points.

<b>Targeting of public spending on health. Spending by individual consumption quintile</b>							
	<b>2000</b>				<b>2006</b>		
	<b>1</b>	<b>3</b>	<b>5</b>		<b>1</b>	<b>3</b>	<b>5</b>
Community health centers	30%	21%	16%		42%	21%	5%
Health stations and centers	19%	29%	9%		22%	24%	8%
Public hospitals	10%	20%	26%		10%	25%	23%
<b>Total</b>	<b>16%</b>	<b>24%</b>	<b>18%</b>		<b>19%</b>	<b>24%</b>	<b>15%</b>

Source: OVE calculations based on ENCOVI 2000 and 2006.

<sup>56</sup> Regional policy dialogue on the environment for the Mesoamerican subregion of the IDB, 2002; Perfil ambiental de Guatemala, 2004. Informe sobre el estado del ambiente y bases para su evaluación sistemática. Universidad Rafael Landívar and Instituto de Incidencia Ambiental; Perfil Ambiental de Guatemala, 2006: tendencias y reflexiones sobre la gestión ambiental. Universidad Rafael Landívar and Instituto de Incidencia Ambiental; Country Environmental Analysis of Guatemala, 2006. Environmentally and Socially Sustainable Development Department, World Bank.

<sup>57</sup> INAB, FAO, 2001, WRI, 2001; Loening y Markussen, 2003. INAB calculates the loss of forest cover between 1991 and 2001 as 73,148 ha per year, or 1.43% per year as the national average. The rate was higher at the start of the decade and slowed considerably toward the end.

<sup>58</sup> UNEP, 2003.

<sup>59</sup> IDB 2007.

<sup>60</sup> INCAE placed the figure at about 0.29% per year, taking the average from 1980 to 2005, and the Central American average at 0.83%.

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<sup>61</sup> For example, the local disaster index evaluates the incidence and uniformity of distribution of local effects in the different municipios with respect to the social and environmental risks of small-scale disasters, considering the number of deaths, injuries, and damage to housing and crops.

<sup>62</sup> UNDP (2006) and its update in 2007.

<sup>63</sup> UNDP (2006) and its update in 2007. These estimates cover several of the consequences of violence with associated public and private costs: (a) losses in health, including the cost of medical care, emotional damage, and the indirect costs linked to lost production; (b) spending on private security; (c) institutional costs linked to public safety and justice services; (d) the opportunity cost stemming from the discouragement of private investment, with the concomitant loss of jobs and income; and (e) material losses. Recognition of the influence of organizations with links to drug trafficking, smuggling, and money laundering over the agencies of justice, security, and other government institutions in peacetime is a step toward resolving one of the fundamental determinants of the country's political, economic, and social situation.

<sup>64</sup> The origins of this new wave of violence in Guatemala are diverse and exogenous to the formal economic system: (i) the demilitarization and dismantling of the so-called civil self-defense patrols and loss by the State of its monopoly over the use of force; (ii) growth of the economic, social, and political power of drug trafficking organizations; (iii) organized crime and the so-called illegal groups and clandestine security apparatuses (CIACS); and (iv) the juvenile delinquent street gangs, which have expanded considerably in the wake of mass deportations from the United States between 1998 and 2004, coupled with more rigorous prosecution policies in neighboring countries (UNDP 2007, Violence statistics in Guatemala).

<sup>65</sup> The objective of the commission is to combat violence that goes unpunished and cooperate with the justice system in criminal investigation and prosecution and to break up criminal groups linked to the State apparatus (Fundación Mirna Mack, 2007).

<sup>66</sup> Stein *et al.* (2007): page 77.

<sup>67</sup> The International Institute for Democracy and Electoral Assistance gives the most recent data on participation in elections for the other Central American countries, as follows: Belize 74.5% (2008); Costa Rica 65.2% (2006); El Salvador 66.2% (2004); Honduras 66.3% (2001); and Panama 76.2% (1999). ([http://www.idea.int/vt/country\\_view.cfm?CountryCode=GT](http://www.idea.int/vt/country_view.cfm?CountryCode=GT)).

<sup>68</sup> In the previous Congress (2003-2007) they numbered 17 out of 158 (Observatorio Electoral Nacional 2007).

<sup>69</sup> Observatorio Electoral Nacional (2007), page 9.

<sup>70</sup> The country strategy identifies the following risks:

- In the political sphere, the difficulties in obtaining the support of a splintered Congress for advances on the reforms needed.
- In the macroeconomic sphere, the limited development of a tax compliance culture and the possibility of achieving reforms in this area to increase spending on the social sectors and infrastructure.
- In the environmental sphere, the possibility of natural disasters.
- For execution, a slow recovery of capacity to execute the Bank's investment programs.

<sup>71</sup> The only intervention proposed by the Bank in this area—which was never disbursed—focused on the social and cultural drivers of violence, even though other factors related to different forms of organized crime—often multinational in nature—had gained in importance.

<sup>72</sup> Indeed, the infrastructure loans included seven investment projects, six of which had already been approved but had very low percentages of disbursements.



<sup>73</sup> The loan was initially slated for approval in 2001, but it was difficult for the Bank to design an execution plan that included a loan with sovereign guarantees to be executed by a private entity, in this case UNION FENOSA. At present, the Bank is waiting for a letter of request from the Ministry of Finance to reactivate the operation so that it can perhaps be included among the approvals for 2008. It is expected to be a loan for US\$55 million that would partly cover the financial requirements to complete the rural electrification plan.

<sup>74</sup> El Estado de la Reserva de la Biosfera Maya en 1996; Instituto Incidencia Ambiental, 2005. Hacia donde va la RBM.

<sup>75</sup> According to FAO 2001 data, the deforestation rate in the upper watershed is about 54,000 ha/year in Guatemala. Also, as was mentioned earlier, two Guatemalan departments in this zone (Chiquimula and Jutiapa) experienced the highest losses of forest cover compared with their forested area at the start of the 1990s.

<sup>76</sup> Particularly owing to fecal contamination of the river (which is more than five times the acceptable limit in water for human contact). This is due to the lack of sanitation (absence of latrines, pollution by the coffee industry, etc.). Source: Estudio de la cuenca del río Lempa de 1999 quoted in the midterm report by the execution agencies of the Trinational Plan for Sustainable Development of the Upper Lempa River Basin.

<sup>77</sup> IDB 2002, Regional policy dialogue on the environment for the Mesoamerican subregion.

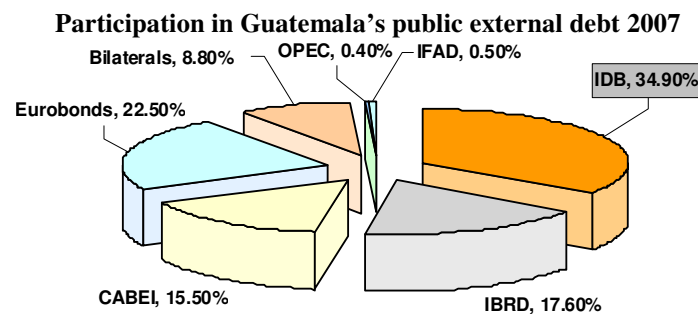
<sup>78</sup> This includes environmental and production management by small farmers on slopes, the provision of small basic infrastructure works, and isolated training on risk mitigation.

<sup>79</sup> AMSA (Authority for the Sustainable Management of Lake Amatitlán and its Basin) calculates that a total of 437.5 million liters of wastewater are discharged every day, mostly without prior treatment, and 1,550 tons of sediment-forming solid waste is produced by more than 1 million individuals, 655 industries, 23 farms, 1 sugar mill, and 440 chalets.

<sup>80</sup> The family context and the marginality of the juvenile population on which the proposed model focuses are predisposing factors for violence in the long term, but today the diagnostic assessments of the causes of violence also include other key factors, not simply related to social and cultural aspects, but also to the existence of a multinational economy of violence and the relationship between the system of violence and the public authorities.

<sup>81</sup> The IBRD's share of Guatemala's public debt is 17.6%, while CABEL's is 15.5%.

<sup>82</sup> The following figure illustrates these points.



Source: MFP, Guatemala

<sup>83</sup> First, the interest rate on the IDB's loans to Guatemala to date (4.36%) compares favorably with the average for the other multilaterals (6.28%), Eurobonds (9.20%), and domestic borrowing denominated in U.S. dollars (8.04%). Only bilateral credits maintain more favorable interest rates (2.88%), although these instruments generally include a series of conditions governing the goods and services used, which end up making the actual cost of credit considerably higher. This positions the IDB during the period as an attractive credit option for Guatemala's public sector. Second, IDB loans compare favorably with regard to maturity periods (29 years) with the rest of the multilaterals (19 years), Eurobonds (17 years), domestic credit denominated in U.S. dollars (10 years), and even with bilateral loans (also 29 years).

<sup>84</sup> Net transfers were US\$56 million during 2004-2007, including 2005.

<sup>85</sup> In total, the unrestricted loans represented 53.6% of disbursements during 2004-2007, a considerably higher percentage than the average for the rest of Central America (22%).

<sup>86</sup> The following table illustrates these points.

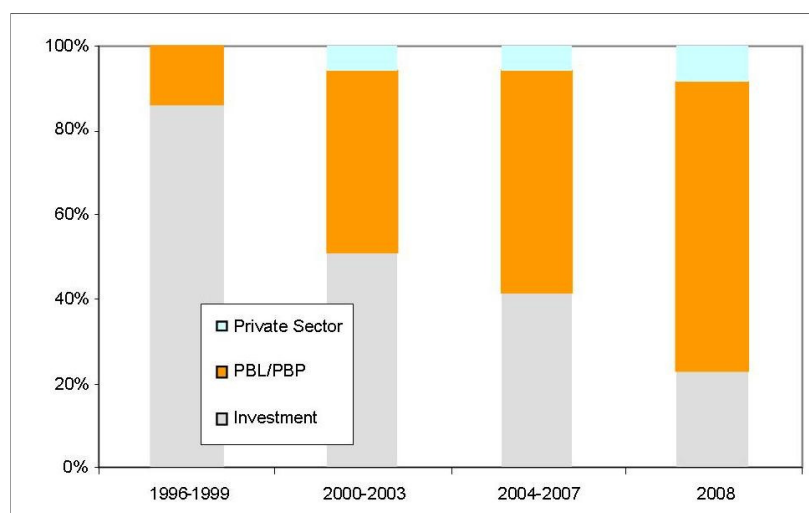
**PBLs and investment loans by period**

	PBL		Investment		Total	
	Disbursements	Net transfers	Disbursements	Net transfers	Disbursements	Net transfers
	<b>% of GDP</b>					
2000-2003	0.16%	0.16%	0.35%	0.03%	0.51%	0.08%
2004-2007	0.24%	0.13%	0.21%	-0.07%	0.45%	0.05%
	<b>% of public spending</b>					
2000-2003	1.13%	0.41%	2.53%	0.19%	3.66%	0.60%
2004-2007	1.72%	0.92%	1.48%	-0.53%	3.20%	0.39%
	<b>% of external financing needs</b>					
2000-2003	2.35%	0.86%	5.24%	0.39%	7.59%	1.25%
2004-2007	4.00%	2.15%	3.44%	-1.24%	7.43%	0.91%

Source: MFP, Guatemala.

<sup>87</sup> The following graph illustrates this point.

**Percentage of project approvals by programming cycle**



Source: OVE 2008.

<sup>88</sup> The following table illustrates this point.

**Approvals, cancellations, and disbursements by BSG strategy**

Strategic objective	Portfolio	Amount approved	% approved	Cancellations	% cancelled	Disbursed
I. To improve the conditions for efficient production	Execution	299,831.80	34%	71,205.30	24%	117,365.46
	New	114,420.00		1,981.27	2%	25,068.73
II. To strengthen human capital with equity	Execution	192,240.00	33%	3,983.91	2%	85,812.94
	New	200,000.00		-	-	100,000.00
III. Crosscutting: To support stronger governance	Execution	200,000.00	33%	-	-	79,800.00
	New	198,000.00		-	-	100,000.00

Source: OVE, 2008.

<sup>89</sup> Eight projects were programmed that were not approved in the end and three were approved that had not been anticipated.

<sup>90</sup> The following table illustrates these points.

**Execution measurements in Guatemala and the region**

Execution measurements	Guatemala				Region (without GU or ME)			
	2000-2001	2002-2003	2004-2005	2006-2007	2000-2001	2002-2003	2004-2005	2006-2007
Design								
Preparation time, INV (months)	59	27	81	17	11	12	13	11
Preparation time PBL (months)	Na	60	14	11	6	7	4	7
Period until the first disbursement, INV (months)	18	34	37	19	13	14	13	10
Execution								
Incidence of underdisbursement of the portfolio	0.38	0.52	0.54	0.52	0.56	0.64	0.56	0.42
Degree of underdisbursement	0.11	0.25	0.30	0.18	.23	0.28	0.25	0.19
Average age of the portfolio (months)	46	34	52	50	67	78	92	103
Quality of the portfolio (PPMR)								
Incidence of problems with development objectives	0.14	0.12	0.23	0.17	0.12	0.09	0.08	0.09
Incidence of problems in implementation progress	0.32	0.21	0.49	0.31	0.25	0.17	0.15	0.19
Portfolio supervision								
Percentage of audited financial statements with objections	0.72	0.60	0.62	0.31	0.21	0.25	0.22	0.22
Percentage of late audited financial statements	0.48	0.76	0.18	0.43	0.68	0.35	0.20	0.36
Missions								
Programming	5	33	32	23	6	20	26	18
Execution and monitoring	94	74	70	42	80	88	76	60
Knowledge	6	12	41	25	6	15	22	19
Total	158	151	172	131	137	148	141	124
Financial measurements								
Disbursements	170.2	256.9	161.6	379.9	1,063	1,257	1,169	1,076
Recoveries	183.0	193.7	241.0	240.6	780	1,106	1,139	1,190
Net cash flow	(12.7)	63.1	(79.3)	139.3	282	151	29	(113)

Source: OVE, 2008.

<sup>91</sup> The efficiency curve of disbursements for Guatemala shows that the investment loan portfolio has a faster disbursement rate than the average for the Bank and for its Central American peers.

<sup>92</sup> The incremental tax rate (increase in gross taxation as a percentage of the increase in GDP) was closely correlated with the rate of growth in GDP (0.55). This relationship is linked to the phenomenon of tax buoyancy, which consists of the procyclical behavior of the tax burden.

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<sup>93</sup> The Bank's 2006 portfolio review report.

<sup>94</sup> According to the comments received for this report from Bank Management: "They are partly development challenges that Guatemala needs to resolve and this requires fundamentally political processes, where the IDB's capacity to influence decisions and push for deadlines and agreements is very limited. [...] It is preferable for the IDB at least to have supported the government in these attempts (and to maintain that support as it continues to do in the new strategy), which have been elusive so far, rather than not to have made the effort." (Comments on CPE 2004-2008, page 2 of 3.)

<sup>95</sup> The law to combat tax evasion included in the loan conditions made it possible to reduce evasion of the VAT from 34.1% in 2005 to 26.1% in 2007, according to the Office of the Superintendent of Tax Administration (SAT), for a VAT productivity rate of 50% (collection rate over tax rate), which is 5.7 percentage points higher than in 2005. This reduction in the evasion rate exceeds the minimum reduction target established in the conditions of the PBL (2%).

<sup>96</sup> This category includes the income tax, the tax on property and net worth, the tax on mercantile and agricultural companies, and the special temporary tax to support the Peace Accords (IETAAP). The tax burden associated with direct taxes not only continues to be low but has remained almost unchanged over the last four years, despite the introduction of the IETAAP and the significant growth in the economy, which tends to have a favorable impact on the revenue-earning capacity of direct taxes. This result is probably the consequence of high evasion, which has not decreased in recent years, and the reduction in the effective income tax rate, with the introduction of the tax on gross income.

<sup>97</sup> Preparation of a comprehensive water resources management plan and an action plan for the National Water Commission (CONAGUA) in 2005, promoted by the PARPA, and the technical-cooperation project (GU-T1022) can be considered an advance. However, the water act has not been passed by the government as yet (materialization of the risk of the lack of political will mentioned in the loan document).

<sup>98</sup> The monitoring reports only offer a list of activities carried out, with no analysis of their prioritization, in six areas: (a) standards and procedures for preventing exotic diseases and supporting laboratory accreditation; (b) agricultural quarantine; (c) animal and plant health surveillance; (d) diagnostic laboratory services; (e) registration and control of agricultural inputs; (f) health quality of unprocessed foodstuffs.

<sup>99</sup> The 2006 environmental profile of Guatemala, although finding the lowest rates for the last decade, at 1.43% per year, considers that these figures mean that in relative terms, Guatemala is losing four times more forest than Brazil and twice as much as Mexico. An estimated 65% of this deforestation is taking place in Petén. The country environmental analysis by the World Bank in 2006 places the figure for national deforestation at 1.7%, which is triple the Latin American average and one of the highest rates in the world according to data from the United Nations Environment Programme (2003).

<sup>100</sup> According to different bibliographical sources, empirical studies conducted in Brazil and Guatemala suggest that the establishment of individual property rights does not appear to reduce the clearing rate, which is explained by the higher returns from crop and livestock farming for the private sector. Jaramillo, C. P. and Kelly, T., 1999. *La deforestación y los derechos de propiedad en América Latina* (IDB publication).

<sup>101</sup> Grandia, L., 2006. Dissertation submitted for the degree of Doctor of Philosophy in Anthropology in the University of California-Berkeley. *Unsettling: Land dispossession and enduring inequity for the Q'eqchi' Maya in the Guatemalan and Belizean Frontier colonization process*. This thesis studies the process of land titling and its connections to speculation in and accumulation of land. Furthermore, the survey conducted by the executing unit indicates that 26% of the initial beneficiaries of land regularization had already sold their parcels scarcely one or two years after obtaining their titles.

<sup>102</sup> According to the executing unit's reports, the program acted on the parcels of 1,314 families or about 1.8% of the population of Petén and 3.13% of the population in the five municipios targeted by this component.

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<sup>103</sup> OVE supports the executing agency's monitoring report that recommends: "directing project development to priority and strategic themes [...] projects to support the use of wood and nonwood forest resources [...] and differentiate this production through organic certification and denomination of origin..." In the case of beneficiaries who were already implementing sustainable farming practices, the inclusion of possible environmental certification among the eligibility requirements might have improved the environmental results of the component. Also, for small producers who were beginning to introduce sustainable management techniques on their farms with the sustainable development program, it would have been interesting to consider possible future certification of their activities, to which end some degree of restriction in the demand-driven mechanism for eligible activities might have improved the alignment of this type of financed activities with the conservation (and deforestation reduction) objectives of the loan. Consideration might also have been given to carrying those activities out in a buffer zone of a protected area.

<sup>104</sup> The executing unit conducted a survey of a sample of beneficiaries in which 69% of respondents said they had no agroforestry projects and 65% said they had not diversified their production to make it environmentally sustainable.

<sup>105</sup> Flores L, J.A., 2001. Evaluación de daños en los edificios restaurados del sitio arqueológico de Yaxhá. Consultant's report commissioned by the executing team of the Petén development program. For further details see the annex on the environmental sector.

<sup>106</sup> Chan, R.M., 2007. Consultant's final report: Análisis de la situación del patrimonio cultural en la Reserva de la biosfera Maya, Petén, Guatemala, commissioned by the consortium in charge of updating the master plan for the Maya Biosphere Reserve 2007-2011 (composed of the Third Millennium Association (A3K), the Agriculture, Natural Resources and Environment Institute (IARNA) of Universidad Rafael Landívar, and International Resources Group, Ltd (IRG).

<sup>107</sup> The number of visitors to Yaxhá-Nakum-Naranjo park has risen steadily since 1998, even exceeding the goal of 16% established in the project. In the case of Aguateca, however, the figures are, according to all sources, below the goal of an annual increase of 12%. While the executing agencies indicate only timid increases that do not meet the goal of 12% per year from 2001 to 2006, the IDAEH shows much smaller absolute numbers of tourists, with some tendency to rise between 1999 and 2007, with a minimum in 2002 and a maximum in 2003.

<sup>108</sup> MIF technical cooperation GU-M1010 which, continuing with the supports provided by USAID and DFID, is intended to promote competitiveness and access to the sustainable tourism market for 20 small and medium-sized companies in Alta and Baja Verapaz, Petén, and Izábal, increasing their sales and integrating tourist circuits. This Green Deal sustainable tourism certification seal has been applied to date to hotels, restaurants, operators, and community projects, and has a series of certification criteria and a network of auditors backed by a regional sustainable tourism network.

<sup>109</sup> Castro., M., 2008. Sistema de Seguimiento y Monitoreo de Impacto – Programa Trinacional de Desarrollo Sostenible de la Cuenca Alta del Río Lempa – El Salvador, Guatemala, Honduras. August 2008. In the case of Guatemala, the adjusted budget was 69% of what had originally been planned, while in El Salvador, despite having cancelled the entire Bank loan, it was reduced to less than half (42%), since US\$3 million was contributed from another loan. No changes were made in the original budget in Honduras.

<sup>110</sup> On the one hand, it takes years for reforested areas to replace the environmental services provided by mature trees that are cut down, to say nothing of the fact that the species replanted are often less well suited to the ecological conditions of the site and present low survival rates (some experiences in Mexico place the rates at 40% in the first year and even lower afterwards).

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<sup>111</sup> The administrative data provided by the executing agencies (types of sustainable management projects implemented per community and municipality and the number of beneficiaries in each one) allowed for a poverty targeting exercise to be performed with respect to the 2002 census. Seventy-six percent of these data could be cross-referenced for Chiquimula department but just 22% for Jutiapa, and therefore this conclusion focuses only on the first department.

<sup>112</sup> For example, in the case of the department of Totonicapán, the whole population lived in prioritized municipios but its share of spending on health care and education fell from 2.3% to 2.2% in the period.

<sup>113</sup> As an exception to the findings of the overall analysis of how spending was targeted, in the particular case of the program to expand coverage, evidence suggests that targeting increased during the period under analysis.

<sup>114</sup> Cristia, Julian, William Evans, and Beomsoo Kim. 2008. "Does Contracting Out Primary Care Improve Child Health? The Case of Guatemala." Mimeograph. Department of Research, Inter-American Development Bank, Washington D.C.

<sup>115</sup> Between 2000 and 2006, the percentage of indigenous women receiving check-ups in their most recent pregnancy rose from 74% to 81% (versus from 83% to 85% for nonindigenous women). The same holds true for women in rural areas, with this indicator rising from 73% to 80% (versus urban women where the rate held steady at 87% during the period).

<sup>116</sup> As mentioned earlier, the percentage of indigenous women assisted by a physician during delivery only rose from 20% to 24% between 2000 and 2006 (versus from 56% to 68% for nonindigenous women).

<sup>117</sup> However, its contribution to expanding coverage is small, given that the area of influence of the five centers that were established covers only 27 surrounding municipios and an area of nearly 5,000 km<sup>2</sup> (equivalent to about 5% of the country's total area) and a population of about 500,000 (4.7% of the national total).

<sup>118</sup> Given the maturity time that these kinds of effects could require and the slowness with which the program has been developing, it is probably too soon to judge its effectiveness in these areas.